Usenet Newsgroup Archive: rec.radio.amateur.homebrew

2005

These Usenet messages were preserved as a plain-text archive. This PDF was generated by Digital Library of Amateur Radio & Communications from the source text file in 2026.

Date span: 2005-01-01 through 2005-12-31

Source text: rec.radio.amateur.homebrew.txt

Source item: https://archive.org/details/usenet-rec

Messages included in this PDF: 6,468

Message records with no readable body available in the source text: 3

Messages are presented chronologically by archived date.

Binary or encoded payloads are not printed as blocks of encoded text; a placeholder appears where such material was detected. The original source text is unchanged.

1. Re: RF/IF cans color code

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-01 05:21:11 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <brqBd.53683$uM5.9626@bgtnsc05-news.ops.worldnet.att.net>
Source record: 21334

The red core is your AM oscillator coil; the yellow is the 1st, the white is the 2nd, and the black is the 3rd I.F. transformers respectively. The brown, blue, orange, and green core units are your 10.7MHz I.F. transformers.

Pete

"Active8" <reply2group@ndbbm.net> wrote in message news:1s1n76droxe3p.dlg@news.individual.net...
> On Fri, 24 Dec 2004 09:25:19 -0800, Tim Wescott wrote:
>
>> Active8 wrote:
>>> I have some cans from an old AM FM transistor radio. ISTR that the
>>> color of the slug indicates what it is.
>>>
>>> Where can I find that info?
>>>
>>> TIA
>>
>> Mouser catalog, where they sell new IF cans.
>
> Thank you. Merry xmas.
> --
> Best Regards,
> Mike

2. Re: RF/IF cans color code

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-01 13:11:12 UTC
From: Clinton <news2004@_nospam_telus.net>
Message-ID: <QjxBd.38630$dv1.7791@edtnps89>
Source record: 21335

```
Harry's Homebrew Pages have info on these. http://web.telia.com/~u85920178/
Reference/Data Technique is where you will find it.

---
Remove _nospam_ to reply via email.

> "Active8" <reply2group@ndbbm.net> wrote in message
> news:1s1n76droxe3p.dlg@news.individual.net...
>> On Fri, 24 Dec 2004 09:25:19 -0800, Tim Wescott wrote:
>>
>>> Active8 wrote:
>>>> I have some cans from an old AM FM transistor radio. ISTR that the
>>>> color of the slug indicates what it is.
>>>>
>>>> Where can I find that info?
>>>>
>>>> TIA
>>>
>>> Mouser catalog, where they sell new IF cans.
>>
>> Thank you. Merry xmas.
>> --
>> Best Regards,
>> Mike
>
>
```

3. NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-01 13:38:44 UTC
From: n2ey@aol.comSPAMNO
Message-ID: <20050101083844.10298.00000325@mb-m25.aol.com>
Source record: 21336

NIST scientists have figured out that Morse code may get through poor transmission conditions when voice does not.

"...first responders may be able to receive and see simple patterns—like Morse code—from a survivor repeatedly turning a radio or phone on and off, in cases where the signal was too weak to receive audible voice messages."

http://www.nist.gov/public_affairs/releases/demolition_dcconv.htm

73 de Jim, N2EY

4. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-01 18:13:02 UTC
From: Larry Gagnon <lagagnon@fakeuniserve.com>
Message-ID: <pan.2005.01.01.18.13.02.415976@fakeuniserve.com>
Source record: 21337

On Sat, 01 Jan 2005 13:38:44 +0000, N2EY wrote:

> NIST scientists have figured out that Morse code may get through poor
> transmission conditions when voice does not.

[snip]

...and guess what? It probably cost the American taxpayer hundreds of thousands of dollars to arrive at a conclusion that most good radio operators knew about decades ago!!! Doh!....

Larry VE7EA

5. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-01 19:25:09 UTC
From: Bert Hyman <bert@visi.com>
Message-ID: <Xns95D1889FE2B08VeebleFetzer@news.octanews.com>
Source record: 21338

In news:h1rdt0tglvbdd71diujjevvu49ls657djg@4ax.com Bill Turner
<noway@nohow.com> wrote:

> On 01 Jan 2005 13:38:44 GMT, n2ey@aol.comSPAMNO (N2EY) wrote:
>
>>"...first responders may be able to receive and see simple patterns&#65533;like
>>Morse code&#65533;from a survivor repeatedly turning a radio or phone on and
>>off, in cases where the signal was too weak to receive audible voice
>>messages."
> _____
>
> May I suggest the correct conclusion to be drawn?
>
> Get better equipment so voice will get through. ...

What's "better" mean? How much better is "good enough"? How much more will
the "better" stuff cost?

--
Bert Hyman St. Paul, MN bert@visi.com

6. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-01 21:50:28 UTC
From: default <none@defaulter.net>
Message-ID: <fe6et01l4uun9gd945sdo1patkv7eovt0c@4ax.com>
Source record: 21339

On Sat, 01 Jan 2005 10:13:02 -0800, Larry Gagnon
<lagagnon@fakeuniserve.com> wrote:

>On Sat, 01 Jan 2005 13:38:44 +0000, N2EY wrote:
>
>> NIST scientists have figured out that Morse code may get through poor
>> transmission conditions when voice does not.
>
>[snip]
>
>...and guess what? It probably cost the American taxpayer hundreds of
>thousands of dollars to arrive at a conclusion that most good radio
>operators knew about decades ago!!! Doh!....
>
>Larry VE7EA

I'm with you there.

The logical thing would be to develop a digital system (after all
morse is digital) that would appear as text (so non-operators could
grok it), and with variable transmission rates to get the message
through - auto repeat? (and/or lots of abbreviations).

Then test it on some blown up buildings.

But if I were the NIST "scientist" would my primary goal be to solve
the problem or make money studying it?

7. Re: FET amplifier (theory != measurement)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-02 00:14:42 UTC
From: Gary Morton <gary@alma.demon.co.uk>
Message-ID: <41D73D10.2050607@alma.demon.co.uk>
Source record: 21340

Roy,

many thanks for taking the time to compose such a detailed reply.

I continued to experiment and make some more measurements, but I got sidetracked into finally constructing a simple SSB receiver. I then got side tracked into trying to figure out why the radio doesn't work very well. Even the damn 2N3819 FET oscillator didn't work! I even tried different FETs. That was fixed by adding extra source resistance.

The following table may not look right as it appears to have tabs in it.

vga in V
idd in mA
gm in ms
Rs in ohm
Rdrain
0.0 13.2 n/a 0.0 n/a
-0.2 12.1 5.1 17.6 196.35
-0.5 10.5 4.8 51.3 207.54
-0.7 9.6 4.4 77.0 227.01
-1.2 7.8 4.3 149.7 231.31
-1.5 6.4 4.2 227.1 240.46
-1.8 5.1 3.8 348.9 260.87
-2.1 4.1 3.5 498.8 284.05 <- operating point
-2.5 2.6 3.2 984.4 312.25
-2.9 1.6 2.5 1781.3 398.94
-3.3 0.7 1.8 4808.8 541.10
-3.6 0.1 n/a 26000.0 n/a

I'd never heard of the effect of "effective drain resistance". I can't recall seeing it explained in any of the texts which I have read. Mind you the PW article suggested that the graph of Id vs Vgs was a straight line for smaller values of Vgs! I re-calculated Rd using this extra value but I just got a less than unity amplifier.

It seems to me and you seem to back this up the a FET buffer whilst a useful impedance converter also distorts the signal due to the x squared function. This makes it good for mixers though. I do often see FETs used as buffers for VFOs in simple rx designs.

Anyway I'll do some more experimenting until I get theory and practice to match.

BTW I have already played with Spice, using it to plot various curves (Vd vs Id for various Vgs, and Id vs Vgs). I have also simulated FET amplifiers and buffers. Now I need to change the 2N3819 model to match the "slope" of my FET and see what the simulator gives.

regards...

--Gary

8. Re: ham radio swap meet

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-02 01:55:32 UTC
From: Clarence_A <no@No.com>
Message-ID: <owIBd.5313$5R.1572@newssvr21.news.prodigy.com>
Source record: 21341

"Gary S." wrote
> Bruce Lane wrote:
> >Idontwantspam@net says...
> >> webberdog@webtv.net wrote:
> >>
> >> >last saturday of every month 7 am to 11:30 am
> >> >THE W6TRW ARC SWAPMEET
> >> >Address:http://www.w6trw.com/swapmeet/w6trw_arc_swapmeet.htm
> >>
> >> Well, now we know when it is.
> >> Any guesses on which state?
> > You must not have:
> > (1) Visited the web link.
> > (2) Realized that a '6' call is going to be California.
> > This particular swap is in Lawndale, CA, southwest of Los
Angeles.
> 1) It does not make sense for me (or anyone) to visit the link
of
> every one of these in case it is nearby. Posters should realize
that
> their message is going to people all over the world, and provide
some
> details.
> 2) There are a number of hams who have moved since receiving
their
> license, who keep their original call, so that is not completely
> useful for location.

> Even so, I hear California is a large place. Just adding "Los
Angeles
> area" or whatever to the original message would have made it far
more
> useful for potential visitors.

The message must be pretty good, there are people (hams) for all
across the US and even from Taiwan, and Japan at the meet! Even
some from MA!

Why do you question success? Oh, a novice... Good luck.

> Gary D. Schwartz, N1ZCE Needham, MA, USA
> Please reply to: garyDOTschwartzATpoboxDOTcom

9. MANY RADIO PARTS.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-02 04:03:06 UTC
From: dialcover@webtv.net
Message-ID: <14549-41D7727A-326@storefull-3254.bay.webtv.net>
Source record: 21342

SEE BELOW.

CHECK MY WEBSITE: www.dialcover.com
Bill Turner, excuse caps, short answers, stroke.
Business SASE, each order a copy of The Pocket Resource Guide.

10. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-02 04:34:41 UTC
From: budgie <me@privacy.net>
Message-ID: <49uet0djj0slc09vdt1fjk45p3er49nmur@4ax.com>
Source record: 21343

On Sat, 01 Jan 2005 16:50:28 -0500, default <none@defaulter.net> wrote:

>On Sat, 01 Jan 2005 10:13:02 -0800, Larry Gagnon
><lagagnon@fakeuniserve.com> wrote:
>
>>On Sat, 01 Jan 2005 13:38:44 +0000, N2EY wrote:
>>
>>> NIST scientists have figured out that Morse code may get through poor
>>> transmission conditions when voice does not.
>>
>>[snip]
>>
>>...and guess what? It probably cost the American taxpayer hundreds of
>>thousands of dollars to arrive at a conclusion that most good radio
>>operators knew about decades ago!!! Doh!....
>>
>>Larry VE7EA
>
>I'm with you there.
>
>The logical thing would be to develop a digital system (after all
>morse is digital) that would appear as text (so non-operators could
>grok it), and with variable transmission rates to get the message
>through - auto repeat? (and/or lots of abbreviations).

When Morse failed to get through, the locally-based branch of a mutlinational
oil produced resorts to ...

FAX. Write the message with a broad-tipped felt pen and send radiofax.
Worked for them. Usually their last Morse transmission as conditons
deteriorated was "send fax ... send fax ..."

>Then test it on some blown up buildings.
>
>But if I were the NIST "scientist" would my primary goal be to solve
>the problem or make money studying it?

If I were him, right now I'd be keeping a very low profile after such an
astonishing announcement of the very obvious.

11. Heathkit Hwa-2036-3 p.s.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-02 20:53:23 UTC
From: Mike Burch <mburch46@mchsi.com>
Message-ID: <7bZBd.13452$wu4.13065@attbi_s52>
Source record: 21344

Hi Fella's

Would any of you know what the semiconductor replacement types are for this powersupply? All the transistors and diodes. IC1, Q1, D5, and the TO-3 pass transistor on the back. I have the bridge diodes already. I trashed something but I don't have a manual and am just trying to take a shortcut. :-).

Thank you in advance.

Mike Burch K8MB

Apache Junction, AZ

12. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-02 21:13:34 UTC
From: john graesser <graesser@tca.net>
Message-ID: <10tgp1e7ue7rb12@corp.supernews.com>
Source record: 21345

"Bill Turner" <noway@nohow.com> wrote in message
news:tmcgt01ejr3vd59t0vr14vr90u74jcvajp@4ax.com...
> On 01 Jan 2005 19:25:09 GMT, Bert Hyman <bert@visi.com> wrote:
>
> >What's "better" mean?
>
> Check your dictionary.
>
>
> >How much better is "good enough"?
>
> Good enough for 100% reliability.
>
>
> >How much more will
> >the "better" stuff cost?
>
> Doesn't matter when lives are at stake. Get it.

One of the local hams here is also a pilot instructor, while flying one day the mic on his aircraft radio broke. Being a long time brass pounder he took the mic apart and made a key out of it.

Luckily one of the people in the tower that day knew morse and was able to understand Mike's messages to the tower.

Lucky for them that aircraft band was still am so Mike had a carrier to turn on and off.

Nothing is 100% reliable. You never know when you will be faced with using broken or impaired equipment so you have to be prepared to improvise.
thanks, John.
KC5DWD

13. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-02 21:30:17 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <%NZBd.2892$Nr2.1644@fe04.lga>
Source record: 21346

"Bill Turner" <noway@nohow.com> wrote in message
news:tmcgt01ejr3vd59t0vr14vr90u74jcvajp@4ax.com...
>
> >How much better is "good enough"?
>
> Good enough for 100% reliability.
>
> >How much more will
> >the "better" stuff cost?
>
> Doesn't matter when lives are at stake. Get it.

This is typical of the sort of babble you would expect from the land of fruits and nuts.

Even if dollars were unlimited, there is no such thing as 100% reliability in anything. And to get significantly closer than they are now requires other prices besides just dollars. How much weight do you want these guys to carry? How much RF radiation do you want to expose these emergency workers to? How big and cumbersome a thing do you want them to have to deal with while they are crawling around an emergency scene? How much care and feeding is this magical equipment going to take? How much complexity do you want them to deal with to disctract from their day job of saving lives?

Even if the problem could be solved by throwing dollars at it, it's basically a zero sum game. I realize that Californians think taxes are wonderful, but most of us have plenty enough taxes thank you. If I recall they were talking about DHS people here mostly, so should we cut down on airport security so we can have more hijackings, or maybe we should cut back on emergency relief to earthquake victims.

This is exactly why we attach a dollar value to saving lives, as unappealing as that exercise is. If we don't do it, we stand to kill ten people to save one. Bad plan.

..

14. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-03 11:41:56 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <33spitF4435ilU1@individual.net>
Source record: 21347

Morse is digital if it results from on-off keying using the fingers.

"Bill Turner" <noway@nohow.com> wrote in message
news:8rcgt0ph0dcteamhna2ds9rjg17ceudtkj@4ax.com...
> On Sat, 01 Jan 2005 16:50:28 -0500, default <none@defaulter.net> wrote:
> >(after all
> >morse is digital)
> Morse is binary (having two states), but it is not digital, since the
> states do not represent numbers.

15. Re: Direct conversion + DSP receiver for S-measurements?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-03 13:53:43 UTC
From: Kustu <kustu@kusett.aa>
Message-ID: <crbik0$8j6$1@phys-news1.kolumbus.fi>
Source record: 21348

"Kristinn Andersen, TF3KX" <tf3kx@simnet.is> kirjoitti viestiss&#65533;
news:cc4f4620.0412301955.7adb4529@posting.google.com...
> Hi:
>
> I am looking for a HF receiver (1,8-30 MHz) that I can use to measure
> received signals and record the measurements into a PC for further
> analysis. I do own an Icom IC746 that provides S-meter data, but it
> has several shortcomings.
>
> So, for example, I wonder if there are any new projects or kits around
> that are based on the R1/R2 direct conversion design, but with the
> addition of good quality DSP and a DDS oscillator? Something that
> would give me digitized signals from a "general coverage" box.
>
> Kanga seems to offer an advanced version of the R2, but with an analog
> VFO and analog AF processing. Any other suggestions or pointers?
>
> 73 de Kristinn, TF3KX

```
Hello
You should check also these pages:
http://www.nikkemedia.fi/hohtola/dc-trcvr/DCradio.htm

73 from Finland
```

16. Anyone familiar with these parts? e.g. VTW 45.3

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-03 19:14:02 UTC
From: Bill K <kirklandb_nospam@sympatico.ca>
Message-ID: <ZJgCd.4310$7n1.268559@news20.bellglobal.com>
Source record: 21349

I have a box full parts labeled with a 3 letter prefix starting with V.

E.g.

VNX 11.5
VSK 11.8
VSM 12.1
VTK 29.4
VTW 45.3
VTX 46.4 labeling on part is : A50 VTWD A402

Anyone have any idea what these are and what the specs are?
They seem to be a precision capacitor as some of the box labels indicated
"pf". I put some on the capacitor meter and get the appropriate reading,
e.g. a VTW 45.3
has 45 pf.

bk
VE3JHU

17. Anyone working on Homebrew Crystal Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-03 19:21:24 UTC
From: Bill K <kirklandb_nospam@sympatico.ca>
Message-ID: <QQgCd.4325$7n1.270552@news20.bellglobal.com>
Source record: 21350

Anyone working on hombrewing their own crystal filters?
I would be interested in hearing your experience esp in regards to uP
crystals.

I have most of the papers over the years so I am interested in hearing about
personal
experiences.

Thanks
Bill VE3JHU

18. FS: Old Radio-Related Books, 1929-1980

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-03 20:23:21 UTC
From: oldbooks78@aol.com
Message-ID: <20050103152321.11818.00002620@mb-m16.aol.com>
Source record: 21351

I currently have the following old radio-related books for sale. Postage (Media Mail within the US) is $2.50 for the first book and $1 for each additional item. The books are:

"Reference Data for Radio Engineers," 2nd Edition, by Federal Telephone And Radio Corporation. Federal Telephone and Radio Corporation, 1946. The 322+ page hardbound book is in about very good condition, clean with no page tears or pen marks except for a previous owners name stamp inside the covers. Green cloth covers. A nice early radio reference text. Available for $7.

"Practical Radio Communication; Principles, Systems, Equipment, Operations" by Nilson, Arthur R. And J.L. Hornung. McGraw-Hill, 1943. Second edition. The 927 page hardbound book is in very good condition, clean with no page tears or pen marks except for a preperty stamp inside the front and rear covers. A nice early radio text. Available for $8.

"Basic Radio, the Essentials of Electron Tubes and Their Circuits" by Hoag, J. Barton. D. Van Nostrand, 1942. Fifth edition. The 379 page hardbound book is in very good condition, clean with no page tears or pen marks except for a previous owners name and address inside the front cover. Tight binding. A nice early radio and electron tube text. Available for $9.

"Communication Engineering" by Everitt, William Littell. McGraw-Hill, 1937. The 727 page hardbound book is in about very good condition. Clean with no page tears or pen marks except for a previous owners name and address inside the front cover, and a few passages underlined in pencil. A nice early text on the science of the radio. Available for $8.

"Radio Engineering Handbook" by Henney, Keith (Editor), McGraw-Hill, 1950. Foueth Edition. The 1197 page hardbound book is in very good condition, clean with no page tears or pen marks except for a previous owners name inside the front cover, and their initials on the upper page ends. Otherwise a very clean copy. Available for $9.

"Reference Data for Radio Engineers, 1st Edition" by Federal Telephone And Radio Corporation. Federal Telephone and Radio Corporation, 1943. First edition, second printing. The 200 page hardbound book is in good+ condition, clean with no page tears or pen marks except for a previous owners name inside the front cover. The pages are a bit wavey along the bottom edge, possibly from minor moisture exposure. Otherwise very nice. Green cloth covers over flexible boards. A nice early radio reference text. Available for $10.

"Instructions for Operation of 6 Tube Superheterodyne Receiver Model 5002" c1940. A 4 page instruction for operations for the Superheterodyne Receiver Model 5002. Not dated, but looks to be from the 1940's or so. The rear page of the instruction sheet is a schematic diagram for the receiver. Available for

$8.

"1933 Report of the Standards Committee of the Institute of Radio Engineers" by Institute Of Radio Engineers, 1933. The 225 page softbound book is in good+ condition, clean with no page tears or pen marks except for a previous owners name on the front cover. Some wear to the spine paper, but not too bad. Page tips in rear lower corner bent outwards somewhat. A neat look at standards development for the radio in the early 1930's. Available for $7.

"Elements of Radio Communication" by Morecroft, John H., John Wiley & Sons, 1929. The 269 page hardbound book is in good+ condition. There is a previous owners name inside the front and rear covers, and light pencil marks/notes on many of the pages. Dust jacket has extensive tape reinforcement along the edges. A nice early text on the radio. Available for $10.

"Principles and Practice of Radio Servicing" by Hicks, H.J., McGraw-Hill, 1943. Second edition. The 391 page hardbound book is in very good condition, clean with no page tears or pen marks. A nice early text on radio repair. Available for $12.

"Radio Propagation Handbook" by Saveskie, Peter N., New York, NY, U.S.A. : T A B Books, 1980. 1st Edition. Red boards. The 499 page hardbound book is in very good condition. There are address labels from the previous owner inside the front and rear covers, and an embossed property stamp on the title page, otherwise very nice. Available for $20.

If interested in any of the above, please email to "Oldbooks78@aol.com" to reserve. Thanks, and best regards.

Dave

19. Anothe Parts Deal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-03 21:23:32 UTC
From: Brian - KB9BVN <kb9bvn@arrl.net>
Message-ID: <oJiCd.6114$Cc.2218@newsread3.news.pas.earthlink.net>
Source record: 21352

I have ended up with several thousand PN2222A NPN's and PN3906 PNP's transistors in TO92 format.

These are new "old stock" and they came from Micro Electronics. Nice long leads too.

These are BULK transistors, so they are blank. They do not have the part number on them.

$2.75 per hundred, plus shipping.

In the US, I will ship via USPS. 100 of these in a bubble pack mailing envelope with 1st Class postage will run $1.30, I think I can put 200 in the mailer for the same postage.

If you are interested in these, let me know.

NO PAYPAL on this one.

73 de KB9BVN

--
==========
Agnus Dei, qui tollis peccata mundi, dona nobis pacem.
==========
KB9BVN/QRP QRP-L 1540 QRP-ARCI 10223
39.558 N 86.095 W Johnson Co., Indiana
GRID: EM69WN - Elecraft K1 - Attic Dipole - 5w
Member of the ARRL - SOC #400
FISTS 5695 CC 764 FPQRP #-57
==========

20. Re: Anothe Parts Deal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-03 23:52:37 UTC
From: w9gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <ae2dnYJ1FaVKR0TcRVn-uw@comcast.com>
Source record: 21353

"Brian - KB9BVN" <kb9bvn@arrl.net> wrote in message
news:oJiCd.6114$Cc.2218@newsread3.news.pas.earthlink.net...
>I have ended up with several thousand PN2222A NPN's and PN3906 PNP's
> transistors in TO92 format.

Brian -

Are the 2N2222A transistors metal or plastic case?

gb

> These are new "old stock" and they came from Micro Electronics. Nice long
> leads too.
>
> These are BULK transistors, so they are blank. They do not have the part
> number on them.
>
> $2.75 per hundred, plus shipping.
>
> In the US, I will ship via USPS. 100 of these in a bubble pack mailing
> envelope with 1st Class postage will run $1.30, I think I can put 200 in
> the
> mailer for the same postage.
>

21. Re: Anyone working on Homebrew Crystal Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-03 23:59:39 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <kmmjt0tlk5n87qqqgq2n05nf4s0i1n68e0@4ax.com>
Source record: 21354

On Mon, 3 Jan 2005 14:21:24 -0500, "Bill K"
<kirklandb_nospam@sympatico.ca> wrote:

>Anyone working on hombrewing their own crystal filters?
>I would be interested in hearing your experience esp in regards to uP
>crystals.
>
>I have most of the papers over the years so I am interested in hearing about
>personal
>experiences.

Good then build a few.

Seriously, I've built 6 of these of various types, frequencies and
bandwidths. My feeling is filters using crystals between 6 and 22 mhz
seem to work best for SSB filters and the lower freqs do well for
narrower CW filters. The best one I've done was a 6 crystal filter
with a 2.4 at 6db bandwidth and good shape down to -60db.

Success is easy to achieve if you measure the crystals and apply the
math carefully. You need to know the characteristics of crystals your
using and also assure they are of the same frequency and quality.
Usually I buy 10 or 20 at very low price and hand sort them.

Allison
KB1GMX

22. Low noise -- op amps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-04 00:22:41 UTC
From: MikeN <mnewman@clear.net.nz>
Message-ID: <o9jjt095jbr74q9bs9f3dr1d0f5inv1v60@4ax.com>
Source record: 21355

I have a choice of two op-amps for an audio application.

Which of the two, TL064 or TLC274 would generate the lowest internal noise in a 300 - 3000 Hz audio application.

Thanks

MikeN

23. Re: Anyone working on Homebrew Crystal Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-04 00:50:29 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <qFICd.25900$Gj2.22498@bignews1.bellsouth.net>
Source record: 21356

nospam@nouce.bellatlantic.net wrote:
> On Mon, 3 Jan 2005 14:21:24 -0500, "Bill K"
> <kirklandb_nospam@sympatico.ca> wrote:
>
>
>>Anyone working on hombrewing their own crystal filters?
>>I would be interested in hearing your experience esp in regards to uP
>>crystals.
>>
>>I have most of the papers over the years so I am interested in hearing about
>>personal
>>experiences.
>
>
> Good then build a few.
>
> Seriously, I've built 6 of these of various types, frequencies and
> bandwidths. My feeling is filters using crystals between 6 and 22 mhz
> seem to work best for SSB filters and the lower freqs do well for
> narrower CW filters. The best one I've done was a 6 crystal filter
> with a 2.4 at 6db bandwidth and good shape down to -60db.
>
> Success is easy to achieve if you measure the crystals and apply the
> math carefully. You need to know the characteristics of crystals your
> using and also assure they are of the same frequency and quality.
> Usually I buy 10 or 20 at very low price and hand sort them.
>
> Allison
> KB1GMX
I have a box full of about 400 8.3886 mhz rocks I got for about
$10 on ebay. I hope to make a filter or two out of them for ssb.
They are the larger hc6u type.

24. Re: Anothe Parts Deal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-04 02:24:37 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnctjvj5.2ons.bit-bucket@shell.config.com>
Source record: 21357

On Mon, 3 Jan 2005 17:52:37 -0600, w9gb wrote:
> "Brian - KB9BVN" <kb9bvn@arrl.net> wrote in message
> news:oJiCd.6114$Cc.2218@newsread3.news.pas.earthlink.net...
>>I have ended up with several thousand PN2222A NPN's and PN3906 PNP's
>> transistors in TO92 format.
>
> Are the 2N2222A transistors metal or plastic case?

PN2222A's are [P]lastic(2)N2222A's

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

25. Re: Anothe Parts Deal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-04 03:52:47 UTC
From: w9gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <1LOdnTxwWNK8jkfcRVn-ug@comcast.com>
Source record: 21358

"Allodoxaphobia" <bit-bucket@config.com> wrote in message
news:slrnctjvj5.2ons.bit-bucket@shell.config.com...
> On Mon, 3 Jan 2005 17:52:37 -0600, w9gb wrote:
>> "Brian - KB9BVN" <kb9bvn@arrl.net> wrote in message
>> news:oJiCd.6114$Cc.2218@newsread3.news.pas.earthlink.net...
>>>I have ended up with several thousand PN2222A NPN's and PN3906 PNP's
>>> transistors in TO92 format.
>>
>> Are the 2N2222A transistors metal or plastic case?
>
> PN2222A's are [P]lastic(2)N2222A's
>
Thanks Jonesy,

I looked at the quad 2 and did not event see the prefix ! ha ..hah

gb

26. Re: Anyone working on Homebrew Crystal Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-04 04:48:57 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <ZepCd.23148$rL3.16585@trnddc03>
Source record: 21359

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
news:qFlCd.25900$Gj2.22498@bignews1.bellsouth.net...
> nospam@nouce.bellatlantic.net wrote:
> > On Mon, 3 Jan 2005 14:21:24 -0500, "Bill K"
> > <kirklandb_nospam@sympatico.ca> wrote:
> >
> >
> >>Anyone working on hombrewing their own crystal filters?
> >>I would be interested in hearing your experience esp in regards to uP
> >>crystals.
> >>
> >>I have most of the papers over the years so I am interested in hearing
about
> >>personal
> >>experiences.
> >
>I have built a 500 Hz, 2.4KHz and a 6KHz filter using 9 MHz rocks from
Dan's Small Parts for a RX I am building. They look quite good on my SNA.
Anxious to finish the N2PK VNA so I can see group delay.
The AM filter required toroidal in/out transformers to reduce the in/out Z
down to 200 OHms of the 2 narrower filters. I characterized the crystals on
an HP network analyzer and used W7ZOI's math.

Dale W4OP

27. Re: Low noise -- op amps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-04 12:58:53 UTC
From: John Walton <jdwalton@comcast.net>
Message-ID: <sdudndrYapQiDEfcRVn-qw@comcast.com>
Source record: 21360

It's in the product description from TI, the TLC274 is 25nV/rtHz, the TL064 is 42nV/rtHz, not ultra-low by the standard of the AD797.

"MikeN" <mnewman@clear.net.nz> wrote in message news:o9jjt095jbr74q9bs9f3dr1d0f5inv1v60@4ax.com...
> I have a choice of two op-amps for an audio application.
>
> Which of the two, TL064 or TLC274 would generate the lowest internal
> noise in a 300 - 3000 Hz audio application.
>
> Thanks
>
> MikeN

28. Re: Anothe Parts Deal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-04 12:59:23 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <cvwCd.11265$iy3.10217@fe04.lga>
Source record: 21361

"w9gb" <onw9mapsgb@no.arrl.spam.net> wrote in message
news:1LOdnTxwWNK8jkfcRVn-ug@comcast.com...

> I looked at the quad 2 and did not event see the prefix ! ha ..hah

Well, I woulda thunk the TO-92 woulda been a dead giveaway, even if the P
wasn't

..

29. FT: Belden #9307 .085" coax for SMA parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-04 16:52:23 UTC
From: alihernlem@hotmail.com
Message-ID: <1104857543.217811.73000@z14g2000cwz.googlegroups.com>
Source record: 21362

Anyone have some unused solder connect .085" (RG-405) SMA plugs that they would like to swap for
Belden #9307 Conformable coax cable? I believe this is identical or substantially identical to #1671A. Label says:

Conformable (TM) 50 ohm Coax Cable
24 AWG (.21 sq mm) silver plated Cu covered steel
.022 (.56 mm) TFE Teflon Dielectric
Cu-Tin composite shield 100% coverage
.085" O.D.

Proposed exchange rate about 2' of coax per SMA connector, subject to negotiation.

Brad

30. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-04 19:09:20 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <34084hF44fncmU1@individual.net>
Source record: 21363

She was the telegraphist's daughter, and she
only did it 'cos her dada did it ;-)

"Bill Turner" <noway@nohow.com> wrote in message
news:mcolt01i1tbs2cbeseruao3kepu975mi62@4ax.com...
> On Mon, 3 Jan 2005 11:41:56 -0000, "Airy R. Bean" <me@privacy.net>
> wrote:
> >Morse is digital if it results from on-off keying using the fingers.
> Hard to argue with that. :-)

31. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-04 19:23:58 UTC
From: jimp@specsol-spam-sux.com
Message-ID: <creqgerbs1@mail.specsol.com>
Source record: 21364

john graesser <graesser@tca.net> wrote:

> "Bill Turner" <noway@nohow.com> wrote in message
> news:tmcgt01ejr3vd59t0vr14vr90u74jcvajp@4ax.com...
> > On 01 Jan 2005 19:25:09 GMT, Bert Hyman <bert@visi.com> wrote:
> >
> > >What's "better" mean?
> >
> > Check your dictionary.
> >
> >
> > >How much better is "good enough"?
> >
> > Good enough for 100% reliability.
> >
> >
> > >How much more will
> > >the "better" stuff cost?
> >
> > Doesn't matter when lives are at stake. Get it.

> One of the local hams here is also a pilot instructor, while flying one day
> the mic on his aircraft radio broke. Being a long time brass pounder he took
> the mic apart and made a key out of it.

> Luckily one of the people in the tower that day knew morse and was able to
> understand Mike's messages to the tower.

> Lucky for them that aircraft band was still am so Mike had a carrier to turn
> on and off.

> Nothing is 100% reliable. You never know when you will be faced with using
> broken or impaired equipment so you have to be prepared to improvise.
> thanks, John.
> KC5DWD

Sounds like a good story, except:

Why would he need to take the mic apart when he could just use the push
to talk switch?

If the "radio broke", how was he able to transmit at all?

If what really broke was the mic or the modulation section of the only
comm radio on board, transmitting a long carrier on a regular basis
would get the attention of ATC personnel and resulted in a call to the
aircraft.

If he was an instructor, or a pilot at all, he should know the procedures for communications failure as described in FARs 91.126, 91.127, and 91.129, none of which call for using morse code.

FAR 91.185 wouldn't apply since he couldn't be flying IFR with just one radio.

--
Jim Pennino

Remove -spam-sux to reply.

32. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-04 20:38:27 UTC
From: James Horn <jimhorn@svn.net>
Message-ID: <10tlvm3a5ksfj44@corp.supernews.com>
Source record: 21365

john graesser <graesser@tca.net> wrote:

> Nothing is 100% reliable. You never know when you will be faced with using
> broken or impaired equipment so you have to be prepared to improvise.
> thanks, John.
> KC5DWD

Good point. But nowadays, why not call the tower's published telephone number on your cell phone? In the early '70s an acquaintance used 2M autopatch to get landing clearance for the USAF C-130 Herculese he was flying when its radios died - thought the Barksdale AFB tower folks were mighty surprised to get that call long before the days of cell phones...

Jim Horn, WB9SYN/6

33. Winterfest 2005 - Jan 15 - Loveland CO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-04 21:15:56 UTC
From: kc0atc@qsl.net
Message-ID: <1104873356.564091.205540@f14g2000cwb.googlegroups.com>
Source record: 21366

```
WinterFest 2005
Northern Colorado's best winter hamfest and
electronics swapmeet.

Saturday January 15th, 2005
8 am starting time.

McMillian Building, old county fairgrounds
700 S. Railroad
Loveland, Colorado

Admission $5
Vendor tables available
Door Prizes include a Kenwood TM-V7A

Contact me for further info
```

34. Re: Heathkit Hwa-2036-3 p.s.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-05 01:24:07 UTC
From: Mike Burch <mburch46@mchsi.com>
Message-ID: <XkHCd.74216$k25.73458@attbi_s53>
Source record: 21367

THank you to all of you who responded, You really helped me out a lot.
Mike

35. Wireless Innovation Contest - Get your innovation noticed!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-05 02:26:29 UTC
From: Andrey <a8421@intergate.bc.ca>
Message-ID: <10tmk1sgnc20255@corp.supernews.com>
Source record: 21368

Get your innovation noticed! Submit it to Wireless Innovation Contest.

If you've created something that's really making a difference, then we want to hear about it. And, more importantly, we want to tell the World about it.

2005 Wireless Innovation Contest takes place in Vancouver, BC Canada. The 2005 Wireless Innovation Contest is out to prove how wireless is changing the world. It could be a successful product, an enterprise solution that saved your customer thousands of dollars, a government solution that helped save lives or enhanced education or an entertainment solution that has made the world a lot more fun.

Nokia, Telus Mobility and other Industry Partners throw Support Behind the Contest this year. A panel of industry leaders will judge each entry and decide on a winner and runner-ups. Winners of WIC 2005 are rewarded with targeted exposure in media and at trade shows, inclusion in a specialcase study publication and a one-hour mentor session with the panel of judges.

More information is available at www.winbc.org/contest

36. Making our own valves (Tubes for the Non-English-Speaking Yanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-05 12:14:49 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <34247bF45ps44U1@individual.net>
Source record: 21369
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

As time passes, valves of the sort and size that we use in our TX's
are becoming increasingly rare and expensive.

There is nearly a century of folklore and industrial craft in producing
valves and overcoming problems thereto, and it seems to me that now is the
time to gather together this expertise before all the associated craftsmen
and industrialists go to the grave and their knowledge becomes lost
forever.

Armed with such a body of knowledge, could we Radio Hams, as a body of
technically-motivated and technically-inspired aficionados, then consider
manufacturing our own?

Is it not, after all, our pride in such technical activity that sets us
apart from
the CBer who buys all his gear from a shop (and even sends it back their
if ever it needs repair)?

37. Re: Making our own valves (Tubes for the Non-English-Speaking Yanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-05 12:36:22 UTC
From: Steve H <g0lmv@yahoo.co.uk>
Message-ID: <41dbdf49$1_2@mk-nntp-1.news.uk.worldonline.com>
Source record: 21370
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

If you'd like some beryllium oxide to get you started please let me know..

Steve H
"Airy R. Bean" <me@privacy.net> wrote in message
news:34247bF45ps44U1@individual.net...
> As time passes, valves of the sort and size that we use in our TX's
> are becoming increasingly rare and expensive.
>
> There is nearly a century of folklore and industrial craft in producing
> valves and overcoming problems thereto, and it seems to me that now is the
> time to gather together this expertise before all the associated craftsmen
> and industrialists go to the grave and their knowledge becomes lost
> forever.
>
> Armed with such a body of knowledge, could we Radio Hams, as a body of
> technically-motivated and technically-inspired aficionados, then consider
> manufacturing our own?
>
> Is it not, after all, our pride in such technical activity that sets us
> apart from
> the CBer who buys all his gear from a shop (and even sends it back their
> if ever it needs repair)?
>
>

38. Re: Making our own valves (Tubes for the Non-English-Speaking Yanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-05 13:12:58 UTC
From: "jim.gm4dhj" <jim.gm4dhj@ntlworld.com>
Message-ID: <uJRCd.97$iX.54@newsfe3-win.ntli.net>
Source record: 21371
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

a century of folklore and industrial craft in producing
> valves and overcoming problems thereto, and it seems to me that now is the
> time to gather together this expertise before all the associated craftsmen
> and industrialists
>
>
Don't worry transistors are just a passing phase........

39. Re: Making our own valves (Tubes for the Non-English-Speaking Yanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-05 13:40:23 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <b7SCd.32214$nN6.7906@edtnps84>
Source record: 21372
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

If you are serious, you might wanna snag-up all the tube mfg. equipment
going for cheap-cheap in Russia and China, before New-Sensor does.

--
Gregg t3h g33k
"Ratings are for transistors....tubes have guidelines"
http://geek.scorpiorising.ca

40. Re: Winterfest 2005 - Jan 15 - Loveland CO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-05 13:41:44 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <s8SCd.32215$nN6.5324@edtnps84>
Source record: 21373

Is this what's called "CQ-Wintereen"? ;-p

--
Gregg t3h g33k
"Ratings are for transistors....tubes have guidelines"
http://geek.scorpiorising.ca

41. Re: Anothe Parts Deal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-05 14:07:16 UTC
From: w9gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <p8udnd-pbb8IaUbcRVn-rA@comcast.com>
Source record: 21375

"xpyttl" <xpyttl_NOSPAM@earthling.net> wrote in message
news:cvwCd.11265$iy3.10217@fe04.lga...
> "w9gb" <onw9mapsgb@no.arrl.spam.net> wrote in message
> news:1LOdnTxwWNK8jkfcRVn-ug@comcast.com...
>
>> I looked at the quad 2 and did not event see the prefix ! ha ..hah
>
> Well, I woulda thunk the TO-92 woulda been a dead giveaway, even if the P
> wasn't
>
... true, since I have never seen a flat side to a metal case transistor
(that worked)

gb

42. Re: Making our own valves (Tubes for the Non-English-Speaking Yanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-05 14:11:40 UTC
From: Mark <bigfathhairybiker@MAILhot.com>
Message-ID: <41dbf418$0$16572$ed9e5944@reading.news.pipex.net>
Source record: 21374
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

There is a bloke in London who makes his own design of valves in his shed.

I've seen him making them. Amazing!

43. Re: Anothe Parts Deal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-05 15:43:50 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <41dc0b36$0$16577$cc9e4d1f@news-text.dial.pipex.com>
Source record: 21376

"w9gb" <onw9mapsgb@no.arrl.spam.net> wrote in message
news:ae2dnYJ1FaVKR0TcRVn-uw@comcast.com...
> "Brian - KB9BVN" <kb9bvn@arrl.net> wrote in message
> news:oJiCd.6114$Cc.2218@newsread3.news.pas.earthlink.net...
>>I have ended up with several thousand PN2222A NPN's and PN3906 PNP's
>> transistors in TO92 format.
>
> Brian -
>
> Are the 2N2222A transistors metal or plastic case?

TO92 is a hint, as well as the 'P'. 8-)

73, Leon

44. Re: Making our own valves (Tubes for the Non-English-Speaking Yanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-05 17:49:15 UTC
From: David Edmonds <dedmonds73@yahoo.co.uk>
Message-ID: <vMVCd.393$Mw3.50@newsfe6-gui.ntli.net>
Source record: 21377
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Airy R. Bean wrote:

> As time passes, valves of the sort and size that we use in our TX's
> are becoming increasingly rare and expensive.

Expensive yes. Rare - not so - just expensive!

> There is nearly a century of folklore and industrial craft in producing
> valves and overcoming problems thereto, and it seems to me that now is the
> time to gather together this expertise before all the associated craftsmen
> and industrialists go to the grave and their knowledge becomes lost
> forever.

Sounds good to me.

> Armed with such a body of knowledge, could we Radio Hams, as a body of
> technically-motivated and technically-inspired aficionados, then consider
> manufacturing our own?

Well - there could be a market in this - though would the 'tooling up'
be more of an outlay than you would reap back?

> Is it not, after all, our pride in such technical activity that sets us
> apart from
> the CBer who buys all his gear from a shop (and even sends it back their
> if ever it needs repair)?

Was there any need to mention 'CBer' in this posting? Totally uneeded
and unrelated.

45. Re: Making our own valves (Tubes for the Non-English-Speaking Yanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-05 18:44:43 UTC
From: Micky Taker <at.aaat@isshhooo.sorry.i.have.a.cold.at.the.moment>
Message-ID: <vAWCd.50029$Z7.13496@fe2.news.blueyonder.co.uk>
Source record: 21378
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Airy R. Bean wrote:
> As time passes, valves of the sort and size that we use in our TX's
> are becoming increasingly rare and expensive.
>
> There is nearly a century of folklore and industrial craft in producing
> valves and overcoming problems thereto, and it seems to me that now is the
> time to gather together this expertise before all the associated craftsmen
> and industrialists go to the grave and their knowledge becomes lost
> forever.
>
> Armed with such a body of knowledge, could we Radio Hams, as a body of
> technically-motivated and technically-inspired aficionados, then consider
> manufacturing our own?
>
> Is it not, after all, our pride in such technical activity that sets us
> apart from
> the CBer who buys all his gear from a shop (and even sends it back their
> if ever it needs repair)?
>
>

Why stop there? Why not make your own capacitors, resistors, crystals etc. If you replace the valves (tubes) in your old TX with your shiny new "home made" ones, what happens when some other component fails? Do you pop down to your local electronics supplier (shop)and buy one of the shelf, Just like a CBer? Or will you make your own?

Anyway as far as I can see you couldn't make a "bloody mess" without buggering it up!

A *Real Radio Ham* would make his own Universe.

Cheers,

Micky

46. Re: Making our own valves (Tubes for the Non-English-Speaking Yanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-05 20:35:40 UTC
From: Bill Janssen <billj9@ieee.org>
Message-ID: <wcYCd.2499$3F4.1104@news01.roc.ny>
Source record: 21379
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Airy R. Bean wrote:

>As time passes, valves of the sort and size that we use in our TX's
>are becoming increasingly rare and expensive.
>
>There is nearly a century of folklore and industrial craft in producing
>valves and overcoming problems thereto, and it seems to me that now is the
>time to gather together this expertise before all the associated craftsmen
>and industrialists go to the grave and their knowledge becomes lost
>forever.
>
>Armed with such a body of knowledge, could we Radio Hams, as a body of
>technically-motivated and technically-inspired aficionados, then consider
>manufacturing our own?
>
>Is it not, after all, our pride in such technical activity that sets us
>apart from
>the CBer who buys all his gear from a shop (and even sends it back their
>if ever it needs repair)?
>
>
>
>
Maybe you would like to buy my wire. I have one spool of wire marked
"Grid Wire" and another
of Tungsten (filament wire ?). I picked them up from surplus and don't
know who threw them out.

Bill K7NOM

47. Re: Making our own valves (Tubes for the Non-English-Speaking Yanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-05 20:49:49 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <crhjtdgko1@sparta.btinternet.com>
Source record: 21380
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

```
> it seems to me that now is the
> time to gather together this expertise before all the associated craftsmen
> and industrialists go to the grave and their knowledge becomes lost
> forever.
>
================================

A rather dramatic statement!

Google will be with us for ever.
```

48. Re: Making our own valves (Tubes for the Non-English-Speaking Yanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-05 21:16:13 UTC
From: tox <nospam@nospamming.co.com>
Message-ID: <xOYCd.242$073.59@newsfe1-win.ntli.net>
Source record: 21381
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Bill Janssen" <billj9@ieee.org> wrote in message
news:wcYCd.2499$3F4.1104@news01.roc.ny...
> >
> Maybe you would like to buy my wire. I have one spool of wire marked
> "Grid Wire" and another
> of Tungsten (filament wire ?). I picked them up from surplus and don't
> know who threw them out.
>

Unfortunately for Mr Bean, I'm almost certain, Social Security would not
wish to pay for them.

Regards
tox

49. Re: Making our own valves (Tubes for the Non-English-Speaking Yanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-05 21:29:06 UTC
From: Nimrod <nospamfor@me.com>
Message-ID: <3435rrF47ja7gU1@individual.net>
Source record: 21382
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Airy R. Bean" <me@privacy.net> wrote in message
news:34247bF45ps44U1@individual.net...
> As time passes, valves of the sort and size that we use in our TX's
> are becoming increasingly rare and expensive.
>
> There is nearly a century of folklore and industrial craft in producing
> valves and overcoming problems thereto, and it seems to me that now is the
> time to gather together this expertise before all the associated craftsmen
> and industrialists go to the grave and their knowledge becomes lost
> forever.
>
> Armed with such a body of knowledge, could we Radio Hams, as a body of
> technically-motivated and technically-inspired aficionados, then consider
> manufacturing our own?
>
Don't you have the interlect to do anything original? All you seem to do is
follow or criticise better men, neither of which you do very well.

Or is this your latest money making scheme?

(After seeing the financial status of your company from HULLY's link I see
you need one.)

Tell us, did your foray into AI not make you heaps of money?

Quote made by you on 1998/11/19

"My main side-interest is to get an understanding of consciousness
(Iwant to make heaps of money in AI & robotics!) mainly through
introspection; it is with some shock that I realise for how long
this has been going on; my philosophy notebook dates back 12 years."

That study is now 18 years advanced! (Even longer than you've studied DSP!)

Any return yet? No?

Maybe this introspection is the problem. Had you thought of studying someone
with some real intelligence?

50. WTB MSM5524 IC

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-05 22:08:31 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <zzZCd.12545$iC4.12332@newssvr30.news.prodigy.com>
Source record: 21383
Cross-posted to:
rec.antiques.radio+phono,sci.electronics.repair,sci.electronics.components,rec.radio.shortwave,rec.radio.amateur.homebrew

I have a late 70s Yaesu FRG-7700 that has a partially working display IC that won't blank center segments. I'd like to find a new or used one or a buy a dead Yaesu or Kenwood R-1000 or other equipment that uses one. It's a 40 pin IC made by OKI stamped MSM5524RS. I've seen the one for auction on Yahoo in Singapore but it's too pricey for this radio because it still has other problems. Any tips or leads appreciated.
tnx

--

73
Hank WD5JFR

51. Re: Making our own valves (Tubes for the Non-English-Speaking Yanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-05 23:33:01 UTC
From: TW <kilocycles**@**yahoo.com>
Message-ID: <m4uot0lnr633taq3f78mo6da19ivi1ug2d@4ax.com>
Source record: 21384
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

On Wed, 5 Jan 2005 21:29:06 -0000, "Nimrod" <nospamfor@me.com> wrote:

>"Airy R. Bean" <me@privacy.net> wrote in message
>news:34247bF45ps44U1@individual.net...
>> As time passes, valves of the sort and size that we use in our TX's
>> are becoming increasingly rare and expensive.
>>
>> There is nearly a century of folklore and industrial craft in producing
>> valves and overcoming problems thereto, and it seems to me that now is the
>> time to gather together this expertise before all the associated craftsmen
>> and industrialists go to the grave and their knowledge becomes lost
>> forever.
>>
>> Armed with such a body of knowledge, could we Radio Hams, as a body of
>> technically-motivated and technically-inspired aficionados, then consider
>> manufacturing our own?
>>
> Don't you have the interlect to do anything original? All you seem to do is
>follow or criticise better men, neither of which you do very well.
>
>Or is this your latest money making scheme?
>
>(After seeing the financial status of your company from HULLY's link I see
>you need one.)
>
>Tell us, did your foray into AI not make you heaps of money?
>
>Quote made by you on 1998/11/19
>
>"My main side-interest is to get an understanding of consciousness
>(Iwant to make heaps of money in AI & robotics!) mainly through
>introspection; it is with some shock that I realise for how long
>this has been going on; my philosophy notebook dates back 12 years."
>
>That study is now 18 years advanced! (Even longer than you've studied DSP!)
>
>Any return yet? No?
>
>Maybe this introspection is the problem. Had you thought of studying someone
>with some real intelligence?
>
>
I wonder if the AI products made by that company had any "interlect"?

:-)

52. Re: Making our own valves (Tubes for the Non-English-Speaking Yanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-06 00:34:11 UTC
From: Dave <davenpat@btopenworld.com>
Message-ID: <cri122pff1@titan.btinternet.com>
Source record: 21385
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:crhjtdgko1@sparta.btinternet.com...
> > it seems to me that now is the
> > time to gather together this expertise before all the associated
craftsmen
> > and industrialists go to the grave and their knowledge becomes lost
> > forever.
> >
> ================================
>
> A rather dramatic statement!
>
> Google will be with us for ever.

Thanks for not passing on my message to Gary, Reg.

Dave

53. Re: WTB MSM5524 IC

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-06 04:14:34 UTC
From: vincentelectronics@erols.com
Message-ID: <1104984874.735792.128460@f14g2000cwb.googlegroups.com>
Source record: 21386
Cross-posted to: rec.antiques.radio+phono, sci.electronics.repair, sci.electronics.components, rec.radio.shortwave, rec.radio.amateur.homebrew

Henry Kolesnik wrote:
> I have a late 70s Yaesu FRG-7700 that has a partially working display
IC
> that won't blank center segments. I'd like to find a new or used one
or a
> buy a dead Yaesu or Kenwood R-1000 or other equipment that uses one.
It's a
> 40 pin IC made by OKI stamped MSM5524RS. I've seen the one for
auction on
> Yahoo in Singapore but it's too pricey for this radio because it
still has
> other problems. Any tips or leads appreciated.
> tnx
>
> --
>
> 73
> Hank WD5JFR

Hank,

Call 4 Star Electronics at 949.240.8500 or you can use a search engine with the IC number only and look for this company. They have a quote page you fill out.

54. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-06 05:20:50 UTC
From: Tony VE6MVP <tony@REMOVEve6mvp.com>
Message-ID: <hkipt05nkpvth7eg20ejnpal6ggm4emf3t@4ax.com>
Source record: 21387

On Mon, 3 Jan 2005 11:41:56 -0000, "Airy R. Bean" <me@privacy.net>
wrote:

>> >(after all morse is digital)
>> Morse is binary (having two states), but it is not digital, since the
>> states do not represent numbers.

>Morse is digital if it results from on-off keying using the fingers.

<chuckle> Good one!

Tony

55. Re: Making our own valves (Tubes for the Non-English-Speaking Yanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-06 12:02:01 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <344o01F459996U1@individual.net>
Source record: 21389
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

```
But have all the craftsmen posted their knowledge?

Perhaps some of them do not use the Internet?

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:crhjtd$gko$1@sparta.btinternet.com...
> > it seems to me that now is the
> > time to gather together this expertise before all the associated
craftsmen
> > and industrialists go to the grave and their knowledge becomes lost
> > forever.
> >
> ================================
>
> A rather dramatic statement!
>
> Google will be with us for ever.
>
>
```

56. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-06 12:04:29 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <344o02F459996U2@individual.net>
Source record: 21388

Misleading posting-order corrected.....

"Tony VE6MVP" <tony@REMOVEve6mvp.com> wrote in message
news:hkipt05nkpvth7eg20ejnpal6ggm4emf3t@4ax.com...
> On Mon, 3 Jan 2005 11:41:56 -0000, "Airy R. Bean" <me@privacy.net>
> wrote:
>
> >Morse is digital if it results from on-off keying using the fingers.
>
> >> >(after all morse is digital)
> >> Morse is binary (having two states), but it is not digital, since the
> >> states do not represent numbers.
> <chuckle> Good one!

57. Re: Making our own valves (Tubes for the Non-English-Speaking Yanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-06 12:14:37 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <8saqt09o3seoair0jonfpe26ji4f10ksi9@4ax.com>
Source record: 21390
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

On Thu, 6 Jan 2005 12:02:01 -0000, "Airy R. Bean" <me@privacy.net>
wrote:

>But have all the craftsmen posted their knowledge?
>
>Perhaps some of them do not use the Internet?

Perhaps some, like you, won't follow urls.
--
from
Aero Spike

58. Re: WTB MSM5524 IC

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-06 13:31:40 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <05bDd.12696$iC4.10467@newssvr30.news.prodigy.com>
Source record: 21391
Cross-posted to:
rec.antiques.radio+phono,sci.electronics.repair,sci.electronics.components,rec.radio.shortwave,rec.radio.amateur.homebrew

```
Already did, min order is $300.00.
tnx

--

73
Hank WD5JFR
<vincentelectronics@erols.com> wrote in message
news:1104984874.735792.128460@f14g2000cwb.googlegroups.com...
>
> Henry Kolesnik wrote:
>> I have a late 70s Yaesu FRG-7700 that has a partially working display
> IC
>> that won't blank center segments. I'd like to find a new or used one
> or a
>> buy a dead Yaesu or Kenwood R-1000 or other equipment that uses one.
> It's a
>> 40 pin IC made by OKI stamped MSM5524RS. I've seen the one for
> auction on
>> Yahoo in Singapore but it's too pricey for this radio because it
> still has
>> other problems. Any tips or leads appreciated.
>> tnx
>>
>> --
>>
>> 73
>> Hank WD5JFR
>
> Hank,
>
> Call 4 Star Electronics at 949.240.8500 or you can use a search engine
> with the IC number only and look for this company. They have a quote
> page you fill out.
>
```

59. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-06 17:12:43 UTC
From: john graesser <graesser@tca.net>
Message-ID: <10tqse16uti9q05@corp.supernews.com>
Source record: 21392

"James Horn" <jimhorn@svn.net> wrote in message
news:10tlvm3a5ksfj44@corp.supernews.com...
> john graesser <graesser@tca.net> wrote:
>
> > Nothing is 100% reliable. You never know when you will be faced with
using
> > broken or impaired equipment so you have to be prepared to improvise.
> > thanks, John.
> > KC5DWD
>
> Good point. But nowadays, why not call the tower's published telephone
> number on your cell phone? In the early '70s an acquaintance used 2M
> autopatch to get landing clearance for the USAF C-130 Herculese he was
> flying when its radios died - thought the Barksdale AFB tower folks were
> mighty surprised to get that call long before the days of cell phones...
>
> Jim Horn, WB9SYN/6

This occured long before cell phones and perhaps even before the common
availability of HT's. He has been a ham for about 50 years and was a pilot
instructor around 30 years ago. Now he develops software and is part owner
of a utility trailer mfr. If you doubt his truth (which I don't, he is one
of the most honest people I know) contact W5WQN and ask him about it.

It was the ptt on the mic that broke, so as another noted, he couldn't just
key down on the mic and get the towers attention.

As for following proper rules, this is Texas, we tend to do what is needed,
not what some drone in Washington comes up with as rules.
thanks, John.
KC5DWD

60. transceiver or transverter designs

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-06 19:29:59 UTC
From: Paul <paul@m0eme.freeserve.co.uk>
Message-ID: <crk3jorrk1@newsg4.svr.pol.co.uk>
Source record: 21393

Has anyone got a workable design for either a 432MHz transceiver suitable
for EME or a transverter design for 432/28 or even a transverter for sale
e.g. a microwave modules 432/28?

--
73's de Paul M0EME
www.qsl.net/m0eme
4 times FO20 432MHz
FT847
100W
Spectran

61. Re: transceiver or transverter designs

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-06 20:13:32 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <ogHERYhsvZ3BFABx@ifwtech.co.uk>
Source record: 21394

Paul wrote:
>Has anyone got a workable design for either a 432MHz transceiver
>suitable for EME or a transverter design for 432/28 or even a
>transverter for sale e.g. a microwave modules 432/28?
>

"Suitable for EME" and "Microwave Modules 432/28" don't really belong in the same sentence. It's a very old design, with poor spectral purity and very audible drift - quite literally, you could pick one out from half-a-million miles away!

Something like the Down East Microwave 432-28 model, ready-built or kit, would be much better.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

62. Re: Making our own valves (Tubes for the Non-English-Speaking Yanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-07 05:26:13 UTC
From: The Eternal Squire <eternalsquire@comcast.net>
Message-ID: <0rWdncHtRIbogEPcRVn-og@comcast.com>
Source record: 21395
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

TW wrote:
> On Wed, 5 Jan 2005 21:29:06 -0000, "Nimrod" <nospamfor@me.com> wrote:
>
>
>>"Airy R. Bean" <me@privacy.net> wrote in message
>>news:34247bF45ps44U1@individual.net...
>>
>>>As time passes, valves of the sort and size that we use in our TX's
>>>are becoming increasingly rare and expensive.
>>>
>>>There is nearly a century of folklore and industrial craft in producing
>>>valves and overcoming problems thereto, and it seems to me that now is the
>>>time to gather together this expertise before all the associated craftsmen
>>>and industrialists go to the grave and their knowledge becomes lost
>>>forever.
>>>
>>>Armed with such a body of knowledge, could we Radio Hams, as a body of
>>>technically-motivated and technically-inspired aficionados, then consider
>>>manufacturing our own?
>>>
>>
>>Don't you have the interlect to do anything original? All you seem to do is
>>follow or criticise better men, neither of which you do very well.
>>
>>Or is this your latest money making scheme?
>>
>>(After seeing the financial status of your company from HULLY's link I see
>>you need one.)
>>
>>Tell us, did your foray into AI not make you heaps of money?
>>
>>Quote made by you on 1998/11/19
>>
>>"My main side-interest is to get an understanding of consciousness
>>(Iwant to make heaps of money in AI & robotics!) mainly through
>>introspection; it is with some shock that I realise for how long
>>this has been going on; my philosophy notebook dates back 12 years."
>>
>>That study is now 18 years advanced! (Even longer than you've studied DSP!)
>>
>>Any return yet? No?
>>
>>Maybe this introspection is the problem. Had you thought of studying someone

>>with some real intelligence?
>>
>>
>
> I wonder if the AI products made by that company had any "interlect"?
> :-)

Good name for a website! www.interlect.com

:)

63. Anyone want to proofread a SPICE for hams book?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-07 06:00:39 UTC
From: The Eternal Squire <eternalsquire@comcast.net>
Message-ID: <kbudnfvHwKEVuEPcRVn-ug@comcast.com>
Source record: 21396

Hi all,

I'm in the process of writing a book about designing simple amateur gear in SPICE. Anyone interested in proofing either the commentary or the circuits for obvious faults? The circuits I have do thier job, but they might not meet the opinion of people who eat toasted transistors for breakfast.

Thanks,

The Eternal Squire

64. Camenzind's Book

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-07 13:11:24 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <VA.00000082.001d427a@btinternet.com>
Source record: 21397

Hi,

If anyone is interested - Hans (of 555 fame) Camenzind's book
is finally finished and available for download at -

http://www.designinganalogchips.com/

Cheers - Joe

65. Re: Anyone want to proofread a SPICE for hams book?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-07 15:56:33 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <347pv4F446e70U1@individual.net>
Source record: 21398

That's not to be sneezed at!

"The Eternal Squire" <eternalsquire@comcast.net> wrote in message
news:kbudnfvHwKEVuEPcRVn-ug@comcast.com...
> I'm in the process of writing a book about designing simple amateur gear
> in SPICE.

66. Re: Low noise -- op amps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-07 18:41:36 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1105123296.963861.247520@z14g2000cwz.googlegroups.com>
Source record: 21399

John W. suggested an AD797 as a standard of comparison for voltage noise, which is fine, but for lowest noise figure, you need to know the source impedance that will be driving the circuit, and you need to be careful about part values in the rest of the circuit as well. Suggest you have a look at some other amps...there are so many good ones available these days. Since you mentioned two quad op amps, I assume you want to use a quad, and not singles like the AD797. TLC074 might be a better choice than either of your suggestions. There are other factors you may not have considered. The TLC274 has very limited slew rate for audio applications, and can only put out a bit over a volt p-p at 3kHz, for example. Is distortion an issue? If so, you at least should pick an amp with adequate slew rate.

If you'd like to optimize the choice of amplifier a bit better, and can pick from a wider range than just the two you mentioned, perhaps you could tell us more about the application and what other constraints there may be.

Cheers,
Tom

67. Re: Anyone want to proofread a SPICE for hams book?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-07 19:04:05 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <F2BDd.64358$KO5.15917@clgrps13>
Source record: 21400

Hi ES,

Outta curiosity, you focusing on Pspice, 3f4 or both?

Thanks.

--
Gregg t3h g33k
"Ratings are for transistors....tubes have guidelines"
http://geek.scorpiorising.ca

68. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-07 20:12:39 UTC
From: jimp@specsol-spam-sux.com
Message-ID: <crmqfn$4rn$1@mail.specsol.com>
Source record: 21401

Bill Turner <noway@nohow.com> wrote:
> On Thu, 6 Jan 2005 11:12:43 -0600, "john graesser" <graesser@tca.net>
> wrote:

> >It was the ptt on the mic that broke, so as another noted, he couldn't just
> >key down on the mic and get the towers attention.
> ____

> So once he had the mike apart and somehow keyed the PTT (touching wires
> together, presumably) why didn't he just talk into the mike? This story
> still does not ring true.

> --
> Bill, W6WRT

Even if true, rather than being an example of "morse code saves the day",
it is an example of stupidity.

Contrary to what most of the non-flying public may think, loss of
communications in the air is a non-event and not a life or death situation.

If you lose communications at a towered airport, all you have lost is the
ability to get traffic information from the tower.

Essentially what you are supposed to do is carefully enter the pattern
being extra vigilant for other aircraft and watch the tower for light
gun signals.

The pilot's attention needs to be outside the aircraft looking for other
aircraft, not screwing around playing with microphone wires.

Actions as described might be part of the reason this person "used to be"
an instructor.

--
Jim Pennino

Remove -spam-sux to reply.

69. Re: WTB MSM5524 IC

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 00:56:03 UTC
From: Franc Zabkar <fzabkar@optussnet.com.au>
Message-ID: <ambut0h2o47o89r29hsujn7nh7nmv21o48@4ax.com>
Source record: 21402
Cross-posted to:
rec.antiques.radio+phono,sci.electronics.repair,sci.electronics.components,rec.radio.shortwave,rec.radio.amateur.homebrew

On Wed, 05 Jan 2005 22:08:31 GMT, "Henry Kolesnik"
<kolesnik@sbcglobal.net> put finger to keyboard and composed:

>I have a late 70s Yaesu FRG-7700 that has a partially working display IC
>that won't blank center segments. I'd like to find a new or used one or a
>buy a dead Yaesu or Kenwood R-1000 or other equipment that uses one. It's a
>40 pin IC made by OKI stamped MSM5524RS. I've seen the one for auction on
>Yahoo in Singapore but it's too pricey for this radio because it still has
>other problems. Any tips or leads appreciated.
>tnx

My local DSE/Tandy store has 7 left in stock at AU$8.40 (= US$6)
each. I don't know if they will ship directly to you. If not, I will
endeavour to get them for you, if you can defray my costs. Contact me
via email if interested.

- Franc Zabkar
--
Please remove one 's' from my address when replying by email.

70. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 03:21:09 UTC
From: budgie <me@privacy.net>
Message-ID: <22kut054r7s05n3t45sjv1pnkcantoaf5l@4ax.com>
Source record: 21403

On Fri, 7 Jan 2005 20:12:39 +0000 (UTC), jimp@specsol-spam-sux.com wrote:

>Bill Turner <noway@nohow.com> wrote:
>> On Thu, 6 Jan 2005 11:12:43 -0600, "john graesser" <graesser@tca.net>
>> wrote:
>
>> >It was the ptt on the mic that broke, so as another noted, he couldn't just
>> >key down on the mic and get the towers attention.
>> ____
>
>> So once he had the mike apart and somehow keyed the PTT (touching wires
>> together, presumably) why didn't he just talk into the mike? This story
>> still does not ring true.
>
>> --
>> Bill, W6WRT
>
>Even if true, rather than being an example of "morse code saves the day",
>it is an example of stupidity.
>
>Contrary to what most of the non-flying public may think, loss of
>communications in the air is a non-event and not a life or death situation.
>
>If you lose communications at a towered airport, all you have lost is the
>ability to get traffic information from the tower.
>
>Essentially what you are supposed to do is carefully enter the pattern
>being extra vigilant for other aircraft and watch the tower for light
>gun signals.

The "comms failure" procedure is taught to student pilots (at least here in .au)
AND PRACTICED prior to their PPL. You enter via the normal entry point and
route, obviously maintaining separation. The tower intially will challenge you,
then on no response will request an acknowledgement that you can read THEIR
transmissions. If you can read them, they simply direct you and keep other
aircraft advised. In the absence of an ACK, it's the light system - and from
the challenge point onwards they alert other aircraft to the situation, so there
is minimal hazard.

>The pilot's attention needs to be outside the aircraft looking for other
>aircraft, not screwing around playing with microphone wires.

Rule of thumb here is 90% outside, 10% on instruments for VFR

>Actions as described might be part of the reason this person "used to be"
>an instructor.

71. Re: Anyone want to proofread a SPICE for hams book?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 03:35:33 UTC
From: The Eternal Squire <eternalsquire@comcast.net>
Message-ID: <a7qdnQ4OFvWZyELcRVn-uA@comcast.com>
Source record: 21404

LTSpice

Gregg wrote:
> Hi ES,
>
> Outta curiosity, you focusing on Pspice, 3f4 or both?
>
> Thanks.
>

72. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 05:08:38 UTC
From: jimp@specsol-spam-sux.com
Message-ID: <crnpsm$6im$1@mail.specsol.com>
Source record: 21405

budgie <me@privacy.net> wrote:
> On Fri, 7 Jan 2005 20:12:39 +0000 (UTC), jimp@specsol-spam-sux.com wrote:

> >Bill Turner <noway@nohow.com> wrote:
> >> On Thu, 6 Jan 2005 11:12:43 -0600, "john graesser" <graesser@tca.net>
> >> wrote:
> >
> >> >It was the ptt on the mic that broke, so as another noted, he couldn't just
> >> >key down on the mic and get the towers attention.
> >> ____
> >
> >> So once he had the mike apart and somehow keyed the PTT (touching wires
> >> together, presumably) why didn't he just talk into the mike? This story
> >> still does not ring true.
> >
> >> --
> >> Bill, W6WRT
> >
> >Even if true, rather than being an example of "morse code saves the day",
> >it is an example of stupidity.
> >
> >Contrary to what most of the non-flying public may think, loss of
> >communications in the air is a non-event and not a life or death situation.
> >
> >If you lose communications at a towered airport, all you have lost is the
> >ability to get traffic information from the tower.
> >
> >Essentially what you are supposed to do is carefully enter the pattern
> >being extra vigilant for other aircraft and watch the tower for light
> >gun signals.

> The "comms failure" procedure is taught to student pilots (at least here in .au)
> AND PRACTICED prior to their PPL. You enter via the normal entry point and
> route, obviously maintaining separation. The tower intially will challenge you,
> then on no response will request an acknowledgement that you can read THEIR
> transmissions. If you can read them, they simply direct you and keep other
> aircraft advised. In the absence of an ACK, it's the light system - and from
> the challenge point onwards they alert other aircraft to the situation, so there
> is minimal hazard.

> >The pilot's attention needs to be outside the aircraft looking for other
> >aircraft, not screwing around playing with microphone wires.

> Rule of thumb here is 90% outside, 10% on instruments for VFR

> >Actions as described might be part of the reason this person "used to be"
> >an instructor.

It is basically the same in the US.

So far I've had three comm failures in flight in rental aircraft, none of
which caused the slightest sweat.

--
Jim Pennino

Remove -spam-sux to reply.

73. Re: beeswax in an oscillator compartment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 05:50:07 UTC
From: Rick Karlquist N6RK <richard@karlquist.removethis.com>
Message-ID: <8Nadnf27areq6ULcRVn-tg@comcast.com>
Source record: 21406

In 1975, I worked for a marine radio company called Konel.
I worked on their first synthesized radio, which I inherited
from another designer. The original design had a VCO that
was quite microphonic. We didn't even bother with beeswax,
we potted itin Red Glyptol. Even that wasn't good enough
for two reasons. The speaker was in the same box and the
sailors would turn it up so you could hear the radio over
the engine noise. Also, the 10,000 HP engines on tug boats
produced a lot of vibration which got into the VCO.
I designed a VCO with an inductor printed on the PC board,
and that did the trick. A few months later, Konel went
out of business and few if any radios were produced.

Rick N6RK

"Larry Gagnon" <lagagnon@fakeuniserve.com> wrote in message
news:pan.2004.12.15.21.21.27.858623@fakeuniserve.com...
> I posted a few days ago about repairing a VHF marine radio. Thankfully I
> solved my problem, locating three cold solder joints in the VCO, which
> entailed removing metal shields and all the beeswax that coated all the
> components. That was character building work!
>
> I gather the beeswax is to ensure rigid components to maintain stability
> of the oscillator? Any other reasons for it? Is it necessary for me to
> remelt the old wax and spread it around as before, or can I get away with
> just reshielding the VCO?
>
> Any suggestions appreciated.
>
> Larry VE7EA
>
> --
> ********************************
> to reply via email remove "fake"
> Microsoft will soon release their newest product: a vacuum cleaner.
> It will be their only product which doesn't suck.
>

74. Re: beeswax in an oscillator compartment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 08:46:44 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <bc7vt0hu6pktvrl9v4qb6v2v3uom3uncat@4ax.com>
Source record: 21407

On Fri, 7 Jan 2005 21:50:07 -0800, "Rick Karlquist N6RK"
<richard@karlquist.removethis.com> wrote:

>In 1975, I worked for a marine radio company called Konel.
>I worked on their first synthesized radio, which I inherited
>from another designer. The original design had a VCO that
>was quite microphonic. We didn't even bother with beeswax,
>we potted itin Red Glyptol. Even that wasn't good enough
>for two reasons. The speaker was in the same box and the
>sailors would turn it up so you could hear the radio over
>the engine noise. Also, the 10,000 HP engines on tug boats
>produced a lot of vibration which got into the VCO.
>I designed a VCO with an inductor printed on the PC board,
>and that did the trick. A few months later, Konel went
>out of business and few if any radios were produced.
>
>Rick N6RK
>
Even British WW2 equipment used beeswax, although the result wasn't
always so good, or perhaps not only English equipment since it was
mentioned in CQ, see http://home.online.no/~la8ak/93a.htm

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

75. advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 17:42:10 UTC
From: alanh_27@yahoo.com
Message-ID: <1105206130.373696.253970@c13g2000cwb.googlegroups.com>
Source record: 21408
Cross-posted to: rec.radio.amateur.homebrew, sci.electronics.repair, rec.autos.tech, alt.engineering.electrical, rec.aviation.homebuilt

cable lacing... a lost art.

Is there anything that a laced cable-bundle does better than a
tie-wrapped cable-bundle?

76. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 18:09:41 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <10u08f0smfcumc3@corp.supernews.com>
Source record: 21409
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

alanh_27@yahoo.com wrote:

> cable lacing... a lost art.
>
> Is there anything that a laced cable-bundle does better than a
> tie-wrapped cable-bundle?
>
Feed through a round tube.

Look good.

Lacing is still alive and well, it's used for many harnesses in
aerospace equipment, although tie-wrap is being used as well.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

77. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 18:25:25 UTC
From: John Kunkel <kunkel.j@shorts.comcast.net>
Message-ID: <FPednff7SMMSuH3cRVn-pQ@comcast.com>
Source record: 21410
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

<alanh_27@yahoo.com> wrote in message
news:1105206130.373696.253970@c13g2000cwb.googlegroups.com...
> cable lacing... a lost art.
>
> Is there anything that a laced cable-bundle does better than a
> tie-wrapped cable-bundle?

I don't know about "does better" but it sure looks good.

My background is in aviation maintenance and I laced the wires in a street rod years ago; very labor intensive but I got some comments on it from those had never seen it done. IMO it looks better in bundles where the wire is all the same color, the various colored wire commonly used in automotive applications doesn't look as good laced.

78. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 18:48:17 UTC
From: Matt Whiting <whiting@chilitech.net>
Message-ID: <crp9th01flk@enews4.newsguy.com>
Source record: 21413
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

alanh_27@yahoo.com wrote:

> cable lacing... a lost art.
>
> Is there anything that a laced cable-bundle does better than a
> tie-wrapped cable-bundle?
>

I think it looks nicer, but functionally I don't believe there is any
difference. Both methods keep the wires neat and organized.

Matt

79. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 18:49:28 UTC
From: CJT <abujlehc@prodigy.net>
Message-ID: <41E02B37.9040402@prodigy.net>
Source record: 21412
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

alanh_27@yahoo.com wrote:
> cable lacing... a lost art.
>
> Is there anything that a laced cable-bundle does better than a
> tie-wrapped cable-bundle?
>

Lacing might contribute a little extra strength in the long direction.

Plus, as others have noted, it looks better.

--
The e-mail address in our reply-to line is reversed in an attempt to
minimize spam. Our true address is of the form che...@prodigy.net.

80. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 18:51:26 UTC
From: w_tom <w_tom1@hotmail.com>
Message-ID: <41E02BAE.B94304EF@hotmail.com>
Source record: 21411
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

Lacing (if it really a nylon laced tube) protects wires from
failure due to constant vibration (ie automotive). Also the
lacing can hold cable together over long distances without
compressing insulation too tightly at the nylon ty wrapped.
Missing information is the environment for that cable. Looks
really have little to due with why things are done.
Furthermore, sometimes a better looking (cleaner) installation
can make things electrically worse.

alanh_27@yahoo.com wrote:
> cable lacing... a lost art.
>
> Is there anything that a laced cable-bundle does better than a
> tie-wrapped cable-bundle?

81. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 19:16:21 UTC
From: Phil <Phil@letskillspam.be>
Message-ID: <9kWDd.25088$iH4.1725506@phobos.telenet-ops.be>
Source record: 21414
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

"w_tom" <w_tom1@hotmail.com> wrote in message
news:41E02BAE.B94304EF@hotmail.com...
> Lacing (if it really a nylon laced tube) protects wires from
> failure due to constant vibration (ie automotive). Also the
> lacing can hold cable together over long distances without
> compressing insulation too tightly at the nylon ty wrapped.
> Missing information is the environment for that cable. Looks
> really have little to due with why things are done.
> Furthermore, sometimes a better looking (cleaner) installation
> can make things electrically worse.
>
> alanh_27@yahoo.com wrote:
> > cable lacing... a lost art.
> >
> > Is there anything that a laced cable-bundle does better than a
> > tie-wrapped cable-bundle?

Tie-wrapping can also turn a bundle of RF cables into a bundle of RF
filters!

82. TX-relay

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 19:38:57 UTC
From: geir knutsen <ge-knuts@online.no>
Message-ID: <cFWDd.3586$SI3.89498@news4.e.nsc.no>
Source record: 21415

Hi i just got an old pager PA and I`m planning to convert it for 2m use. For this project I need to put in two relays for bypassing the amp while receiving. Can anyone recommend the relays?
I`m also thinking of putting in a relay to take the power of the PA module while receiving to protect the transistors.

Any hints and kinks will help me allot.

Geir

83. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 19:42:57 UTC
From: CJT <abujlehc@prodigy.net>
Message-ID: <41E037C1.3000205@prodigy.net>
Source record: 21416
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

```
Phil wrote:
> "w_tom" <w_tom1@hotmail.com> wrote in message
> news:41E02BAE.B94304EF@hotmail.com...
>
>> Lacing (if it really a nylon laced tube) protects wires from
>>failure due to constant vibration (ie automotive). Also the
>>lacing can hold cable together over long distances without
>>compressing insulation too tightly at the nylon ty wrapped.
>>Missing information is the environment for that cable. Looks
>>really have little to due with why things are done.
>>Furthermore, sometimes a better looking (cleaner) installation
>>can make things electrically worse.
>>
>>alanh_27@yahoo.com wrote:
>>
>>>cable lacing... a lost art.
>>>
>>>Is there anything that a laced cable-bundle does better than a
>>>tie-wrapped cable-bundle?
>
>
> Tie-wrapping can also turn a bundle of RF cables into a bundle of RF
> filters!
>
>

... and make crosstalk more of an issue.

--
The e-mail address in our reply-to line is reversed in an attempt to
minimize spam. Our true address is of the form che...@prodigy.net.
```

84. Re: Need tube info for 1P25

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 20:02:23 UTC
From: Bob Weiss <bob.weiss@verizon.net>
Message-ID: <j%WDd.940$7b.568@trndny02>
Source record: 21417

Ken Scharf wrote:

> It's a 'head on' photomultiplier tube.
> They were used in flying spot scanners,
> and noise generators in radar jammers.

No, it isn't a PMT.

The 1P25 was the first commercial infrared image converter, now commonly called a "night vision" tube. Infrared energy is focused onto the photocathode at the large end of the tube, and a green image appears on a phosphor screen at the small end. These were used in "snooperscopes" and "sniperscopes" during WW2.

Firing it up requires about 5,000 V at a very low current. A resistive voltage divider sets the potentials for focusing, etc. The tube was declassified shortly after the war, and a good overview of it's operation was published in the Sept. 1946 issue of "Electronics". If you can't get a copy, email me and I can scan it for you.

Bob Weiss N2IXK

85. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 20:04:37 UTC
From: NSM <nowrite@to.me>
Message-ID: <p1XDd.80180$KO5.34387@clgrps13>
Source record: 21418
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

<alanh_27@yahoo.com> wrote in message
news:1105206130.373696.253970@c13g2000cwb.googlegroups.com...
| cable lacing... a lost art.
|
| Is there anything that a laced cable-bundle does better than a
| tie-wrapped cable-bundle?

Don't overlook spiral wrapping.

N

86. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 20:11:12 UTC
From: floyd@barrow.com
Message-ID: <87y8f34r6n.fld@barrow.com>
Source record: 21419
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

Matt Whiting <whiting@chilitech.net> wrote:
>alanh_27@yahoo.com wrote:
>
>> cable lacing... a lost art.
>> Is there anything that a laced cable-bundle does better than a
>> tie-wrapped cable-bundle?
>>
>
>I think it looks nicer, but functionally I don't believe there
>is any difference. Both methods keep the wires neat and
>organized.

That is true... *if* both are done correctly.

However, the usual poor job of lacing will have few if any
negative effects, while a poor job of using tie-wraps can
1) put crimps in the cables, 2) literally break wires, and
3) leave some very sharp edges that can slice up hands that
handle the bundle years into the future.

Hence, if the craftperson knows what they're doing... lacing is
pretty and tie-wrapping is easy. If they don't really know the
difference, lacing is safer.

--
Floyd L. Davidson <http://web.newsguy.com/floyd_davidson>
Ukpeagvik (Barrow, Alaska) floyd@barrow.com

87. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 20:13:41 UTC
From: Blueskies <nospamedblueskies@ameritech.net>
Message-ID: <V9XDd.6625$Vj3.4098@newssvr17.news.prodigy.com>
Source record: 21420
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

<alanh_27@yahoo.com> wrote in message
news:1105206130.373696.253970@c13g2000cwb.googlegroups.com...
> cable lacing... a lost art.
>
> Is there anything that a laced cable-bundle does better than a
> tie-wrapped cable-bundle?
>

Less cut knuckles.

Less expensive?

Lighter?

88. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 20:30:51 UTC
From: Matt Whiting <whiting@chilitech.net>
Message-ID: <crpfts11qpr@enews2.newsguy.com>
Source record: 21422
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

Phil wrote:

> "w_tom" <w_tom1@hotmail.com> wrote in message
> news:41E02BAE.B94304EF@hotmail.com...
>
>> Lacing (if it really a nylon laced tube) protects wires from
>>failure due to constant vibration (ie automotive). Also the
>>lacing can hold cable together over long distances without
>>compressing insulation too tightly at the nylon ty wrapped.
>>Missing information is the environment for that cable. Looks
>>really have little to due with why things are done.
>>Furthermore, sometimes a better looking (cleaner) installation
>>can make things electrically worse.
>>
>>alanh_27@yahoo.com wrote:
>>
>>>cable lacing... a lost art.
>>>
>>>Is there anything that a laced cable-bundle does better than a
>>>tie-wrapped cable-bundle?
>
>
> Tie-wrapping can also turn a bundle of RF cables into a bundle of RF
> filters!
>
>

How is tie wrapping any worse than lacing in this regard?

Matt

89. textronix 3a72 scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 20:37:22 UTC
From: george.brien@ns.sympatico.ca
Message-ID: <a298decf.0501081237.72c3d719@posting.google.com>
Source record: 21421

Just picked up (actually it too heavy to just pick up)
one of these old boat anchors. The cost was less tnan
a large coffee so I guess the fellow Ham wanted to move
it out of his basement!!
It makes a nice squiggly line when plugged in but without
a manual, I may have to turn it into a back doorstep.

No hits back on a "google' on this model.
Anyone familiar with this unit??

George- Nova Scotia

90. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 21:30:14 UTC
From: w_tom <w_tom1@hotmail.com>
Message-ID: <41E050E6.DD043B57@hotmail.com>
Source record: 21423
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

Ty wrap, for example, a coaxial cable. Now wire's
characteristic impedance is changed where ty wrap pressure has
changed dimensions of cable.

Matt Whiting wrote:
> How is tie wrapping any worse than lacing in this regard?
>
> Matt

91. 97.21(b)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 21:30:23 UTC
From: n2ey@aol.comSPAMNO
Message-ID: <20050108163023.21658.00000524@mb-m14.aol.com>
Source record: 21424

Lenof21 wrote:

> All licensees are perfectly legal to continue operating in their grace
> period.

Nope. Wrong. You are mistaken. Once an amateur's license expires,
he or she *cannot* legally operate until the is renewed.

To quote FCC rules:

"97.21(b) A person whose amateur station license grant has expired
may apply to the FCC for renewal of the license grant for another term
during a 2 year filing grace period. The application must be received
t the address specified above prior to the end of the grace period.
Unless and until the license grant is renewed, no privileges in this Part
are conferred."

Last sentence says it all: "Unless and until the license grant is renewed,
no privileges in this Part are conferred."

This isn't some fine point of the rules that's subject to interpretation.
FCC amateur licenses have 10 year terms, and if a license is allowed
to expire, the licensee *cannot* legally operate until the license is renewed.

Do you agree or disagree, Len?

> There is no necessity (nor sense) to eliminate those in the
> grace period from those in the normal 10-year license period from
> any class totals.

Sure there is - their licenses are expired and they cannot operate.

If you want to include expired-but-in-the-grace-period licensees in
the totals, go right ahead. But be sure to indicate that you are doing
so, unless *you* want to "massage" the numbers.

The numbers I post twice each month are the totals of *unexpired*
licenses held by *individuals*. That's clear (to people who can
understand plain English) in every one of my post of license totals.
Nothing "massaged" about them.

> To repeat, the allegation that there is a "big drop" in Technician
> Class numbers is WRONG. Raw data doesn't show that.

What "raw data" have you examined, Len?

"hamdata.com" isn't "raw data".

Have you downloaded the FCC database? Processed it yourself?
Or do you simply take the numbers from a trusted website, same as
I do?

>Implying that the allegation still exists is merely compounding the wrongness.

Who made such an allegation, Len?

The sum of *unexpired* Technicians and Technician Pluses *has* declined since
May of 2000.

Jim, N2EY

92. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-08 22:03:22 UTC
From: Phil <Phil@letskillspam.be>
Message-ID: <KMYDd.25212$wF7.1681456@phobos.telenet-ops.be>
Source record: 21425
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

> Matt Whiting wrote:
> > How is tie wrapping any worse than lacing in this regard?
> >
> > Matt

"w_tom" <w_tom1@hotmail.com> wrote in message
news:41E050E6.DD043B57@hotmail.com...
> Ty wrap, for example, a coaxial cable. Now wire's
> characteristic impedance is changed where ty wrap pressure has
> changed dimensions of cable.
>

That is the answer indeed.

Applying tie wraps on a coaxial cable with a copper braid - even without exaggerating the pressure - precisely every 20 cm or so over tens of meters makes great filters.

I suppose lacing allows a milder treatment for RF cables.

Phil

93. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 00:01:23 UTC
From: Sam Goldwasser <sam@saul.cis.upenn.edu>
Message-ID: <6wekgvv5bg.fsf@saul.cis.upenn.edu>
Source record: 21426
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

CJT <abujlehc@prodigy.net> writes:

> alanh_27@yahoo.com wrote:
> > cable lacing... a lost art.
> > Is there anything that a laced cable-bundle does better than a
> > tie-wrapped cable-bundle?
> >
>
> Lacing might contribute a little extra strength in the long direction.
>
> Plus, as others have noted, it looks better.

And, you don't get flesh wounds from the cut ends of nylon cable ties. :)

--- sam | Sci.Electronics.Repair FAQ Mirror: http://repairfaq.ece.drexel.edu/
Repair | Main Table of Contents: http://repairfaq.ece.drexel.edu/REPAIR/
+Lasers | Sam's Laser FAQ: http://repairfaq.ece.drexel.edu/sam/lasersam.htm
| Mirror Sites: http://repairfaq.ece.drexel.edu/REPAIR/F_mirror.html

Note: These links are hopefully temporary until we can sort out the excessive
traffic on Repairfaq.org.

Important: Anything sent to the email address in the message header above is
ignored unless my full name is included in the subject line. Or, you can
contact me via the Feedback Form in the FAQs.

94. Re: 97.21(b)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 00:04:23 UTC
From: Lou <lf08357@yahoo.com>
Message-ID: <fA_Dd.34815$NC6.31908@newsread1.mlpsca01.us.to.verio.net>
Source record: 21427

"N2EY" <n2ey@aol.comSPAMNO> wrote in message
news:20050108163023.21658.00000524@mb-m14.aol.com...
> Lenof21 wrote:
>
>> All licensees are perfectly legal to continue operating in their grace
>> period.
>
> Nope. Wrong. You are mistaken. Once an amateur's license expires,
> he or she *cannot* legally operate until the is renewed.
>
> To quote FCC rules:
>
> "97.21(b) A person whose amateur station license grant has expired
> may apply to the FCC for renewal of the license grant for another term
> during a 2 year filing grace period. The application must be received
> t the address specified above prior to the end of the grace period.
> Unless and until the license grant is renewed, no privileges in this Part
> are conferred."
>
> Last sentence says it all: "Unless and until the license grant is renewed,
> no privileges in this Part are conferred."
>
> This isn't some fine point of the rules that's subject to interpretation.
> FCC amateur licenses have 10 year terms, and if a license is allowed
> to expire, the licensee *cannot* legally operate until the license is
> renewed.
>
> Do you agree or disagree, Len?
>
>> There is no necessity (nor sense) to eliminate those in the
>> grace period from those in the normal 10-year license period from
>> any class totals.
>
> Sure there is - their licenses are expired and they cannot operate.
>
> If you want to include expired-but-in-the-grace-period licensees in
> the totals, go right ahead. But be sure to indicate that you are doing
> so, unless *you* want to "massage" the numbers.
>
> The numbers I post twice each month are the totals of *unexpired*
> licenses held by *individuals*. That's clear (to people who can
> understand plain English) in every one of my post of license totals.
> Nothing "massaged" about them.
>

>> To repeat, the allegation that there is a "big drop" in Technician
>> Class numbers is WRONG. Raw data doesn't show that.
>
> What "raw data" have you examined, Len?
>
> "hamdata.com" isn't "raw data".
>
> Have you downloaded the FCC database? Processed it yourself?
> Or do you simply take the numbers from a trusted website, same as
> I do?
>
>>Implying that the allegation still exists is merely compounding the
>>wrongness.
>
> Who made such an allegation, Len?
>
> The sum of *unexpired* Technicians and Technician Pluses *has* declined
> since
> May of 2000.
>
> Jim, N2EY
>

Corretomundo..... the "grace" period is only for renewing to save you from having to retest for that class of license.
While it is expired - as in past the expiration date, you are NOT permitted to operate. The difference now is - where before you had to wait for the license to arrive in the mail, now you do not. Once you apply for renewal online and see it in the FCC database as having been renewed, then you can resume operations prior to receiving your new license in the mail.

Lou

95. Re: textronix 3a72 scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 00:25:01 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <VA.00000084.004323ed@btinternet.com>
Source record: 21428

Hi George,

The 3A72 is a plug-in amplifier not a complete scope. You
probably have something like a Tek 561, 4 or 5.

Have a look here for more info.

http://www.barrytech.com/tektronix/vintage/tekvintage.html

Cheers - Joe

96. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 00:45:08 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <o8%Dd.5344$06.4734@clgrps12>
Source record: 21429
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

In the case of temprature extremes (outdoor applications, direct UV exposure or vacuum tube chassis), I belive a laced bundle will outlive a tie strapped bundle. Also more economical - have you seen the prices of zip-ties that can handle the environmental extremes of good ol' lacing? EEEK!

--
Gregg t3h g33k
"Ratings are for transistors....tubes have guidelines"
http://geek.scorpiorising.ca

97. Re: TX-relay

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 00:47:25 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <xa%Dd.5345$06.2801@clgrps12>
Source record: 21430

For low power (<10W), a reed relay. Else, a RF solenoid perhaps would be
in order.

--
Gregg t3h g33k
"Ratings are for transistors....tubes have guidelines"
http://geek.scorpiorising.ca

98. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 00:59:32 UTC
From: Matt Whiting <whiting@chilitech.net>
Message-ID: <crpvlo02cai@enews4.newsguy.com>
Source record: 21432
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

w_tom wrote:
> Ty wrap, for example, a coaxial cable. Now wire's
> characteristic impedance is changed where ty wrap pressure has
> changed dimensions of cable.
>
> Matt Whiting wrote:
>
>>How is tie wrapping any worse than lacing in this regard?
>>
>>Matt

You don't have to apply 50 lbs of tension to the tie wrap! :-)

Matt

99. Re: textronix 3a72 scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 01:26:39 UTC
From: george.brien@ns.sympatico.ca
Message-ID: <1105233999.891407.188400@c13g2000cwb.googlegroups.com>
Source record: 21433

Hi Joe,
Of course, you,re right - I only read the marking
on the amp. It,s a Tek 568 and looks like
a pretty nice unit. Must search for some
more info on it
Thanks

George

100. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 01:31:47 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1c4a295f7761be398969c@localhost>
Source record: 21434
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

In article <crp9th01flk@enews4.newsguy.com>, whiting@chilitech.net
says...

> alanh_27@yahoo.com wrote:
>
> > cable lacing... a lost art.
> >
> > Is there anything that a laced cable-bundle does better than a
> > tie-wrapped cable-bundle?
> >
>
> I think it looks nicer, but functionally I don't believe there is any
> difference. Both methods keep the wires neat and organized.

Indeed there is a difference, notably in the aviation world.

Look inside the avionics bay of a commercial jet sometime. Come to
think of it, look at the innards of any piece of older avionics gear
that uses point-to-point wiring instead of, or in addition to, a printed
circuit backplane. What you'll see is the absence of tie-wraps, and an
abundance of laced cable harnesses.

I used to work at Boeing, and I had some friends in the Wire
Design group. I asked about this very question once. I was told that
tie-wraps are not favored for two reasons.

(1) If the tension on the tie-wrap is too high, it can crush
fragile coaxial cables.

(2) It's much easier to damage wire insulation under tie-wraps in
a high-vibration environment. Lacing twine is nowhere near as sharp
along its edges, and thus does not nick or cut said insulation.

Keep the peace(es).

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped
with surreal ports?"

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

101. Re: 12V Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 01:42:35 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <41E08C0B.8556CD0A@rica.net>
Source record: 21435

beerbarrel wrote:
>
> Anyone have a source for a schematic for a 12v around 20 to 30 amp
> power supply that makes use of a full wave rectifier? I've found quite
> a few for a bridge rectifier but I'm not really sure how to mod them
> to use a full wave rectifier. I have a nice 32v 30 amp center tapped
> at 16v transformer that I would like to make use of.
>
> Thanks...

You can use half of your bridge with this transformer to produce
something like 22 volts DC at the filter cap. Connect each end ot the
secondary to one of the AC inputs ot the bridge and connect the cap
and load between one of the DC connections of the bridge and the
center tap. If you use the + terminal of the bridge, it will be the
positive output. If you use the - terminal of the bridge, the center
tap will be the positive output.

The bridges will handle a bit more current than they are rated for,
because only two of the 4 rectifiers will be getting hot. They will
certainly need a heat sink for anything like 20 amperes out, though.

After you get that working and running a couple 12 volt headlights in
series (at least), you can start thinking about how to regulate this
down to 12 volts.

--
John Popelish

102. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 01:43:01 UTC
From: NSM <nowrite@to.me>
Message-ID: <F_%Dd.81160$KO5.75223@clgrps13>
Source record: 21436
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

"Matt Whiting" <whiting@chilitech.net> wrote in message
news:crpvlo02cai@enews4.newsguy.com...

| > Matt Whiting wrote:
| >
| >>How is tie wrapping any worse than lacing in this regard?
| >>
| >>Matt
|
| You don't have to apply 50 lbs of tension to the tie wrap! :-)
|
| Matt

I pull them up till they break then loosen them two clicks.
Or else I pull them up as tight as they'll go then add another 50 lbs.

N

103. Experimrnting with spread spectrum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 01:50:07 UTC
From: "David H." <d_h@nospam.com>
Message-ID: <ij21u0poa044b094j9045329rd2e74k6gg@4ax.com>
Source record: 21437

greets all,

Am looking to start experimenting with spread spectrum communications.

I'm pretty much starting from scratch in this area. Could anyone please point me to a good starting point? Thanks.

Dave

104. Re: Camenzind's Book

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 02:15:56 UTC
From: lenover21@aol.com
Message-ID: <20050108211556.21903.00000555@mb-m06.aol.com>
Source record: 21438

In article <VA.00000082.001d427a@btinternet.com>, Joe McElvenney
<ximac@btinternet.com> writes:

> If anyone is interested - Hans (of 555 fame) Camenzind's book
>is finally finished and available for download at -
>
> http://www.designinganalogchips.com/

Thank you for the link and advisory!

Camenzind's book is EXCELLENT in describing the elementary
semiconductor junctions and how/why they came to be. The
capsule history of the transistor and integrated circuits, along
with its movers and shakers who made it all possible is well worth
the time of downloading something bigger than 20 MB (the
manuscript is 280+ pages long). [set it up, go do some other
things, come back in an hour if you have dial-up in order to see if
it all came down] Note: Hans' comments on some of the personalities
involved in semiconductors favors Silicon Valley, but that's under-
standable considering his long involvement there.

The majority of the text is for actual IC design but that does tie in
with detailed circuit designing done with packages as well. I thought
it an excellent bridge between the insides and outsides of ICs. Gives
a better "feel" for lots of the rules and specs of ICs when connecting to
them and trying to make things work.

Despite an "easy" writing style and minimal math, it ain't a "Dummies"
kind of book. Those who've just learned to handle Ohm's Law should
wait a few years before tackling it.

LenAnderson@ieee.org

105. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 02:24:11 UTC
From: "Paul Hovnanian P.E." <Paul@Hovnanian.com>
Message-ID: <41E095CB.F324299B@Hovnanian.com>
Source record: 21431
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

Phil wrote:
>
> > Matt Whiting wrote:
> > > How is tie wrapping any worse than lacing in this regard?
> > >
> > > Matt
>
> "w_tom" <w_tom1@hotmail.com> wrote in message
> news:41E050E6.DD043B57@hotmail.com...
> > Ty wrap, for example, a coaxial cable. Now wire's
> > characteristic impedance is changed where ty wrap pressure has
> > changed dimensions of cable.
> >
>
> That is the answer indeed.
>
> Applying tie wraps on a coaxial cable with a copper braid - even without
> exaggerating the pressure - precisely every 20 cm or so over tens of meters
> makes great filters.
>
> I suppose lacing allows a milder treatment for RF cables.

I think the advantage of lacing here is that the loops around the bundle
are held in place along the length of the bundle. With tie wraps, more
pressure is needed to keep them from slipping over time.

--
Paul Hovnanian mailto:Paul@Hovnanian.com

Where am I going, and what am I doing in this handbasket?

106. WTB: new latching relay

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 03:27:00 UTC
From: k9sqg@aol.com
Message-ID: <20050108222700.06537.00002663@mb-m15.aol.com>
Source record: 21439

Looking for a new old stock latching relay for RF switching. Would like 1/4 inch contacts, and a well insulated frame.

73s,

Evan

107. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 05:23:59 UTC
From: lenover21@aol.com
Message-ID: <20050109002359.26734.00000001@mb-m11.aol.com>
Source record: 21440

In article <MPG.1c4a295f7761be398969c@localhost>, Dr. Anton T. Squeegee
<SpammersAreVermin@dev.null> writes:

>In article <crp9th01flk@enews4.newsguy.com>, whiting@chilitech.net
>says...
>
>> alanh_27@yahoo.com wrote:
>>
>> > cable lacing... a lost art.
>> >
>> > Is there anything that a laced cable-bundle does better than a
>> > tie-wrapped cable-bundle?
>> >
>>
>> I think it looks nicer, but functionally I don't believe there is any
>> difference. Both methods keep the wires neat and organized.
>
> Indeed there is a difference, notably in the aviation world.
>
> Look inside the avionics bay of a commercial jet sometime. Come to
>think of it, look at the innards of any piece of older avionics gear
>that uses point-to-point wiring instead of, or in addition to, a printed
>circuit backplane. What you'll see is the absence of tie-wraps, and an
>abundance of laced cable harnesses.
>
> I used to work at Boeing, and I had some friends in the Wire
>Design group. I asked about this very question once. I was told that
>tie-wraps are not favored for two reasons.

Ahem...Boeing is not necessarily a good source for wire bundles
that are "safe." See the NTSB report on the air liner that blew up
just outside of NYC over the bay...especially the part investigating
wire bundles going through a fuselange gas tank.

On the other hand, military avionics has used waxed nylon cord
(usually dyed black) and made under a MIL SPEC since the 1950s,
prinicipally because it was a neat, cheap way to bundle up wires
that were not otherwise clamped together.

Lots of folks use tie-wraps (trade name of one is "Ty-rap") but
invariably use sizes way too big for the purpose. There's a MIL
SPEC for that, too, if anyone bothers to look it up.

I bought a package of 100 Ty-Raps at DoItCenters couple months ago
to hold up an outside planter's drip irrigation tubing to an aluminum
awning. Tubing is very soft, about 1/4" diameter. 8-inch tie wraps,

standard white nylon material. No problem. No stoppages, no damages, but didn't try to put a full arm's strength into completing the tie. :-).

> (1) If the tension on the tie-wrap is too high, it can crush
>fragile coaxial cables.

Yeah, right. :-) Crushing RG-8? :-) How about semi-rigid SMA coax? :-)

I can't see, nor haven't seen anyplace that either tie-wraps or laces up coax cable of any size/type. Clamping with cushioned clamps, yes.

> (2) It's much easier to damage wire insulation under tie-wraps in
>a high-vibration environment. Lacing twine is nowhere near as sharp
>along its edges, and thus does not nick or cut said insulation.

Not necessarily true. Any tied/laced bundle of wires can be damaged by doing it at the wrong place with hi-g shock/vibration. I've seen improper lacing damage wire bundles (nylon-jacketed PVC, MIL SPEC for aircraft) just by the wrong operator's technique. I've seen tie-wrap bundles survive horrible hi-g vibration (in excess of 0.06 inch DA)...and some that failed a single 10g shock drop.

Nicely done lacing can be a neato show-job that could pass QA with flying colors. That's its main attraction: Looking good.

If there's to be some reasonably guaranteed, actual protection, then WEAVE lacing cord all around the bundle and make it super-neat looking. Distribution of tension quite even over all wires. Can cost a small fortune for a weaving machine plus all the spindles of lacing cord, though. Great way to make cable break-outs! :-)

Waxed nylon lacing cord is great for spot-tying small Teflon-insulated wire bundles. A 25 W iron can do the cut-offs and also melt the edges in the same operation.

Electrons, fields and waves don't always go along with human esthetic tastes of "neatness." :-)

LenAnderson@ieee.org

108. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 06:25:40 UTC
From: John Moriarity <k6qq@hdo.net>
Message-ID: <10u1jiqod30lged@corp.supernews.com>
Source record: 21441

> On the other hand, military avionics has used waxed nylon cord
> (usually dyed black) and made under a MIL SPEC since the 1950s,
> prinicipally because it was a neat, cheap way to bundle up wires
> that were not otherwise clamped together.

Here's my take on this (I laced a lot of wires
in the 1950s).

Wiring *harnesses* were made to facilitate
interconnection in equipment. Boards of
plywood with a drawing of the harness glued
on were the pattern, and finishing nails used
as guides for the wires. Wires were laid into
this guide according to a printed list. These
wires were usually pre-stripped and tinned.
Then the wires were soldered to connectors
when appropriate, and finally it was laced up.
This served both to constrain the wires, and
to make the harness easier to handle while
it was installed in the equipment. The stitches
or knots had to be done precisely according
to a MIL-Spec. It wasn't a lot of fun, and I
can remember rush jobs where everybody
from the lowest technician (me) to the engineering
manager worked long hours to make those
harnesses! Sure looked nice when it was done!

BTW, we only used white waxed nylon.

73, John - K6QQ

109. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 06:43:59 UTC
From: Robert Murray <bobm4360@earthlink.net>
Message-ID: <Po4Ed.2121$li4.1671@newsread3.news.pas.earthlink.net>
Source record: 21442
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

Biggest advantage is you don't get cut by poorly trimmed tie wraps!

110. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 06:52:07 UTC
From: Slip'er <cjhixon1@cox.net>
Message-ID: <8w4Ed.47830$8e5.10565@fed1read07>
Source record: 21443
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

Okay, what does lacing look like? I've never noticed it...

111. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 07:06:38 UTC
From: veeduber@isp.com
Message-ID: <1105254398.697242.11300@c13g2000cwb.googlegroups.com>
Source record: 21444
Cross-posted to: rec.radio.amateur.homebrew, sci.electronics.repair, rec.autos.tech, alt.engineering.electrical, rec.aviation.homebuilt

It weighs less, costs less, requires less equipment to install .
I've never heard of anyone slicing their hand open on lacing but I've
seen some serious lacerations from the cut-ends of tie-wrap.

If you've never done it, give it a try. Even if you don't use it,
it's a handy skill to have in your warbag.

-R.S.Hoover

112. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 07:28:31 UTC
From: NSM <nowrite@to.me>
Message-ID: <z25Ed.83017$KO5.46236@clgrps13>
Source record: 21445
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

"Slip'er" <cjhixon1@cox.net> wrote in message
news:8w4Ed.47830$8e5.10565@fed1read07...
| Okay, what does lacing look like? I've never noticed it...

Looks like a sausage wrapped in string. The string may be waxed string (old
style) or small diameter plastic tubing.

N

113. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 08:30:07 UTC
From: John G <Greentest@ozemail.com.au>
Message-ID: <tY5Ed.452$Sa7.23713@nnrp1.ozemail.com.au>
Source record: 21446
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

"Slip'er" <cjhixon1@cox.net> wrote in message
news:8w4Ed.47830$8e5.10565@fed1read07...
> Okay, what does lacing look like? I've never noticed it...
>
>
You have never worked on aircraft and are very young.
--
John G

Wot's Your Real Problem?

114. Re: TX-relay

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 09:04:43 UTC
From: geir knutsen <ge-knuts@online.no>
Message-ID: <zs6Ed.3476$IW4.75090@news2.e.nsc.no>
Source record: 21447

It is an 100w pa.
Any names or numbers will help
"Gregg" <nospam@unknown.org> wrote in message
news:xa%Dd.5345$06.2801@clgrps12...
> For low power (<10W), a reed relay. Else, a RF solenoid perhaps would be
> in order.
>
> --
> Gregg t3h g33k
> "Ratings are for transistors....tubes have guidelines"
> http://geek.scorpiorising.ca

115. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 09:28:26 UTC
From: Palindr☻me <sb382638@hotmail.com.invalid>
Message-ID: <34cbpqF491fcqU1@individual.net>
Source record: 21248
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

NSM wrote:
> "Slip'er" <cjhixon1@cox.net> wrote in message
> news:8w4Ed.47830$8e5.10565@fed1read07...
> | Okay, what does lacing look like? I've never noticed it...
>
> Looks like a sausage wrapped in string. The string may be waxed string (old
> style) or small diameter plastic tubing.

RS Components (rswww.com) have it under part number 554-080
and describe it as: "A strong and flexible rayon-cored PVC
string for all ‘cable-forming’ and similar applications.
Dia. 0·75 mm. Breaking strain 4·5 kg (10 lb).
Colour: Black."

The start and finish knots, as well as the intermediate
ones, are very specific and designed so that the cord will
not work loose or the knots move on the cable assembly.

Laced "Commercial" wiring looms are normally assembled on a
make-up board which has the position of every knot clearly
defined along the length of the loom - so each wiring loom
turns out identical.

Once you are taught how to lace, you don't forget. Probably
something to do with the instructor cutting the whole lacing
off the loom for a single knot incorrectly positioned,
tensioned or done - leaving you to do the whole job again,
and again and again.

It didn't used to pay to be "the" female apprentice as
females are supposed to have nimbler fingers, a greater
attention to detail and more patience for doing mundane
repetitive work. So, whereas the guys could get away with a
half-assed job, I got to see the same loom time and time
again... Or it could just be I missed out that bit of the
genes...

--

Sue

116. Re: Experimrnting with spread spectrum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 09:46:20 UTC
From: Wim Ton <wimton@blueyonder.co.uk>
Message-ID: <M37Ed.42393$C8.1417@fe3.news.blueyonder.co.uk>
Source record: 21249

> Am looking to start experimenting with spread spectrum communications.
>
> I'm pretty much starting from scratch in this area. Could anyone please point me to a
> good starting point? Thanks.
>

The ARRL published a book about spread spectrum quite a while ago. The Brittish magazine "Electronics & Wireless World" published a 2 part article at least 5 years ago.

Wim

117. Re: TX-relay

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 10:03:29 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <ca02u0lmbidajce70e09ctmnd7634ovllf@4ax.com>
Source record: 21250

On Sun, 9 Jan 2005 10:04:43 +0100, "geir knutsen" <ge-knuts@online.no>
wrote:

>It is an 100w pa.
>Any names or numbers will help
>"Gregg" <nospam@unknown.org> wrote in message
>news:xa%Dd.5345$06.2801@clgrps12...
>> For low power (<10W), a reed relay. Else, a RF solenoid perhaps would be
>> in order.

for HF almost anything will work

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

118. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 10:44:29 UTC
From: phil-news-nospam@ipal.net
Message-ID: <crr1ud02a56@news1.newsguy.com>
Source record: 21252
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

In alt.engineering.electrical alanh_27@yahoo.com wrote:

| cable lacing... a lost art.

Links for cable lacing:

How-to:
http://www.dairiki.org/hammond/cable-lacing-howto/

Pictures:
http://brucehowes.com/cable_lacing.htm

Products:
http://www.tecratools.com/pages/telecom/80170.html

--

| Phil Howard KA9WGN | http://linuxhomepage.com/ http://ham.org/ |
| (first name) at ipal.net | http://phil.ipal.org/ http://ka9wgn.ham.org/ |
---

119. Re: TX-relay

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 10:56:49 UTC
From: geir knutsen <ge-knuts@online.no>
Message-ID: <E58Ed.3486$IW4.75137@news2.e.nsc.no>
Source record: 21251

It is one of the Magnetic 8172 on your web.
The plan is to take out the circulator and place the TX relay there instead.
The LP-filter I`ll probably leave or mabe replace it with a bandpass for 2m.
Link to pa. http://home.online.no/~la8ak/d25.htm

Geir
"J M Noeding" <la8ak@online.no> wrote in message
news:ca02u0lmbidajce70e09ctmnd7634ovllf@4ax.com...
> On Sun, 9 Jan 2005 10:04:43 +0100, "geir knutsen" <ge-knuts@online.no>
> wrote:
>
>>It is an 100w pa.
>>Any names or numbers will help
>>"Gregg" <nospam@unknown.org> wrote in message
>>news:xa%Dd.5345$06.2801@clgrps12...
>>> For low power (<10W), a reed relay. Else, a RF solenoid perhaps would be
>>> in order.
>
> for HF almost anything will work
>
> ---
> J. M. Noeding, LA8AK, N-4623 Kristiansand
> http://home.online.no/~la8ak/c.htm

120. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 12:07:59 UTC
From: Ken Moffett <KLMoffett@mn.rr.com>
Message-ID: <41E11DEF.7E15@mn.rr.com>
Source record: 21253
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

Slip'er wrote:
>
> Okay, what does lacing look like? I've never noticed it...

Look at pages 3 and 4:

http://www.faa.gov/avr/afs/300/pdf/4b-ch11_12.pdf

121. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 12:12:44 UTC
From: Ken Moffett <KLMoffett@mn.rr.com>
Message-ID: <41E11F0C.4CA9@mn.rr.com>
Source record: 21254
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

Slip'er wrote:
>
> Okay, what does lacing look like? I've never noticed it...

Look at pages 3 and 4:
http://www.faa.gov/avr/afs/300/pdf/4b-ch11_12.pdf

122. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 13:53:18 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <iHaEd.13517$iC4.12685@newssvr30.news.prodigy.com>
Source record: 21255
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

No one has mentioned that cable mining is much safer and easier with laced
cables and can be impossible with ty wrapped cables.

--

73
Hank WD5JFR

<phil-news-nospam@ipal.net> wrote in message
news:crr1ud02a56@news1.newsguy.com...
> In alt.engineering.electrical alanh_27@yahoo.com wrote:
>
> | cable lacing... a lost art.
>
> Links for cable lacing:
>
> How-to:
> http://www.dairiki.org/hammond/cable-lacing-howto/
>
> Pictures:
> http://brucehowes.com/cable_lacing.htm
>
> Products:
> http://www.tecratools.com/pages/telecom/80170.html
>
> --
> --
> | Phil Howard KA9WGN | http://linuxhomepage.com/
> http://ham.org/ |
> | (first name) at ipal.net | http://phil.ipal.org/
> http://ka9wgn.ham.org/ |
> --

123. Re: Experimrnting with spread spectrum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 15:02:01 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <JHbEd.47843$8e5.9174@fed1read07>
Source record: 21256

Web sites for Spread Spectrum mode

http://www.tapr.org/tapr/html/Ffhsspaper.97.html

http://www.tapr.org/ss/

http://sss-mag.com/index.html

--
Caveat Lector

>> Am looking to start experimenting with spread spectrum communications.
>>
>> I'm pretty much starting from scratch in this area. Could anyone please
> point me to a
>> good starting point? Thanks.
>>
>

124. A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 15:04:59 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <34cvmdF42au28U1@individual.net>
Source record: 21257
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

.....is that we club together and conceive of a design
for an HF transceiver that could form the basis of the
station of any budding Radio Ham.

We wouldn't need any facilities other than were present in,
say, the KW2000 of 35 years ago (apart from greater than
200 kHz coverage on each band!)

None of the CBer's facilities such as scanners, memories,
CAT interfaces, CTCSS and the like are necessary.

I suggest that we consider a DSP approach for all the
baseband mod and demod, and then phasing techniques
for translating into the various bands.

A power output of 5W will be more than sufficient for
any self-respecting _REAL_ Radio Hams - it is only
CBers and CBers-Masquerading-As-Radio-Hams who
need to work with BBC levels of signal strength.

Such a project could be what we need to capture the
interest of newcomers who would not then be sidetracked
into the CB-like purchasing of brand-new rigs from the
shelves of emporia, and, having, constructed their own
rigs, would feel competent to maintain those rigs, unlike
those who send them back to the emporia and thus show
themselves as closet CBers.

We _COULD_ take a lead in this NG!

125. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 15:20:13 UTC
From: mexico_zero <nospam@please.com>
Message-ID: <NYbEd.2277$Rg1.705@newsfe4-gui.ntli.net>
Source record: 21258
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Airy R. Bean" <me@privacy.net> wrote in message >.....

>is that we club together and conceive of a design <snip>

> We wouldn't need any facilities other than were present in,
> say, the KW2000 of 35 years ago <snip>

> None of the CBer's facilities such as scanners, memories,
> CAT interfaces, CTCSS and the like are necessary <snip>

> I suggest that we consider a DSP approach for all the
> baseband mod and demod, and then phasing techniques
> for translating into the various bands.<snip>

Adress the contradictions and I may consider this as a sensible
suggestion....

126. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 15:30:11 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34d103F477pfqU1@individual.net>
Source record: 21259
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"mexico_zero" <nospam@please.com> wrote in message
news:NYbEd.2277$Rg1.705@newsfe4-gui.ntli.net...
>
> "Airy R. Bean" <me@privacy.net> wrote in message >.....
>
> >is that we club together and conceive of a design <snip>
>
> > We wouldn't need any facilities other than were present in,
> > say, the KW2000 of 35 years ago <snip>
>
> > None of the CBer's facilities such as scanners, memories,
> > CAT interfaces, CTCSS and the like are necessary <snip>
>
> > I suggest that we consider a DSP approach for all the
> > baseband mod and demod, and then phasing techniques
> > for translating into the various bands.<snip>
>
> Adress the contradictions and I may consider this as a sensible
> suggestion....

Indeed, not a bad idea at all.

However, what is to be gained by re-inventing a (in radio terms) stone age
design?

Thinks like computer control provide added challenge and attraction to the
idea, why dismiss them? They could always be add-ons. DSP. Oh dear. I
assume this phasing technique relies on Big K.

Or maybe he just meant mixing, an existing technique not needing DSP.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

127. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 15:33:47 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <vkj2u0th5qfrvlj064novucosk5u61dbf7@4ax.com>
Source record: 21260
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

On Sun, 9 Jan 2005 15:04:59 -0000, "Airy R. Bean" <me@privacy.net>
wrote:

>.....is that we club together and conceive of a design
>for an HF transceiver that could form the basis of the
>station of any budding Radio Ham.

Bean apears to be operating in 'Rehabilitation Mode' - old his old
chestnuts are coming out.....:-(
--
from
Aero Spike

128. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 15:34:13 UTC
From: Ron <"no one"@home.com>
Message-ID: <JccEd.10$ha7.2979@news.uswest.net>
Source record: 21261
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

BOY! These 'How-To' websites certainly bring back memories. These are the methods, procedures, & materials we used when I hired on with Western Electric in the early 50s. In those days we used tons of #6 & #12 cord for securing gazillions of feet of telephone cables inside the telephone company switching central offices. We also got lots of blisters & calluses while making the cabling look neat & secure. Cable mining? YUK!

Thanks!

Ron

<phil-news-nospam@ipal.net> wrote in message
news:crr1ud02a56@news1.newsguy.com...
> In alt.engineering.electrical alanh_27@yahoo.com wrote:
>
> | cable lacing... a lost art.
>
> Links for cable lacing:
>
> How-to:
> http://www.dairiki.org/hammond/cable-lacing-howto/
>
> Pictures:
> http://brucehowes.com/cable_lacing.htm
>
> Products:
> http://www.tecratools.com/pages/telecom/80170.html
>
> --
> ---
> | Phil Howard KA9WGN | http://linuxhomepage.com/
http://ham.org/ |
> | (first name) at ipal.net | http://phil.ipal.org/
http://ka9wgn.ham.org/ |
> ---
---

129. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 15:37:38 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34d1dvF49g16mU1@individual.net>
Source record: 21262
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Spike" <Aero.Spike@Speed.invalid> wrote in message
news:vkj2u0th5qfrvlj064novucosk5u61dbf7@4ax.com...
> On Sun, 9 Jan 2005 15:04:59 -0000, "Airy R. Bean" <me@privacy.net>
> wrote:
>
> >.....is that we club together and conceive of a design
> >for an HF transceiver that could form the basis of the
> >station of any budding Radio Ham.
>
> Bean apears to be operating in 'Rehabilitation Mode' - old his old
> chestnuts are coming out.....:-(

I've little doubt that is his ploy. However, I lean toward being of an
overly forgiving nature and, if he can behave, maybe some good will come of
it and he will learn something.

At worst we can go back though Google and refer him to previous answers.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

130. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 15:38:47 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <34d1n6F4ah6i5U1@individual.net>
Source record: 21263
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

M3OSN continues to exhibit a negative and destructive
maladjusted personality and demonstrates well why
anybody who holds, or who has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme will never make it into
the ranks of _REAL_ Radio Hams.

What is to be gained by designing a radio that is, or should
be, reproducible with ease by newcomers? Nothing if you're
a defeatist SFB Jonah such as Mr.Reay presents below, but everything if
you have the makings of being a _REAL_ Radio Ham!

Stone-age design? What a silly-billy is Mr.Reay! No doubt
by that childish sneer he reveals himself to be one of the
CB types who buys his radios off-the-shelf! What a bad
example he presents to any prospective newcomers!

Once again Mr.Reay demonstrates why he will always be
no more than an SFB CBer and never a _REAL_ Radio Ham!
(Newcomers! Do you wish to be a sneering failure such as
Mr.Reay presents, or do you wish to join the Radio Hams?)

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34d103F477pfqU1@individual.net...
> "mexico_zero" <nospam@please.com> wrote in message
> news:NYbEd.2277$Rg1.705@newsfe4-gui.ntli.net...
> > "Airy R. Bean" <me@privacy.net> wrote in message >.....
> > >is that we club together and conceive of a design <snip>
> > > We wouldn't need any facilities other than were present in,
> > > say, the KW2000 of 35 years ago <snip>
> > > None of the CBer's facilities such as scanners, memories,
> > > CAT interfaces, CTCSS and the like are necessary <snip>
> > > I suggest that we consider a DSP approach for all the
> > > baseband mod and demod, and then phasing techniques
> > > for translating into the various bands.<snip>
> > Adress the contradictions and I may consider this as a sensible
> > suggestion....
> Indeed, not a bad idea at all.
> However, what is to be gained by re-inventing a (in radio terms) stone age
> design?
> Thinks like computer control provide added challenge and attraction to the
> idea, why dismiss them? They could always be add-ons. DSP. Oh dear. I
> assume this phasing technique relies on Big K.
> Or maybe he just meant mixing, an existing technique not needing DSP.

131. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 15:47:55 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <34d26uF4a7bt5U1@individual.net>
Source record: 21267
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

(I see that the spikeful Old Mother-Hen Nugatory RVMJ-Binary Era
is still demonstrating her paranoid obsessive ways.)

As to Mr.Reay's rather silly and snide comments, I always behave
in a respectable manner in this NG. It is Mr.Reay, with his obsession
of sheep-shagging who regularly resorts to rather silly and childish
outbursts; witness his two sneering contributions to this thread already!

Mr.Reay does have one useful redeeming feature; he does illustrate
to a "T" why anybody who holds, or who has ever held, a licence
issued under the gangrenous degeneration that is the M3/CB Fools'
Licence scheme will never make it into the ranks of _REAL_ Radio
hams and thus may yet serve to put off newcomers from making the
mistake of taking up such a licence.

Perhaps even Mr.Reay may learn something from this thread - how to
behave in a respectable manner more suited to an international
public forum than the infantile boastful manner that is his wont?

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34d1dvF49g16mU1@individual.net...
> "Spike" <Aero.Spike@Speed.invalid> wrote in message
> news:vkj2u0th5qfrvlj064novucosk5u61dbf7@4ax.com...
> > On Sun, 9 Jan 2005 15:04:59 -0000, "Airy R. Bean" <me@privacy.net>
> > wrote:
> > >.....is that we club together and conceive of a design
> > >for an HF transceiver that could form the basis of the
> > >station of any budding Radio Ham.
> > Bean apears to be operating in 'Rehabilitation Mode' - old his old
> > chestnuts are coming out.....:-(
> I've little doubt that is his ploy. However, I lean toward being of an
> overly forgiving nature and, if he can behave, maybe some good will come
of
> it and he will learn something.
> At worst we can go back though Google and refer him to previous answers.

132. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 15:48:57 UTC
From: Blueskies <nospamedblueskies@ameritech.net>
Message-ID: <JncEd.7315$Vj3.4486@newssvr17.news.prodigy.com>
Source record: 21264
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
news:iHaEd.13517$iC4.12685@newssvr30.news.prodigy.com...
> No one has mentioned that cable mining is much safer and easier with laced cables and can
be impossible with ty
> wrapped cables.
>
> --
>
> 73
> Hank WD5JFR
>

What is cable mining?

133. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 15:49:51 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <jdk2u053qfmao2i4e5cmmp1hm3fkio630n@4ax.com>
Source record: 21265
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

On Sun, 9 Jan 2005 15:37:38 -0000, "Brian Reay"
<brian.reay@(spamstopper)bigfoot.com> wrote:

>
>"Spike" <Aero.Spike@Speed.invalid> wrote in message
>news:vkj2u0th5qfrvlj064novucosk5u61dbf7@4ax.com...
>> On Sun, 9 Jan 2005 15:04:59 -0000, "Airy R. Bean" <me@privacy.net>
>> wrote:
>>
>> >.....is that we club together and conceive of a design
>> >for an HF transceiver that could form the basis of the
>> >station of any budding Radio Ham.
>>
>> Bean apears to be operating in 'Rehabilitation Mode' - all his old
>> chestnuts are coming out.....:-(
>
>I've little doubt that is his ploy. However, I lean toward being of an
>overly forgiving nature and, if he can behave, maybe some good will come of
>it and he will learn something.

Hmm...perhaps it's just another turn of the ever-repeating cycle?

>At worst we can go back though Google and refer him to previous answers.

Afraid not - he doesn't follow urls. I don't know if this is from
unfamiliarity with usenet, or that he can't read a reference and
understand which parts were relevant to the discussion. And anyway, if
you start quoting him back at himself, he killfiles you. Allegedly.
--
from
Aero Spike

134. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 15:51:48 UTC
From: mr_wibble@mad.scientist.com
Message-ID: <1105285908.526191.142060@c13g2000cwb.googlegroups.com>
Source record: 21266
Cross-posted to: uk.radio.amateur, rec.radio.amateur.homebrew

Brian Reay (spamstopper) wrote:

> However, what is to be gained by re-inventing a (in radio terms)
stone age
> design?

Beanie can just copy something out of SPRAT and claim it as being new.
There's nothing innovative in yet another DC RX on 40m ;-)
Regards,

Mr Wibble

135. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 15:56:59 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34d2i8F4a496cU1@individual.net>
Source record: 21268
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Spike" <Aero.Spike@Speed.invalid> wrote in message
news:jdk2u053qfmao2i4e5cmmp1hm3fkio630n@4ax.com...
> On Sun, 9 Jan 2005 15:37:38 -0000, "Brian Reay"
> <brian.reay@(spamstopper)bigfoot.com> wrote:
>
> >
> >"Spike" <Aero.Spike@Speed.invalid> wrote in message
> >news:vkj2u0th5qfrvlj064novucosk5u61dbf7@4ax.com...
> >> On Sun, 9 Jan 2005 15:04:59 -0000, "Airy R. Bean" <me@privacy.net>
> >> wrote:
> >>
> >> >.....is that we club together and conceive of a design
> >> >for an HF transceiver that could form the basis of the
> >> >station of any budding Radio Ham.
> >>
> >> Bean apears to be operating in 'Rehabilitation Mode' - all his old
> >> chestnuts are coming out.....:-(
> >
> >I've little doubt that is his ploy. However, I lean toward being of an
> >overly forgiving nature and, if he can behave, maybe some good will come
of
> >it and he will learn something.
>
> Hmm...perhaps it's just another turn of the ever-repeating cycle?

Well some people are slow learners. In fact, I seem to recall one student of
DSP admitting he was just such a slow learner.

If he learns just one new thing every cycle, have we not a duty as radio
amateurs to try and assist him? OK, it maybe painful for us, he will be
ungrateful, it may seem like we are banging out heads against a brick wall,
but think of the challenge. We could succeed where Essex University failed!

>
> >At worst we can go back though Google and refer him to previous answers.
>
> Afraid not - he doesn't follow urls. I don't know if this is from
> unfamiliarity with usenet, or that he can't read a reference and
> understand which parts were relevant to the discussion. And anyway, if
> you start quoting him back at himself, he killfiles you. Allegedly.

Treat it as another challenge- something we can teach him.

I'm almost tempted to let him out of the killfile but I think I'll just
watch the follow ups for now. With a recalcitrant people it does no good to

give them too much rope early on.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

136. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 16:08:28 UTC
From: David Edmonds <dedmonds73@yahoo.co.uk>
Message-ID: <0GcEd.71$pj7.56@newsfe1-win.ntli.net>
Source record: 21269
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Airy R. Bean wrote:

> .....is that we club together and conceive of a design
> for an HF transceiver that could form the basis of the
> station of any budding Radio Ham.

From my past reading of this newsgroup, you've tabled this suggestion
to the various newsgroups before, and despite many viable suggestions
and offers of support, have done little with the responses.

(This is actually a copy and paste of the past posting isn't it old bean!)

> We wouldn't need any facilities other than were present in,
> say, the KW2000 of 35 years ago (apart from greater than
> 200 kHz coverage on each band!)
>
> None of the CBer's facilities such as scanners, memories,
> CAT interfaces, CTCSS and the like are necessary.
>
> I suggest that we consider a DSP approach for all the
> baseband mod and demod, and then phasing techniques
> for translating into the various bands.

Apart from wanting DSP, I can offer you the ideal radios all ready built
for the job - either the KW2000, the FT101 or the FT102! Why re-invent
the wheel?

> A power output of 5W will be more than sufficient for
> any self-respecting _REAL_ Radio Hams - it is only
> CBers and CBers-Masquerading-As-Radio-Hams who
> need to work with BBC levels of signal strength.

Oh dear - a lot of us have already lost interest now due to this post
Masquerading-As-Leigitimate-But-Really-Is-Just-An-Excuse-To-Provoke-More-Comments.

If you want 5w with DSP - go for the Elecraft K2 which you can construct
in stages!!!

> Such a project could be what we need to capture the
> interest of newcomers who would not then be sidetracked
> into the CB-like purchasing of brand-new rigs from the
> shelves of emporia, and, having, constructed their own
> rigs, would feel competent to maintain those rigs, unlike
> those who send them back to the emporia and thus show
> themselves as closet CBers.

Yes - an ideal road to go down but sadly somewhat restricted by the UK Foundation Licence that only allows the use of type-approved equipment - unless you propose you can gain type-approval for your design and eventual product that will probably cost a lot more than a purchased radio?!

(I note you use the term 'rig' rather than 'radio' which is the more _Gentlemanly_ way of traditionally talking about your equipment - surely the word 'rig' is a term used by a CB'er that you detest so much?)

Just my thoughts....nothing even like a provoke!

David.

137. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 16:17:10 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34d3o4F4b8b9dU1@individual.net>
Source record: 21270
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"David Edmonds" <dedmonds73@yahoo.co.uk> wrote in message
news:0GcEd.71$pj7.56@newsfe1-win.ntli.net...
>
> Yes - an ideal road to go down but sadly somewhat restricted by the UK
> Foundation Licence that only allows the use of type-approved equipment -
> unless you propose you can gain type-approval for your design and
> eventual product that will probably cost a lot more than a purchased
radio?!
>

The restriction isn't "type approved" transmitters- they can use commercial
equipment designed for the amateur market (eg Yaesu et al) and those made
from commercial kits. The words "type approved" etc do not feature.

Plus, of course, as the newcomers progress there is the option of totally
home brew designs (ie not from kits). As a group, we should be encouraging
M3s to progress so let us not get bogged down with this.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

138. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 16:19:44 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <34d43gF4844n6U1@individual.net>
Source record: 21271
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

More bullshitting, side-stepping and downright lying.

If the rigs are home designed and constructed then they are of
a type that is not approved.

Mr.Reay proves to be a silly-billy once again.

As a group, we should definitely _NOT_ be encouraging those who
have a licence issued under the gangrenous degeneration that
is the M3/CB Fools' Licence scheme one iota! Such people
are not Radio Hams by any stretch of the imagination.

Perhaps uk.rec.radio.cb, as a group, would be more appropriate?

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34d3o4F4b8b9dU1@individual.net...
> "David Edmonds" <dedmonds73@yahoo.co.uk> wrote in message
> news:0GcEd.71$pj7.56@newsfe1-win.ntli.net...
> > Yes - an ideal road to go down but sadly somewhat restricted by the UK
> > Foundation Licence that only allows the use of type-approved equipment -
> > unless you propose you can gain type-approval for your design and
> > eventual product that will probably cost a lot more than a purchased
> radio?!
>
> The restriction isn't "type approved" transmitters- they can use
commercial
> equipment designed for the amateur market (eg Yaesu et al) and those made
> from commercial kits. The words "type approved" etc do not feature.
> Plus, of course, as the newcomers progress there is the option of totally
> home brew designs (ie not from kits). As a group, we should be
encouraging
> M3s to progress so let us not get bogged down with this.

139. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 16:24:46 UTC
From: David Edmonds <dedmonds73@yahoo.co.uk>
Message-ID: <iVcEd.160$%W.134@newsfe2-gui.ntli.net>
Source record: 21272
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Airy R. Bean wrote:

> (I see that the spikeful Old Mother-Hen Nugatory RVMJ-Binary Era
> is still demonstrating her paranoid obsessive ways.)
>
> As to Mr.Reay's rather silly and snide comments, I always behave
> in a respectable manner in this NG. It is Mr.Reay, with his obsession
> of sheep-shagging who regularly resorts to rather silly and childish
> outbursts; witness his two sneering contributions to this thread already!
>
> Mr.Reay does have one useful redeeming feature; he does illustrate
> to a "T" why anybody who holds, or who has ever held, a licence
> issued under the gangrenous degeneration that is the M3/CB Fools'
> Licence scheme will never make it into the ranks of _REAL_ Radio
> hams and thus may yet serve to put off newcomers from making the
> mistake of taking up such a licence.
>
> Perhaps even Mr.Reay may learn something from this thread - how to
> behave in a respectable manner more suited to an international
> public forum than the infantile boastful manner that is his wont?

.....and on reading this typically 'gangrenous degenerationed'
follow-up, members of two newsgroups yawn and quietly close their design
books.

Well done old bean - another fine plan falls flat on its arse!

43 minutes to kill off one of your own 'almost credible' postings must
be a record for you.

David.

140. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 16:31:57 UTC
From: David Edmonds <dedmonds73@yahoo.co.uk>
Message-ID: <10dEd.107$4J5.19@newsfe5-gui.ntli.net>
Source record: 21273
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Brian Reay wrote:

> The restriction isn't "type approved" transmitters- they can use commercial
> equipment designed for the amateur market (eg Yaesu et al) and those made
> from commercial kits. The words "type approved" etc do not feature.
>
> Plus, of course, as the newcomers progress there is the option of totally
> home brew designs (ie not from kits). As a group, we should be encouraging
> M3s to progress so let us not get bogged down with this.

Thanks for clearing this up Brian.

I for one support the M3 licence scheme and the progress up the licence
classes to gain more skills and aid self-development.

David.

141. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 16:36:00 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34d4reF48obggU1@individual.net>
Source record: 21274
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"David Edmonds" <dedmonds73@yahoo.co.uk> wrote in message
news:10dEd.107$4J5.19@newsfe5-gui.ntli.net...
> Brian Reay wrote:
>
> > The restriction isn't "type approved" transmitters- they can use
commercial
> > equipment designed for the amateur market (eg Yaesu et al) and those
made
> > from commercial kits. The words "type approved" etc do not feature.
> >
> > Plus, of course, as the newcomers progress there is the option of
totally
> > home brew designs (ie not from kits). As a group, we should be
encouraging
> > M3s to progress so let us not get bogged down with this.
>
> Thanks for clearing this up Brian.
>
> I for one support the M3 licence scheme and the progress up the licence
> classes to gain more skills and aid self-development.
>

I never doubted you supported the scheme, I just want to 'kill' a common red
herring.

Good article on STELAR in the TES, by the way.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

142. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 16:38:51 UTC
From: Matthew Haigh <$matthaigh{News07}$@haigh.org>
Message-ID: <eT1AN3Tb4V4BFwt3@local.gcrsoft.com>
Source record: 21275
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

In article <34d103F477pfqU1@individual.net>, Brian Reay
<brian.reay@bigfoot.com> writes

>Indeed, not a bad idea at all.

Given enough interested people, it would be a possible project.

>
>However, what is to be gained by re-inventing a (in radio terms) stone age
>design?

Which is always the problem in community-based projects - defining what
the actual goals are :-)
There is a definite place for "stone age" design in teaching the basics
(simple single band sets, etc.), but I would personally like to put
together something more cutting edge.

>
>Thinks like computer control provide added challenge and attraction to the
>idea, why dismiss them? They could always be add-ons.

That would be my ideal for a project like this - the design split into
discrete modules, which can be mixed & matched to provide the facilities
wanted. This would also help out in getting it going, as you can split
the effort into teams with their own competencies (e.g. a PSU team, a
display team, a PA team, etc.), who all know what the interface to their
module has to be in order to work with the rest of the kit, but other
than that have free reign in design.

Manage it with a sourceforge-style website (where schematics, processor
code etc. can be checked into a version control system), and you'd have
a chance of pulling it together even with geographically separated
teams.

You'd end up with something like an open-hardware K2 - something I'd
really like to build once I get some free time (currently scheduled for
May 2023).

Matt
--
Matthew Haigh --$matthaigh{News07}$@haigh.org--
GCRSoft, providing SMS solutions since 1996...
http://www.gcrsoft.com http://www.moretext.com

143. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 16:47:13 UTC
From: Matthew Haigh <$matthaigh{News07}$@haigh.org>
Message-ID: <Ox3klXVRAW4BFwdt@local.gcrsoft.com>
Source record: 21276
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

In article <34d3o4F4b8b9dU1@individual.net>, Brian Reay
<brian.reay@bigfoot.com> writes
>
>
>
>
>"David Edmonds" <dedmonds73@yahoo.co.uk> wrote in message
>news:0GcEd.71$pj7.56@newsfe1-win.ntli.net...
> >
>> Yes - an ideal road to go down but sadly somewhat restricted by the UK
>> Foundation Licence that only allows the use of type-approved equipment -
>> unless you propose you can gain type-approval for your design and
>> eventual product that will probably cost a lot more than a purchased
>radio?!

It is quite likely that a reasonably "modern" radio with bells &
whistles would be more expensive than a rice box. Still, people build
the K2 (which on paper at least costs more and does less than a
Yaekencom box), because at the end of the day this is a hobby, and you
do it as an enjoyable way of passing time & learning something rather
than as a commercial endeavour (why do people spend years building a
model boat out of matchsticks when they could buy a far more functional
radio controlled one from the local toyshop for ï¿½20?).

>The restriction isn't "type approved" transmitters- they can use commercial
>equipment designed for the amateur market (eg Yaesu et al) and those made
>from commercial kits. The words "type approved" etc do not feature.
>
>Plus, of course, as the newcomers progress there is the option of totally
>home brew designs (ie not from kits). As a group, we should be encouraging
>M3s to progress so let us not get bogged down with this.

So I guess that whilst a project like this wouldn't be acceptable for an
M3, if a company released a kit version of the project then it would be
OK (as it would be commercial then)?

Matt
--
Matthew Haigh --$matthaigh{News07}$@haigh.org--
GCRSoft, providing SMS solutions since 1996...
http://www.gcrsoft.com http://www.moretext.com

144. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 16:50:31 UTC
From: David Edmonds <dedmonds73@yahoo.co.uk>
Message-ID: <rhdEd.213$gf5.203@newsfe3-win.ntli.net>
Source record: 21277
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Brian Reay wrote:

> Good article on STELAR in the TES, by the way.

A publication, out of choice, I rarely read now but will no doubt be
giving the clipping due to the Amateur Radio content!

David.

145. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 17:09:54 UTC
From: floyd@barrow.com
Message-ID: <8765267cm5.fld@barrow.com>
Source record: 21278
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

"Blueskies" <nospamedblueskies@ameritech.net> wrote:
>"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
news:iHaEd.13517$iC4.12685@newssvr30.news.prodigy.com...
>> No one has mentioned that cable mining is much safer and easier with laced cables and
can be impossible with ty
>> wrapped cables.
>>
>> --
>>
>> 73
>> Hank WD5JFR
>>
>
>What is cable mining?

New cables are laid into cable racks on top of old cables, and
the old ones that are no longer used are just cut off where they
enter the cable rack and left in place. Eventually, of course,
the cable rack fills up with old unused cable.

So every decade or so some poor smucks get the job of removing
all old cables. And that... is cable mining.

It isn't fun and it isn't exciting (but if you get the cable it
might be profitable though).

And if any of the cable was put in with tie-wraps, you also get
your hands shredded from the sharp edges where the tie wraps
were cut off. That is bad enough if a proper tool is used, and
far worse if some dingbat has used snips to cut them.

--
Floyd L. Davidson <http://web.newsguy.com/floyd_davidson>
Ukpeagvik (Barrow, Alaska) floyd@barrow.com

146. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 17:11:40 UTC
From: Slip'er <cjhixon1@cox.net>
Message-ID: <_AdEd.47855$8e5.37238@fed1read07>
Source record: 21279
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

> You have never worked on aircraft and are very young.

I have never worked on aircraft. I am 37; young to some, ancient to my
kids.

147. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 17:25:42 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <82q2u05250gulv67rmqu3v5v9f3g2iqgj7@4ax.com>
Source record: 21281
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

On Sun, 9 Jan 2005 15:56:59 -0000, "Brian Reay"
<brian.reay@(spamstopper)bigfoot.com> wrote:

Aero spike wrote:
>
>> Afraid not - he doesn't follow urls. I don't know if this is from
>> unfamiliarity with usenet, or that he can't read a reference and
>> understand which parts were relevant to the discussion. And anyway, if
>> you start quoting him back at himself, he killfiles you. Allegedly.
>
>Treat it as another challenge- something we can teach him.

The problem is that he's appears to be such a slow learner - it takes
a lot of repetition before anything seemingly gets accepted, and even
then one isn't sure that it's just being regurgitated parrot-fashion.

>I'm almost tempted to let him out of the killfile but I think I'll just
>watch the follow ups for now. With a recalcitrant people it does no good to
>give them too much rope early on.

Well, it's one of the downsides of usenet, we mustn't let it blind us
to its good qualities!
--
from
Aero Spike

148. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 17:26:18 UTC
From: Slip'er <cjhixon1@cox.net>
Message-ID: <HOdEd.47858$8e5.35664@fed1read07>
Source record: 21280
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

That's exactly the kind of reply everybody likes to get to a question.
Thanks.

Slip'er

> Links for cable lacing:
>
> How-to:
> http://www.dairiki.org/hammond/cable-lacing-howto/
>
> Pictures:
> http://brucehowes.com/cable_lacing.htm
>
> Products:
> http://www.tecratools.com/pages/telecom/80170.html
>

149. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 17:28:34 UTC
From: Slip'er <cjhixon1@cox.net>
Message-ID: <PQdEd.47859$8e5.37237@fed1read07>
Source record: 21283
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

Thanks Ken.

"> Look at pages 3 and 4:
>
> http://www.faa.gov/avr/afs/300/pdf/4b-ch11_12.pdf

150. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 17:28:42 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34d7u9F4a8jq7U1@individual.net>
Source record: 21282
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Spike" <Aero.Spike@Speed.invalid> wrote in message
news:82q2u05250gulv67rmqu3v5v9f3g2iqgj7@4ax.com...
> On Sun, 9 Jan 2005 15:56:59 -0000, "Brian Reay"
> <brian.reay@(spamstopper)bigfoot.com> wrote:
>
> Aero spike wrote:
> >
> >> Afraid not - he doesn't follow urls. I don't know if this is from
> >> unfamiliarity with usenet, or that he can't read a reference and
> >> understand which parts were relevant to the discussion. And anyway, if
> >> you start quoting him back at himself, he killfiles you. Allegedly.
> >
> >Treat it as another challenge- something we can teach him.
>
> The problem is that he's appears to be such a slow learner - it takes
> a lot of repetition before anything seemingly gets accepted, and even
> then one isn't sure that it's just being regurgitated parrot-fashion.

A definite case of SEN, I fancy.
--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

151. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 17:31:43 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <fiq2u0t0kdh457ccrvpltv1g58i0lpl93r@4ax.com>
Source record: 21284
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

On Sun, 9 Jan 2005 16:19:44 -0000, "Airy R. Bean" <me@privacy.net>
wrote:

>As a group, we should definitely _NOT_

This is a collection of individuals...so cut the 'we should...' stuff.
--
from
Aero Spike

152. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 17:43:23 UTC
From: Micky Taker <micky.t@ker>
Message-ID: <%2eEd.88962$48.15020@fe1.news.blueyonder.co.uk>
Source record: 21285
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

David Edmonds wrote:
> Airy R. Bean wrote:
>
>> .....is that we club together and conceive of a design
>> for an HF transceiver that could form the basis of the
>> station of any budding Radio Ham.
>
>
> (This is actually a copy and paste of the past posting isn't it old bean!)
>
>> We wouldn't need any facilities other than were present in,
>> say, the KW2000 of 35 years ago (apart from greater than
>> 200 kHz coverage on each band!)
>>
>> None of the CBer's facilities such as scanners, memories,
>> CAT interfaces, CTCSS and the like are necessary.
>>
>> I suggest that we consider a DSP approach for all the
>> baseband mod and demod, and then phasing techniques
>> for translating into the various bands.

Whilst some so called *Radio Hams* Waffle, suggest and propose the
Radio Amateurs just get on and do it! See-

http://www.qrpeter.de/UK/Speaky2.htm

> Apart from wanting DSP, I can offer you the ideal radios all ready built
> for the job - either the KW2000, the FT101 or the FT102! Why re-invent
> the wheel?

Absolutely and many other models available 2nd hand.

> (I note you use the term 'rig' rather than 'radio' which is the more
> _Gentlemanly_ way of traditionally talking about your equipment - surely
> the word 'rig' is a term used by a CB'er that you detest so much?)

Liking Airy to CB'ers is an insult to CB'ers!

Micky

--
E&OE (C) 2005 Micky Taker
Micky Taker accepts no responsibility for any personal injury or
emotional distress that may occur as a result of reading the contents of
this message.

153. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 17:55:52 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <962dnUkvDPOx7XzcRVn-sQ@comcast.com>
Source record: 21286

"Airy R. Bean" <me@privacy.net> wrote in message
news:34cvmdF42au28U1@individual.net...
> .....is that we club together and conceive of a design
> for an HF transceiver that could form the basis of the
> station of any budding Radio Ham.
>
> We wouldn't need any facilities other than were present in,
> say, the KW2000 of 35 years ago (apart from greater than
> 200 kHz coverage on each band!)
>
> None of the CBer's facilities such as scanners, memories,
> CAT interfaces, CTCSS and the like are necessary.
>
> I suggest that we consider a DSP approach for all the
> baseband mod and demod, and then phasing techniques
> for translating into the various bands.
>
> A power output of 5W will be more than sufficient for
> any self-respecting _REAL_ Radio Hams - it is only
> CBers and CBers-Masquerading-As-Radio-Hams who
> need to work with BBC levels of signal strength.
>
> Such a project could be what we need to capture the
> interest of newcomers who would not then be sidetracked
> into the CB-like purchasing of brand-new rigs from the
> shelves of emporia, and, having, constructed their own
> rigs, would feel competent to maintain those rigs, unlike
> those who send them back to the emporia and thus show
> themselves as closet CBers.
>
> We _COULD_ take a lead in this NG!
>

... and your thoughts on the existing Elecraft K2 (which meetings you power output criteria), which has almost 5,000 kits of this model now sold worldwide?
http://www.elecraft.com/

Do you desire to build upon this kit and building experience (referred to as "K3" designs among Elecraft builders) by adding additional features you have mentioned?

gb

154. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 17:58:50 UTC
From: shay <shayglenn@gmail.com>
Message-ID: <1105293530.300068.68830@c13g2000cwb.googlegroups.com>
Source record: 21287
Cross-posted to: rec.radio.amateur.homebrew, sci.electronics.repair, rec.autos.tech, alt.engineering.electrical, rec.aviation.homebuilt

Spiral Wrap is pretty nice and robust but when it comes to
fault-finding broken wires etc it can be a bitch.
Have a look at this :

http://www.geocities.com/svxdc/AI-pics/254-11a-HarnAdapWrap.jpg

I find this better for dirty/oily environments or where there's a
chance of vibration. The the harnes is easly "moulded" to fit intricate
contours.

155. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 17:59:27 UTC
From: tox <nospam@nospamming.co.com>
Message-ID: <3ieEd.130$4J5.76@newsfe5-gui.ntli.net>
Source record: 21288
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34d7u9F4a8jq7U1@individual.net...
>
Try not to wind Professor Bean up too much Brian, if he's still on Dial Up,
it must be costing him a fortune replying to your postings ;-)

Keep up the good work...

Regards
tox

156. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 18:04:58 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34da7tF49vqthU1@individual.net>
Source record: 21289
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

I'm not proposing anything like that. I don't know
anything about the K2.

You seem to have missed the point somewhat, if your
thoughts go straight to what you can buy off the shelf.

I don't follow URL's from Usenet - it is a bad debating style
to send your correspondents off to do reading. if you have
something of value to say, then please say it yourself.

"gb" <onw9mapsgb@no.arrl.spam.net> wrote in message
news:962dnUkvDPOx7XzcRVn-sQ@comcast.com...
> "Airy R. Bean" <me@privacy.net> wrote in message
> news:34cvmdF42au28U1@individual.net...
> > .....is that we club together and conceive of a design
> > for an HF transceiver that could form the basis of the
> > station of any budding Radio Ham.
> >
> > We wouldn't need any facilities other than were present in,
> > say, the KW2000 of 35 years ago (apart from greater than
> > 200 kHz coverage on each band!)
> >
> > None of the CBer's facilities such as scanners, memories,
> > CAT interfaces, CTCSS and the like are necessary.
> >
> > I suggest that we consider a DSP approach for all the
> > baseband mod and demod, and then phasing techniques
> > for translating into the various bands.
> >
> > A power output of 5W will be more than sufficient for
> > any self-respecting _REAL_ Radio Hams - it is only
> > CBers and CBers-Masquerading-As-Radio-Hams who
> > need to work with BBC levels of signal strength.
> >
> > Such a project could be what we need to capture the
> > interest of newcomers who would not then be sidetracked
> > into the CB-like purchasing of brand-new rigs from the
> > shelves of emporia, and, having, constructed their own
> > rigs, would feel competent to maintain those rigs, unlike
> > those who send them back to the emporia and thus show
> > themselves as closet CBers.
> >
> > We _COULD_ take a lead in this NG!
> >

>
> ... and your thoughts on the existing Elecraft K2 (which meetings you
power
> output criteria), which has almost 5,000 kits of this model now sold
> worldwide?
> http://www.elecraft.com/
>
> Do you desire to build upon this kit and building experience (referred to
as
> "K3" designs among Elecraft builders) by adding additional features you
have
> mentioned?
>
> gb
>
>

157. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 18:18:38 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34daruF49eob9U1@individual.net>
Source record: 21290
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"tox" <nospam@nospamming.co.com> wrote in message
news:3ieEd.130$4J5.76@newsfe5-gui.ntli.net...
>
> "Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
> news:34d7u9F4a8jq7U1@individual.net...
> >
> Try not to wind Professor Bean up too much Brian, if he's still on Dial
Up,
> it must be costing him a fortune replying to your postings ;-)
>
> Keep up the good work...
>

Is he getting wound up? Oh dear, the ultimate failure. He tries to troll
(and thus wind up others) and ends up getting wound up himself.

What a pity ;-)

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

158. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 18:33:34 UTC
From: David Edmonds <dedmonds73@yahoo.co.uk>
Message-ID: <2OeEd.138$pj7.103@newsfe1-win.ntli.net>
Source record: 21291
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Airy dearest,

Airy R.Bean wrote:
> I'm not proposing anything like that. I don't know
> anything about the K2.

Well - the K2 is an American produced radio that is exactly what you are proposing. It is a QRP radio that is very small and compact that can be constructed in stages then tested and used. You then add to it as you go along - this teaching yourself construction and study the design idea.

> You seem to have missed the point somewhat, if your
> thoughts go straight to what you can buy off the shelf.

Yes - but this is a kit not obtainable off the shelf.

> I don't follow URL's from Usenet - it is a bad debating style
> to send your correspondents off to do reading. if you have
> something of value to say, then please say it yourself.

But - search do search for the Elekraft K2 - you'll be pleased, I hope, that is teaches everything you stand for - self training, construction and the development of _REAL_ skills.

David.

159. Re: 12V Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 18:48:18 UTC
From: john graesser <graesser@tca.net>
Message-ID: <10u2v4jbatepp5b@corp.supernews.com>
Source record: 21292

"beerbarrel" <beerbarrel@cox.net> wrote in message
news:2s11u0puknmttp09v2vfrn131tnrg98pbp@4ax.com...
> Anyone have a source for a schematic for a 12v around 20 to 30 amp
> power supply that makes use of a full wave rectifier? I've found quite
> a few for a bridge rectifier but I'm not really sure how to mod them
> to use a full wave rectifier. I have a nice 32v 30 amp center tapped
> at 16v transformer that I would like to make use of.

Are you mixing things together here?

There are full wave bridges that use a ct transformer and half wave bridges
that use non-ct transformers.

I know of no distiction between bridge rectifiers and full wave rectifiers
other than there can be full wave or half wave rectifiers and there is
usually a disctinction between encapsulated rectifier bridges and ones built
of discrete diodes and resisters.

After running a 32v ct transformer thru a full wave bridge you are going to
have way too much voltage for regulating down to 12v unless you enjoy the
extra heat.

Sounds like you intend to make a linear power supply, what sort of regulator
and pass transitors do you have in mind?
thanks, John.

160. Re: TX-relay

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 19:02:14 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <adv2u093ltsg60v9q07fdesoas5s5n4536@4ax.com>
Source record: 21293

On Sun, 9 Jan 2005 11:56:49 +0100, "geir knutsen" <ge-knuts@online.no>
wrote:

>It is one of the Magnetic 8172 on your web.
>The plan is to take out the circulator and place the TX relay there instead.
>The LP-filter I`ll probably leave or mabe replace it with a bandpass for 2m.
>Link to pa. http://home.online.no/~la8ak/d25.htm
>
>Geir

I might have used a smaller dpdt pcb relay from LA3VW which type is
tested by LA6LCA and LA8OJ, but don't know about the availability and
type, and it is some precautions to make to make it operate properly.
The easiest is always to use PIN diode, the Unitrode UM9401 is a very
easy choice (for the series diode), and the dealer is service minded,
at least they were when I bought some. Demanded 50, but they only had
25, and I later sold most of them to friends around, hi
This type of diode may be used to at least 1kW according to SM5BSZ,
but it is a quite complex switch design to do it, normally they are
good enough for more than 100W. The smaller diode could be 2x BA182 or
2x BA282 or something better in anti-parallel. I prefer the anti-
parallel configuration even if I use some current through the diodes
during transmit

73,
JM

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

161. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 19:19:01 UTC
From: huLLy <hully@despammed.com>
Message-ID: <34deatF47inm2U1@individual.net>
Source record: 21294
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Airy R. Bean" <me@privacy.net> wrote in message
news:34d43gF4844n6U1@individual.net...
> More bullshitting, side-stepping and downright lying.
>
> If the rigs are home designed and constructed then they are of
> a type that is not approved.
>

Yes, and I'm sure soon that if you don't get them CE marked and EMC tested
they will soon be banned..

162. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 19:28:24 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <10u31ei6ga3v552@corp.supernews.com>
Source record: 21295
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Airy R. Bean wrote:

-- the usual crap --

DON'T FEED THE TROLL!

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

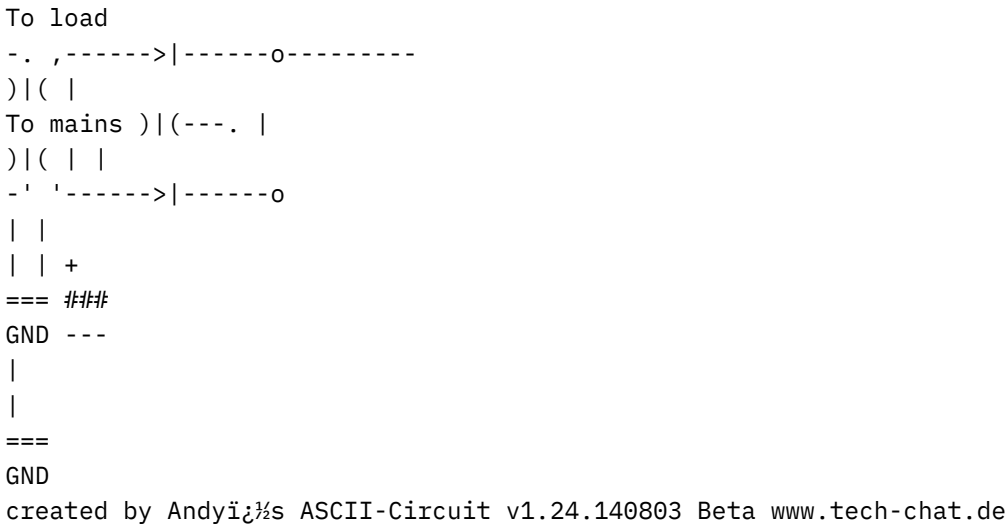
163. Re: 12V Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 19:34:36 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <10u31qa5t6q209d@corp.supernews.com>
Source record: 21296

beerbarrel wrote:

> On Sat, 08 Jan 2005 20:42:35 -0500, John Popelish <jpopelish@rica.net>
> wrote:
>
>
>>beerbarrel wrote:
>>
>>>Anyone have a source for a schematic for a 12v around 20 to 30 amp
>>>power supply that makes use of a full wave rectifier? I've found quite
>>>a few for a bridge rectifier but I'm not really sure how to mod them
>>>to use a full wave rectifier. I have a nice 32v 30 amp center tapped
>>>at 16v transformer that I would like to make use of.
>>>
>>>Thanks...
>>
>>You can use half of your bridge with this transformer to produce
>>something like 22 volts DC at the filter cap. Connect each end ot the
>>secondary to one of the AC inputs ot the bridge and connect the cap
>>and load between one of the DC connections of the bridge and the
>>center tap. If you use the + terminal of the bridge, it will be the
>>positive output. If you use the - terminal of the bridge, the center
>>tap will be the positive output.
>>
>>The bridges will handle a bit more current than they are rated for,
>>because only two of the 4 rectifiers will be getting hot. They will
>>certainly need a heat sink for anything like 20 amperes out, though.
>>
>>After you get that working and running a couple 12 volt headlights in
>>series (at least), you can start thinking about how to regulate this
>>down to 12 volts.
>
>
>
> Thanks John...
>
> I saw that particular setup somewhere while I was looking for a
> schematic. I would really like to try to use the transformer as
> designed if I could. It would be nice to throw it into some of the
> good schematics that I've seen on the net. I might wind up using the
> one secondary and the centertap if I can find something.

It does use the transformer as-designed -- it just doesn't use all of
the bridge rectifier. This is what you're trying to do:



created by Andyï¿½s ASCII-Circuit v1.24.140803 Beta www.tech-chat.de

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

164. Re: 12V Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 21:25:55 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <41E1A163.A015365F@rica.net>
Source record: 21297

beerbarrel wrote:

> Let me rephrase what I said, or what I meant to say. I have a 32v
> transformer that is centertapped at 16v. It has the diodes in place
> for a full wave rectifier.

Two diodes or 4?

I want to construct a linear PS from this.
> I don't really want to add a bridge to make this work in another
> configuration. What I need is a schematic that allows use for a high
> current transformer (30 AMP) using this configuration. I would like to
> get max current out of the transformer. I realize that I could use one
> of the secondaries and the center tap with a bridge to make a PS and I
> might have to do that. I think that it would cut into my current
> rating heavily though. Any thoughts?

--
John Popelish

165. Re: textronix 3a72 scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 22:32:50 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <4vf1u05hnfnc7p5o63bv561rda9edoi03m@4ax.com>
Source record: 21199

On 8 Jan 2005 12:37:22 -0800 george.brien@ns.sympatico.ca (George)
wrote:

>Just picked up (actually it too heavy to just pick up)
>one of these old boat anchors. The cost was less tnan
>a large coffee so I guess the fellow Ham wanted to move
>it out of his basement!!
>It makes a nice squiggly line when plugged in but without
>a manual, I may have to turn it into a back doorstep.

It's one of the very early 3 series Tek vertical amp plugins for the
560 series of scopes. You mentioned that your scope is a 568, but
which time base plugin does it have?

I like the 560 scopes, but the max bandwidth is only 10 MHz. For the
3A72, the bandwidth is only 650 kHz. The 3A1 and 3A6 will give you the
full 10 MHz bandwidth, and there are lots of specialty plugins which
are available out there for fairly cheap.

The 568 was made to work with a special digital unit which I believe
was supposed to readout times and voltages in digital form. I'm not
actually sure of what it was supposed to do, but it's mentioned in
Stan Griffith's Tek book. I've never worked with one.

Personally, I am most fond of the 564B, which is a later solid state
storage scope mainframe, but still limited to 10 MHz.

I'm always amazed at how often 10 MHz is plenty.

-

Jim Adney jadney@vwtype3.org
Madison, WI 53711 USA
---

166. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 22:37:50 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <EtadnY5v8qnfL3zcRVn-3A@comcast.com>
Source record: 21198

"Airy R.Bean" <Me@privacy.net> wrote in message news:34da7tF49vqthU1@individual.net...
> I'm not proposing anything like that. I don't know
> anything about the K2.
>
> You seem to have missed the point somewhat, if your
> thoughts go straight to what you can buy off the shelf.

Not "off the shelf" product. I am very surprised that you are unaware of Elecraft (founded in 1998) by Wayne Burdick (N6KR) and Eric Swartz (WA6HHQ).
They are the design team dedicated to "hands-on" ham radio transceivers and accessories that can easily be built by amateurs.
> I don't follow URL's from Usenet - it is a bad debating style
> to send your correspondents off to do reading. if you have
> something of value to say, then please say it yourself.
I guess you do not read hobby print magazine or had a contact with an Elecraft user.
Elecraft (and its concept) of building and reparing your won equipment has been widely covered in amateur print magazines in Europe, Far East and US.

Debating is not the point and usenet is not the forum for true debate.
Compare your stated specifications and criteria to the Elecraft K2 design team's criteria and specs --- you shoudl discover that it meets the majority of your stated criteria.

gb
>> "Airy R. Bean" <me@privacy.net> wrote in message
>> news:34cvmdF42au28U1@individual.net...
>> > .....is that we club together and conceive of a design
>> > for an HF transceiver that could form the basis of the
>> > station of any budding Radio Ham.
>> >
>> > We wouldn't need any facilities other than were present in,
>> > say, the KW2000 of 35 years ago (apart from greater than
>> > 200 kHz coverage on each band!)
>> >
>> > None of the CBer's facilities such as scanners, memories,
>> > CAT interfaces, CTCSS and the like are necessary.
>> >
>> > I suggest that we consider a DSP approach for all the
>> > baseband mod and demod, and then phasing techniques
>> > for translating into the various bands.
>> >
>> > A power output of 5W will be more than sufficient for
>> > any self-respecting _REAL_ Radio Hams - it is only
>> > CBers and CBers-Masquerading-As-Radio-Hams who
>> > need to work with BBC levels of signal strength.
>> >

>> > Such a project could be what we need to capture the
>> > interest of newcomers who would not then be sidetracked
>> > into the CB-like purchasing of brand-new rigs from the
>> > shelves of emporia, and, having, constructed their own
>> > rigs, would feel competent to maintain those rigs, unlike
>> > those who send them back to the emporia and thus show
>> > themselves as closet CBers.
>> >
>> > We _COULD_ take a lead in this NG!
>> >
>>
>> ... and your thoughts on the existing Elecraft K2 (which meetings you
> power
>> output criteria), which has almost 5,000 kits of this model now sold
>> worldwide?
>> http://www.elecraft.com/
>>
>> Do you desire to build upon this kit and building experience (referred to
> as
>> "K3" designs among Elecraft builders) by adding additional features you
> have
>> mentioned?
>>
>> gb
>>
>>
>
>

167. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 22:54:48 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <8fd3u0dl23btskti7ne3m21lgc1mh0ioth@4ax.com>
Source record: 21200
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

On Sun, 9 Jan 2005 18:04:58 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>I don't follow URL's from Usenet - it is a bad debating style
>to send your correspondents off to do reading. if you have
>something of value to say, then please say it yourself.

<groan>

But if it's someone else's work, it is only correct to point to it.
After all, you might have a different interpretation of it....sheesh!
--
from
Aero Spike

168. Re: TX-relay

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 23:03:31 UTC
From: geir knutsen <ge-knuts@online.no>
Message-ID: <XKiEd.3753$Sl3.92431@news4.e.nsc.no>
Source record: 21201

Do you have a link for the schematics of the PIN diode switching? or can you
send me the drafts?

Geir

"J M Noeding" <la8ak@online.no> wrote in message
news:adv2u093ltsg60v9q07fdesoas5s5n4536@4ax.com...
> On Sun, 9 Jan 2005 11:56:49 +0100, "geir knutsen" <ge-knuts@online.no>
> wrote:
>
>>It is one of the Magnetic 8172 on your web.
>>The plan is to take out the circulator and place the TX relay there
>>instead.
>>The LP-filter I`ll probably leave or mabe replace it with a bandpass for
>>2m.
>>Link to pa. http://home.online.no/~la8ak/d25.htm
>>
>>Geir
>
> I might have used a smaller dpdt pcb relay from LA3VW which type is
> tested by LA6LCA and LA8OJ, but don't know about the availability and
> type, and it is some precautions to make to make it operate properly.
> The easiest is always to use PIN diode, the Unitrode UM9401 is a very
> easy choice (for the series diode), and the dealer is service minded,
> at least they were when I bought some. Demanded 50, but they only had
> 25, and I later sold most of them to friends around, hi
> This type of diode may be used to at least 1kW according to SM5BSZ,
> but it is a quite complex switch design to do it, normally they are
> good enough for more than 100W. The smaller diode could be 2x BA182 or
> 2x BA282 or something better in anti-parallel. I prefer the anti-
> parallel configuration even if I use some current through the diodes
> during transmit
>
> 73,
> JM
> ---
> J. M. Noeding, LA8AK, N-4623 Kristiansand
> http://home.online.no/~la8ak/c.htm

169. HP 10544 OCXO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 23:08:38 UTC
From: Arnd Gronenberg <arnd@gronenberg.com>
Message-ID: <crsdhnimb05$1@news.t-online.com>
Source record: 21202
Cross-posted to: sci.electronics.equipment,rec.radio.amateur.homebrew

Hi,

the HP 10544A OCXO driving my HP5328A counter failed due to a blown thermo fuse. The underlying problem was a broken Thermistor lead (unfortunately within the sealed hole) which caused the owen to run away (and blow the fuse). I already searched, but didn't find answers to the following questions. In order to find a suitable replacement thermistor, I would like to know:
- At what temperature does the OCXO nominally operate?
- What are the characteristics of the original thermistor used by HP? (my copy of the 10544 schematic lists the thermistor as "9.93K @80C 0637-0122", but it is difficult to distinguish "6" and "8")
- Which temperature specification is required for the thermo fuse?

Thanks in advance!

73 de Arnd

--
Arnd Gronenberg
EMail: arnd@gronenberg.com
HAM: DJ9PZ / AB2QP

170. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 23:21:23 UTC
From: Matthew Haigh <$matthaigh{News07}$@haigh.org>
Message-ID: <XTvCt1rzxb4BFwsA@local.gcrsoft.com>
Source record: 21204
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <8fd3u0dl23btskti7ne3m21lgc1mh0ioth@4ax.com>, Spike
<Aero.Spike@Speed.invalid> writes
>On Sun, 9 Jan 2005 18:04:58 -0000, "Airy R.Bean" <Me@privacy.net>
>wrote:
>
>>I don't follow URL's from Usenet - it is a bad debating style
>>to send your correspondents off to do reading. if you have
>>something of value to say, then please say it yourself.
>
><groan>
>
>But if it's someone else's work, it is only correct to point to it.
>After all, you might have a different interpretation of it....sheesh!

This also shows Gareth's view of Usenet - somewhere to stir up arguments
(sorry, "debates"), rather than somewhere to chat and exchange
information. "gb" posted an informative link, but Gareth refuses to
follow it and find something interesting because it doesn't suit his
agenda in starting an argument (sorry, "debate").

Matt
--
Matthew Haigh --$matthaigh{News07}$@haigh.org--
GCRSoft, providing SMS solutions since 1996...
http://www.gcrsoft.com http://www.moretext.com

171. Re: 12V Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 23:21:57 UTC
From: jgboyles@aol.com
Message-ID: <20050109182157.09434.00000027@mb-m13.aol.com>
Source record: 21203

>Anyone have a source for a schematic for a 12v around 20 to 30 amp
>power supply that makes use of a full wave rectifier? I've found quite
>a few for a bridge rectifier but I'm not really sure how to mod them
>to use a full wave rectifier.

Hi, Bridge rectifiers are full wave. Sounds like you want a full wave center tap arrangment. These are very common, surprised you could not find a schematic.
With a 32 volt center tapped xfmr, connect the center tap to common and attach 2 rather large diodes to the other two transformer leads, and common their anodes. You now have an unfiltered 22.6 volt full wave DC power supply. Xfmr CT is negative, and the diode anodes are positive.
To get to a 12 VDC regulated supply add sufficient filter capacitors, and regulator devices. A 12 volt 20 amp linear power supply requires heat sinks on the solid state devices. I use about 50,000mfd filtering on mine, and a 200 volt 50 amp darlington transistor, as the series pass transistor regulator. I used them because that is what I had on hand. The final design of your regulated supply will depend on a number of factors.
73 Gary N4AST

172. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-09 23:52:01 UTC
From: G1LVN <google@g1lvn.org.uk>
Message-ID: <1105314721.521452.199930@c13g2000cwb.googlegroups.com>
Source record: 21205
Cross-posted to: uk.radio.amateur, rec.radio.amateur.homebrew

Suggest you look at:
http://groups-beta.google.com/group/uk.radio.amateur/about

There you will se that there are less than 100 users of this NG of which only 10 are regular posters (of which you are one). The other nine all hate you, so I'd say your chances are slim to none (and Slim's on holiday).

173. Re: HP 10544 OCXO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 00:06:52 UTC
From: DaveM <masondg4499@comcast99.net>
Message-ID: <nLWdneXSS9KDWnzcRVn-hg@comcast.com>
Source record: 21206
Cross-posted to: sci.electronics.equipment,rec.radio.amateur.homebrew

Arnd,
There is some really good info on the HP oscillator at
http://www.realhamradio.com/GPS_Frequency_Standard.htm, which describes uses
for the HP Z3801A GPS Receiver/Time Standard. The page at
http://www.realhamradio.com/z3801a-turning-point.htm gives you some really
great info on setting the crystal turning point temperature for the best
stability. This will help you to understand your questions about the
thermistor also. The oven isn't set to a standard temp, but to the best
temp that puts the crystal in the middle of its curve. The thermistor is
spec'ed at 100K @ 25C and 9.93K @ 80C. You'll have to shop around for a
suitable replacement, keeping in mind the physical size of the thermistor.
Mouser, Digikey, Allied, etc. are good sources of those. After replacement,
you'll have to go through the turning point calibration as described in the
above article. The thermistor is part of the oven mass assembly, and isn't
separately orderable from Agilent.

The thermal fuse isn't described in the documentation, just given a part
number. I don't have the manual for the 10544A, but I do have one for the
10811A/B oscillator, which is very similar.

--
Dave M
MasonDG44 at comcast dot net (Just subsitute the appropriate characters in
the address)

Never take a laxative and a sleeping pill at the same time!!
"Arnd Gronenberg" <arnd@gronenberg.com> wrote in message
news:crsdhnimb05$1@news.t-online.com...
> Hi,
>
> the HP 10544A OCXO driving my HP5328A counter failed due to a blown thermo
> fuse. The underlying problem was a broken Thermistor lead (unfortunately
> within the sealed hole) which caused the owen to run away (and blow the
> fuse). I already searched, but didn't find answers to the following
> questions. In order to find a suitable replacement thermistor, I would
> like to know:
> - At what temperature does the OCXO nominally operate?
> - What are the characteristics of the original thermistor used by
> HP? (my copy of the 10544 schematic lists the thermistor as
> "9.93K @80C 0637-0122", but it is difficult to distinguish "6" and
> "8")
> - Which temperature specification is required for the thermo fuse?
>
> Thanks in advance!

>
> 73 de Arnd
>
> --
> Arnd Gronenberg
> EMail: arnd@gronenberg.com
> HAM: DJ9PZ / AB2QP

174. Re: TX-relay

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 02:39:34 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <6eq3u091d97v23vssampm5olq5vh9ujhfs@4ax.com>
Source record: 21207

On Mon, 10 Jan 2005 00:03:31 +0100, "geir knutsen"
<ge-knuts@online.no> wrote:

>Do you have a link for the schematics of the PIN diode switching? or can you
>send me the drafts?
>
>Geir
>
>
>"J M Noeding" <la8ak@online.no> wrote in message
>news:adv2u093ltsg60v9q07fdesoas5s5n4536@4ax.com...
>> On Sun, 9 Jan 2005 11:56:49 +0100, "geir knutsen" <ge-knuts@online.no>
>> wrote:
>>
>>>It is one of the Magnetic 8172 on your web.

>>>Link to pa. http://home.online.no/~la8ak/d25.htm

>>
>> I might have used a smaller dpdt pcb relay from LA3VW which type is
>> tested by LA6LCA and LA8OJ, but don't know about the availability and
>> type, and it is some precautions to make to make it operate properly.
>> The easiest is always to use PIN diode, the Unitrode UM9401 is a very
>> easy choice (for the series diode), and the dealer is service minded,
>> at least they were when I bought some. Demanded 50, but they only had
>> 25, and I later sold most of them to friends around, hi
>> This type of diode may be used to at least 1kW according to SM5BSZ,
>> but it is a quite complex switch design to do it, normally they are
>> good enough for more than 100W. The smaller diode could be 2x BA182 or
>> 2x BA282 or something better in anti-parallel. I prefer the anti-
>> parallel configuration even if I use some current through the diodes
>> during transmit

http://home.online.no/~la8ak/d2.htm shows several variationsin
applications for PIN diode switches, cannot remember how much direct
current is needed for your switch, it is limited by the smaller diode
D2 in fig 5
D3 is only protection for receiver if something goes wrong with the TX
switching voltage

73 jm

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

175. Re: 12V Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 02:56:33 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <41E1EEE1.55E20F8E@rica.net>
Source record: 21208

beerbarrel wrote:
>
> On Sun, 09 Jan 2005 16:25:55 -0500, John Popelish <jpopelish@rica.net>
> wrote:
>
> >beerbarrel wrote:
> >
> >> Let me rephrase what I said, or what I meant to say. I have a 32v
> >> transformer that is centertapped at 16v. It has the diodes in place
> >> for a full wave rectifier.
> >
> >Two diodes or 4?
> >
> > I want to construct a linear PS from this.
> >> I don't really want to add a bridge to make this work in another
> >> configuration. What I need is a schematic that allows use for a high
> >> current transformer (30 AMP) using this configuration. I would like to
> >> get max current out of the transformer. I realize that I could use one
> >> of the secondaries and the center tap with a bridge to make a PS and I
> >> might have to do that. I think that it would cut into my current
> >> rating heavily though. Any thoughts?
>
> 2
>
> The transformer was removed from a automotive battery charger and has
> 2 heavy duty rectifiers pressed into a heavy aluminum plate. I have a
> 65000 mF cap band ready to go for the filter.

Then you have the basis for a high current supply. You could get a slight increase in current capability by separating the two halves of the secondary, put a 4 diode bridge in each half and connect the outputs of those bridges in parallel, but the view is probably not worth the climb unless you really need every ampere this thing is capable of. And in that case you would want a switching regulator to convert volts to amperes, instead of a linear regulator. Lots more difficult.

Here is the data sheet for a control chip commonly used for high current linear regulators. The application notes (figure 5) give the general idea of what is required. You will have to come up with a bank of pass transistors (6 to 10 TIP36, perhaps and a big heat sink).

http://cache.national.com/ds/LM/LM723.pdf
--
John Popelish

176. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 06:26:06 UTC
From: JeffM <jeffm_@email.com>
Message-ID: <1105338366.641076.205820@c13g2000cwb.googlegroups.com>
Source record: 21209
Cross-posted to: rec.radio.amateur.homebrew, sci.electronics.repair, rec.autos.tech, alt.engineering.electrical, rec.aviation.homebuilt

>>Lacing might contribute a little extra strength in the long
direction.
>>Plus, as others have noted, it looks better.
>> CJT
>
>And, you don't get flesh wounds from the cut ends of nylon cable ties.
:)
> Sam Goldwasser

...after someone has cut them off with semi-flush dikes
or other inappropriate tool.

177. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 07:07:55 UTC
From: Tony VE6MVP <tony@REMOVEve6mvp.com>
Message-ID: <uti3u05g9k5h5v4fu1fh5cch9e3bjo7tv6@4ax.com>
Source record: 21210

On Thu, 6 Jan 2005 12:04:29 -0000, "Airy R. Bean" <me@privacy.net>
wrote:

>Misleading posting-order corrected.....

Misleading how?

I'm a bottom poster and trimmer for about 15 years or more.

Tony

178. Re: 12V Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 07:33:18 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <sp84u0pfna8dmlujifhj9ccap5j20cgvkd@4ax.com>
Source record: 21211

On 09 Jan 2005 23:21:57 GMT, jgboyles@aol.com (JGBOYLES) wrote:

> With a 32 volt center tapped xfmr, connect the center tap to common and
>attach 2 rather large diodes to the other two transformer leads, and common
>their anodes. You now have an unfiltered 22.6 volt full wave DC power supply.
>Xfmr CT is negative, and the diode anodes are positive.

You have the rectifiers connected the wrong way to get a positive
output voltage. In half wave rectifiers, two diode CT full wave
rectifiers and in bridge rectifiers, the cathodes are always connected
to the _positive_ capacitor terminal.

Paul OH3LWR

179. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 07:51:13 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <g7c4u0t0el2rlb82p0uh6fkv81n2f3lggr@4ax.com>
Source record: 21212

On Sat, 08 Jan 2005 11:21:09 +0800, budgie <me@privacy.net> wrote:

>>The pilot's attention needs to be outside the aircraft looking for other
>>aircraft, not screwing around playing with microphone wires.
>
>Rule of thumb here is 90% outside, 10% on instruments for VFR

Messing too much with microphone wires will make you a candidate for
the Darwin price due to the Controlled Flight into Terrain (CFIT)
syndrome.

A well known case is the L1011 crash in Florida killing 100, when the
crew were too occupied fixing the landing gear light problem and
forgot to fly the aircraft.

http://www.aviationcrm.com/humanerror.htm

Paul OH3LWR

180. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 12:31:38 UTC
From: mr_wibble@mad.scientist.com
Message-ID: <1105360298.564400.123170@c13g2000cwb.googlegroups.com>
Source record: 21213
Cross-posted to: rec.radio.amateur.homebrew, uk.radio.amateur

Greteings, one and all!

Airy R.Bean wrote:

> I'm not proposing anything like that. I don't know
> anything about the K2.

Thereby showing the massive extent of his ignorance. Anyone propounding to know anything about developments in amateur (not 'HAM') radio during the past decade who doesn't know anything about the K2 is of course not worth the space he takes up: and most certainly not the air that he breaths.

To paraphrase poor Airy - the Ignorant Prat reveals his true nature every time he opens his mouth.

Regards,

Mr Wibble

181. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 13:26:09 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34febpF49ke07U2@individual.net>
Source record: 21214
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Mr.Westcott once again demonstrates his infantile personality.

Grow up, Mr.Westcott!

"Tim Wescott" <tim@wescottnospamdesign.com> wrote in message
news:10u31ei6ga3v552@corp.supernews.com...
> Airy R. Bean wrote:
>
> -- the usual crap --
>
> DON'T FEED THE TROLL!

182. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 13:32:05 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34fekaF4b6hqhU1@individual.net>
Source record: 21215
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

I wonder why Mr.Reay pours scorn on a proposal
which perhaps he himself ought to have come up
with bearing in mind his regular _BOASTING_ about how
important he perceives himself to be in the training
of newcomers?

Is it because he is tetchy (to use his own phrase) that he
didn't think of the idea first?

Perhaps, bearing in mind his recent boasts about share dealings,
he has shares in Waters And Stanton?

Either way, his rather silly and infantile sneering below does seem
to suggest that he is irrelevant to the future of _REAL_ Ham Radio;
and of no value to any scheme for beginners.

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34d103F477pfqU1@individual.net...
> "mexico_zero" <nospam@please.com> wrote in message
> news:NYbEd.2277$Rg1.705@newsfe4-gui.ntli.net...
> > "Airy R. Bean" <me@privacy.net> wrote in message >.....
> > >is that we club together and conceive of a design <snip>
> > > We wouldn't need any facilities other than were present in,
> > > say, the KW2000 of 35 years ago <snip>
> > > None of the CBer's facilities such as scanners, memories,
> > > CAT interfaces, CTCSS and the like are necessary <snip>
> > > I suggest that we consider a DSP approach for all the
> > > baseband mod and demod, and then phasing techniques
> > > for translating into the various bands.<snip>
> Indeed, not a bad idea at all.
> However, what is to be gained by re-inventing a (in radio terms) stone age
> design?
> Thinks like computer control provide added challenge and attraction to the
> idea, why dismiss them? They could always be add-ons. DSP. Oh dear. I
> assume this phasing technique relies on Big K.
> Or maybe he just meant mixing, an existing technique not needing DSP.

183. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 14:27:08 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34fi6uF4b131pU1@individual.net>
Source record: 21217

The posting misquoted me as a bottom poster.

Top-posting is the preferred option - you get to
see the new content without having to page down
through loads of already-seen quotations.

English reads from the top-down with _FOOT_ notes
at the _FOOT_ of the page.

"Tony VE6MVP" <tony@REMOVEve6mvp.com> wrote in message
news:uti3u05g9k5h5v4fu1fh5cch9e3bjo7tv6@4ax.com...
> On Thu, 6 Jan 2005 12:04:29 -0000, "Airy R. Bean" <me@privacy.net>
> wrote:
> >Misleading posting-order corrected.....
> Misleading how?
> I'm a bottom poster and trimmer for about 15 years or more.

184. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 14:31:46 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34fi6vF4b131pU2@individual.net>
Source record: 21216
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Whatever you say about your K2, it is a proprietary design,
and thus no different from the YaesKenIcom products, and
therefore is off-the-shelf

The essence of Ham Radio is that we produce and maintain
our own designs and are not beholden to any commercial
operation that has its sights set on the shekels.

I'm not interested in a comparison with commercial gear. The
idea is to design a transceiver that is easily reproducible by
beginners, and which is future-proofed by having the
interface between stages well-specified so that you could,
for example, substitute your own mixing stages.

"gb" <onw9mapsgb@no.arrl.spam.net> wrote in message
news:EtadnY5v8qnfL3zcRVn-3A@comcast.com...
"Airy R.Bean" <Me@privacy.net> wrote in message
news:34da7tF49vqthU1@individual.net...
> I'm not proposing anything like that. I don't know
> anything about the K2.
> You seem to have missed the point somewhat, if your
> thoughts go straight to what you can buy off the shelf.

Not "off the shelf" product. I am very surprised that you are unaware of
Elecraft (founded in 1998) by Wayne Burdick (N6KR) and Eric Swartz (WA6HHQ).
They are the design team dedicated to "hands-on" ham radio transceivers and
accessories that can easily be built by amateurs.

> I don't follow URL's from Usenet - it is a bad debating style
> to send your correspondents off to do reading. if you have
> something of value to say, then please say it yourself.
I guess you do not read hobby print magazine or had a contact with an
Elecraft user.
Elecraft (and its concept) of building and reparing your won equipment has
been widely covered in amateur print magazines in Europe, Far East and US.

Debating is not the point and usenet is not the forum for true debate.
Compare your stated specifications and criteria to the Elecraft K2 design
team's criteria and specs --- you shoudl discover that it meets the majority
of your stated criteria.

gb
>> "Airy R. Bean" <me@privacy.net> wrote in message
>> news:34cvmdF42au28U1@individual.net...
>> > .....is that we club together and conceive of a design

>> > for an HF transceiver that could form the basis of the
>> > station of any budding Radio Ham.
>> >
>> > We wouldn't need any facilities other than were present in,
>> > say, the KW2000 of 35 years ago (apart from greater than
>> > 200 kHz coverage on each band!)
>> >
>> > None of the CBer's facilities such as scanners, memories,
>> > CAT interfaces, CTCSS and the like are necessary.
>> >
>> > I suggest that we consider a DSP approach for all the
>> > baseband mod and demod, and then phasing techniques
>> > for translating into the various bands.
>> >
>> > A power output of 5W will be more than sufficient for
>> > any self-respecting _REAL_ Radio Hams - it is only
>> > CBers and CBers-Masquerading-As-Radio-Hams who
>> > need to work with BBC levels of signal strength.
>> >
>> > Such a project could be what we need to capture the
>> > interest of newcomers who would not then be sidetracked
>> > into the CB-like purchasing of brand-new rigs from the
>> > shelves of emporia, and, having, constructed their own
>> > rigs, would feel competent to maintain those rigs, unlike
>> > those who send them back to the emporia and thus show
>> > themselves as closet CBers.
>> >
>> > We _COULD_ take a lead in this NG!
>> >
>>
>> ... and your thoughts on the existing Elecraft K2 (which meetings you
> power
>> output criteria), which has almost 5,000 kits of this model now sold
>> worldwide?
>> http://www.elecraft.com/
>>
>> Do you desire to build upon this kit and building experience (referred to
> as
>> "K3" designs among Elecraft builders) by adding additional features you
> have
>> mentioned?
>>
>> gb
>>
>>
>
>

185. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 14:55:14 UTC
From: me@privacy.net
Message-ID: <dk55u0tjub1dsffi2bp3ngdpoql7gb8gk3@4ax.com>
Source record: 21218

On Mon, 10 Jan 2005 14:27:08 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>Top-posting is the preferred option - you get to
>see the new content without having to page down
>through loads of already-seen quotations.

Top-posting is not the preferred option, unless you mean it is your
personal preference. You should be able to make the distinction
easily enough.

186. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 15:19:03 UTC
From: Ron <"no one"@home.com>
Message-ID: <V5xEd.19$Ax.4653@news.uswest.net>
Source record: 21219
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

Good to hear from someone with VERY similar experiences,. I started in SxS, and of course the new guys always start on the cable crew. Tough job, so I soon learned how to get involved in 're-grade' of SxS. This got me out of the cabling, and into a softer job. I never got into X-Bar, so had no experience with 'troughs'. etc. A lot of PBX jobs, then hired on with the telco in about 1960, went to COE Engineering in 1966, and retired from toll equipment engineering in 1984. My calloused hands are now back to normal. I still have a half-roll of #6 cord which I've saved and I hate to use because then I'll be out of it <G>.

I'm now completely out of contact with those I worked with, so it is good to know that I'm not the only one still alive.

Thanks for the walk down Memory Lane.

Ron

"Ross Herbert" <rherber1@bigpond.net.au> wrote in message news:0254u0tv3jujbhjtjng8u16k4mqu89jr71@4ax.com...
> On Sun, 9 Jan 2005 07:34:13 -0800, "Ron" <no one @home.com> wrote:
>
> >BOY! These 'How-To' websites certainly bring back memories. These are the
> >methods, procedures, & materials we used when I hired on with Western
> >Electric in the early 50s. In those days we used tons of #6 & #12 cord for
> >securing gazillions of feet of telephone cables inside the telephone company
> >switching central offices. We also got lots of blisters & calluses while
> >making the cabling look neat & secure. Cable mining? YUK!
> >
> >
> Ron, with SxS every cable run was intricately planned and the
> individual cables in a block had to occupy a pre-determined location
> in the block so that the cables would fall out at both ends without
> any cross-overs. It was a laborious task and perhaps you recall making
> up the block layout sketches and walking the cable route with the
> sketch in front of you and turning it in accordance with the twists
> and turns, just so that you could verify that you had every cable in
> the right location? Planning a cable block layout was a skill in those
> days. Cable recovery in step exchanges occurred rarely unless a major
> change was required and runway space was insufficient for the new run.
> When total overhead cable mesh and free run cabling came in during the

> 60's with crossbar installations the only cable lacing was at the
> equipment rack ends where the wires were formed into looms for
> distribution to the respective relayset terminating jacks. With many
> more cables required for crossbar the old block lacing methods were no
> longer suitable and the view of the overhead cabling in a crossbar
> exchange looked like spaghetti junction with cables about 2 feet deep
> at certain places. Nobody bothered about recovring the dead cables
> because it was almost impossible to do so. Only when these exchanges
> were pulled out in the 90's was any cable mining done.

187. Re: Experimenting with spread spectrum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 15:31:11 UTC
From: "David H." <d_h@nospam.com>
Message-ID: <5l75u0d1ia0bb2tcq4oq2n6795n4bgksvf@4ax.com>
Source record: 21220

On Sun, 09 Jan 2005 18:51:50 -0800, Bill Turner <noway@nohow.com> wrote:

>Spread Spectrum = Legalized Jamming.
>
>Please don't.

Hi bill, I plan on experimenting with this on a very small scale (as far as power output goes) and would be monitoring the power density of the spectrum matrix at all times. It's just something I've always been very interested in.

Dave

188. Re: Experimenting with spread spectrum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 15:49:27 UTC
From: "David H." <d_h@nospam.com>
Message-ID: <kv75u0daot63p5q0i814e9tdeimk2qi1f5@4ax.com>
Source record: 21221

On Sun, 09 Jan 2005 09:46:20 GMT, "Wim Ton" <wimton@blueyonder.co.uk> wrote:

>The ARRL published a book about spread spectrum quite a while ago. The
>Brittish magazine "Electronics & Wireless World" published a 2 part article
>at least 5 years ago.
>
>Wim

Literally the last book I read that had anything to do with spread spectrum was the 1993 edition of the ARRL Handbook. I read enough of the basic theory to get me very interested, and it's been stewing in the back of my mind ever since. Recently I saw something the refired my interest once again in spread spectrum.

A Quote:

"Also, a 500mw spread spectrum device can easily have an effective range of over 20 miles. In 1994 I field tested a spread spectrum LPD/LPI handheld radio designed for downed pilots. The power would vary between one half milliwatt to one full watt based on the quality of a duplex link. With power levels below 25mw we could communicate clearly at a distance of 45 miles on the open ocean (from a life raft), and 15 miles in the dense woods of Maine. When the device was tested in a dense urban area, a range of 2500 to 8600 feet was obtained while keeping the power output *below* 15mw."

I've seen two publications on the web regarding spread spectrum:

The ARRL spread spectrum sourcebook at:
http://www.powells.com/cgi-bin/biblio?isbn=0872593177

and

TAPR's Spread Spectrum Update at:
http://www.tapr.org/tapr/html/Fpub.ss.html

Has anyone read either of these publications? I'm afraid I'm just a little rusty on the old algebra, trig and calculus. So a relatively math-free (not completely math-free, mind you) book would be appreciated.

As I understand it, the ARRL spread spectrum sourcebook is evidently a collection or articles put out by the ARRL/AMRAD on spread spectrum experiments. Would this be correct?

Like I said, I'm a beginner in this area, but usually learn quickly. Is there any such thing as, perhaps, a few "ready-made" kits or consumer devices that could be immediately utilized in exploring this fascinating field? This would be very nice indeed.

Dave

189. Re: Experimenting with spread spectrum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 16:16:05 UTC
From: "David H." <d_h@nospam.com>
Message-ID: <9095u05h74pm4kkni2fu93gp542r8utprc@4ax.com>
Source record: 21222

Thanks for the info, Caveat. Looks like I may have had run across one of your links in all my searching :)

There are many question I have regarding SS, but one that's bothering me in particular. Regarding the PN spreading sequence, these sequences obviously have to be aligned perfectly in both transmitter and receiver. Naturally they could be kept in sync if both circuits were initialized at the same time.

However, 3 things: 1) The circuits will not be initialized at the same time in 99% of most cases, as in the use of, say, a portable field radio. 2) If they were synchronized at the same time, well, no clock or oscillator is perfect. It would eventually drift. 3) As I understand it, there is no initial "handshake" signal at the beginning of transmission with the receiver to initialize/syncronize the PN sequences on both ends.

So in short, how do the PN sequences became and remain synchronized through time? Thanks.

Dave

On Sun, 9 Jan 2005 07:02:01 -0800, "Caveat Lector" <CL@barahmas.com> wrote:

>Web sites for Spread Spectrum mode
>
>http://www.tapr.org/tapr/html/Ffhsspaper.97.html
>
>http://www.tapr.org/ss/
>
>http://sss-mag.com/index.html
>
>--
>Caveat Lector
>
>>> Am looking to start experimenting with spread spectrum communications.
>>>
>>> I'm pretty much starting from scratch in this area. Could anyone please
>> point me to a
>>> good starting point? Thanks.
>>>
>>

190. Re: Experimenting with spread spectrum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 16:24:33 UTC
From: mikea@mikea.ath.cx
Message-ID: <crua81$uu5$4@puck.litech.org>
Source record: 21223

David H. <d_h@nospam.com> wrote:
> Thanks for the info, Caveat. Looks like I may have had run across one of your links
> in all my searching :)

> There are many question I have regarding SS, but one that's bothering me in
> particular. Regarding the PN spreading sequence, these sequences obviously have to be
> aligned perfectly in both transmitter and receiver. Naturally they could be kept in
> sync if both circuits were initialized at the same time.

> However, 3 things: 1) The circuits will not be initialized at the same time in 99% of
> most cases, as in the use of, say, a portable field radio. 2) If they were
> synchronized at the same time, well, no clock or oscillator is perfect. It would
> eventually drift. 3) As I understand it, there is no initial "handshake" signal at
> the beginning of transmission with the receiver to initialize/syncronize the PN
> sequences on both ends.

> So in short, how do the PN sequences became and remain synchronized through time?
> Thanks.

Two ways that come to mind immediately:

1) The transmitter sending its state periodically, so that the
receiver can jam that into its spreading or hop control
registers and be instantly synchronized. No good for *secure*
comms, but great for insecure comms.

2) The transmitter using spreading or hop control based in some
way on (GPS) time, say by automatically loading new control
state periodically. The receiver would load the same control
state for that time period, and then could slew the clock
forward in time until it detected synchronization. This is a
variation on (1) which *is* good for secure comms.

Drift can be corrected by circuitry in the receiver, from the received
signal. If the link is via satellite, drift (and Doppler shift) *must*
be corrected in the receiver to maintain sync.

--
Mike Andrews
mikea@mikea.ath.cx
Tired old sysadmin

191. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 16:32:08 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34fp5uF49lkdvU1@individual.net>
Source record: 21224
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Hmm..... only 6 replies and only one in anything that
might be construed as a positive response, and that
one was pretty defeatist.

Perhaps Ham Radio has degenerated in to becoming an offshoot
of CB Radio in Yankland as well as in Britland?

"Airy R. Bean" <me@privacy.net> wrote in message
news:34cvmdF42au28U1@individual.net...
> .....is that we club together and conceive of a design
> for an HF transceiver that could form the basis of the
> station of any budding Radio Ham.
>
> We wouldn't need any facilities other than were present in,
> say, the KW2000 of 35 years ago (apart from greater than
> 200 kHz coverage on each band!)

192. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 17:06:22 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <iCyEd.84797$k25.40602@attbi_s53>
Source record: 21225
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34fp5uF49lkdvU1@individual.net...
> Hmm..... only 6 replies and only one in anything that
> might be construed as a positive response, and that
> one was pretty defeatist.
>
> Perhaps Ham Radio has degenerated in to becoming an offshoot
> of CB Radio in Yankland as well as in Britland?

The alternate conclusion of course, might well be simply that your fame preceeds you Airhead. In truth, if you only read your own National magazine that you profess so much dislike for, you would find that they recently carried for some 20 months a construction article having every feature you have supposedly considered. Done by amateurs for amateurs and surpassing in most features, anything offered commercially at any price.

You're very good Airhead, you are the only one on any newsgroup that I subscribe to that can raise my blood pressure just by reading your byline. Fortunately, I am blessed with low blood pressure and can stand it, but to absolutely preclude any possible ill side effects, you are now entering my kill file zone. Too bad God made so many more horses asses than he did horses.

W4ZCB

193. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 17:24:40 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34fs2gF495va1U1@individual.net>
Source record: 21226
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Harold E. Johnson" <W4ZCB@mchsi.com> wrote in message
news:iCyEd.84797$k25.40602@attbi_s53...
>
> "Airy R.Bean" <Me@privacy.net> wrote in message
> news:34fp5uF49lkdvU1@individual.net...
> > Hmm..... only 6 replies and only one in anything that
> > might be construed as a positive response, and that
> > one was pretty defeatist.
> >
> > Perhaps Ham Radio has degenerated in to becoming an offshoot
> > of CB Radio in Yankland as well as in Britland?
>
> The alternate conclusion of course, might well be simply that your fame
> preceeds you Airhead. In truth, if you only read your own National
magazine
> that you profess so much dislike for, you would find that they recently
> carried for some 20 months a construction article having every feature you
> have supposedly considered. Done by amateurs for amateurs and surpassing
in
> most features, anything offered commercially at any price.
>
> You're very good Airhead, you are the only one on any newsgroup that I
> subscribe to that can raise my blood pressure just by reading your byline.
> Fortunately, I am blessed with low blood pressure and can stand it, but to
> absolutely preclude any possible ill side effects, you are now entering my
> kill file zone. Too bad God made so many more horses asses than he did
> horses.
>

Brilliant Harold, no one can dress an insult up like an American. I love
it!

ROTFLMAO !

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

194. Tek 2754P LO adjustment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 17:29:42 UTC
From: rfgelitronics <no_spam@nowhere.com>
Message-ID: <aYyEd.9057$wZ2.6923@newssvr13.news.prodigy.com>
Source record: 21227
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,sci.electronics.equipment,rec.radio.amateur.equipment

Hello everybody:

I am adjusting the LO hardware of my 2754P and there are some things that I
can not find or undestand:

After pressing shift 0 , loops calibration, overall system option the first
message is:

Connect a DVM on TP1058...etc (no problem)
(the meter shows 17mV)

Adjust frequency control
for a reading of 0.000 +/- 2mV

(problem WHICH FREQUENCY CONTROL?? OR POTENTIOMETER OR RESISTOR???)
The freuquency control board???

2.Connect a DVM on oint B of the controlled oscillator board and ground..
WHERE THE HECK IS POINT B AND WHERE IS THE CONTROLLED OSCILLATOR BOARD???

Thank you your help

195. Re: Tek 2754P LO adjustment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 17:33:17 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <x%yEd.14040$iC4.5559@newssvr30.news.prodigy.com>
Source record: 21228
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,sci.electronics.equipment,rec.radio.amateur.equipment

there's a Tek group on Yahoo & SA are discussed.
http://groups.yahoo.com/group/TekScopes/

--

73
Hank WD5JFR
"rfgelitronics" <no_spam@nowhere.com> wrote in message
news:aYyEd.9057$wZ2.6923@newssvr13.news.prodigy.com...
> Hello everybody:
>
> I am adjusting the LO hardware of my 2754P and there are some things that
> I can not find or undestand:
>
> After pressing shift 0 , loops calibration, overall system option the
> first message is:
>
> Connect a DVM on TP1058...etc (no problem)
> (the meter shows 17mV)
>
> Adjust frequency control
> for a reading of 0.000 +/- 2mV
>
> (problem WHICH FREQUENCY CONTROL?? OR POTENTIOMETER OR RESISTOR???)
> The freuquency control board???
>
>
> 2.Connect a DVM on oint B of the controlled oscillator board and ground..
> WHERE THE HECK IS POINT B AND WHERE IS THE CONTROLLED OSCILLATOR BOARD???
>
> Thank you your help
>

196. Re: Tek 2754P LO adjustment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 17:40:19 UTC
From: rfgelitronics <no_spam@nowhere.com>
Message-ID: <76zEd.9065$wZ2.4873@newssvr13.news.prodigy.com>
Source record: 21229
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,sci.electronics.equipment,rec.radio.amateur.equipment

This is an spectrum analyzer, but I will give it a try..

Thank you

"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
news:x%yEd.14040$iC4.5559@newssvr30.news.prodigy.com...
> there's a Tek group on Yahoo & SA are discussed.
> http://groups.yahoo.com/group/TekScopes/
>
> --
>
> 73
> Hank WD5JFR
> "rfgelitronics" <no_spam@nowhere.com> wrote in message
> news:aYyEd.9057$wZ2.6923@newssvr13.news.prodigy.com...
>> Hello everybody:
>>
>> I am adjusting the LO hardware of my 2754P and there are some things that
>> I can not find or undestand:
>>
>> After pressing shift 0 , loops calibration, overall system option the
>> first message is:
>>
>> Connect a DVM on TP1058...etc (no problem)
>> (the meter shows 17mV)
>>
>> Adjust frequency control
>> for a reading of 0.000 +/- 2mV
>>
>> (problem WHICH FREQUENCY CONTROL?? OR POTENTIOMETER OR RESISTOR???)
>> The freuquency control board???
>>
>>
>> 2.Connect a DVM on oint B of the controlled oscillator board and ground..
>> WHERE THE HECK IS POINT B AND WHERE IS THE CONTROLLED OSCILLATOR BOARD???
>>
>> Thank you your help
>>
>
>

197. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 18:03:28 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34fv1lF48dfkqU1@individual.net>
Source record: 21230
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

A rather silly and childish broadcast (CB) from you.

Grow up, Harold.

Stupid boy.

"Harold E. Johnson" <W4ZCB@mchsi.com> wrote in message
news:iCyEd.84797$k25.40602@attbi_s53...
> "Airy R.Bean" <Me@privacy.net> wrote in message
> news:34fp5uF49lkdvU1@individual.net...
> > Hmm..... only 6 replies and only one in anything that
> > might be construed as a positive response, and that
> > one was pretty defeatist.
> > Perhaps Ham Radio has degenerated in to becoming an offshoot
> > of CB Radio in Yankland as well as in Britland?
> The alternate conclusion of course, might well be simply that your fame
> preceeds you Airhead. In truth, if you only read your own National
magazine
> that you profess so much dislike for, you would find that they recently
> carried for some 20 months a construction article having every feature you
> have supposedly considered. Done by amateurs for amateurs and surpassing
in
> most features, anything offered commercially at any price.
> You're very good Airhead, you are the only one on any newsgroup that I
> subscribe to that can raise my blood pressure just by reading your byline.
> Fortunately, I am blessed with low blood pressure and can stand it, but to
> absolutely preclude any possible ill side effects, you are now entering my
> kill file zone. Too bad God made so many more horses asses than he did
> horses.

198. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 18:06:51 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34fv1nF48dfkqU2@individual.net>
Source record: 21231
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

That Mr.Reay rejoices at insults but not at
technical proposals serves to illustrate once again
that nobody who holds, or who has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme will _EVER_ make it
into the ranks of _REAL_ Radio Hams with their gentlemanly
traditions.

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34fs2gF495va1U1@individual.net...
> Brilliant Harold, no one can dress an insult up like an American. I love
> it!
> ROTFLMAO !

199. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 18:08:54 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34fv1oF48dfkqU3@individual.net>
Source record: 21232
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

There is no national magazine for Radio Hams in Britland,
unless you mean Practical Wireless.

No other magazine is widely available to all who wish to
purchase it.

"Harold E. Johnson" <W4ZCB@mchsi.com> wrote in message
news:iCyEd.84797$k25.40602@attbi_s53...
> In truth, if you only read your own National magazine
> that you profess so much dislike for, you would find that they recently
> carried for some 20 months a construction article having every feature you
> have supposedly considered.

200. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 18:19:10 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34fvhfF4au7q8U1@individual.net>
Source record: 21234

Top posting _IS_ the preferred option, not the least reason
being that you get to see the new stuff immediately without
having to trawl through repeated stuff that you've
already seen.

English is read from the top down, and citations and _FOOT_
notes belong at the _FOOT_ of the page.

"Bill Turner" <noway@nohow.com> wrote in message
news:rec5u0l4rmnfvp2ukrinh425k14u5qluri@4ax.com...
> On Mon, 10 Jan 2005 14:55:14 +0000, me@privacy.net wrote:
> >Top-posting is not the preferred option, unless you mean it is your
> >*personal* preference.
> Actually, it's Bill Gates' preference, since Outlook and Outlook Express
> default to top posting and they're used by darn near everyone in
> business. It can't help but carry over to private email.

201. Re: Experimenting with spread spectrum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 18:20:43 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34fvhfF4au7q8U2@individual.net>
Source record: 21233

AIUI, the receiver does a number of correlations against
the incoming signal to establish synchronisation.

"David H." <d_h@nospam.com> wrote in message
news:9095u05h74pm4kkni2fu93gp542r8utprc@4ax.com...
> So in short, how do the PN sequences became and remain synchronized
through time?
> Thanks.

202. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 19:00:04 UTC
From: Nimrod <nospamfor@me.com>
Message-ID: <34g1l7F4a66qcU1@individual.net>
Source record: 21236
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34fekaF4b6hqhU1@individual.net...
> I wonder why Mr.Reay pours scorn on a proposal
> which perhaps he himself ought to have come up
> with bearing in mind his regular _BOASTING_ about how
> important he perceives himself to be in the training
> of newcomers?
>

Actually, Dr Reay said it was a good idea. He did point out a few flaws in your concept. As we have all done in the past.

You always react like this Gareth when one of your great ideas proves to be less than great. At least this failure isn't going to cost you your job.

203. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 19:00:07 UTC
From: Nimrod <nospamfor@me.com>
Message-ID: <34g1IcF4a265cU1@individual.net>
Source record: 21237
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Spike" <Aero.Spike@Speed.invalid> wrote in message
news:jdk2u053qfmao2i4e5cmmp1hm3fkio630n@4ax.com...
> On Sun, 9 Jan 2005 15:37:38 -0000, "Brian Reay"
> <brian.reay@(spamstopper)bigfoot.com> wrote:
>
> >
> >"Spike" <Aero.Spike@Speed.invalid> wrote in message
> >news:vkj2u0th5qfrvlj064novucosk5u61dbf7@4ax.com...
> >> On Sun, 9 Jan 2005 15:04:59 -0000, "Airy R. Bean" <me@privacy.net>
> >> wrote:
> >>
> >> >.....is that we club together and conceive of a design
> >> >for an HF transceiver that could form the basis of the
> >> >station of any budding Radio Ham.
> >>
> >> Bean apears to be operating in 'Rehabilitation Mode' - all his old
> >> chestnuts are coming out.....:-(
> >
> >I've little doubt that is his ploy. However, I lean toward being of an
> >overly forgiving nature and, if he can behave, maybe some good will come
of
> >it and he will learn something.
>
> Hmm...perhaps it's just another turn of the ever-repeating cycle?
>
> >At worst we can go back though Google and refer him to previous answers.
>
> Afraid not - he doesn't follow urls. I don't know if this is from
> unfamiliarity with usenet, or that he can't read a reference and
> understand which parts were relevant to the discussion. And anyway, if
> you start quoting him back at himself, he killfiles you. Allegedly.

Gareth has always been full of 'good ideas'. They just never seem to have
actually been implemented- be they radio, railway signalling, home made
hacksaws, or telecoms systems. He has always been so- way back to TMC days.

204. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 19:00:09 UTC
From: Nimrod <nospamfor@me.com>
Message-ID: <34g1leF4a265cU2@individual.net>
Source record: 21235
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34da7tF49vqthU1@individual.net...
> I'm not proposing anything like that. I don't know
> anything about the K2.
>

Something else you know nothing about. That list keeps growing Gareth. Have you thought of studying at all?

You have plenty of time on your hands. (Your posting times suggest you are not working at the moment.)

205. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 19:00:12 UTC
From: Nimrod <nospamfor@me.com>
Message-ID: <34g1mlF4acnu4U1@individual.net>
Source record: 21238
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"Spike" <Aero.Spike@Speed.invalid> wrote in message
news:8fd3u0dl23btskti7ne3m21lgc1mh0ioth@4ax.com...
> On Sun, 9 Jan 2005 18:04:58 -0000, "Airy R.Bean" <Me@privacy.net>
> wrote:
>
> >I don't follow URL's from Usenet - it is a bad debating style
> >to send your correspondents off to do reading. if you have
> >something of value to say, then please say it yourself.
>
> <groan>
>
> But if it's someone else's work, it is only correct to point to it.
> After all, you might have a different interpretation of it....sheesh!

Standard practice for Gareth, has been so for years. Way back to the TMC
days. If he avoids research he can pretend it wasn't his fault when it goes
belly up.

206. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 19:00:14 UTC
From: Nimrod <nospamfor@me.com>
Message-ID: <34g1moF4acnu4U2@individual.net>
Source record: 21239
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Airy R.Bean" (aka Gareth G4SDW) <Me@privacy.net> wrote in message
news:34fv1nF48dfkqU2@individual.net...
> That Dr.Reay rejoices at insults but not at
> technical proposals

But yoy have to admit Gareth, the insult was a good one and your technical
proposal was pretty crap. As we have come to expect of you.

207. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 19:17:24 UTC
From: David Edmonds <dedmonds73@yahoo.co.uk>
Message-ID: <8xAEd.719$Fv4.541@newsfe3-win.ntli.net>
Source record: 21240
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Airy R.Bean wrote:

> Whatever you say about your K2, it is a proprietary design,
> and thus no different from the YaesKenIcom products, and
> therefore is off-the-shelf

Yes - but it isn't a propreitary design - it's simply been put together by a group of radio amateurs and there is scope within the kits to do your own modifications - making it way way different from the commercial far-eastern models.

> The essence of Ham Radio is that we produce and maintain
> our own designs and are not beholden to any commercial
> operation that has its sights set on the shekels.

Whatever you say.

> I'm not interested in a comparison with commercial gear. The
> idea is to design a transceiver that is easily reproducible by
> beginners, and which is future-proofed by having the
> interface between stages well-specified so that you could,
> for example, substitute your own mixing stages.

But, why not move with the times and include an element of computer control and computer based audio filtering rather then re-inventing the wheel.

As I've said before, apart from the DSP, I and other radio amateurs have radios here that match your criteria, so why should we bother?

David.

208. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 19:21:00 UTC
From: David Edmonds <dedmonds73@yahoo.co.uk>
Message-ID: <wAAEd.725$Fv4.577@newsfe3-win.ntli.net>
Source record: 21241
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Harold E. Johnson wrote:

> The alternate conclusion of course, might well be simply that your fame
> preceeds you Airhead. In truth, if you only read your own National magazine
> that you profess so much dislike for, you would find that they recently
> carried for some 20 months a construction article having every feature you
> have supposedly considered.

He refuses to read anything 'official' or that represents the public at
large for fear of having to catch up or having his views challenged.

You can bet his workshop drill is still treadle powered with wooden
drill bits.

David.

209. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 19:24:33 UTC
From: David Edmonds <dedmonds73@yahoo.co.uk>
Message-ID: <RDAEd.733$Fv4.595@newsfe3-win.ntli.net>
Source record: 21242
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Airy R.Bean wrote:

> A rather silly and childish broadcast (CB) from you.
>
> Grow up, Harold.
>
> Stupid boy.

Nice, once more old Bean, to see you classing someone of Harold's
vintage as a 'CBer'.

Typical Bean style - if all else fails - cry CBer and run!

Muppet.

David.

210. Re: Experimenting with spread spectrum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 19:27:06 UTC
From: Wim Ton <wimton@blueyonder.co.uk>
Message-ID: <eGAEd.58506$C8.17528@fe3.news.blueyonder.co.uk>
Source record: 21243

>
> The ARRL spread spectrum sourcebook at:
> http://www.powells.com/cgi-bin/biblio?isbn=0872593177
>
> and
>
> TAPR's Spread Spectrum Update at:
> http://www.tapr.org/tapr/html/Fpub.ss.html
>
> Has anyone read either of these publications? I'm afraid I'm just a
little rusty on
> the old algebra, trig and calculus. So a relatively math-free (not
completely
> math-free, mind you) book would be appreciated.
>
> As I understand it, the ARRL spread spectrum sourcebook is evidently a
collection or
> articles put out by the ARRL/AMRAD on spread spectrum experiments. Would
this be
> correct?

I had the ARRL spread spectrum sourcebook (before I sold it on eBay). It is
a bit a jumble of chapters:
A lot of legal and restrictive stuff (as SS originated in military comms and
can be used for covert and/or jam resistant communication)
Several articles on shift register sequences and coding gain.
Synchronisation
Some designs, but the digital parts are quite obsolete now.

Wim

211. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 19:27:20 UTC
From: David Edmonds <dedmonds73@yahoo.co.uk>
Message-ID: <sGAEd.737$Fv4.588@newsfe3-win.ntli.net>
Source record: 21244
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Airy R.Bean wrote:

> A rather silly and childish broadcast (CB) from you.
>
> Grow up, Harold.
>
> Stupid boy.

Actually, if you care to look at Harold's website - www.W4ZCB.com, you'll see he is more than qualified to critise you old Bean - as he seems to have much more design and construction skills than you've dreamt of.

Then again, any common sense you have is often released against the porcelain I bet!

David.

212. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 19:29:56 UTC
From: David Edmonds <dedmonds73@yahoo.co.uk>
Message-ID: <UIAEd.742$Fv4.507@newsfe3-win.ntli.net>
Source record: 21245
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Airy R.Bean wrote:

> There is no national magazine for Radio Hams in Britland,
> unless you mean Practical Wireless.
>
> No other magazine is widely available to all who wish to
> purchase it.

The muppet demonstrates his silly attitude when challenged once more.

You know which magazine he means old Bean - except it's the official
organ of an organisation you despise so much.

Such pathetic and childish behaviour for a man in his 50s!

David.

213. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 19:31:24 UTC
From: cabledude <cabledude@nospam.com>
Message-ID: <41E2D80A.F08B22C0@nospam.com>
Source record: 21246
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

Agreed, also the insides of any IBM mainframe and perhiperial devices
fom past and present.

Laced and cable tied are common.

> Indeed there is a difference, notably in the aviation world.

214. Re: Experimenting with spread spectrum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 19:32:47 UTC
From: Wim Ton <wimton@blueyonder.co.uk>
Message-ID: <zLAEd.58539$C8.44590@fe3.news.blueyonder.co.uk>
Source record: 21098

> So in short, how do the PN sequences became and remain synchronized
through time?
> Thanks.
>
The E&WW article used a Delay Locked Loop, 3 decoders, one fed with the
actual PN secquenc, one with a leading version and one with a lagging
version. The error signal was used to correct the PN clock.

What some military radios use is that the receiver hops much slower than the
transmitter before achieving synchronisation, so I will catch a signal at
some time.

Wim

215. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 19:33:12 UTC
From: tox <nospam@nospamming.co.com>
Message-ID: <YLAEd.468$AY4.137@newsfe5-gui.ntli.net>
Source record: 21247
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"David Edmonds" <dedmonds73@yahoo.co.uk> wrote in message
news:8xAEd.719$Fv4.541@newsfe3-win.ntli.net...
> Airy R.Bean wrote:
>
>>
> As I've said before, apart from the DSP, I and other radio amateurs have
> radios here that match your criteria, so why should we bother?
>

Funny you should mention DSP, David, Airys theory on this subject is
legendary.

Google DSP and Airy, within this forum and the results will keep you amused
for hours!

Regards
tox

216. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 19:34:05 UTC
From: cabledude <cabledude@nospam.com>
Message-ID: <41E2D8AB.2C33E322@nospam.com>
Source record: 21099

Now we all know where they got the idea for dental floss !

Waxed nylon lacing cord is great for spot-tying small
Teflon-insulated wire bundles.

217. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 19:45:22 UTC
From: Gary Cavie <m0jjh@despammed.com>
Message-ID: <MPG.1c4cebad1a184de19896a3@news.individual.net>
Source record: 21100

In article <34fvhfF4au7q8U1@individual.net>, Me@privacy.net says...
>
> English is read from the top down, and citations and _FOOT_
> notes belong at the _FOOT_ of the page.
>

So, chronologically, a reply belongs at the bottom, not at the top

218. Re: Experimenting with spread spectrum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 19:46:13 UTC
From: dplatt@radagast.org
Message-ID: <10u5ms5m1pjng21@corp.supernews.com>
Source record: 21101

In article <9095u05h74pm4kkni2fu93gp542r8utprc@4ax.com>,
David H. <d_h@nospam.com> wrote:
>Thanks for the info, Caveat. Looks like I may have had run across one
>of your links
>in all my searching :)
>
>There are many question I have regarding SS, but one that's bothering me in
>particular. Regarding the PN spreading sequence, these sequences
>obviously have to be
>aligned perfectly in both transmitter and receiver. Naturally they could
>be kept in
>sync if both circuits were initialized at the same time.
>
>However, 3 things: 1) The circuits will not be initialized at the same
>time in 99% of
>most cases, as in the use of, say, a portable field radio. 2) If they were
>synchronized at the same time, well, no clock or oscillator is perfect. It would
>eventually drift. 3) As I understand it, there is no initial "handshake"
>signal at
>the beginning of transmission with the receiver to initialize/syncronize the PN
>sequences on both ends.
>
>So in short, how do the PN sequences became and remain synchronized
>through time?
>Thanks.

The ones I'm familiar with - the Barker codes used in 802.11 DSS -
have the interesting characteristic that their auto-correlation is
extremely specific. That is: if you take two copies of the Barker
sequence, put 'em above one another, multiply them together (treating
the two states as 1 and -1 rather than 1 and 0) and then sum up the
products, you get a very high positive value (11, in the case of an
11-bit Barker code). If you invert one of the two before multiplying,
then you end up with a very large negative value (e.g. -11).

However, if you shift one of the sequences one or more bit positions
to either side (in a circular-shift fashion), and do the multiply-
and-add thing again, the final sum is very close to zero. In other
words, the correlation between a Barker code, and a time-shifted
version of that code, is very small.

So - in order to transmit using DSS, you take the incoming bits,
multiply (XOR) them with a Barker sequence of chips running at (e.g.)
11x the bit rate, and transmit. To receive, you take the incoming
(11x rate) pattern, and perform the "multiply and add" process against

the original Barker chip pattern at the full 11x rate. If nothing's being transmitted, and the input signal is simply noise, the correlation between the noise and the Barker pattern will be very low, and the sums coming out of the adder will be close to zero.

During a transmission, the sums from the correleator will also be close to 0 when the bits don't line up. Every 11th chip-time, though, when a complete bit's worth of chips from the receiver has entered the correlator, the sum will jump up to a high absolute value (+11 or -11 in the example case, if none of the chips were corrupted by noise). This sudden jump to a high absolute value tells you what the original data bit was (1 or 0) and can also create a synchronization pulse which you can use to discipline your receive oscillator.

The above description is crude, inexact, and may contain errors, but perhaps it gives the flavor of the method.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

219. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 20:20:10 UTC
From: me@privacy.net
Message-ID: <7qo5u0lkbkcefgk8pjbdr995iu4g4ifolb@4ax.com>
Source record: 21102

On Mon, 10 Jan 2005 18:19:10 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>English is read from the top down

Japanese is read from the top down.

English is read from left to right.

220. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 20:28:47 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <bvo5u091m3u737bdbsk2u4cif06f4er537@4ax.com>
Source record: 21103
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

```
On Mon, 10 Jan 2005 19:00:12 -0000, "Nimrod" <nospamfor@me.com> wrote:

>
>"Spike" <Aero.Spike@Speed.invalid> wrote in message
>news:8fd3u0dl23btskti7ne3m21lgc1mh0ioth@4ax.com...
>> On Sun, 9 Jan 2005 18:04:58 -0000, "Airy R.Bean" <Me@privacy.net>
>> wrote:
>>
>> >I don't follow URL's from Usenet - it is a bad debating style
>> >to send your correspondents off to do reading. if you have
>> >something of value to say, then please say it yourself.
>>
>> <groan>
>>
>> But if it's someone else's work, it is only correct to point to it.
>> After all, you might have a different interpretation of it....sheesh!
>
>Standard practice for Gareth, has been so for years. Way back to the TMC
>days. If he avoids research he can pretend it wasn't his fault when it goes
>belly up.
>

Yes....When he was a student at his avant-garde university in the
turbulent sixties, I'll bet he never said to his lecturers "it is a
bad debating style to send your students off to do reading, if you
have something of value to say".
--
from
Aero Spike
```

221. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 20:33:53 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <HBCEd.50513$8e5.34594@fed1read07>
Source record: 21104
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Here in New York -- we say Foo Get Bout It

This is 2005 not 1927

--
Caveat Lector

222. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 21:54:21 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <41E2F98D.1040407@psu.edu>
Source record: 21105

Airy R.Bean wrote:
> Top posting _IS_ the preferred option, not the least reason
> being that you get to see the new stuff immediately without
> having to trawl through repeated stuff that you've
> already seen.

We should get away from this silly top/bottom (actually interleaved) posting argument and get to something that is important, like "how many angels can dance on the head of a pin", Or "Can God make a burrito so hot that he can't eat it?"

- Mike KB3EIA -

223. Re: 12V Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 22:34:21 UTC
From: jgboyles@aol.com
Message-ID: <20050110173421.06250.00000016@mb-m25.aol.com>
Source record: 21106

>You have the rectifiers connected the wrong way to get a positive
>output voltage.

You are right Paul, thanks for pointing that out. Been too long since I thought about anodes and cathodes on solid state rectifiers. I just look for the band or the diode symbol on the the device and hook it up.
73 Gary N4AST

224. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 23:47:51 UTC
From: Nimrod <nospamfor@me.com>
Message-ID: <34gigqF4aaup3U1@individual.net>
Source record: 21109
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34fi6vF4b131pU2@individual.net...
> Whatever you say about your K2, it is a proprietary design,
> and thus no different from the YaesKenIcom products, and
> therefore is off-the-shelf
>
> The essence of Ham Radio is that we produce and maintain
> our own designs and are not beholden to any commercial
> operation that has its sights set on the shekels.
>
> I'm not interested in a comparison with commercial gear. The
> idea is to design a transceiver that is easily reproducible by
> beginners, and which is future-proofed by having the
> interface between stages well-specified so that you could,
> for example, substitute your own mixing stages.

Please list all projects you have designed and completed, radio or
otherwise.

Have they even been published? Surely a man of you 'expertise' could put
them on the internet.

225. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 23:47:57 UTC
From: Nimrod <nospamfor@me.com>
Message-ID: <34gigvF4arufcU2@individual.net>
Source record: 21108
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"Caveat Lector" <CL@barahmas.com> wrote in message
news:HBCEd.50513$8e5.34594@fed1read07...
> Here in New York -- we say Foo Get Bout It
>
> This is 2005 not 1927
>

Not in bits of Chippenham.

226. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-10 23:48:00 UTC
From: Nimrod <nospamfor@me.com>
Message-ID: <34gih4F4bhu6lU1@individual.net>
Source record: 21107
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

```
"Spike" <Aero.Spike@Speed.invalid> wrote in message
news:bvo5u091m3u737bdbsk2u4cif06f4er537@4ax.com...
> On Mon, 10 Jan 2005 19:00:12 -0000, "Nimrod" <nospamfor@me.com> wrote:
>
> >
> >"Spike" <Aero.Spike@Speed.invalid> wrote in message
> >news:8fd3u0dl23btskti7ne3m21lgc1mh0ioth@4ax.com...
> >> On Sun, 9 Jan 2005 18:04:58 -0000, "Airy R.Bean" <Me@privacy.net>
> >> wrote:
> >>
> >> >I don't follow URL's from Usenet - it is a bad debating style
> >> >to send your correspondents off to do reading. if you have
> >> >something of value to say, then please say it yourself.
> >>
> >> <groan>
> >>
> >> But if it's someone else's work, it is only correct to point to it.
> >> After all, you might have a different interpretation of it....sheesh!
> >
> >Standard practice for Gareth, has been so for years. Way back to the TMC
> >days. If he avoids research he can pretend it wasn't his fault when it
goes
> >belly up.
> >
>
> Yes....When he was a student at his avant-garde university in the
> turbulent sixties, I'll bet he never said to his lecturers "it is a
> bad debating style to send your students off to do reading, if you
> have something of value to say".

Maybe he never graduated? That could explain lots of things. Especially his
degree envy.
```

227. battery specific-gravity = AmpHour capacity?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 00:03:38 UTC
From: alanh_27@yahoo.com
Message-ID: <1105401818.678643.124190@c13g2000cwb.googlegroups.com>
Source record: 21110
Cross-posted to: sci.chem.electrochem, sci.physics, sci.electronics.repair, rec.radio.amateur.homebrew

does specific-gravity of a conventional lead-acid cell, linearly
measure its AmpHour capacity?

If not, what exactly does it indicate with respect to the battery
user's needs?

228. Re: battery specific-gravity = AmpHour capacity?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 00:26:22 UTC
From: Sam Wormley <swormley1@mchsi.com>
Message-ID: <O2FEd.267$EG1.88@attbi_s53>
Source record: 21111
Cross-posted to: sci.chem.electrochem,sci.physics,sci.electronics.repair,rec.radio.amateur.homebrew

alanh_27@yahoo.com wrote:
> does specific-gravity of a conventional lead-acid cell, linearly
> measure its AmpHour capacity?

What happen is you double the battery's volume?

>
> If not, what exactly does it indicate with respect to the battery
> user's needs?
>

Try: http://www.universalsolutions.com/techdocs/RTCPAUFVP.pdf
http://www.faqs.org/docs/electric/DC/DC_11.html

229. Re: battery specific-gravity = AmpHour capacity?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 00:35:58 UTC
From: NSM <nowrite@to.me>
Message-ID: <ObFEd.62458$nN6.5823@edtnps84>
Source record: 21112
Cross-posted to: sci.chem.electrochem,sci.physics,sci.electronics.repair,rec.radio.amateur.homebrew

<alanh_27@yahoo.com> wrote in message
news:1105401818.678643.124190@c13g2000cwb.googlegroups.com...
| does specific-gravity of a conventional lead-acid cell, linearly
| measure its AmpHour capacity?
|
| If not, what exactly does it indicate with respect to the battery
| user's needs?

It's proportional to % of charge. I doubt it is linear. See
http://www.buchanan1.net/lead_acid.shtml

230. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 02:07:03 UTC
From: gfulton <gfulton@webkorner.com>
Message-ID: <41e326f4$1_2@127.0.0.1>
Source record: 21113
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

"Bill Turner" <noway@nohow.com> wrote in message
news:2mr3u0t2i2cuabv8gfvmd5omokuhbefdln@4ax.com...
> On 8 Jan 2005 09:42:10 -0800, alanh_27@yahoo.com wrote:
>
> >cable lacing... a lost art.
> >
> >Is there anything that a laced cable-bundle does better than a
> >tie-wrapped cable-bundle?
> ____
>
> I'm sure the unions prefer lacing.
>
> --
> Bill, W6WRT
>
>

Unions had nothing to do with it. I remember a job a friend did at an overhaul base on a Navy S2, (Grumman aircraft, if I remember right). Had a government inspector walking around watching the work. My bud had just spent most of two days lacing a long wire run inside the fuselage. Beady eyed little inspector got his eyes about 3 inches from the lacing, then took a tiny pair of sidecutters out of his shirt pocket and started cutting every last lace. My bud yelled at him, "What the @#&(are you doing?" Inspector says, "Wrong knot". Any of you old gray haired, (like me), A&P's remember the specified knot? I can still tie it blindfolded. If a particular aircraft had the wire runs to be laced in the standard practice manual for that aircraft, then you, by damn, laced them. Did more than my share on a few DC-6's.

Garrett Fulton

231. Any good 13cm WideCoverage Receiver?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 02:22:02 UTC
From: Ultra Kiasu <ultrakiasu@hotmail.com>
Message-ID: <1105410122.863281.21050@c13g2000cwb.googlegroups.com>
Source record: 21114
Cross-posted to: alt.radio.scanner.uk, rec.radio.amateur.digital.misc, rec.radio.amateur.homebrew, rec.radio.scanner

I had scoured the net for cheaper 13cm (2.3-2.6 GHz) widecoverage
receiver with fine adjustable stepping LCD controller.

So far, had only found these 2 main suppliers at http://www.13cm.co.uk
and http://www.g1mfg.com which both is UK based.

G1MFG products look good but expensive, while 13cm's were cheap but
crude (required DIY connections).

Is there cheaper alternative, or better, ready-made (minimal
construction required) which LCD controller built-in?

I believe that since the main radio components are supplied by
Taiwanese company, Comtech, there should be more similar products
around the world, or at least, "clones".

Any good recommendation?

Thank you.

Regards,
Kevin

PS: Appreciate if you could email me a copy of your reply.

232. Re: battery specific-gravity = AmpHour capacity?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 02:22:51 UTC
From: budgie <me@privacy.net>
Message-ID: <2vd6u09g7ofre9b8p4k2mo0jpela5f9plc@4ax.com>
Source record: 21115
Cross-posted to: sci.chem.electrochem,sci.physics,sci.electronics.repair,rec.radio.amateur.homebrew

On Tue, 11 Jan 2005 00:35:58 GMT, "NSM" <nowrite@to.me> wrote:

>
><alanh_27@yahoo.com> wrote in message
>news:1105401818.678643.124190@c13g2000cwb.googlegroups.com...
>| does specific-gravity of a conventional lead-acid cell, linearly
>| measure its AmpHour capacity?
>|
>| If not, what exactly does it indicate with respect to the battery
>| user's needs?
>
>It's proportional to % of charge. I doubt it is linear. See
>http://www.buchanan1.net/lead_acid.shtml

It is close enough to linear that some battery manufacturers provide
coefficients and/or graphs of SOC vs SG and temp.

It does of course require "calibration" to accomodate the actual acid/water
proportions at fill and any loss/replacement.

233. Re: battery specific-gravity = AmpHour capacity?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 04:41:34 UTC
From: "Sbharris[atsign]ix.netcom.com" <sbharris@ix.netcom.com>
Message-ID: <1105418494.182662.107730@f14g2000cwb.googlegroups.com>
Source record: 21116
Cross-posted to: sci.chem.electrochem, sci.physics, sci.electronics.repair, rec.radio.amateur.homebrew

And you're talking about the specific gravity of just the liquid
electrolyte, of course, not the entire cell.

234. Re: Experimenting with spread spectrum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 05:34:32 UTC
From: lenover21@aol.com
Message-ID: <20050111003432.06767.00000014@mb-m20.aol.com>
Source record: 21117

In article <9095u05h74pm4kkni2fu93gp542r8utprc@4ax.com>, David H.
<d_h@nospam.com> writes:

>There are many question I have regarding SS, but one that's bothering me in
>particular. Regarding the PN spreading sequence, these sequences obviously
>have to be aligned perfectly in both transmitter and receiver. Naturally they
could be
>kept in sync if both circuits were initialized at the same time.
>
>However, 3 things: 1) The circuits will not be initialized at the same time in
99% of
>most cases, as in the use of, say, a portable field radio. 2) If they were
>synchronized at the same time, well, no clock or oscillator is perfect. It
would
>eventually drift. 3) As I understand it, there is no initial "handshake"
signal at
>the beginning of transmission with the receiver to initialize/syncronize the
PN
>sequences on both ends.

While I can't give you a detailed example of how a portable field radio
(such
as the U.S. military's standard small-unit SINCGARS), there are a host of
already-working-for-a-long-time examples. One is the ordinary modem which
has both a "fast clocking" (almost like coarse acquisition) initial
synchronization that stabilizes the receiver decoder's internal bit rate,
then
an actual sync decoder from that to "line up" everthing.

With repetitive digital signals incoming, an ordinary modem borrows a
technique from magnetic data recording to set the decoding bit rate on the
transition of each pulse. Usually that is done at twice the bit rate to
grab
either transition. That can be a simple PLL with emphasis on the Phase,
but it can also be a simple R-C differentiator thing since the initial
timing
doesn't have to be precise. Once that is locked into place, the "fine
tuning"
for time synchronization can be done in several ways. One way is very
much like the old radar/transponder "coincidence detectors" which run a
pulse pair into a delay line and look for an AND (or coincidence) of the
input with the output, the pair's spacing equal to the delay line delay.
That
old "analogue" method was done in prehistoric times of tubes/valves and
useful in aviation radionavigation (IFF transponders, DME, all of which had

to coexist with unsynchronized pulse pairs from other interrogators).

A more modern way with digital logic is to use a multiple-stage Shift Register, clocking the S-R with the "coarse" bit rate achieved with the first data stream arrival. The S-R outputs can be Exclusive-ORed with the incoming signal and all the Ex-ORs ANDed to select the coincidence which was known for that particular system. The versatility of that is being able to
pick any sequence pattern of 1s and 0s desired to get that "time sync" (some prefer "framing" synchronization as a term) to get in step with the transmitter
signal. Once that framing lock has been achieved, it is not difficult to keep a
crystal oscillator phase-locked to the incoming bit rate (NTSC and PAL TV do that). The framing sync lock pattern could be 4 to 256 bits long, whatever
is system-desireable and there are no great demands on timing accuracy for that (fairly easy to work out if thinking in terms of time). With phase-
locking internal to the receiver, it aligns itself to the transmitter, no sweat.
There are no great demands on jitter specs to get initial bit rate sync or even to get framing sync; once the first sync is done, the system can fine tune itself to stay in timing.

A "framing sync" pattern is slightly wasteful overhead in that it can't carry
any data during its existance. From there on, there's all kinds of system variations possible depending on modulation rate, sampling times, time-multiplexing (if used), and all kinds of other things. Once a Tx-to-Rx sync has been achieved, the data portion can be tailored to fit...along with the internal stability necessary to limit the number of framing sync sendings to maintain a good lock. In the initial acquisition of a signal there's bound to
be some time wasted for the Rx to get in step with the Tx signal but that is quite short indeed despite a wide variation in such system architecture.

The ubiquitous "keyless" auto lock is an example of a very secure (through very long) digital bit pattern. Bandwidth isn't very high despite being UHF (for keyfob size packaging) but it does the whole works and determines the correct lock/unlock sequence (along with the convoluted decoding thing for security) very quick - does it before that one "squeep" of the horn
or speaker sounds.

Those of us who've worked with aircraft DME (Distance Measuring Equipment) will have seen the ability of simple pulse-pair "coincidence detection" work through a mass of "fruit" (pulse pairs from dozens of other aircraft) to pick out the time-delayed ground station response. No PLL needed there. The return signal is seen like right away on a scope, the scope synchronized to the DME interrogator signal. I've

forgotten the ARINC spec but it's like 200+ aircraft can be interrogating the ground station at the same time (ground station replies with a fixed 50 uSec time delay) and nobody interferes with anyone else.

In a modern digital example, the U.S. military SINCGARS field radios have an extremely tight spec temperature compensated (like its hard to believe how tight that is) internal crystal oscillator. The "Plugger" (old AN/PSN-11 GPS receiver) can attach to it and update the time to accuracy of the GPSS. Strangely enough, that isn't needed to get SINCGARS sets to work together as much as the precise time is needed to do networking, to get all the "hops" in sync (SINCGARS is a frequency-hopper hopping at about 10+ hops/second in addition to doing digitized voice and data). [see public data on AN/PRC-119 latest models from ITT Fort Wayne IN website] About a quarter million of the SINCGARS R/Ts have been produced since first operational around end of 1989. Extemely secure radio in the field and many can be working at the same time without interference to one another.

In conventional NTSC TV receivers, the color subcarrier sample of only 6 to 8 cycles of 3.58 MHz is sufficient to work the PLL in the receiver for holding on very tightly to that color burst signal. A crystal oscillator is used to insure minimal jitter and maximum phase hold for a single horizontal sweep time (NTSC is most unforgiving of phase errors). "Lost time" due to sending the color burst is only about 2 1/2 percent of a horizontal sweep duration. While that isn't an SS thing it shows that overhead time to lock in on a transmitter doesn't take much time nor does it subtract much from the actual data (video) transmission time.

To work with SS, either Direct Sequency or Frequency-Hopping, one has to think in terms of TIME rather than frequency. Once that can be done you will find lots of such examples in the wider field of radio-electronics done over the last half century.

LenAnderson@ieee.org

retired (from regular hours) electronic engineer person

235. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 08:38:43 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34hhq9F4b45dcU1@individual.net>
Source record: 21118

I agree entirely.

However, it is not the top-posters who originate
the rather silly neurotic threads on the matter. It is the
bottom-posters who so behave and so illustrate
their mental problems.

(As do religionists demonstrate their mental problems
in that they live in a world of make-believe)

The top-posters only exercise their right of reply to
state the truth that top-posting _IS_ the preferred option.

"Mike Coslo" <mjc5remove@psu.edu> wrote in message
news:41E2F98D.1040407@psu.edu...
> Airy R.Bean wrote:
> > Top posting _IS_ the preferred option, not the least reason
> > being that you get to see the new stuff immediately without
> > having to trawl through repeated stuff that you've
> > already seen.
>
> We should get away from this silly top/bottom (actually interleaved)
> posting argument and get to something that is important, like "how many
> angels can dance on the head of a pin", Or "Can God make a burrito so
> hot that he can't eat it?"
>
> - Mike KB3EIA -
>

236. Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 12:52:27 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34i0m1F48qvm6U1@individual.net>
Source record: 21119
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Picking up a project that has been put down for 6 months - has
anybody got experience of manufacturing their own ATU
switches out of brass, either as knife switches or else as
ginormous banana plugs which then engage axially with
a sliding action?

I have conceived of a design for an experimental ATU that
allows changes of configuration (including the safety earthing
when not in use) using only 8 single-pole single throw switches,
into the most common configurations.

(I may have mentioned this before in this NG, sorry if so and
thus inducing ennui in my loyal-but-paranoid fan-club of CB types
who seem to hang on my every word)

237. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 13:10:39 UTC
From: Dominic G7NPW <Dominic@check-my-sig.com>
Message-ID: <cs0j9m$7bs$1$8302bc10@news.demon.co.uk>
Source record: 21121
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34i0m1F48qvm6U1@individual.net...
> Picking up a project that has been put down for 6 months - has
> anybody got experience of manufacturing their own ATU
> switches out of brass, either as knife switches or else as
> ginormous banana plugs which then engage axially with
> a sliding action?
>
> I have conceived of a design for an experimental ATU that
> allows changes of configuration (including the safety earthing
> when not in use) using only 8 single-pole single throw switches,
> into the most common configurations.
>
> (I may have mentioned this before in this NG, sorry if so and
> thus inducing ennui in my loyal-but-paranoid fan-club of CB types
> who seem to hang on my every word)
>
>
I cant believe the amount of Shit you come out with!

238. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 13:12:46 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <e5k7u0ds4h123vrsefm3jhom591r539g8j@4ax.com>
Source record: 21120
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

On Tue, 11 Jan 2005 12:52:27 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>I may have mentioned this before in this NG

Which ng? You have posted to two.
--
from
Aero Spike

239. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 13:15:36 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <49k7u09smqa1oritshpokctraptj9malv7@4ax.com>
Source record: 21122
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

On Tue, 11 Jan 2005 13:10:39 -0000, "Dominic G7NPW"
<Dominic@check-my-sig.com> wrote:

>I cant believe the amount of Shit you come out with!

You might not like what Bean posts, and few would disagree with you,
but PLEASE DONT REPOST IT ALL JUST TO ADD A ONE-LINER.
--
from
Aero Spike

240. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 13:46:05 UTC
From: Dominic G7NPW <Dominic@check-my-sig.com>
Message-ID: <cs0lb8$9ue$1$8302bc10@news.demon.co.uk>
Source record: 21123
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Spike" <Aero.Spike@Speed.invalid> wrote in message
news:49k7u09smqa1oritshpokctraptj9malv7@4ax.com...

<<<<SNIP>>>>>

> You might not like what Bean posts, and few would disagree with you,
> but PLEASE DONT REPOST IT ALL JUST TO ADD A ONE-LINER.

Advice Taken, Thanks for pointing this out to me.

73 Dominic

241. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 13:48:25 UTC
From: Dominic G7NPW <Dominic@check-my-sig.com>
Message-ID: <cs0lfi$n59$1$830fa79d@news.demon.co.uk>
Source record: 21124
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Spike" <Aero.Spike@Speed.invalid> wrote in message
news:49k7u09smqa1oritshpokctraptj9malv7@4ax.com...

<<<<SNIP>>>>

> You might not like what Bean posts, and few would disagree with you,
> but PLEASE DONT REPOST IT ALL JUST TO ADD A ONE-LINER.

Oh and there was no need to shout at me I can hear you fine.

73 Dominic

242. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 13:50:54 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <a8m7u05tadsjg1ks3lvnii9egprjlib4tt@4ax.com>
Source record: 21125
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

On Tue, 11 Jan 2005 13:46:05 -0000, "Dominic G7NPW"
<Dominic@check-my-sig.com> wrote:

>
>"Spike" <Aero.Spike@Speed.invalid> wrote in message
>news:49k7u09smqa1oritshpokctraptj9malv7@4ax.com...
>
><<<<SNIP>>>>>
>
>> You might not like what Bean posts, and few would disagree with you,
>> but PLEASE DONT REPOST IT ALL JUST TO ADD A ONE-LINER.
>
>Advice Taken, Thanks for pointing this out to me.

You're welcome.

It's just that those who have killfiled Bean because they don't want
to see his posts may well killfile you for that same reason, shoud you
continue to repost the whole of his postings. Usually it's only
necessary to quote a word or two from him in your reply, as he hasn't
said anything new seemingly for ages......
--
from
Aero Spike

243. Re: Experimrnting with spread spectrum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 13:58:59 UTC
From: Paul Burridge <pb@notthisbit.osiris1.co.uk>
Message-ID: <2om7u0piqml2h9kd2jh6mudonq8g0jiin4@4ax.com>
Source record: 21126

On Sun, 09 Jan 2005 18:51:50 -0800, Bill Turner <noway@nohow.com>
wrote:

>____
>
>Spread Spectrum = Legalized Jamming.

Is it even legal for hams, though??
The authorities seem to feel they have to be able to monitor what we
put out (somewhere in the licence conditions, I believe) and SSC makes
that extremely difficult for them to say the least.
--

"What is now proved was once only imagin'd." - William Blake, 1793.

244. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 14:03:01 UTC
From: Paul Burridge <pb@notthisbit.osiris1.co.uk>
Message-ID: <tvm7u0pqidmbojndisb602857o5sbfcl1c@4ax.com>
Source record: 21127
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

On Sun, 9 Jan 2005 15:04:59 -0000, "Airy R. Bean" <me@privacy.net>
wrote:

>.....is that we club together and conceive of a design
>for an HF transceiver that could form the basis of the
>station of any budding Radio Ham.

Excellent idea. Let's make it a high-quality job, though;
uncompromising on sensitivity/selectivity/noise etc. And use
ubiquitous, easily-available components that will be around for the
foreseeable future to come to permit serviceability over the long
term!
--

"What is now proved was once only imagin'd." - William Blake, 1793.

245. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 14:09:29 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1c4d7df21f26e34598969e@localhost>
Source record: 21128

In article <20050109002359.26734.00000001@mb-m11.aol.com>, lenover21
@aol.com says...

> Ahem...Boeing is not necessarily a good source for wire bundles
> that are "safe." See the NTSB report on the air liner that blew up
> just outside of NYC over the bay...especially the part investigating
> wire bundles going through a fuselange gas tank.

I never claimed they were perfect. I was using my experiences and
observations as a supporting point.

> On the other hand, military avionics has used waxed nylon cord
> (usually dyed black) and made under a MIL SPEC since the 1950s,
> prinicipally because it was a neat, cheap way to bundle up wires
> that were not otherwise clamped together.

I have no doubt that the military came up with some sort of lacing
machine. ;-)

> I bought a package of 100 Ty-Raps at DoItCenters couple months ago
> to hold up an outside planter's drip irrigation tubing to an aluminum
> awning. Tubing is very soft, about 1/4" diameter. 8-inch tie wraps,
> standard white nylon material. No problem. No stoppages, no
> damages, but didn't try to put a full arm's strength into completing the
> tie. :-).

<snip remainder>

The reference to 'fragile' coaxial cables was made in regards to
the Teflon-jacketed stuff in use in aircraft, not conventional RG8 or
others. I should have clarified that a bit.

It was found that some types of insulation (notably Kapton) show a
greater sensitivity to arcing if they have been nicked or scored, even
slightly. Ty-wraps, if not properly used, are more likely to do this
than lacing, especially in a vibration environment. This is why they are
not generally favored for aircraft wire bundles.

While I agree that neatness was certainly one of the reasons, it
was not the only one.

I would be most interested to hear what anyone working in CURRENT
wire design on aircraft has to say about the subject.

Keep the peace(es).

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.

(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped
with surreal ports?"

246. Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 14:42:37 UTC
From: tox <nospam@nospamming.co.com>
Message-ID: <xBREd.90$fj7.9@newsfe3-gui.ntli.net>
Source record: 21129
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

http://news.bbc.co.uk/1/hi/health/4163003.stm

Any views?

--
tox

247. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 14:58:01 UTC
From: Trevor Day <Trev@secornwall.removethis.com>
Message-ID: <ZZFKQtizl+4BFw8Z@secornwall.com>
Source record: 21130
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In message <xBREd.90$fj7.9@newsfe3-gui.ntli.net>, tox
<nospam@nospamming.co.com> writes
>http://news.bbc.co.uk/1/hi/health/4163003.stm
>
>
>Any views?
>
>--
>tox

Well I would say that if mobile phones are eventually proven to be bad for your health, it is most likely to be the phone itself that is the culprit rather than the mast mounted tx at the local school etc; a point that still has not been made by the media or, it seems, anyone providing them with information.

It is probably worth noting that, in my experience, most children use their mobiles almost exclusively for 'texting' rather than 'talking'; presumably this carries significantly less risk perceived or otherwise.

Trev G3ZYY

--
Trevor Day
SIP: 84411998@voiptalk.org

248. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 15:20:43 UTC
From: Paul Burridge <pb@notthisbit.osiris1.co.uk>
Message-ID: <obr7u0124fgj0o87nnuq0mmsafrkmlt0su@4ax.com>
Source record: 21131
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Tue, 11 Jan 2005 14:58:01 GMT, Trevor Day
<Trev@secornwall.removethis.com> wrote:

>It is probably worth noting that, in my experience, most children use
>their mobiles almost exclusively for 'texting' rather than 'talking';
>presumably this carries significantly less risk perceived or otherwise.

I agree. Proximity is the dominant factor at work here. That's why
these scare stories about mobile phone masts and cancer are such
total nonsense.
There may well be some significant risk associated with the
conventional use of mobiles right next to the head, though. The EM
field is bound to invade brain tissue and the effects of such exposure
to even low levels of near-microwave frequencies are as yet not fully
known.
--

"What is now proved was once only imagin'd." - William Blake, 1793.

249. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 15:32:23 UTC
From: G1LVN <google@g1lvn.org.uk>
Message-ID: <1105457543.732389.138790@f14g2000cwb.googlegroups.com>
Source record: 21132
Cross-posted to: uk.radio.amateur, rec.radio.amateur.homebrew

Yep 6 replies - obviously the other 4 users of this newsgroup have
killfiled you Bean (or are on Hoilday with Slim).

250. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 15:36:48 UTC
From: Trunky <trunky@geemail.com>
Message-ID: <koSEd.8389$GG1.7111@text.news.blueyonder.co.uk>
Source record: 21133
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

http://www.cellular.co.za/news_2001/092601-mobile_phones_may_do_harm.htm

--
http://www.stressed-out.org
CS Public #1, 195.242.236.171:27015 ff=on, awp=off
CS Public #2, 195.242.236.171:27035 ff=on
CS Public #3, Mini_maps only 195.242.236.171:27045

"Paul Burridge" <pb@notthisbit.osiris1.co.uk> wrote in message
news:obr7u0124fgj0o87nnuq0mmsafrkmlt0su@4ax.com...
> On Tue, 11 Jan 2005 14:58:01 GMT, Trevor Day
> <Trev@secornwall.removethis.com> wrote:
>
>>It is probably worth noting that, in my experience, most children use
>>their mobiles almost exclusively for 'texting' rather than 'talking';
>>presumably this carries significantly less risk perceived or otherwise.
>
> I agree. Proximity is the dominant factor at work here. That's why
> these scare stories about mobile phone masts and cancer are such
> total nonsense.
> There may well be some significant risk associated with the
> conventional use of mobiles right next to the head, though. The EM
> field is bound to invade brain tissue and the effects of such exposure
> to even low levels of near-microwave frequencies are as yet not fully
> known.
> --
>
> "What is now proved was once only imagin'd." - William Blake, 1793.

251. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 15:37:24 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34ial7F4atnscU1@individual.net>
Source record: 21135
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Therein lies a problem; I had considered the use of 270MHz
SAW filters as used in GSM phones as RX roofing filters, but
with the deign of GSM phones moving en masse to direct
conversion, that's not possible.

One area in which we can assure some degree of future proofing
is to define the interfaces between the sections so that any
section could be replaced by circuitry of your own making
and/or of your own repair.

"Paul Burridge" <pb@notthisbit.osiris1.co.uk> wrote in message
news:tvm7u0pqidmbojndisb602857o5sbfcl1c@4ax.com...
> On Sun, 9 Jan 2005 15:04:59 -0000, "Airy R. Bean" <me@privacy.net>
> wrote:
>
> >.....is that we club together and conceive of a design
> >for an HF transceiver that could form the basis of the
> >station of any budding Radio Ham.
>
> Excellent idea. Let's make it a high-quality job, though;
> uncompromising on sensitivity/selectivity/noise etc. And use
> ubiquitous, easily-available components that will be around for the
> foreseeable future to come to permit serviceability over the long
> term!
> --
>
> "What is now proved was once only imagin'd." - William Blake, 1793.

252. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 15:38:54 UTC
From: Starr <Starr@proxima.net>
Message-ID: <cs0rufrke0@pita.alt.net>
Source record: 21134
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Dominic G7NPW" <Dominic@check-my-sig.com> wrote in message
news:cs0lb8$9ue$1$8302bc10@news.demon.co.uk...

you certainly enjoyed constructing your web site didn't you? :)

253. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 16:10:19 UTC
From: Dominic G7NPW <Dominic@check-my-sig.com>
Message-ID: <cs0tr3jea1$8302bc10@news.demon.co.uk>
Source record: 21137
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Starr" <Starr@proxima.net> wrote in message
news:cs0rufrke0@pita.alt.net...

> you certainly enjoyed constructing your web site didn't you? :)

Yep, Better then Corro & Eastenders.

--
Regards Dominic G7NPW

Derby Echolink Gateway. Number 92369

www.derby-radio.co.uk

254. Re: Experimrnting with spread spectrum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 16:10:50 UTC
From: mikea@mikea.ath.cx
Message-ID: <cs0tqa$8rl$2@puck.litech.org>
Source record: 21136

Paul Burridge <pb@notthisbit.osiris1.co.uk> wrote:
> On Sun, 09 Jan 2005 18:51:50 -0800, Bill Turner <noway@nohow.com>
> wrote:

> >_____
> >
> >Spread Spectrum = Legalized Jamming.

> Is it even legal for hams, though??
> The authorities seem to feel they have to be able to monitor what we
> put out (somewhere in the licence conditions, I believe) and SSC makes
> that extremely difficult for them to say the least.

It is legal, provided you use the FCC-approved spreading polynomials
and whatnot and hold your mouth right. So long as you do it the FCC
way, they have no trouble monitoring.

--
Mike Andrews, KE5DMQ
mikea@mikea.ath.cx
Tired old sysadmin

255. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 16:53:52 UTC
From: G1LVN <google@g1lvn.org.uk>
Message-ID: <1105462432.708081.295470@z14g2000cwz.googlegroups.com>
Source record: 21138
Cross-posted to: uk.radio.amateur, rec.radio.amateur.homebrew, rec.radio.amateur.antenna

tox wrote:
> http://news.bbc.co.uk/1/hi/health/4163003.stm
>
>
> Any views?
>
> --
> tox

Sounds rather like the precautionary principle to me. Nothing
particularly new about it. Perhaps a crisis waiting to happen.

256. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 16:53:55 UTC
From: G1LVN <google@g1lvn.org.uk>
Message-ID: <1105462435.317675.3290@c13g2000cwb.googlegroups.com>
Source record: 21139
Cross-posted to: uk.radio.amateur, rec.radio.amateur.homebrew, rec.radio.amateur.antenna

tox wrote:
> http://news.bbc.co.uk/1/hi/health/4163003.stm
>
>
> Any views?
>
> --
> tox

Sounds rather like the precautionary principle to me. Nothing
particularly new about it. Perhaps a crisis waiting to happen.

257. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 16:53:58 UTC
From: G1LVN <google@g1lvn.org.uk>
Message-ID: <1105462438.510018.3540@c13g2000cwb.googlegroups.com>
Source record: 21140
Cross-posted to: uk.radio.amateur, rec.radio.amateur.homebrew, rec.radio.amateur.antenna

tox wrote:
> http://news.bbc.co.uk/1/hi/health/4163003.stm
>
>
> Any views?
>
> --
> tox

Sounds rather like the precautionary principle to me. Nothing
particularly new about it. Perhaps a crisis waiting to happen.

258. Re: Making our own valves (Tubes for the Non-English-Speaking Yanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 17:04:27 UTC
From: G1LVN <google@g1lvn.org.uk>
Message-ID: <1105463067.188146.18240@z14g2000cwz.googlegroups.com>
Source record: 21141
Cross-posted to: uk.radio.amateur, rec.radio.amateur.homebrew

Airy R. Bean wrote:
> As time passes, valves of the sort and size that we use in our TX's
> are becoming increasingly rare and expensive.
>
> snipo
> Armed with such a body of knowledge, could we Radio Hams, as a body
of
> technically-motivated and technically-inspired aficionados, then
consider
> manufacturing our own?
>

You really are a prize fool. The invention of the Thermionic Vacuum
Valve (tube) held up the development of transisters by around 20 years.
They were shit in the 30's and are still shit today. Just think what we
could be doing now, 20 years further down Moores Law curve.
You are living in the past Bean.
- a32ws

259. Re: Making our own valves (Tubes for the Non-English-Speaking Yanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 17:04:31 UTC
From: G1LVN <google@g1lvn.org.uk>
Message-ID: <1105463071.137259.274710@f14g2000cwb.googlegroups.com>
Source record: 21142
Cross-posted to: uk.radio.amateur, rec.radio.amateur.homebrew

Airy R. Bean wrote:
> As time passes, valves of the sort and size that we use in our TX's
> are becoming increasingly rare and expensive.
>
> snipo
> Armed with such a body of knowledge, could we Radio Hams, as a body
of
> technically-motivated and technically-inspired aficionados, then
consider
> manufacturing our own?
>

You really are a prize fool. The invention of the Thermionic Vacuum
Valve (tube) held up the development of transisters by around 20 years.
They were shit in the 30's and are still shit today. Just think what we
could be doing now, 20 years further down Moores Law curve.
You are living in the past Bean.
- a32ws

260. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 17:06:05 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cs111t$m03$1@titan.btinternet.com>
Source record: 21144
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Dear Airy,

I can't resist the temptation to read most of what you write. It's habit forming.

It's because there appears to be an unexpected element of truth in many of your thought-out if unruly statements.

But try not to be so offensive in your, chip-on-the-shoulder, mode of expression. You could be even more effective.

Reg.

261. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 17:06:25 UTC
From: Starr <Starr@proxima.net>
Message-ID: <cs112j$5c4$0@pita.alt.net>
Source record: 21143
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Dominic G7NPW" <Dominic@check-my-sig.com> wrote in message
news:cs0tr3jea1$8302bc10@news.demon.co.uk...
>
> "Starr" <Starr@proxima.net> wrote in message
> news:cs0rufrke0@pita.alt.net...
>
> > you certainly enjoyed constructing your web site didn't you? :)
>
> Yep, Better then Corro & Eastenders.

What isn't? :)
>
>
> --
> Regards Dominic G7NPW
>
> Derby Echolink Gateway. Number 92369
>
> www.derby-radio.co.uk
>
>

262. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 17:15:23 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34ift3F4bfeljU1@individual.net>
Source record: 21145
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cs111t$m03$1@titan.btinternet.com...
> Dear Airy,
>
> I can't resist the temptation to read most of what you write. It's habit
> forming.
>
> It's because there appears to be an unexpected element of truth in many of
> your thought-out if unruly statements.
>
> But try not to be so offensive in your, chip-on-the-shoulder, mode of
> expression. You could be even more effective.

Reg, break the habit.

You won't miss much.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

263. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 17:32:28 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cs12jcnve1@titan.btinternet.com>
Source record: 21147
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Airy R.Bean" wrote -
> Picking up a project that has been put down for 6 months - has
> anybody got experience of manufacturing their own ATU
> switches out of brass, either as knife switches or else as
> ginormous banana plugs which then engage axially with
> a sliding action?
>
> I have conceived of a design for an experimental ATU that
> allows changes of configuration (including the safety earthing
> when not in use) using only 8 single-pole single throw switches,
> into the most common configurations.
>
==========

The trouble with as many as 8 single-throw, high-current, high-voltage switches in a tuner, is the stray inter-component wiring and inductance and capacitance they introduce.

Even with a minimum number of, or no switches, it requires TWO independent tuners, in separate boxes with separate coaxial connectors, to cover the range 1.8 to 30 Mhz with reasonable power efficiency.

You need practical experience by building one or two to see how they perform. Try again and then come back!

Reg.

264. Re: Experimrnting with spread spectrum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 17:34:12 UTC
From: Paul Burridge <pb@notthisbit.osiris1.co.uk>
Message-ID: <7e38u09ivr7k9qrkuqnfos4vj4vkuh1345@4ax.com>
Source record: 21146

On Tue, 11 Jan 2005 16:10:50 +0000 (UTC), mikea@mikea.ath.cx (Mike
Andrews) wrote:

>Paul Burridge <pb@notthisbit.osiris1.co.uk> wrote:
>> On Sun, 09 Jan 2005 18:51:50 -0800, Bill Turner <noway@nohow.com>
>> wrote:
>
>> >____
>> >
>> >Spread Spectrum = Legalized Jamming.
>
>> Is it even legal for hams, though??
>> The authorities seem to feel they have to be able to monitor what we
>> put out (somewhere in the licence conditions, I believe) and SSC makes
>> that extremely difficult for them to say the least.
>
>It is legal, provided you use the FCC-approved spreading polynomials
>and whatnot and hold your mouth right. So long as you do it the FCC
>way, they have no trouble monitoring.

I see. Well we're not governed by the FCC here in Little Britland, so
I guess it's probably illegal to use it in the UK. Perhaps a G with a
licence to hand can verify...

--

"What is now proved was once only imagin'd." - William Blake, 1793.

265. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 17:39:15 UTC
From: RT <noreply.co.uk>
Message-ID: <41e40f41.0@entanet>
Source record: 21151
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"tox" <nospam@nospamming.co.com> wrote in message
news:xBREd.90$fj7.9@newsfe3-gui.ntli.net...
> http://news.bbc.co.uk/1/hi/health/4163003.stm
>
>
> Any views?
>
> --
> tox
>
>

Yes, it's a usual load of Tosh, the opening paragraph says it all, even a so called expert admits he doesn't know.

"Parents should ensure their children use mobile phones only when absolutely necessary because of the potential health risks, an expert is warning."
Then in same sentence,

"The latest study by Sir William Stewart says there is still no proof mobile phones are unsafe,"

The vision of angry villagers with flaming torches spring to mind every time I hear about objections to mobile phones/masts.

266. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 17:43:10 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34ihh6F492nb3U1@individual.net>
Source record: 21148
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cs12jcnve1@titan.btinternet.com...

>
> The trouble with as many as 8 single-throw, high-current, high-voltage
> switches in a tuner, is the stray inter-component wiring and inductance
and
> capacitance they introduce.
>
> Even with a minimum number of, or no switches, it requires TWO independent
> tuners, in separate boxes with separate coaxial connectors, to cover the
> range 1.8 to 30 Mhz with reasonable power efficiency.
>
> You need practical experience by building one or two to see how they
> perform. Try again and then come back!

Would a solution based on two, contra-rotatinng "roller coasters" not be
better? This would enable a true balanced ATU to be made, offering a wide
matching impedance, and, with motorised capacitor, avoiding switching all
together?

Making a suitable capacitor is straight forward. The rollor coaster former
will turn up on a lathe nicely (I've made a similar former from PTFE in the
past). The rest of the mechanics are easy enough.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

267. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 17:44:46 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cs13ae$e80$1@hercules.btinternet.com>
Source record: 21150
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

> I have conceived of a design for an experimental ATU

==========

Stick to conceiving babies - try Viagra - you might have greater success.

268. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 17:45:25 UTC
From: paul <rgn@ntlworld.com>
Message-ID: <VgUEd.102$0G6.99@newsfe6-win.ntli.net>
Source record: 21149
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

> (I may have mentioned this before in this NG, sorry if so and
> thus inducing ennui in my loyal-but-paranoid fan-club of CB types
> who seem to hang on my every word)
>

dont feed the troll
>

269. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 17:49:21 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34iis2F4bf360U1@individual.net>
Source record: 21152
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Which is why I was considering the use of axially operated
banana-plug-like switches which would then exist in-line with the
wiring, and be operated by fishing line (in a sort of pull-in/pull-out
mode).

Knife switches of sufficient mechanical movement would also serve
to reduce capacitive coupling when open. Now that I mention it, I
do seem to remember discussing this before, especially with regard to
springy brass for knife switch contacts.

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cs12jcnve1@titan.btinternet.com...
>
> "Airy R.Bean" wrote -
> > Picking up a project that has been put down for 6 months - has
> > anybody got experience of manufacturing their own ATU
> > switches out of brass, either as knife switches or else as
> > ginormous banana plugs which then engage axially with
> > a sliding action?
>
> The trouble with as many as 8 single-throw, high-current, high-voltage
> switches in a tuner, is the stray inter-component wiring and inductance
and
> capacitance they introduce.

270. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 17:55:23 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34iis3F4bf360U2@individual.net>
Source record: 21153
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

A woman goes into the chemist, "Does that Viagra really work?"
"Oh Yes! Madam! I can vouch for its effectiveness personally!"
"Can you get it over the counter?"
"I can if I take two!"

-----ooooo-----

A man reaches over the counter and steals some Viagra.
However, on rushing out of the chemist's, he bumps into a plod.
In a panic, he swallowed the whole contents of the packet and
ran off.
The plods are looking for someone with a very stiff neck.

-----ooooo-----

Because of concerns about corruption in the NHS, doctors are
no longer allowed to prescribe Viagra, as such, they have to
specify it by its chemical name.....
.....
.....
.....
MYCOXAFLOPPIN

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cs13ae$e80$1@hercules.btinternet.com...
> > I have conceived of a design for an experimental ATU
> Stick to conceiving babies - try Viagra - you might have greater
success.

271. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 18:02:39 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34iis4F4bf360U3@individual.net>
Source record: 21154
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Dear Reg,

Thank-you for your few kind words.

I, in my turn, read with interest your contributions to the
various NG. From what you profess, I have much to
learn about the common sense of what really happens
in antennae and feeders and I am an avid pupil of yours.
(That is part of parcel of Ham Radio, not only to
improve one's own knowledge, but also to encourage
others in what is essentially a technical pursuit.)

As to offensiveness, none is intended. If it was your
intention to refer to my stance against the gangrenous
degeneration that is the M3/CB Fools' Licence scheme,
then I regret that I can offer you no apology. We Radio
Hams must take a stand now, and that stand must be to
refuse to have anything to do with what are essentially
second-class citizens in the radio context.

In other matters, if you do indeed refer to other matters, I speak
my mind and I speak the truth as I see it. Do not be so
surprised at candidness and openness. (If there are those
who take the liberty of taking offence at ideas expressed
that are not their own ideas, then they would be well advised
not to read an international forum such as this NG.

Caveat Lector.

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cs111t$m03$1@titan.btinternet.com...
> Dear Airy,
> I can't resist the temptation to read most of what you write. It's habit
> forming.
> It's because there appears to be an unexpected element of truth in many of
> your thought-out if unruly statements.
> But try not to be so offensive in your, chip-on-the-shoulder, mode of
> expression. You could be even more effective.

272. Re: Any good 13cm WideCoverage Receiver?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 18:21:29 UTC
From: Chris Eilbeck <chris@yordas.demon.co.uk>
Message-ID: <m24qhnakt2.fsf@yordas.demon.co.uk>
Source record: 21155
Cross-posted to: alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.scanner

"Ultra Kiasu" <ultrakiasu@hotmail.com> writes:

> I had scoured the net for cheaper 13cm (2.3-2.6 GHz) widecoverage
> receiver with fine adjustable stepping LCD controller.
>
> So far, had only found these 2 main suppliers at http://www.13cm.co.uk
> and http://www.g1mfg.com which both is UK based.
>
> G1MFG products look good but expensive, while 13cm's were cheap but
> crude (required DIY connections).
>
> Is there cheaper alternative, or better, ready-made (minimal
> construction required) which LCD controller built-in?
>
> I believe that since the main radio components are supplied by
> Taiwanese company, Comtech, there should be more similar products
> around the world, or at least, "clones".
>
> Any good recommendation?

If you're not up to hooking up a LCD controller and a receiver then
your only real option is a videosender receiver.

Chris
--
Chris Eilbeck mailto:chris@yordas.demon.co.uk
MARS Flight Crew http://www.mars.org.uk/
UKRA #1108 Level 2 UYB
Tripoli UK Member #9527 LSMR

273. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 18:56:58 UTC
From: Neil <usenet1@blueyonder.co.uk>
Message-ID: <_jVEd.103405$48.103236@fe1.news.blueyonder.co.uk>
Source record: 21156
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

I made a hf atu. Tends to arc across tho above 100w. Pity Bean hasnt got his finger in it at the time.

"Airy R.Bean" <Me@privacy.net> wrote in message news:34i0m1F48qvm6U1@individual.net...
> Picking up a project that has been put down for 6 months - has
> anybody got experience of manufacturing their own ATU
> switches out of brass, either as knife switches or else as
> ginormous banana plugs which then engage axially with
> a sliding action?
>
> I have conceived of a design for an experimental ATU that
> allows changes of configuration (including the safety earthing
> when not in use) using only 8 single-pole single throw switches,
> into the most common configurations.
>
> (I may have mentioned this before in this NG, sorry if so and
> thus inducing ennui in my loyal-but-paranoid fan-club of CB types
> who seem to hang on my every word)
>
>

274. Re: Experimenting with spread spectrum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 19:01:36 UTC
From: lenover21@aol.com
Message-ID: <20050111140136.09981.00000015@mb-m18.aol.com>
Source record: 21157

In article <9095u05h74pm4kkni2fu93gp542r8utprc@4ax.com>, David H.
<d_h@nospam.com> writes:

>There are many question I have regarding SS, but one that's bothering me in
>particular. Regarding the PN spreading sequence, these sequences obviously
>have to be aligned perfectly in both transmitter and receiver. Naturally they
could be
>kept in sync if both circuits were initialized at the same time.
>
>However, 3 things: 1) The circuits will not be initialized at the same time in
99% of
>most cases, as in the use of, say, a portable field radio. 2) If they were
>synchronized at the same time, well, no clock or oscillator is perfect. It
would
>eventually drift. 3) As I understand it, there is no initial "handshake"
signal at
>the beginning of transmission with the receiver to initialize/syncronize the
PN
>sequences on both ends.

While I can't give you a detailed example of how a portable field radio
(such
as the U.S. military's standard small-unit SINCGARS), there are a host of
already-working-for-a-long-time examples. One is the ordinary modem which
has both a "fast clocking" (almost like coarse acquisition) initial
synchronization that stabilizes the receiver decoder's internal bit rate,
then
an actual sync decoder from that to "line up" everthing.

With repetitive digital signals incoming, an ordinary modem borrows a
technique from magnetic data recording to set the decoding bit rate on the
transition of each pulse. Usually that is done at twice the bit rate to
grab
either transition. That can be a simple PLL with emphasis on the Phase,
but it can also be a simple R-C differentiator thing since the initial
timing
doesn't have to be precise. Once that is locked into place, the "fine
tuning"
for time synchronization can be done in several ways. One way is very
much like the old radar/transponder "coincidence detectors" which run a
pulse pair into a delay line and look for an AND (or coincidence) of the
input with the output, the pair's spacing equal to the delay line delay.
That
old "analogue" method was done in prehistoric times of tubes/valves and
useful in aviation radionavigation (IFF transponders, DME, all of which had

to coexist with unsynchronized pulse pairs from other interrogators).

A more modern way with digital logic is to use a multiple-stage Shift Register, clocking the S-R with the "coarse" bit rate achieved with the first data stream arrival. The S-R outputs can be Exclusive-ORed with the incoming signal and all the Ex-ORs ANDed to select the coincidence which was known for that particular system. The versatility of that is being able to
pick any sequence pattern of 1s and 0s desired to get that "time sync" (some prefer "framing" synchronization as a term) to get in step with the transmitter
signal. Once that framing lock has been achieved, it is not difficult to keep a
crystal oscillator phase-locked to the incoming bit rate (NTSC and PAL TV do that). The framing sync lock pattern could be 4 to 256 bits long, whatever
is system-desireable and there are no great demands on timing accuracy for that (fairly easy to work out if thinking in terms of time). With phase-
locking internal to the receiver, it aligns itself to the transmitter, no sweat.
There are no great demands on jitter specs to get initial bit rate sync or even to get framing sync; once the first sync is done, the system can fine tune itself to stay in timing.

A "framing sync" pattern is slightly wasteful overhead in that it can't carry
any data during its existance. From there on, there's all kinds of system variations possible depending on modulation rate, sampling times, time-multiplexing (if used), and all kinds of other things. Once a Tx-to-Rx sync has been achieved, the data portion can be tailored to fit...along with the internal stability necessary to limit the number of framing sync sendings to maintain a good lock. In the initial acquisition of a signal there's bound to
be some time wasted for the Rx to get in step with the Tx signal but that is quite short indeed despite a wide variation in such system architecture.

The ubiquitous "keyless" auto lock is an example of a very secure (through very long) digital bit pattern. Bandwidth isn't very high despite being UHF (for keyfob size packaging) but it does the whole works and determines the correct lock/unlock sequence (along with the convoluted decoding thing for security) very quick - does it before that one "squeep" of the horn
or speaker sounds.

Those of us who've worked with aircraft DME (Distance Measuring Equipment) will have seen the ability of simple pulse-pair "coincidence detection" work through a mass of "fruit" (pulse pairs from dozens of other aircraft) to pick out the time-delayed ground station response. No PLL needed there. The return signal is seen like right away on a scope, the scope synchronized to the DME interrogator signal. I've

forgotten the ARINC spec but it's like 200+ aircraft can be interrogating the ground station at the same time (ground station replies with a fixed 50 uSec time delay) and nobody interferes with anyone else.

In a modern digital example, the U.S. military SINCGARS field radios have an extremely tight spec temperature compensated (like its hard to believe how tight that is) internal crystal oscillator. The "Plugger" (old AN/PSN-11 GPS receiver) can attach to it and update the time to accuracy of the GPSS. Strangely enough, that isn't needed to get SINCGARS sets to work together as much as the precise time is needed to do networking, to get all the "hops" in sync (SINCGARS is a frequency-hopper hopping at about 10+ hops/second in addition to doing digitized voice and data). [see public data on AN/PRC-119 latest models from ITT Fort Wayne IN website] About a quarter million of the SINCGARS R/Ts have been produced since first operational around end of 1989. Extemely secure radio in the field and many can be working at the same time without interference to one another.

In conventional NTSC TV receivers, the color subcarrier sample of only 6 to 8 cycles of 3.58 MHz is sufficient to work the PLL in the receiver for holding on very tightly to that color burst signal. A crystal oscillator is used to insure minimal jitter and maximum phase hold for a single horizontal sweep time (NTSC is most unforgiving of phase errors). "Lost time" due to sending the color burst is only about 2 1/2 percent of a horizontal sweep duration. While that isn't an SS thing it shows that overhead time to lock in on a transmitter doesn't take much time nor does it subtract much from the actual data (video) transmission time.

To work with SS, either Direct Sequency or Frequency-Hopping, one has to think in terms of TIME rather than frequency. Once that can be done you will find lots of such examples in the wider field of radio-electronics done over the last half century.

LenAnderson@ieee.org

retired (from regular hours) electronic engineer person

275. Re: Experimrnting with spread spectrum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 20:01:56 UTC
From: dplatt@radagast.org
Message-ID: <10u8c5khbvj80f6@corp.supernews.com>
Source record: 21158

In article <2om7u0piqml2h9kd2jh6mudonq8g0jiin4@4ax.com>,
Paul Burridge <pb@notthisbit.osiris1.co.uk> wrote:

>>Spread Spectrum = Legalized Jamming.
>
>Is it even legal for hams, though??

Yes, with restrictions. See Part 97 section 311 for the detailed rules.

Briefly:

- SS is allowed, but must not be used for the purpose of obscuring
the meaning of the transmissions.

- SS transmissions must not cause harmful interference to non-SS
stations, and must accept all interference from non-SS stations.

- SS transmissions are limited to 100 watts, and if over 1 watt must
implement automatic transmitter power control which limits power to
the minimum needed to maintain a specified SNR.

- SS stations can be ordered to shut down or restrict their
transmissions, and/or required to maintain a complete record of
information transmitted via SS.

If I recall correctly, the FCC rules used to restrict amateur SS
tranmsissions to using certain specified coding techniques, but this
restriction appears to have been relaxed. I infer that the broader
rule about using publicly-documented modulation techniques is the one
which now applies.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

276. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 20:02:38 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e430e9$1_2@127.0.0.1>
Source record: 21159
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

RT wrote:
> "Parents should ensure their children use mobile phones only when absolutely
> necessary because of the potential health risks, an expert is warning."
> Then in same sentence,
>
> "The latest study by Sir William Stewart says there is still no proof mobile
> phones are unsafe,"

The IEEE Spectrum reports that cell phone use for ten years
results in a benign tumor that causes hearing loss.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

277. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 20:28:35 UTC
From: RT <noreply.co.uk>
Message-ID: <41e436ef.0@entanet>
Source record: 21168
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

> The IEEE Spectrum reports that cell phone use for ten years
> results in a benign tumor that causes hearing loss.

What?

;-)

I heard (no pun intended) that the YAAH committee report states that most of the talk about health being put under risk by mobile phones/mast is totally bollox.

I have to agree, before anyone spouts off about being sick due to a nearby mast perhaps the investigators ought to check the contents of moaners fridge etc first.

278. Re: HP 10544 OCXO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 20:30:35 UTC
From: Arnd Gronenberg <arnd@gronenberg.com>
Message-ID: <cs1d1b$9uj$01$1@news.t-online.com>
Source record: 21160
Cross-posted to: sci.electronics.equipment,rec.radio.amateur.homebrew

DaveM wrote:
> Arnd,
> There is some really good info on the HP oscillator at
> http://www.realhamradio.com/GPS_Frequency_Standard.htm, which describes uses
> for the HP Z3801A GPS Receiver/Time Standard. The page at
> http://www.realhamradio.com/z3801a-turning-point.htm gives you some really
> great info on setting the crystal turning point temperature for the best
> stability. This will help you to understand your questions about the
> thermistor also. The oven isn't set to a standard temp, but to the best
> temp that puts the crystal in the middle of its curve. The thermistor is
> spec'ed at 100K @ 25C and 9.93K @ 80C. You'll have to shop around for a
> suitable replacement, keeping in mind the physical size of the thermistor.
> [...]

Hi Dave,

thanks a lot for your reply! And also to Fred for his remarks.

The information regarding the temperature calibration is very helpful. I found a replacement thermistor, which seems to be suitable: 83K @ 25C, 10.24K @ 80C, reaction time 0.7s, size 1.5mm diameter.

As the HP 10544A uses an AT cut crystal I assume that I have to calibrate for a frequency minimum (according to the above mentioned website). As the HP 10544A contains a 10 turn variable resistor instead of a hand-picked resistor, calibration should be quite straight forward.

Thanks again, best regards, 73,
Arnd

--
Arnd Gronenberg
EMail: arnd@gronenberg.com
HAM: DJ9PZ / AB2QP

279. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 20:33:07 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34irfsF49m8g4U1@individual.net>
Source record: 21161
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:41e430e9$1_2@127.0.0.1...
> RT wrote:
> > "Parents should ensure their children use mobile phones only when
absolutely
> > necessary because of the potential health risks, an expert is warning."
> > Then in same sentence,
> >
> > "The latest study by Sir William Stewart says there is still no proof
mobile
> > phones are unsafe,"
>
> The IEEE Spectrum reports that cell phone use for ten years
> results in a benign tumor that causes hearing loss.

Is that 10 years continous use? If so, most youngsters will be death by the
time they are 18, if the 'music' hasn't 'got them by 15 ;-)

I'm glad I'm too old to like what passes for 'music' these days ;-)

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

280. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 20:35:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10u8e5h1n6adja5@corp.supernews.com>
Source record: 21162
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Cecil Moore wrote:
>
> The IEEE Spectrum reports that cell phone use for ten years
> results in a benign tumor that causes hearing loss.

Which issue was that? I'd like to read the article.

Roy Lewallen, W7EL

281. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 20:38:00 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e43933$1_2@127.0.0.1>
Source record: 21163
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Brian Reay wrote:

> "Cecil Moore" <w5dxp@hotmail.com> wrote:
>>The IEEE Spectrum reports that cell phone use for ten years
>>results in a benign tumor that causes hearing loss.
>
> Is that 10 years continous use? If so, most youngsters will be death by the
> time they are 18, if the 'music' hasn't 'got them by 15 ;-)

I assume you mean deaf? Few people have used cell phones
for ten years already. Some of those few are starting to
get tumors inside their ears. I have switched over to a
headset for my cellphone activities after having one
for about three years.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

282. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 20:44:59 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e43ad6$1_1@127.0.0.1>
Source record: 21164
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Roy Lewallen wrote:

> Cecil Moore wrote:
>> The IEEE Spectrum reports that cell phone use for ten years
>> results in a benign tumor that causes hearing loss.
>
> Which issue was that? I'd like to read the article.

December 2004, page 20: "Cellphones Linked To Brain Tumors"
"No tumors were associated with less than 10 years of
cellphone use." There will be about 50 million people with
10 years of cellphone use in 1907. I won't be one of them.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

283. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 20:52:11 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34isjjF4aj19tU1@individual.net>
Source record: 21165
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:41e43933$1_2@127.0.0.1...
> Brian Reay wrote:
>
> > "Cecil Moore" <w5dxp@hotmail.com> wrote:
> >>The IEEE Spectrum reports that cell phone use for ten years
> >>results in a benign tumor that causes hearing loss.
> >
> > Is that 10 years continous use? If so, most youngsters will be death by
the
> > time they are 18, if the 'music' hasn't 'got them by 15 ;-)
>
> I assume you mean deaf?

Indeed, thinking of something else as I typed. Its the 'music' ;-)

>Few people have used cell phones
> for ten years already.

Not sure about that. The mobile phone was an icon of the 'Yuppie' era (along
with the Filofax, BMW, Rolex, etc.) That was mid 1980s.

I'm pretty sure we one of the early 'next generation' phones (digital) in
about 1990.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

284. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 20:56:08 UTC
From: Howard Eisenhauer <howarde@REMOVECAPShfx.eastlink.ca>
Message-ID: <7af8u015k6hbfqge04t0n9917hnvu2dr53@4ax.com>
Source record: 21166
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Tue, 11 Jan 2005 14:42:37 GMT, "tox" <nospam@nospamming.co.com>
wrote:

>http://news.bbc.co.uk/1/hi/health/4163003.stm
>
>
>Any views?

No, just an unbiased review of what appears to be all studies done so
far-

http://www.mcw.edu/gcrc/cop/cell-phone-health-FAQ/toc.html

Read thoroughly & make up your own mind :).

H.

285. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 21:03:15 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34it8bF4a0va6U1@individual.net>
Source record: 21167
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34isjjF4aj19tU1@individual.net...

>
> >Few people have used cell phones
> > for ten years already.
>
> Not sure about that. The mobile phone was an icon of the 'Yuppie' era
(along
> with the Filofax, BMW, Rolex, etc.) That was mid 1980s.
>
> I'm pretty sure we one of the early 'next generation' phones (digital) in
> about 1990.
>

Just checked, it One2One launched in 1993, and there were other systems
before that.

Hard to believe, I don't recall a time when we weren't plagued by the
'mobile'.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

286. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 21:16:01 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <dmZJkodRIE5BFw3Z@newbrain.demon.co.uk>
Source record: 21169
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <41e43ad6$1_1@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com>
writes
>Roy Lewallen wrote:
>
>> Cecil Moore wrote:
>>> The IEEE Spectrum reports that cell phone use for ten years
>>> results in a benign tumor that causes hearing loss.
>> Which issue was that? I'd like to read the article.
>
>December 2004, page 20: "Cellphones Linked To Brain Tumors"
>"No tumors were associated with less than 10 years of
>cellphone use." There will be about 50 million people with
>10 years of cellphone use in 1907. I won't be one of them.

I smell some faulty logic, just because "No tumors were associated with
less than 10 years of cellphone use" you can not infer that tumours
should be associated with more than ten years use. Since handheld mobile
phones have been in use for over ten years there should be statistical
evidence of tumour induction, in fact give the large proportion of the
population using such devices the stats would indicate some tumours in
less than ten years. Where are they?
--
Ian G8ILZ

287. Re: Experimenting with spread spectrum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 21:37:32 UTC
From: Howard Eisenhauer <howarde@REMOVECAPShfx.eastlink.ca>
Message-ID: <d5h8u0pje2ke1cu3kufunua7rk1csraq9d@4ax.com>
Source record: 21170

On Mon, 10 Jan 2005 11:16:05 -0500, David H. <d_h@nospam.com> wrote:

>Thanks for the info, Caveat. Looks like I may have had run across one of your links
>in all my searching :)
>
>There are many question I have regarding SS, but one that's bothering me in
>particular. Regarding the PN spreading sequence, these sequences obviously have to be
>aligned perfectly in both transmitter and receiver. Naturally they could be kept in
>sync if both circuits were initialized at the same time.
>
>However, 3 things: 1) The circuits will not be initialized at the same time in 99% of
>most cases, as in the use of, say, a portable field radio. 2) If they were
>synchronized at the same time, well, no clock or oscillator is perfect. It would
>eventually drift. 3) As I understand it, there is no initial "handshake" signal at
>the beginning of transmission with the receiver to initialize/syncronize the PN
>sequences on both ends.
>
>So in short, how do the PN sequences became and remain synchronized through time?
>Thanks.
>
>Dave
>
snip

FYI on CDMA cell phone systems the base station transmits an
"unspread" pilot carrier for the mobile to lock onto. Once the phone
finds a pilot it starts looking for the sync/paging channel, which is,
IIRC, the "101010..." Walsh Code. Can't remenber now but I think one
of the "rake reciever" channels stays glued to this to keep the
timing.

The base stations obtain thier PN offset timing from GPS synced clocks
at each site, all system timing is based on the "even" second output
from the clocks.

Not sure about the current military gear but it used to take a few
seconds after pushing the PTT before a little beep sounded letting you
know it was OK to talk, but they wern't running at anything like the
spreading rates used today, probably a lot easier to find & sync to
the transmission pattern.

H.

288. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 21:46:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10u8i9qmod3umd6@corp.supernews.com>
Source record: 21171
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> Cecil Moore wrote:
>>
>>> The IEEE Spectrum reports that cell phone use for ten years
>>> results in a benign tumor that causes hearing loss.
>>
>>
>> Which issue was that? I'd like to read the article.
>
>
> December 2004, page 20: "Cellphones Linked To Brain Tumors"
> "No tumors were associated with less than 10 years of
> cellphone use." There will be about 50 million people with
> 10 years of cellphone use in 1907. I won't be one of them.

Thanks. Here's what the article really said:

"Researchers at the Karolinska Institute of Environmental Medicine, in Stockholm, Sweden, have found an association between long-term cellphone use and a rare, benign tumor, causing concern among radiation specialists and epidemiologists, though they emphasize that the results haven't been replicated yet. Scientists now eagerly await results from other studies under way around the world.

Published in the November issue of the journal _Epidemiology_, the Swedish study, led by Stefan Lï¿½nn of the Karolinska Institute, looked at 148 people who had acoustic neuroma and compared them with 604 healthy people. It found that people who used cellphones for more than 10 years doubled their risk of developing the tumor, a benign condition affecting one in 100 000 people. . ."

So when you compacted this into the statement that "cell phone use for ten years results in a benign tumor that causes hearing loss", was it an emulation of today's journalistic technique, or just the effect of years spent working with binary circuits?

Looks to me like it said that a single study, yet to be replicated, of a small group of people indicated that long-term cell phone use caused a doubling of the risk of a rare benign tumor, raising the odds of getting one from about 1 in 100,000 to 1 in 50,000.

So when you compacted this into the statement that "cell phone use for ten years results in a benign tumor that causes hearing loss", was it an

emulation of today's journalistic technique, or just the effect of years spent working with binary circuits?

Roy Lewallen, W7EL

289. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 21:51:46 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <2mh8u055ddf6hntkimna5qklbquusbaeck@4ax.com>
Source record: 21172
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Tue, 11 Jan 2005 21:16:01 +0000, Prometheus <Prometheus@127.0.0.1>
wrote:

>..... in fact give the large proportion of the
>population using such devices the stats would indicate some tumours in
>less than ten years. Where are they?

Firstly, you have to ask yourself what is meant by 'ten years of use'.

Does it mean

- owning one for ten tears?
- having it switched on for ten years?
- using it for x hours a day for ten years?

The meaning of 'ten years' hasn't been made clear so far, at least on
this ng.

Then you need to take into account of the mechanics of tumour
initiation and development. There are thought to be five or six events
in the initiation and growth of a tumour to the stage where it can be
clinically diagnosed. Only one of these is associated with the
causative factor, which will have its own rate of effectiveness, and
so will each of the remaining steps.

Unless the statistics have been very carefully researched and
manipulated, and they may well have been, the numbers reported should
be treated with some caution....
--
from
Aero Spike

290. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 21:55:02 UTC
From: huLLy <hully@despammed.com>
Message-ID: <34j08cF43pc2nU1@individual.net>
Source record: 21173
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"tox" <nospam@nospamming.co.com> wrote in message
news:xBREd.90$fj7.9@newsfe3-gui.ntli.net...
> http://news.bbc.co.uk/1/hi/health/4163003.stm
>
>
> Any views?
>

I think common sense dictates caution when you slap something on the side of your head that heats your brain (Airy excluded) up... There must be health issues with this....

291. Re: HP 10544 OCXO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 22:09:58 UTC
From: Gerhard Hoffmann <dk4xp@arcor.de>
Message-ID: <41e44e8e$0$23137$9b4e6d93@newsread2.arcor-online.net>
Source record: 21174
Cross-posted to: sci.electronics.equipment,rec.radio.amateur.homebrew

Arnd Gronenberg wrote:

> The information regarding the temperature calibration is very helpful. I
> found a replacement thermistor, which seems to be suitable: 83K @ 25C,
> 10.24K @ 80C, reaction time 0.7s, size 1.5mm diameter.
>
> As the HP 10544A uses an AT cut crystal I assume that I have to
> calibrate for a frequency minimum (according to the above mentioned
> website). As the HP 10544A contains a 10 turn variable resistor instead
> of a hand-picked resistor, calibration should be quite straight forward.

If your oven works at 80 degC, it contains an SC cut crystal and not an AT.
AT crystals have their optimum temperature at abt. 28 degC, they are close
to useless at 80 degC.

73, Gerhard dk4xp

292. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 22:16:42 UTC
From: Howard Eisenhauer <howarde@REMOVECAPShfx.eastlink.ca>
Message-ID: <jrj8u05i1g3ufiarm4bbt2bbhhm18es8q0@4ax.com>
Source record: 21175
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Tue, 11 Jan 2005 13:46:17 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Cecil Moore wrote:
>> Roy Lewallen wrote:
>>
>>> Cecil Moore wrote:
>>>
>>>> The IEEE Spectrum reports that cell phone use for ten years
>>>> results in a benign tumor that causes hearing loss.
>>>
>>>
>>> Which issue was that? I'd like to read the article.
>>
>>
>> December 2004, page 20: "Cellphones Linked To Brain Tumors"
>> "No tumors were associated with less than 10 years of
>> cellphone use." There will be about 50 million people with
>> 10 years of cellphone use in 1907. I won't be one of them.
>
>Thanks. Here's what the article really said:
>
>"Researchers at the Karolinska Institute of Environmental Medicine, in
>Stockholm, Sweden, have found an association between long-term cellphone
>use and a rare, benign tumor, causing concern among radiation
>specialists and epidemiologists, though they emphasize that the results
>haven't been replicated yet. Scientists now eagerly await results from
>other studies under way around the world.
>
Snip
>Roy Lewallen, W7EL

Just curious, did the study take into account putting vinyl phone
cases against skin, being warmed up & subsequently out-gassing
carcinogens that were then absorbed through the skin & into the blood
stream???

Enquiring Minds Want to Know-

Howard.

p.s.- Just what are "double the odds" for this "rare" cancer? Any
chance they're within the statistical noise floor?? EMWtK.

H.E.

293. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 22:45:53 UTC
From: Dave <davenpat@btopenworld.com>
Message-ID: <cs1kv1kca1@titan.btinternet.com>
Source record: 21176
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:41e43933$1_2@127.0.0.1...
>
>
> I assume you mean deaf? Few people have used cell phones
> for ten years already.

You in the USA already? ;-)

Already I have used an already mobile phone for well over ten years already.
(not too sure how to punctuate that in the USA vernacular) ;-)
I see no signs of ill health in either myself, or my daughter already. We
both went with Orange about the same time. (A British mobile phone network)
Now Orange work at about 1.8 Gig? At that time, that was about the highest
frequency phone system that was going. Now we have systems that work at 3
gigabyte? already. Or do they operate at even higher frequencies already?
I'm not to sure already.

Right! I'm off to bed already. ;-)

Dave

294. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 22:59:40 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34j42lF4a363lU1@individual.net>
Source record: 21177
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Dave" <davenpat@btopenworld.com> wrote in message
news:cs1kv1kca1@titan.btinternet.com...
>
> "Cecil Moore" <w5dxp@hotmail.com> wrote in message
> news:41e43933$1_2@127.0.0.1...
> >
> >
> > I assume you mean deaf? Few people have used cell phones
> > for ten years already.
>
> You in the USA already? ;-)
>
> Already I have used an already mobile phone for well over ten years
already.
> (not too sure how to punctuate that in the USA vernacular) ;-)
> I see no signs of ill health in either myself, or my daughter already. We
> both went with Orange about the same time. (A British mobile phone
network)

Isn't Orange an offshoot of Hutchinsion Telecom which was, I think, from
Hong Kong?

> Now Orange work at about 1.8 Gig? At that time, that was about the highest
> frequency phone system that was going. Now we have systems that work at 3
> gigabyte? already. Or do they operate at even higher frequencies already?
> I'm not to sure already.
>
> Right! I'm off to bed already. ;-)

Actually Dave, Cecil's use of "already" was quite appropriate. Just
because it may not be 'our' English doesn't make it incorrect- for good or
ill US and UK English are diverging. Languages change. In fact, there is
some evidence the US English is nearer to old English than current UK usage.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

295. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 23:09:01 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34j4k7F4cc2n2U1@individual.net>
Source record: 21178
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Howard Eisenhauer" <howarde@REMOVECAPShfx.eastlink.ca> wrote in message
news:jrj8u05i1g3ufiarm4bbt2bbhhm18es8q0@4ax.com...
> Just curious, did the study take into account putting vinyl phone
> cases against skin, being warmed up & subsequently out-gassing
> carcinogens that were then absorbed through the skin & into the blood
> stream???
>
> Enquiring Minds Want to Know-
>

Not to mention using the MP3 or Radio features with the volume too high. Or
RSI in the thumbs due to over texting.

Even worse, terminal boredom watching phone geeks comparing features. What
is wrong with a basic phone?
Some things are best simple:

Mobilephones (Proud owner of a Nokia 3310.)
Watches (I don't even like quartz watches, give me a mechanical automatic
any day.)
Razors (why do people like electric razors?)
Toothbrushes (electric toothes, I ask you).

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

296. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 23:20:55 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <y6WdnaXV1dTHwnncRVn-gQ@comcast.com>
Source record: 21179
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

> It found that people who used cellphones for more than 10 years doubled
> their risk of developing the tumor, a benign condition affecting one in
> 100 000 people. . ."

I bet that driving a car to work every day raises the likelihood of a multiude of serious health illnesses by an order of magnitude, and those risks are a lot greater than 1 in 100,000 to begin with!

A lot people don't seem to reailze that lifestyle choices (where you live, what you eat, etc.) have a vastly greater influence on their likelihood of coming down with some dreaded disease than most forms of new technology do...

(Although I am all for continuing research so that appropriate levels for polluting gases, EM radiation emissions, etc. can be set... but of course 'the appropriate level' is at least as much if not more a political problem than a technical problem.)

297. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 23:23:49 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <0KidnUKT75iY_XncRVn-ig@comcast.com>
Source record: 21180
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34j4k7F4cc2n2U1@individual.net...
> Some things are best simple:
>
> Mobilephones (Proud owner of a Nokia 3310.)

I'm sold on wireless Internet connectivity, sorry. WiFi/WiMax's coverage is
still a drop in the bucket compared to WCDMA/GPRS/EDGE coverage.

> Watches (I don't even like quartz watches, give me a mechanical automatic
> any day.)

I like mechnical watches, but there's something to be said for dual time
zones, chronographs, count down alarms, etc. too!

> Razors (why do people like electric razors?)

Mainly laziness; the last thing I want to do when I'm still groggy in the
morning is deal with changing a double-edged razor blade.

> Toothbrushes (electric toothes, I ask you).

I'd speculate that _most_ people do a better job of cleaning with an
electric toothbrush than with a 'manual...'

298. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 23:36:32 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34j67pF476ujvU1@individual.net>
Source record: 21181
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Joel Kolstad" <JKolstad71HatesSpam@Yahoo.Com> wrote in message
news:0KidnUKT75iY_XncRVn-ig@comcast.com...
> "Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
> news:34j4k7F4cc2n2U1@individual.net...
> > Some things are best simple:
> >
> > Mobilephones (Proud owner of a Nokia 3310.)
>
> I'm sold on wireless Internet connectivity, sorry. WiFi/WiMax's coverage
is
> still a drop in the bucket compared to WCDMA/GPRS/EDGE coverage.

Must be a big phone just to get the label on it ;-)

> > Watches (I don't even like quartz watches, give me a mechanical
automatic
> > any day.)
>
> I like mechnical watches, but there's something to be said for dual time
> zones, chronographs, count down alarms, etc. too!

I can't imagine how I live without then. Nice mechanical hands that move, a
nice tick, and not having to wind it up. If cars were as reliable as a
Rolex, garages would be out of business.

>
> > Razors (why do people like electric razors?)
>
> Mainly laziness; the last thing I want to do when I'm still groggy in the
> morning is deal with changing a double-edged razor blade.

Don't you have those snazzy clip in dual (or even triple) bladed beasts. Do
them in the dark.

Plus, a proper wet shave lasts all day. An electric tickle about 4 hours.

> > Toothbrushes (electric toothes, I ask you).
>
> I'd speculate that _most_ people do a better job of cleaning with an
> electric toothbrush than with a 'manual...'

I've heard that before. However, there is also the case for 'up and down'
motion (no innuendo intended) and electric toothbrushes are rotary.
--
Brian Reay
www.g8osn.org.uk

www.amateurradiotraining.org.uk
FP#898

299. Re: textronix 3a72 scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-11 23:53:32 UTC
From: george.brien@ns.sympatico.ca
Message-ID: <1105487612.913973.222750@c13g2000cwb.googlegroups.com>
Source record: 21182

Jim- The time base is a 3b2 and the amp is a 3a72.
Just downloaded the complete manual from BAMA=
all 100+ pages.!!! Its going to take a while to see
if I figure out this "tool". I understood it could also
be used as a signal generator but the manual reads as if I should
already know all these things?
One of those BNC connectors must be used to input a signal to the
scope and/or output a
455khz sig. I,ve got the whole winter to play
with it.
George VE1NK

300. Re: Making our own valves (Tubes for the Non-English-Speaking Yanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 00:04:19 UTC
From: m005kennedy <m005kennedy@netzero.net>
Message-ID: <1105488259.858067.269900@z14g2000cwz.googlegroups.com>
Source record: 21183
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

It was my understanding that some of the tubes from Russia were in fact made by hand. I would like to know how you progress in this.
In regards to a previous negative comment, what compels someone to write a derogatory comment about someone for their technical ideas? In the Xtals crystals society there is a book on building a crystal set from scratch, headphones and all without purchasing any built electronic parts. More power to people who do it!!!

Airy R. Bean wrote:
> As time passes, valves of the sort and size that we use in our TX's
> are becoming increasingly rare and expensive.
>
> There is nearly a century of folklore and industrial craft in producing
> valves and overcoming problems thereto, and it seems to me that now is the
> time to gather together this expertise before all the associated craftsmen
> and industrialists go to the grave and their knowledge becomes lost
> forever.
>
> Armed with such a body of knowledge, could we Radio Hams, as a body of
> technically-motivated and technically-inspired aficionados, then consider
> manufacturing our own?
>
> Is it not, after all, our pride in such technical activity that sets us
> apart from
> the CBer who buys all his gear from a shop (and even sends it back their
> if ever it needs repair)?

301. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 00:12:53 UTC
From: Chris Kirby <g4fzn@yahoo.com>
Message-ID: <spq8u0pfkoutod97hl9704q8761jagjvh2@4ax.com>
Source record: 21184
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Dave wrote:

>We
>both went with Orange about the same time. (A British mobile phone network)

Eh? Orange is almost wholly owned by France Telecom. Hardly British!!

--
Chris

302. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 00:16:28 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <N0atQMfcxG5BFw0c@newbrain.demon.co.uk>
Source record: 21185
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <2mh8u055ddf6hntkimna5qklbquusbaeck@4ax.com>, Spike
<Aero.Spike@Speed.invalid> writes
>On Tue, 11 Jan 2005 21:16:01 +0000, Prometheus <Prometheus@127.0.0.1>
>wrote:
>
>>..... in fact give the large proportion of the
>>population using such devices the stats would indicate some tumours in
>>less than ten years. Where are they?
>
>Firstly, you have to ask yourself what is meant by 'ten years of use'.
>
>Does it mean
>
> - owning one for ten tears?
> - having it switched on for ten years?
> - using it for x hours a day for ten years?
>
>The meaning of 'ten years' hasn't been made clear so far, at least on
>this ng.

True, owning for ten years but never switching on can be no worse then
any other lump of plastic and metal. Having it switched on but not
making any calls is also of minimal risk. Using for X hours per day
might be meaningful but if X is not defined it is of little value, we
also need to know what proportion of users suffer adverse effect. If the
proportion is little different to that in non-mobile phone users then
use of mobile phones can not be considered significant.

>Then you need to take into account of the mechanics of tumour
>initiation and development. There are thought to be five or six events
>in the initiation and growth of a tumour to the stage where it can be
>clinically diagnosed. Only one of these is associated with the
>causative factor, which will have its own rate of effectiveness, and
>so will each of the remaining steps.

Again information not published.

>Unless the statistics have been very carefully researched and
>manipulated, and they may well have been, the numbers reported should
>be treated with some caution....

Give the lack of atestable figures I prefer distrust to caution.
--
Ian G8ILZ

303. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 00:38:55 UTC
From: Matthew Haigh <$matthaigh{News07}$@haigh.org>
Message-ID: <FGFWIjNfGH5BFwGM@local.gcrsoft.com>
Source record: 21187
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <34j67pF476ujvU1@individual.net>, Brian Reay
<brian.reay@bigfoot.com> writes
>"Joel Kolstad" <JKolstad71HatesSpam@Yahoo.Com> wrote in message
>news:0KidnUKT75iY_XncRVn-ig@comcast.com...
>> "Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
>> news:34j4k7F4cc2n2U1@individual.net...

>> > Razors (why do people like electric razors?)
>>
>> Mainly laziness; the last thing I want to do when I'm still groggy in the
>> morning is deal with changing a double-edged razor blade.
>
>Don't you have those snazzy clip in dual (or even triple) bladed beasts. Do
>them in the dark.

Personally I use an electric because it doesn't take chunks out of my
face. Not that I do that often with a razor, but you can bet that the
day I have an important meeting is the one I end up looking like an
extra from a slasher horror film :-)

>
>Plus, a proper wet shave lasts all day. An electric tickle about 4 hours.
>
>> > Toothbrushes (electric toothes, I ask you).
>>
>> I'd speculate that _most_ people do a better job of cleaning with an
>> electric toothbrush than with a 'manual...'
>
>I've heard that before. However, there is also the case for 'up and down'
>motion (no innuendo intended) and electric toothbrushes are rotary.

My electric one goes up and down. It is also a completely sealed handle,
with the battery charging done inductively, and the motion transferred
to the head magnetically. I can't believe the amount of engineering gone
into something that could be done with a stick of plastic and a few
bristles :-)
(and no, I didn't buy it - it was given to me).

Matt
--
Matthew Haigh --$matthaigh{News07}$@haigh.org--
GCRSoft, providing SMS solutions since 1996...
http://www.gcrsoft.com http://www.moretext.com

304. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 00:39:03 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <MKEN$XgnGH5BFwHW@newbrain.demon.co.uk>
Source record: 21186
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <34j4k7F4cc2n2U1@individual.net>, Brian Reay
<brian.reay@bigfoot.com> writes
>Even worse, terminal boredom watching phone geeks comparing features.

An anthropomorphic study of the lesser witted geek should be
interesting, one must ask is the species viable?

> What
>is wrong with a basic phone?

Unless you need the extra features, nothing. I have a digital camera
which is much better than any in a phone, my pocket radio is better than
any phone, my handheld computer is better than any phone. My mobile
phone is smaller than any phone containing "feature" I seldom want to
carry around.

>Some things are best simple:

However not automatically so.

>Mobilephones (Proud owner of a Nokia 3310.)

Depends if you NEED more than speech.

>Watches (I don't even like quartz watches, give me a mechanical
>automatic
>any day.)

My analogue quarts is more rugged and accurate but I do have to change
the battery every three years so I do have some sympathy for a
mechanical automatic.

>Razors (why do people like electric razors?)

Perhaps they find the vibration of an electric shaver to be auto-erotic,
I prefer the closer shave obtained with a real razor.

>Toothbrushes (electric toothes, I ask you).

Depends on the type; the reciprocating rotary head are more effective
than an ordinary brush, the vibrating etc. are a waste of time.

I take an engineering approach and select equipment to be effective
rather than simply rejecting anything that is not traditional (otherwise
you would have to reject all phones and use runners).

--
Ian G8ILZ

305. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 01:44:40 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <xZmdnXcXvbuWHHncRVn-vA@comcast.com>
Source record: 21188
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Prometheus" <Prometheus@127.0.0.1> wrote in message
news:MKEN$XgnGH5BFwHW@newbrain.demon.co.uk...
>>Mobilephones (Proud owner of a Nokia 3310.)
> Depends if you NEED more than speech.

Hmm... I don't know that we NEED much of any modern technology... but I'm certainly willing to pay for it! (And it is interesting how the Internet has gone from being 'a cool toy' to something many would argue is NEEDed for 'modern jobs' in under a decade... I wonder how long telephones took to reach the same level of 'NEED'?)

> My analogue quarts is more rugged and accurate but I do have to change the
> battery every three years so I do have some sympathy for a mechanical
> automatic.

Casio has some nice 10 year (battery life) models, although they're plastic so generally the case will die years before the battery...

There are also solar powered and kinetically powered quartz (electric) watches out there...

> I take an engineering approach and select equipment to be effective rather
> than simply rejecting anything that is not traditional (otherwise you
> would have to reject all phones and use runners).

I thought it was smoke signals? :-)

306. Re: textronix 3a72 scope

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 04:01:45 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <nh69u0t4gspmoshef9gev5i217cbte7a10@4ax.com>
Source record: 21190

On 11 Jan 2005 15:53:32 -0800 george.brien@ns.sympatico.ca wrote:

>Jim- The time base is a 3b2 and the amp is a 3a72.
>Just downloaded the complete manual from BAMA=
>all 100+ pages.!!! Its going to take a while to see
>if I figure out this "tool". I understood it could also
>be used as a signal generator but the manual reads as if I should
>already know all these things?
>One of those BNC connectors must be used to input a signal to the
>scope and/or output a
>455khz sig. I,ve got the whole winter to play
>with it.

The 560 series of scopes could use either 2 or 3 series plugins. Of these, the 3 series were the more advanced, but the 3A72, and a few others, are exceptions. There were several 3A7? plugins, all of which started out as just 7? plugins, and were even more primitive that the 2 series. Consequently, the 3A7? plugins are not very desirable, except for the 3A74, which is the only 4 channel plugin made for these scopes.

I had to look up the 3B2 plugin. I've never seen one, but I found that it was made to provide digital output to work with the 567 and 568 scopes. It is usually paired with the (also digital capable) 3A2, which I've also never seen. It is only a 500 kHz plugin, however.

The 3A72 plugin only has inputs, and this is where you need to feed the signals that you want to display on the scope.

The 3B2 has an external trigger input as well as a couple of outputs, but you can ignore them for most uses.

I'm not familiar with the 568. I doubt if there is a 455 kHz output on it, but I could be wrong. If it's there, then it must have something to do with the digital display unit, which you don't have (and probably don't want, it's just as big as the scope!)

If you want more information on these and other early Tek scopes, including pictures of all the items we've been talking about, there is a good book available on them. Look for "Oscilloscopes, Selecting and Restoring a Classic" by Stan Griffiths. I believe you can find Stan on the web and buy the book directly from him.

3 series plugins sometimes appear at swap meets for very reasonable prices. I've paid as little as $5 for one, but then it required tubes and repairs. I have quite a few of these, including a number of working spares, so if you are interested in purchasing some upgrades,

I probably have them.

-

Jim Adney jadney@vwtype3.org
Madison, WI 53711 USA
---

307. WTB: RF Spectrum Analyxer - At least 1Ghz

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 04:03:53 UTC
From: "David H." <d_h@nospam.com>
Message-ID: <jq79u09399oc2ve0h79mv3h5968p0m2svg@4ax.com>
Source record: 21189

greets all

Just wanted to let everyone [who might read this] know that I am looking to purchase a spectrum analyzer. Make and model is not terribly important. Just looking for something that works reasonably well, has fairly good input sensitivity (measurements made from an antenna are prime objective) and has a top end of at least 1Ghz.

I've looked on ebay. Most of these unit are running at least $1000.00 - $1500.00 or over. If anyone's recently purchased a new 6 or 22Ghz SA, and would like to get rid of that older one that might be sitting in the closet, I'd be interested. Thanks.

Dave

308. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 04:25:47 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e4a6d5$1_3@127.0.0.1>
Source record: 21192
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Brian Reay wrote:
> "Cecil Moore" <w5dxp@hotmail.com> wrote:
>>Few people have used cell phones
>>for ten years already.
>
> Not sure about that.

Few compared to an estimated 200,000,000 by 2017.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

309. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 04:39:03 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e4a9f2_2@127.0.0.1>
Source record: 21193
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Prometheus wrote:
> I smell some faulty logic, just because "No tumors were associated with
> less than 10 years of cellphone use" you can not infer that tumours
> should be associated with more than ten years use.

People with less than 10 years of cellphone use suffered the same
rate of tumors as non-cellphone users. People with more than 10 years
of cellphone use suffered twice as many tumors as non-cellphone users
and tumors among cellphone users was four times more likely to occur
on the side of the head normally used for the cellphone. Where's the
faulty logic?
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

310. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 04:49:44 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e4ac73$1_4@127.0.0.1>
Source record: 21194
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Roy Lewallen wrote:
> So when you compacted this into the statement that "cell phone use for
> ten years results in a benign tumor that causes hearing loss", was it an
> emulation of today's journalistic technique, or just the effect of years
> spent working with binary circuits?

That was the gist of what I got out of reading the article the
title and header of which is:

"CELLPHONES LINKED TO BRAIN TUMORS, THE GOOD NEWS IS THEY'RE
BENIGN; THE BAD NEWS IS THAT THEY'RE THERE."

Your gist may vary. I assume one argument from the "no energy
in RF waves" guys will be "no energy = no tumor".
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

311. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 04:54:58 UTC
From: phil-news-nospam@ipal.net
Message-ID: <cs2aj242afi@news3.newsguy.com>
Source record: 21197
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

In alt.engineering.electrical Floyd L. Davidson <floyd@barrow.com> wrote:
| "Blueskies" <nospamedblueskies@ameritech.net> wrote:
|>"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
news:iHaEd.13517$iC4.12685@newssvr30.news.prodigy.com...
|>> No one has mentioned that cable mining is much safer and easier with laced cables and
can be impossible with ty
|>> wrapped cables.
|>>
|>> --
|>>
|>> 73
|>> Hank WD5JFR
|>>
|>
|>What is cable mining?
|
| New cables are laid into cable racks on top of old cables, and
| the old ones that are no longer used are just cut off where they
| enter the cable rack and left in place. Eventually, of course,
| the cable rack fills up with old unused cable.
|
| So every decade or so some poor smucks get the job of removing
| all old cables. And that... is cable mining.
|
| It isn't fun and it isn't exciting (but if you get the cable it
| might be profitable though).
|
| And if any of the cable was put in with tie-wraps, you also get
| your hands shredded from the sharp edges where the tie wraps
| were cut off. That is bad enough if a proper tool is used, and
| *far* worse if some dingbat has used snips to cut them.

I've had to do that under computer room raised floors. New computers come
in before the old ones leave and cables get laid on top of existing cable.
When the oldest ones eventually do get decommissioned, the cables are at
the bottom and too hard to get out. Eventually they pile up. This was in
the mainframe days when a computer _system_ involved a "CPU" the size of
your living room, and a hundred washing machine size peripherals that
would fill up a large house, all on hundreds of 2 foot by 2 foot squares
sitting on a grid of poles and crossmembers. At one place I used to work
we decommissioned an entire machine room which was being converted to
office space. All the cables did have to be removed in that one, and
there were some interesting things found deep down. Mainframe cables

were quite large, BTW.

--

| Phil Howard KA9WGN | http://linuxhomepage.com/ http://ham.org/ |
| (first name) at ipal.net | http://phil.ipal.org/ http://ka9wgn.ham.org/ |
---

312. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 04:55:02 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e4adb1$1_1@127.0.0.1>
Source record: 21195
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Dave wrote:
> I see no signs of ill health in either myself, or my daughter already.

That's nice and fits right in with one in 100,000 non-cellphone
users getting it Vs two in 100,000 10-year cellphone users getting
it.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

313. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 04:58:08 UTC
From: tox <nospam@nospamming.co.com>
Message-ID: <A72Fd.3$fr6.0@newsfe4-gui.ntli.net>
Source record: 21196
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:41e4a6d5$1_3@127.0.0.1...
> Brian Reay wrote:
> > "Cecil Moore" <w5dxp@hotmail.com> wrote:
> >>Few people have used cell phones
> >>for ten years already.
> >
> > Not sure about that.
>
> Few compared to an estimated 200,000,000 by 2017.

In which case, it could well be the end of the world! With all that RF
flying about, chances are, by 2017 every male in the world will be sterile.

If there's a moral here, it must be, don't keep your phone in your trouser
pocket!

Regards
tox

314. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 05:11:35 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e4b194$1_1@127.0.0.1>
Source record: 21048
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

tox wrote:
> If there's a moral here, it must be, don't keep your phone in your trouser
> pocket!

More on the subject from:
http://www.timesonline.co.uk/article/0,,2-1436543,00.html

"CHILDREN under the age of eight should not use mobile phones, parents were advised last night after an authoritative report linked heavy use to ear and brain tumours and concluded that the risks had been underestimated by most scientists.

Professor Sir William Stewart, chairman of the National Radiological Protection Board (NRPB), said that evidence of potentially harmful effects had become more persuasive over the past five years.

The news prompted calls for phones to carry health warnings and panic in parts of the industry. One British manufacturer immediately suspended a model aimed at four to eight-year-olds.

The number of mobiles in Britain has doubled to 50 million since the first government-sponsored report in 2000. The number of children aged between five and nine using mobiles has increased fivefold in the same period.

In his report, Mobile Phones and Health, Sir William said that four studies have caused concern. One ten-year study in Sweden suggests that heavy mobile users are more prone to non-malignant tumours in the ear and brain while a Dutch study had suggested changes in cognitive function. A German study has hinted at an increase in cancer around base stations, while a project supported by the EU had shown evidence of cell damage from fields typical of those of mobile phones."
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

315. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 06:21:46 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <tRT1JWi6HM5BFwSZ@newbrain.demon.co.uk>
Source record: 21049
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <41e4a9f2_2@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com>
writes
>Prometheus wrote:
>> I smell some faulty logic, just because "No tumors were associated
>>with less than 10 years of cellphone use" you can not infer that
>>tumours should be associated with more than ten years use.
>
>People with less than 10 years of cellphone use suffered the same
>rate of tumors as non-cellphone users. People with more than 10 years
>of cellphone use suffered twice as many tumors as non-cellphone users
>and tumors among cellphone users was four times more likely to occur
>on the side of the head normally used for the cellphone. Where's the
>faulty logic?

The faulty logic was in the presumption that ten years use was different when your statement in Message-ID: <41e43ad6$1_1@127.0.0.1> of 'December 2004, page 20: "Cellphones Linked To Brain Tumors" "No tumors were associated with less than 10 years of cellphone use." There will be about 50 million people with 10 years of cellphone use in 1907. I won't be one of them' which made no mention of effects either use for more than ten years or non-use. I do not expect anything a simplistic as a step function at the ten year threshold, perhaps this like your previous post is also omitting essential information?
--
Ian G8ILZ

316. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 07:18:40 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34k1a7F2ie14pU1@individual.net>
Source record: 21050
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:41e4ac73$1_4@127.0.0.1...
> Roy Lewallen wrote:
> > So when you compacted this into the statement that "cell phone use for
> > ten years results in a benign tumor that causes hearing loss", was it an
> > emulation of today's journalistic technique, or just the effect of years
> > spent working with binary circuits?
>
> That was the gist of what I got out of reading the article the
> title and header of which is:
>
> "CELLPHONES LINKED TO BRAIN TUMORS, THE GOOD NEWS IS THEY'RE
> BENIGN; THE BAD NEWS IS THAT THEY'RE THERE."
>
> Your gist may vary. I assume one argument from the "no energy
> in RF waves" guys will be "no energy = no tumor".

Have other factors in the 'life style' of phone users been ruled out?

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

317. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 07:24:14 UTC
From: ssparling <ssparling@rogers.com>
Message-ID: <jMSdnZ_sLMeFO3ncRVn-hQ@rogers.com>
Source record: 21191
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

Is there any website, or even better pics of your lacing I can see this?

318. Re: Making our own valves (Tubes for the Non-English-Speaking Yanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 07:29:27 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <qMnEawDXHN5BFAym@ifwtech.co.uk>
Source record: 21051
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

m005kennedy wrote:
>It was my understanding that some of the tubes from Russia were in fact
>made by hand.

You may have given too much credence to rumours about tubes like the GS35 (photo on my website).

The anode cooler only *looks* like it was made by some be-whiskered traditional Russian coppersmith, on a side bench in People's Samovar Factory No 23. The grid only *looks* like it was hand-knitted by his wife.

The latter is definitely not true. It's made from a tea strainer.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

319. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 07:45:09 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <a1l9u0dqv6iigqp8nar18ue1sl5povepr9@4ax.com>
Source record: 21052

On Tue, 11 Jan 2005 18:56:58 GMT, "Neil" <usenet1@blueyonder.co.uk>
wrote:

>I made a hf atu. Tends to arc across tho above 100w. Pity Bean hasnt got his
>finger in it at the time.
>
>
I made a Z-match, it tended to arc on 40m, but not on other bands. It
depends much on the antenna impedance

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

320. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 07:45:09 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <h6l9u0p4qmdbvn156l26t0vjen9shkrna5@4ax.com>
Source record: 21053

On Tue, 11 Jan 2005 17:32:28 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>
>The trouble with as many as 8 single-throw, high-current, high-voltage
>switches in a tuner, is the stray inter-component wiring and inductance and
>capacitance they introduce.
>
>Even with a minimum number of, or no switches, it requires TWO independent
>tuners, in separate boxes with separate coaxial connectors, to cover the
>range 1.8 to 30 Mhz with reasonable power efficiency.
>
>You need practical experience by building one or two to see how they
>perform. Try again and then come back!
>----
>Reg.
>
not posted to uk.radio.amateur cb-group

Don't understand why one should make switches, they are offered in
large quantities at rallies and many other occasions

LA8AK

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

321. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 08:48:36 UTC
From: Rv! <not.a.valid@email.address.invalid>
Message-ID: <41e4e462$0$19165$cc9e4d1f@news-text.dial.pipex.com>
Source record: 21054
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

> If there's a moral here, it must be, don't keep your phone in your trouser
> pocket!

Less painful than the snip! :0

Rv!

322. Hairy R. Beanz proposal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 10:19:43 UTC
From: Old Macdonald <oeieio@hotmail.com>
Message-ID: <cs2tc4bvn1@newstree.wise.edt.ericsson.se>
Source record: 21055

>A proposal for the body of Hams that make up this

>NG is that we club together and conceive of a design

>for an HF transceiver that could form the basis of the

>station of any budding Radio Ham.

Interesting! If Hairy R. Beanz has anything to do with it then it would indeed be an unisual rig. Synthesiser whine, or any other whining would have to be encouraged. The PTT switch would have to be rewired to a PTR (Press To receive) switch since listening would be only used occasionally. The microphone would need to be large - it would have to be HUGE, - Large enough for even Hairy's mouth. the output power would need to be meggawatts to make sure Hairy can impose his views world-wide (as he is doing now). The modulating system would need a digital sound recorder so the same views can be repeated over and over, again , and again, and again ...

The club that Hairy is proposing would also be a big one, especially when one considers the membership. I would hate to be in the club room at the weekly club meeting, but then again, Hairy would probably introduce club subscriptions. Then there would have to be a club "constitutional" so Hairy could have his "daily constitutional", which would probably mean fitting the newly designed rig in the toilet.

Naaaa. Count me out. The "acid toungue" would also require a special microphone, and I, for one, am not prepared to contribute anything to this project to make a free rig for Hairy R. Beanz.

323. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 10:45:43 UTC
From: G1LVN <google@g1lvn.org.uk>
Message-ID: <1105526743.722764.155190@f14g2000cwb.googlegroups.com>
Source record: 21056
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Unlike heavy mobile phone use it has been proven that increasing Oxydisation of cell structures causes, cancer, aging and ultimately death. Doesn't stop anyone breathing though does it? If we al stopped breathing there would be no cancer, no aging.

Seriously though, as an illustration, say that in 20 years time we find that the heating effect of RF from mobile phones provides a catalyst for increased oxydisation in the brain when combined with the inhilation of plastics vapour from the material used in cellphone keypd membranes to cause cancer of the nose (it could happen!!). This would be a totally unforseen risk to our health. What this report says that is as a precaution to unforseen health risks it is better not to let childern use mobile phones and audults only when absolutly necessary and to limit use. This is an example of the "precautionary principle", specifically used to limit or halt future crisis.

see: http://en.wikipedia.org/wiki/Precautionary_principle
http://www.spiked-online.com/Articles/00000006DE2F.htm
http://www.emfacts.com/papers/newspeak.pdf
http://www.chstm.man.ac.uk/outreach/mobile-phones.htm
http://www.seas.upenn.edu/~kfoster/precautionary_foster.PDF

324. FA---SET OF 8 ELECTROLYTIC CAPS FOR VALVE AMP. 220uF 400V

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 10:47:04 UTC
From: Steve H <g0lmv@yahoo.co.uk>
Message-ID: <41e5008d_3@mk-nntp-2.news.uk.tiscali.com>
Source record: 21057

http://cgi.ebay.co.uk/ws/eBayISAPI.dll?ViewItem&item=5741965940

Last few

325. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 13:24:57 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <828au0huh16iso8ejfft7bljhvq7iska87@4ax.com>
Source record: 21058
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On 12 Jan 2005 02:45:43 -0800, "G1LVN" <google@g1lvn.org.uk> wrote:

>Unlike heavy mobile phone use it has been proven that increasing
>Oxydisation of cell structures causes, cancer, aging and ultimately
>death. Doesn't stop anyone breathing though does it? If we al stopped
>breathing there would be no cancer, no aging.

Although meant humorously, it should be noted that oxidation is a process that doesn't necessarily involve oxygen at all!

Oxidation is the process of losing one or more electrons by an atom (which may form part of a molecule) - the species that gained the appropriate electrons is said to be 'reduced'. Redox reactions are a basic part of chemistry.

The real oxidation damage to human cells comes from the action of 'free radicals' - molecules that have gained a lone electron. These electrons are highly reactive, and the transfer of this electron to a molecule in a cell can cause (chemical) damage. If this happens to be part of the cell's DNA, then the 'message' encoded by the DNA has been altered.....which can lead to uncontrolled cell growth and reproduction, and hence The Big Casino.

Where do free radicals come from? Currently they are though to arise through pollution, fried foods, alcohol, sunlight, solvents, ionising radiation, the sources are many and varied. What can you do to prevent free-radical attack? Avoid free-radical producers, and ensure you take enough anti-oxidants through dietary supplementation....

The interested reader is encouraged to find out more through, e.g. web searches. There's a lot of info out there.

I've laboured this a bit because there are people on this ng whose level of understanding is such that they believe things like 'dehumidifiers absorb heat.....you can use this to warm up your shed'.
--
from
Aero Spike

326. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 14:34:53 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e53597$1_3@127.0.0.1>
Source record: 21059
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Prometheus wrote:
> I do not expect anything a simplistic as a
> step function at the ten year threshold, perhaps this like your previous
> post is also omitting essential information?

I didn't say there was a step function at the ten year threshold
and I'm certainly not going to type in the entire article. It is
much more likely that it is a ramp function roughly emerging from
the average after around ten years of use.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

327. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 14:41:03 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e5370a$1_1@127.0.0.1>
Source record: 21060
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Brian Reay wrote:
> Have other factors in the 'life style' of phone users been ruled out?

For further information, please contact Stefan Lï¿½nn at the
Karolinska Institute in Sweden.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

328. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 14:54:05 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34ks6fF4e1hbjU1@individual.net>
Source record: 21061
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

You don't understand the interest and enthusiasm
that comes from doing things yourself?

Are you really a Radio Ham?

"J M Noeding" <la8ak@online.no> wrote in message
news:h6l9u0p4qmdbvn156l26t0vjen9shkrna5@4ax.com...
> On Tue, 11 Jan 2005 17:32:28 +0000 (UTC), "Reg Edwards"
> <g4fgq.regp@ZZZbtinternet.com> wrote:
> >The trouble with as many as 8 single-throw, high-current, high-voltage
> >switches in a tuner, is the stray inter-component wiring and inductance
and
> >capacitance they introduce.
> >Even with a minimum number of, or no switches, it requires TWO
independent
> >tuners, in separate boxes with separate coaxial connectors, to cover the
> >range 1.8 to 30 Mhz with reasonable power efficiency.
> >You need practical experience by building one or two to see how they
> >perform. Try again and then come back!
> not posted to uk.radio.amateur cb-group
> Don't understand why one should make switches, they are offered in
> large quantities at rallies and many other occasions

329. Re: Any good 13cm WideCoverage Receiver?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 15:15:14 UTC
From: David Norris <david_norris@fastmail.fm>
Message-ID: <6abFd.627$2z3.304@newsfe5-gui.ntli.net>
Source record: 21062
Cross-posted to: alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.scanner

<posted & mailed>

Ultra Kiasu wrote:

> I had scoured the net for cheaper 13cm (2.3-2.6 GHz) widecoverage
> receiver with fine adjustable stepping LCD controller.
>
> So far, had only found these 2 main suppliers at http://www.13cm.co.uk
> and http://www.g1mfg.com which both is UK based.
>
> G1MFG products look good but expensive, while 13cm's were cheap but
> crude (required DIY connections).
>
> Is there cheaper alternative, or better, ready-made (minimal
> construction required) which LCD controller built-in?
>
> I believe that since the main radio components are supplied by
> Taiwanese company, Comtech, there should be more similar products
> around the world, or at least, "clones".
>
> Any good recommendation?
>
>
> Thank you.
>
> Regards,
> Kevin
>
> PS: Appreciate if you could email me a copy of your reply.

The receivers which ship with 2.4GHz wireless cameras may be available separately, but only cover the 2.4-2.5 GHz area. Typically 4 channels. To be honest. the LCD although looking good isn't really vital since video is so wideband that you'll soon get to remember which is which, and a small tuning error isn't the end of the world.
I would suggest investing in a good high gain aerial though (I use a 20dB gain parabolic (cheapest about 40 UKP for a mesh one, if you don't fell like making one). You can use those for 802.11b wireless networking, since this operates in the same band.
David (G7VDI).

330. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 18:19:43 UTC
From: Dave <davenpat@btopenworld.com>
Message-ID: <cs3pnvgog1@titan.btinternet.com>
Source record: 21063
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34j42lF4a363lU1@individual.net...
>
> Isn't Orange an offshoot of Hutchinsion Telecom which was, I think, from
> Hong Kong?

That was the company that created it, then sold it to British Aerospace, who
in turn sold it on again. It is now French (spit) owned.

> Actually Dave, Cecil's use of "already" was quite appropriate.

That was why I included the smilies. I find it kinda cute that English in
this country has modernised, but that English spoken over the pond is stuck
in the 17 century.

> Languages change. In fact, there is
> some evidence the US English is nearer to old English than current UK
usage.

Once again, I find this fact hard to understand, when the world's fastest
growing technology, with the worlds largest budget etc can't up-grade the
language it speaks, to what the rest of the English speaking world use.

Regards

Dave

331. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 19:02:38 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <3qsau09u3da5to9brn0fblui91rcdp4kuv@4ax.com>
Source record: 21064

On Wed, 12 Jan 2005 14:54:05 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>You don't understand the interest and enthusiasm
>that comes from doing things yourself?

again xposted to the CB newsgroup I deleted in the first place.

>
>Are you really a Radio Ham?
>

Radio amateurs have official callsigns, did you know? Non of your
postings indicates that you have such callsign to show us

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

332. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 19:45:13 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <D7$eDVnJ5X5BFwkV@newbrain.demon.co.uk>
Source record: 21067
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <41e53597$1_3@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com>
writes
>Prometheus wrote:
>> I do not expect anything a simplistic as a step function at the ten
>>year threshold, perhaps this like your previous post is also omitting
>>essential information?
>
>I didn't say there was a step function at the ten year threshold
>and I'm certainly not going to type in the entire article. It is
>much more likely that it is a ramp function roughly emerging from
>the average after around ten years of use.

Of course a proportional function is more likely although perhaps not
linear however your statements that "No tumors were associated with less
than 10 years of cellphone use" and "People with more than 10 years of
cellphone use suffered twice as many tumors as non-cellphone users"
describes a step function at ten years {t = 1 for y < 10 and t = 2 for y
> 10, where y is the number of years and t the base rate for brain
tumours in a non-mobile phone using control group). Given this
simplistic step function I must have doubts about the accuracy of the
study that lead to such a conclusion

I do not expect you to type in the entire article, but you only stated
"No tumors were associated with less than 10 years of cellphone use"
which provide no information about any association after ten years.
--
Ian G8ILZ

333. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 19:45:17 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <M7OdTpnN5X5BFwkx@newbrain.demon.co.uk>
Source record: 21066
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <ij2au01vm6huk0v8qjrtdjeil98bg2ae0j@4ax.com>,
lucifer@eternal-flames.gov writes
>On Wed, 12 Jan 2005 06:21:46 +0000, Prometheus <Prometheus@127.0.0.1>,
>paused briefly between playing with his doll's house, to write:
>
>
>>The faulty logic was in the presumption that ten years use was different
>>when your statement in Message-ID: <41e43ad6$1_1@127.0.0.1> of 'December
>>2004, page 20: "Cellphones Linked To Brain Tumors" "No tumors were
>>associated with less than 10 years of cellphone use." There will be
>>about 50 million people with 10 years of cellphone use in 1907. I won't
>>be one of them' which made no mention of effects either use for more
>>than ten years or non-use. I do not expect anything a simplistic as a
>>step function at the ten year threshold, perhaps this like your previous
>>post is also omitting essential information?
>
>Ah yes... 1907. A very good year for whines. :-)

I refrained from pointing out just how large "mobile phones" were in
1907, and that was after ten years of development.

--
Ian G8ILZ

334. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 19:49:37 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34ldg7F4d2h3bU1@individual.net>
Source record: 21065

As the originator of this thread, I retain the two groups to
which it was posted.

"J M Noeding" <la8ak@online.no> wrote in message
news:3qsau09u3da5to9brn0fblui91rcdp4kuv@4ax.com...
> On Wed, 12 Jan 2005 14:54:05 -0000, "Airy R.Bean" <Me@privacy.net>
> wrote:
> >You don't understand the interest and enthusiasm
> >that comes from doing things yourself?
> again xposted to the CB newsgroup I deleted in the first place.

335. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 19:50:38 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34ldi2F4ce7mcU1@individual.net>
Source record: 21068
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Or...I do when I remember to add it!

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34ldg7F4d2h3bU1@individual.net...
> As the originator of this thread, I retain the two groups to
> which it was posted.
>
> "J M Noeding" <la8ak@online.no> wrote in message
> news:3qsau09u3da5to9brn0fblui91rcdp4kuv@4ax.com...
> > On Wed, 12 Jan 2005 14:54:05 -0000, "Airy R.Bean" <Me@privacy.net>
> > wrote:
> > >You don't understand the interest and enthusiasm
> > >that comes from doing things yourself?
> > again xposted to the CB newsgroup I deleted in the first place.
>
>

336. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 20:24:33 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <fn1bu0dh9na9hf9bj0fkutca4v5n15q38d@4ax.com>
Source record: 21069

"Airy R.Bean" <Me@privacy.net> wrote:

>
>Are you really a Radio Ham?
>

Radio amateurs have official callsigns, didn't you know? Non of your
postings indicates that you belong to such group

LA8AK

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

337. Safe Handling ways in the production of Quartz blanks!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 20:43:22 UTC
From: y2kvickyindia@yahoo.com
Message-ID: <7e7f2d7e.0501121243.b841864@posting.google.com>
Source record: 21070

Hi All

Happy New Year!!!

My question is regarding the different safe handling procedure that can be applied during the production of Quartz crystal to prevent the blanks from Chipping, Breaking and Scratches.

Thanks
Pankaj.

338. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 21:55:57 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41e59cbb.7663510@news.iol.ie>
Source record: 21071
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote:

: Brilliant Harold, no one can dress an insult up like an American. I love
: it!
:
: ROTFLMAO !

said m3osn who objected to the morse test but sat a morse assessment to
get his m3 callsign !!

339. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 21:56:31 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41e59d07.7739964@news.iol.ie>
Source record: 21072
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"G1LVN" <google@g1lvn.org.uk> wrote:

: Yep 6 replies - obviously the other 4 users of this newsgroup have
: killfiled you Bean (or are on Hoilday with Slim).

i thought you left ?

340. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 21:56:59 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41e59d21.7765600@news.iol.ie>
Source record: 21073
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote:

: Reg, break the habit.
:
: You won't miss much.

said m3osn

341. Re: Making our own valves (Tubes for the Non-English-Speaking Yanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 23:27:16 UTC
From: Bob Weiss <bob.weiss@verizon.net>
Message-ID: <oniFd.12984$4b.8634@trndny09>
Source record: 21074
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

G1LVN wrote:
>The invention of the Thermionic Vacuum
> Valve (tube) held up the development of transisters by around 20 years.

How exactly could transistors have been developed if tubes weren't
already around?

Manufacturing semiconductors involves induction heaters to melt the
silicon/germanium during the refining process. Large induction heaters
to this day still use big honking TUBES to generate RF power.

Not to mention all the tubes in the test equipment that was used to
develop transistors....

Bob Weiss N2IXK

342. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 23:38:40 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e5b64a$1_2@127.0.0.1>
Source record: 21075
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Prometheus wrote:
> Of course a proportional function is more likely although perhaps not
> linear however your statements that "No tumors were associated with less
> than 10 years of cellphone use" and "People with more than 10 years of
> cellphone use suffered twice as many tumors as non-cellphone users"
> describes a step function at ten years {t = 1 for y < 10 and t = 2 for y
> 10, where y is the number of years and t the base rate for brain
> tumours in a non-mobile phone using control group). Given this
> simplistic step function I must have doubts about the accuracy of the
> study that lead to such a conclusion

Your basic ignorance of statistical data is showing. What if, starting
at ten years of use, 1% of cell phone users suffered 1% more tumors
than non-cellphone users and a year later, 2% of cellphone users
suffered 2% more tumors than non-cellphone users, and a year later 3%
of cellphone users suffered 3% more tumors than non-cellphone users
... That is certainly ***NOT*** a step function, to which you objected,
but a ramp function that is certainly something to be concerned about.
Hint: I'm surprised that you don't know that nothing changes
instantaneously in reality, i.e. a 'step function' is purely an
invention of the human mind.
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

343. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 23:50:05 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <E0GvQXpteb5BFwFd@newbrain.demon.co.uk>
Source record: 21076
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <i75bu0tdm1og3h8b36erk59lmese4f1inl@4ax.com>,
lucifer@eternal-flames.gov writes
>On Wed, 12 Jan 2005 19:45:17 +0000, Prometheus <Prometheus@127.0.0.1>,
>paused briefly between playing with his doll's house, to write:
>
>>I refrained from pointing out just how large "mobile phones" were in
>>1907, and that was after ten years of development.
>
>As I understand it, mobile phones actually had wheels back then...
>Together with a huge drum of cable.

Wheels, yes; drum of cable, no: they would have been spark transmitters,
see the experiments of Maxwell and Hertz.

--
Ian G8ILZ

344. Re: 12V Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-12 23:56:07 UTC
From: geir knutsen <ge-knuts@online.no>
Message-ID: <hOiFd.4313$Sl3.102548@news4.e.nsc.no>
Source record: 21077

This is probably the thing for you.

http://www.qsl.net/yo5ofh/projects/power_supply.gif

Geir

"beerbarrel" <beerbarrel@cox.net> wrote in message
news:2s11u0puknmttp09v2vfrn131tnrg98pbp@4ax.com...
> Anyone have a source for a schematic for a 12v around 20 to 30 amp
> power supply that makes use of a full wave rectifier? I've found quite
> a few for a bridge rectifier but I'm not really sure how to mod them
> to use a full wave rectifier. I have a nice 32v 30 amp center tapped
> at 16v transformer that I would like to make use of.
>
> Thanks...

345. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 00:53:14 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <jDzWNWr6Zc5BFwTQ@newbrain.demon.co.uk>
Source record: 21078
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <41e5b64a$1_2@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com>
writes
>Prometheus wrote:
>> Of course a proportional function is more likely although perhaps not
>>linear however your statements that "No tumors were associated with
>>less than 10 years of cellphone use" and "People with more than 10
>>years of cellphone use suffered twice as many tumors as non-cellphone
>>users" describes a step function at ten years {t = 1 for y < 10 and t
>>= 2 for y 10, where y is the number of years and t the base rate for
>>brain tumours in a non-mobile phone using control group). Given this
>>simplistic step function I must have doubts about the accuracy of the
>>study that lead to such a conclusion
>
>Your basic ignorance of statistical data is showing. What if, starting
>at ten years of use, 1% of cell phone users suffered 1% more tumors
>than non-cellphone users and a year later, 2% of cellphone users
>suffered 2% more tumors than non-cellphone users, and a year later 3%
>of cellphone users suffered 3% more tumors than non-cellphone users
>... That is certainly ***NOT*** a step function, to which you objected,
>but a ramp function that is certainly something to be concerned about.
>Hint: I'm surprised that you don't know that nothing changes
>instantaneously in reality, i.e. a 'step function' is purely an
>invention of the human mind.

If, as you state, it went from nothing below ten years to two times
after then there was a step, it is that I object to; perhaps you do not
understand that it is a step {t = 1 for y < 10 and t = 2 for y 10,
where y is the number of years and t the base rate for brain tumours in
a non-mobile phone using control group)

Hint: YOU quoted a single value for less than ten years and single value
for above, maybe you do not understand that is a step, do I have to draw
a graph of your statement.

t

2 ----------------------

1 ---------------------------
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 y

Can you see what happened? Of course I object to the function you quoted
as being improbable.

Your example of a proportional relationship is not justified from your quotes, is irrelevant, and being a deception has no place in a discussion of this nature.
--
Ian G8ILZ

346. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 04:09:03 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e5f5a9$1_2@127.0.0.1>
Source record: 21079
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Prometheus wrote:
> Hint: YOU quoted a single value for less than ten years and single value
> for above, maybe you do not understand that is a step, do I have to draw
> a graph of your statement.

No, you should get in touch with reality. Discontinuities,
like step functions, exist only in limited minds, apparently
like yours, certainly not in reality.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

347. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 07:10:07 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <jv+WWdtP7h5BFwBj@newbrain.demon.co.uk>
Source record: 21080
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <41e5f5a9$1_2@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com>
writes
>Prometheus wrote:
>> Hint: YOU quoted a single value for less than ten years and single
>>value for above, maybe you do not understand that is a step, do I
>>have to draw a graph of your statement.
>
>No, you should get in touch with reality. Discontinuities,
>like step functions, exist only in limited minds, apparently
>like yours, certainly not in reality.

It was you who described a step function and I am disputing it precisely
because it can not be as you describe, why don't you admit that your
description is wrong instead of pretending that you are not, or are you
to stupid to understand that you are wrong.
--
Ian G8ILZ

348. Re: Making our own valves (Tubes for the Non-English-Speaking Yanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 09:27:23 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34mudaF4b3d3jU1@individual.net>
Source record: 21081
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Was it not the case that the principles of the FET were
established in the early 1900's?

As to test eqpt, surely a red herring, for where did the
valves (tubes to the non-English-speaking Yanks) come
from to make the test eqpt to test the first valves?

In any case, ISTR using transistor test rigs that consisted
of meters, resistors and batteries only. (In the days when
we got hold of manufacturer's rejects and had to sort out
the still-usable ones)

"Bob Weiss" <bob.weiss@verizon.net> wrote in message
news:oniFd.12984$4b.8634@trndny09...
> G1LVN wrote:
> >The invention of the Thermionic Vacuum
> > Valve (tube) held up the development of transisters by around 20 years.
> How exactly could transistors have been developed if tubes weren't
> already around?
> Manufacturing semiconductors involves induction heaters to melt the
> silicon/germanium during the refining process. Large induction heaters
> to this day still use big honking TUBES to generate RF power.
> Not to mention all the tubes in the test equipment that was used to
> develop transistors....

349. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 09:30:20 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34mudbF4b3d3jU2@individual.net>
Source record: 21082
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Please don't post your rudeness into groups to which
you do not subscribe.

"J M Noeding" <la8ak@online.no> wrote in message
news:hl8bu0ho8phohdso6cu7e98gfa2blcfbd8@4ax.com...
> please keep your rubbish to the English cb group, don't spread the
> noise into the amateur radio newsgroup "rec.radio.amateur.homebrew"
> (I wouldn't see any replies since I don't subscribe to the cb group)

350. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 09:49:53 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34muo3F4d9gh8U1@individual.net>
Source record: 21083

Your Childish Broadcast (CB) quoted below seems
to classify you in another group.

I advise everybody who appears on Usenet to remain
anonymous because there are a large number of
vicious loonies around.

"J M Noeding" <la8ak@online.no> wrote in message
news:fn1bu0dh9na9hf9bj0fkutca4v5n15q38d@4ax.com...
> "Airy R.Bean" <Me@privacy.net> wrote:
> >Are you really a Radio Ham?
> Radio amateurs have official callsigns, didn't you know? Non of your
> postings indicates that you belong to such group

351. Re: Manufacturing ATU switches

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 09:58:58 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34mv8mF4e83f1U1@individual.net>
Source record: 21084

Callsigns are not required on Usenet, in any case.

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34muo3F4d9gh8U1@individual.net...
> Your Childish Broadcast (CB) quoted below seems
> to classify you in another group.
>
> I advise everybody who appears on Usenet to remain
> anonymous because there are a large number of
> vicious loonies around.
>
> "J M Noeding" <la8ak@online.no> wrote in message
> news:fn1bu0dh9na9hf9bj0fkutca4v5n15q38d@4ax.com...
> > "Airy R.Bean" <Me@privacy.net> wrote:
> > >Are you really a Radio Ham?
> > Radio amateurs have official callsigns, didn't you know? Non of your
> > postings indicates that you belong to such group
>
>

352. Re: Making our own valves (Tubes for the Non-English-Speaking Yanks)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 10:38:44 UTC
From: G1LVN <google@g1lvn.org.uk>
Message-ID: <1105612724.165596.209640@f14g2000cwb.googlegroups.com>
Source record: 21085
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Of course we all know the Truth is out there.....

http://www.nexusmagazine.com/articles/accandroswell.html
73s de G1LVN
www.g1lvn.org.uk

353. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 13:01:58 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34n9vrF4c6ng5U1@individual.net>
Source record: 21086
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

The Mongolian Hordes of CBers are present in Britland,
particularly in the shape of the gangrenous degeneration that
is the M3/CB Fools' Licence scheme.

If we stand aside and let them take over, then who will
speak out for the excellent technical pursuit that is Ham Radio?

Yes - the NG uk.radio.amateur has become largely a CB
group, not the least reason being the sometimes-vicious
and always-infantile abusive tirades from those who
are CBers in one guise or another, as overt CBers,
as M3/CBers and as CBers-Masquerading-As-Radio-Hams.

Do we let them sweep away all that is excellent about Ham Radio,
or do we take a stand against them by staying in, and continuing to
demonstrate our own standards in, the NG uk.radio.amateur?

"J M Noeding" <la8ak@online.no> wrote in message
news:hl8bu0ho8phohdso6cu7e98gfa2blcfbd8@4ax.com...
> please keep your rubbish to the English cb group, don't spread the
> noise into the amateur radio newsgroup "rec.radio.amateur.homebrew"
> (I wouldn't see any replies since I don't subscribe to the cb group)

354. ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 13:09:02 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34nal2F4ak7h3U1@individual.net>
Source record: 21087
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I wonder if there is any mileage to be had from adapting
the numerous junk-mail CD's as the vanes of ATU
capacitors?

1. We already have a form that is circular (no waste) and
with an accurately-positioned central hole.

2. There is a metallic film sandwiched between the plastic.

3. Is this film to thin to stand up to the RF currents that
will spread out across it when charging & discharging?

4. How would we make metallic contact to the film without
destroying the film at the point of contact?

5. Does anybody know the type of metal making up the film, i.e.,
can we solder to it?

6. Is the plastic of a suitable quality? Will it arc-through?

355. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 13:55:38 UTC
From: Dave Fawthrop <hyphen@hyphenologist.co.uk>
Message-ID: <q5vcu0dasurqfj7prm7ian3fco7tjpiis4@4ax.com>
Source record: 21089
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Thu, 13 Jan 2005 13:09:02 -0000, "Airy R.Bean" <Me@privacy.net> wrote:

| I wonder if there is any mileage to be had from adapting
| the numerous junk-mail CD's as the vanes of ATU
| capacitors?

I make mine into Christmas decorations.
Stick in pairs using double sided foam pads, on monofilament fishing line.
Dangle a lot of these strings inside a window.

--
Dave Fawthrop <dave hyphenologist co uk>
Killfile and Anti Troll FAQs at
http://www.hyphenologist.co.uk/killfile.

356. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 13:56:33 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <a8vcu0hjdlgqkg8gkog41rcnt1f54f0cej@4ax.com>
Source record: 21088
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Thu, 13 Jan 2005 13:09:02 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>I wonder if there is any mileage to be had from adapting
>the numerous junk-mail CD's as the vanes of ATU
>capacitors?
>
>1. We already have a form that is circular (no waste) and
>with an accurately-positioned central hole.
>
>2. There is a metallic film sandwiched between the plastic.
>
>3. Is this film to thin to stand up to the RF currents that
>will spread out across it when charging & discharging?
>
>4. How would we make metallic contact to the film without
>destroying the film at the point of contact?
>
>5. Does anybody know the type of metal making up the film, i.e.,
>can we solder to it?
>
>6. Is the plastic of a suitable quality? Will it arc-through?

A little Googling would soon show you whether the critical factor,
which you doubtless have already determined from your preliminary
calculations is the loss tangent for the CD substrate, may well render
such a use as inadvisable.
--
from
Aero Spike

357. Re: Safe Handling ways in the production of Quartz blanks!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 14:53:04 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <kXvFd.1727$2e7.284@newssvr12.news.prodigy.com>
Source record: 21090

suction pod
"Pankaj Trivedi" <y2kvickyindia@yahoo.com> wrote in message
news:7e7f2d7e.0501121243.b841864@posting.google.com...
> Hi All
>
> Happy New Year!!!
>
> My question is regarding the different safe handling procedure that
> can be applied during the production of Quartz crystal to prevent the
> blanks from Chipping, Breaking and Scratches.
>
> Thanks
> Pankaj.

358. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 15:21:59 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e692a4$1_1@127.0.0.1>
Source record: 21091
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Prometheus wrote:
> In article <41e5f5a9$1_2@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com> writes
>
>> Prometheus wrote:
>> No, you should get in touch with reality. Discontinuities,
>> like step functions, exist only in limited minds, apparently
>> like yours, certainly not in reality.
>
> It was you who described a step function ...

Sorry, until you choose to tell the truth, I have
nothing further to say. What I described was a
ramp function starting at 10 years of use. It was
you, not I, who introduced the *step* function
concept.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

359. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 16:50:51 UTC
From: David Edmonds <dedmonds73@yahoo.co.uk>
Message-ID: <LFxFd.437$fd4.24@newsfe1-win.ntli.net>
Source record: 21092
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Airy R.Bean wrote:

> I wonder if there is any mileage to be had from adapting
> the numerous junk-mail CD's as the vanes of ATU
> capacitors?

So you've given up on using them to make 30 line television systems then?

Do a web search about this - plenty of info - though you claim you don't
web search.

David.

360. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 17:03:39 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34nnv1F4fuougU1@individual.net>
Source record: 21093
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"David Edmonds" <dedmonds73@yahoo.co.uk> wrote in message
news:LFxFd.437$fd4.24@newsfe1-win.ntli.net...
> Airy R.Bean wrote:
>
> > I wonder if there is any mileage to be had from adapting
> > the numerous junk-mail CD's as the vanes of ATU
> > capacitors?
>
> So you've given up on using them to make 30 line television systems then?
>
> Do a web search about this - plenty of info - though you claim you don't
> web search.

Superficially the idea has some merit but you would have to machine the
discs anyway (they are totally symetrical and thus the area overlapping with
the fixed vanes wouldn't change). By the time you've machined then to be
asysmetric, might as well have made metal plates and avoid all the other
problems as well.

To problems in making variable Cs, the use of a CDROMs offers little.

Etching plates on PCB and using the fibre glass for the mechanical side is
maybe a better idea.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

.

361. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 17:06:39 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34nob2F4diiruU1@individual.net>
Source record: 21094
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Hardly - you have the cost of purchase and the inconvenience of
etching. Junk mail cd's are free issue.

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34nnv1F4fuougU1@individual.net...
> Etching plates on PCB and using the fibre glass for the mechanical side is
> maybe a better idea.

362. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 17:27:14 UTC
From: Radio Man <puns@verizon.net>
Message-ID: <SbyFd.20564$lG.19133@trnddc03>
Source record: 21095
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I wonder if there is any merit in using aluminum foil
duct tape to make a capacitor?
"Airy R.Bean" <Me@privacy.net> wrote in message
news:34nal2F4ak7h3U1@individual.net...
>I wonder if there is any mileage to be had from adapting
> the numerous junk-mail CD's as the vanes of ATU
> capacitors?
>
> 1. We already have a form that is circular (no waste) and
> with an accurately-positioned central hole.
>
> 2. There is a metallic film sandwiched between the plastic.
>
> 3. Is this film to thin to stand up to the RF currents that
> will spread out across it when charging & discharging?
>
> 4. How would we make metallic contact to the film without
> destroying the film at the point of contact?
>
> 5. Does anybody know the type of metal making up the film, i.e.,
> can we solder to it?
>
> 6. Is the plastic of a suitable quality? Will it arc-through?
>
>

363. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 17:42:35 UTC
From: jakdedert <jdedert@bellsouth.net>
Message-ID: <BlyFd.23510$vM4.16982@bignews3.bellsouth.net>
Source record: 21096
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

JeffM wrote:
>>> Lacing might contribute a little extra strength in the long
>>> direction. Plus, as others have noted, it looks better.
>>> CJT
>>
>> And, you don't get flesh wounds from the cut ends of nylon cable
>> ties. :) Sam Goldwasser
>
> ...after someone has cut them off with semi-flush dikes
> or other inappropriate tool.

If you find these 'slicers' in cables which you must handle, you can usually blunt the sharp edges by heating each with a lighter...or maybe a soldering iron with an old tip. (Some high-quality cable ties resist melting.)

I once had to deal with a 100' cable which was completely cable tied. After one time of coiling that monster, I went through the entire thing with a cigarette lighter...

...no more sliced palms!

jak

364. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 17:50:38 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34nqn4F4ed6fqU1@individual.net>
Source record: 21097
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Radio Man" <puns@verizon.net> wrote in message
news:SbyFd.20564$lG.19133@trnddc03...
> I wonder if there is any merit in using aluminum foil
> duct tape to make a capacitor?

I wonder what the background to you idea is?

New approaches to existing designs should offer one or more of:

Cost savings (cheaper materials, less man hours, ease of manufacture etc)
Better reliability and/or life (not the same thing by the way)
Extra functionality

For most things, the cost of materials is not a cost driver- the cost of the material in a variable capacitor is dwarfed by the labour and machining costs.

So, how does using duct tape help?

The CD idea falls flat as, while they may be cheap, the amount of machining 'saved' is mininmal. I suppose if you are totally strapped for cash, out of work and with time on your hands, they may offer some advantage, but you end up with a 'product' of inferior quality. Engineers who are driven by such a penny pinching approach usually end up bankrupting their company as their products are poor.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

365. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 18:14:36 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34nss9F4borpmU1@individual.net>
Source record: 20998
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Machining"? What, cutting with a pair of scissors?

There's considerably more machining involved in your
proposal to use etched PCB.

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34nqn4F4ed6fqU1@individual.net...
>> The CD idea falls flat as, while they may be cheap, the amount of
machining
> 'saved' is mininmal. I

366. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 18:15:38 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34nsscF4borpmU2@individual.net>
Source record: 20999
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

The proposal to investigate the use of junk-mail CD's
seems to meet your very first criterion.

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34nqn4F4ed6fqU1@individual.net...
> New approaches to existing designs should offer one or more of:
>
> Cost savings (cheaper materials, less man hours, ease of manufacture etc)

367. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 18:16:50 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34nsseF4borpmU3@individual.net>
Source record: 21002
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Extra Functionality! - What "Extra Functionality" do you
envisage in a variable capacitor?!!!!!

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34nqn4F4ed6fqU1@individual.net...

> New approaches to existing designs should offer one or more of:
> Extra functionality

368. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 18:18:20 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34nssfF4borpmU4@individual.net>
Source record: 21000
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

You don't seem to have the qualities that makes
for a _REAL_ Radio Ham, OM!

There are no labour costs when you do things for yourself!

There are no machining costs in cutting up a CD with a pair of scissors.

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34nqn4F4ed6fqU1@individual.net...

> For most things, the cost of materials is not a cost driver- the cost of
the
> material in a variable capacitor is dwarfed by the labour and machining
> costs.

369. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 18:24:02 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34nssgF4borpmU5@individual.net>
Source record: 21001
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On what basis do you claim that a variable capacitor fashioned
from junk-mail CD ROMs is a "'product' of inferior quality"?

From the power handling capability?

From the flash-over voltage?

From the max and min capacitance?

Which companies do you say have been bankrupted by looking for
economical means of production? (Not all of us can boasts that we
are employed by profligate defence companies and are proud to
have been involved in the development of the weapons that
were responsible for the deaths of so many innocent children
in Iraq, OM)

Or is your posting below yet another example of bullshitting,
of side-stepping and of downright lying?

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34nqn4F4ed6fqU1@individual.net...
> The CD idea falls flat as, while they may be cheap, the amount of
machining
> 'saved' is mininmal. I suppose if you are totally strapped for cash, out
of
> work and with time on your hands, they may offer some advantage, but you
> end up with a 'product' of inferior quality. Engineers who are driven by
> such a penny pinching approach usually end up bankrupting their company as
> their products are poor.

370. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 18:44:19 UTC
From: Mr Jolly <nospamta@ntlworld.com>
Message-ID: <34nts4F4dgqdqU1@individual.net>
Source record: 21003
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"David Edmonds" <dedmonds73@yahoo.co.uk> wrote in message
news:LFxFd.437$fd4.24@newsfe1-win.ntli.net...
> Airy R.Bean wrote:
>
> > I wonder if there is any mileage to be had from adapting
> > the numerous junk-mail CD's as the vanes of ATU
> > capacitors?
>
> So you've given up on using them to make 30 line television systems then?
>
> Do a web search about this - plenty of info - though you claim you don't
> web search.

And if your realy bored http://www.scitoys.com/

371. 2N3553 NPNs for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 18:45:18 UTC
From: ddelakas@midway.uchicago.edu
Message-ID: <2IzFd.21$45.11696@news.uchicago.edu>
Source record: 21004

I have a small supply of new old stock 2N3553 NPN transistors I'm offering for sale.

You can see a datasheet on the 2N3553 at:

http://www.oselectronics.com/downloads/2n3553.pdf

I'm selling them in lots of 10 pieces for $22.00 INCLUDING DOMESTIC SHIPPING. There is an additional $2 charge for overseas shipping.

PayPal gladly accepted.

With my thanks and kind regards,
Dave KB9YOZ

372. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 18:50:26 UTC
From: Nimrod <nospamfor@me.com>
Message-ID: <34nu73F4f392nU1@individual.net>
Source record: 21006
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"David Edmonds" <dedmonds73@yahoo.co.uk> wrote in message
news:LFxFd.437$fd4.24@newsfe1-win.ntli.net...
> Airy R.Bean wrote:
>
> > I wonder if there is any mileage to be had from adapting
> > the numerous junk-mail CD's as the vanes of ATU
> > capacitors?
>
> So you've given up on using them to make 30 line television systems then?
>

Just like the TMC days. One daft idea after another.

373. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 18:50:30 UTC
From: Nimrod <nospamfor@me.com>
Message-ID: <34nu79F4cnderU1@individual.net>
Source record: 21005
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34nal2F4ak7h3U1@individual.net...
> I wonder if there is any mileage to be had from adapting
> the numerous junk-mail CD's as the vanes of ATU
> capacitors?

These would be the CDs returned with your defective, over priced, operating system on them?

374. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 18:50:33 UTC
From: Nimrod <nospamfor@me.com>
Message-ID: <34nu7aF4cnderU2@individual.net>
Source record: 21007
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

You can always tell when Gareth has lost the game and is wound up - lots of posts sent in anger.

I love it.

Just like the TMC days.

375. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 19:26:38 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <w1GyQLxuts5BFwTa@newbrain.demon.co.uk>
Source record: 21008
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <41e692a4$1_1@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com>
writes
>Prometheus wrote:
>> In article <41e5f5a9$1_2@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com> writes
>>
>>> Prometheus wrote:
>>> No, you should get in touch with reality. Discontinuities,
>>> like step functions, exist only in limited minds, apparently
>>> like yours, certainly not in reality.
>> It was you who described a step function ...
>
>Sorry, until you choose to tell the truth, I have
>nothing further to say. What I described was a
>ramp function starting at 10 years of use. It was
>*you*, not I, who introduced the *step* function
>concept.

It was you in Message-ID: <41e4a9f2_2@127.0.0.1> who quoted from the
article that "People with more than 10 years of cellphone use suffered
twice as many tumors as non-cellphone users", that you subsequently
present a hypothetical ramp function of your own creation and not
attributed to the original article does not change the quote from the
article in to a ramp function.

There is no point attempting deception by omitting my quotes from your
replies since everyone can read them and see that you are a liar.

Can you even recognise the truth, presumably not since you are not
telling it.

--
Ian G8ILZ

376. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 19:57:16 UTC
From: Terry <tsanford@nf.sympatico.ca>
Message-ID: <qqAFd.32330$b64.962084@news20.bellglobal.com>
Source record: 21009
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

"Slip'er" <cjhixon1@cox.net> wrote in message
news:_AdEd.47855$8e5.37238@fed1read07...
> > You have never worked on aircraft and are very young.
>
> I have never worked on aircraft. I am 37; young to some, ancient to my
> kids.
>
Yep he's young! Welcome to the 'young thinkers club'! :-)

377. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 20:17:12 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41e6d6bd.1222937@news.iol.ie>
Source record: 21010
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote:

: Etching plates on PCB and using the fibre glass for the mechanical side is
: maybe a better idea.

hey everybody...brian has made capacitors (or is that capacitErs ?)

378. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 20:18:22 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41e6d76e.1399658@news.iol.ie>
Source record: 21011
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote:

: "Radio Man" <puns@verizon.net> wrote in message
: news:SbyFd.20564$lG.19133@trnddc03...
: > I wonder if there is any merit in using aluminum foil
: > duct tape to make a capacitor?

well done!

you got a BIG BITE with that one.

379. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 20:22:42 UTC
From: Terry <tsanford@nf.sympatico.ca>
Message-ID: <cOAFd.32359$b64.965495@news20.bellglobal.com>
Source record: 21013
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

It didn't used to pay to be "the" female apprentice as
females are supposed to have nimbler fingers, a greater
attention to detail and more patience for doing mundane
repetitive work. So, whereas the guys could get away with a
half-assed job, I got to see the same loom time and time
again... Or it could just be I missed out that bit of the
genes...

Sue

Sounds rough. Although I do recall having to tear out all the lacing for a
run of large guage black power cables because they 'should' (to meet
specification) have been laced with red twine and were not! IIRC we used a
waxed Irish lacing twine in at least two thicknesses, usually 'natural'
unless red or black was specified by the customer. The customer in the above
instance being the General Post Office, who at that time operated the United
Kingdom telephone system.
Until and even after approx 1953, each individual wire and the cable
covering fabric; often silk and wool insulated; with the cable ends dipped
in wax before individual wire stripping and terminating!
Then plastic insulated wire was introduced. Cable forms (harnesses) were
made and a girl sitting at a machine on a raised platform, that heated the
ends of the wires, operated it to 'hot strip' each wire (or group of wires)!
Respectable girl though she was she inevitably got nicknamed 'The hot
stripper'.
I do also recall in those days plastic insulated wire/cable was far from
perfect; there was a story about a large form (i.e. bundles of multiwire
cables, laced together in layers on a cable runway), that had been installed
near a warm air heating duct in a telephone switching centre. The many
cables slightly melted and fused together in a big slightly sticky mass.
Eventually wires migrated through the soft plastic and touched together.
Cor; what a mess that must have been!
Inevitably the stitching/lacing would then be immersed in the now fused to
gether plastic! Layers of cables still laced to each other and on the bottom
laced to the steel bars of the cable runway!

380. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 20:24:23 UTC
From: David Edmonds <dedmonds73@yahoo.co.uk>
Message-ID: <XNAFd.621$fv6.194@newsfe6-gui.ntli.net>
Source record: 21012
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Nimrod wrote:
> You can always tell when Gareth has lost the game and is wound up - lots of
> posts sent in anger.

Yes - I thought that too - from a very 'constructive' response to one
that has a pop-shot at Brian's former employment for no reason at all
then, despite Airy's "I don't attack" claims, gets straight in there
with the 'bullshitting' line. Oh well. Obviously the Special Brew has
worn off.

He'll be along claiming malicious deleting next....;-)

David.

381. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 20:46:20 UTC
From: Custos Custodum <me@privacy.net>
Message-ID: <f8ndu0tga0t344cuc637r0luhlcv920bt6@4ax.com>
Source record: 21014
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Thu, 13 Jan 2005 18:50:33 -0000, "Nimrod" <nospamfor@me.com> wrote:

>
>You can always tell when Gareth has lost the game and is wound up - lots of
>posts sent in anger.
>
>I love it.
>
>Just like the TMC days.
>
The reason for the multiple posts is that it's the only way he can
top-post responses to individual points made in the previous post. I
think his record is about 10 replies to one post. And still he thinks
top-posting is the way to go.

382. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 20:48:56 UTC
From: lenover21@aol.com
Message-ID: <20050113154856.24384.00000024@mb-m03.aol.com>
Source record: 21015

In article <34nal2F4ak7h3U1@individual.net>, "Airy R.Bean" <Me@privacy.net>
writes:

>I wonder if there is any mileage to be had from adapting
>the numerous junk-mail CD's as the vanes of ATU
>capacitors?

Good grief...now there are "Technical TROLLS" from the person
wanting amateurs to get into the vacuum valve fabrication. :-)

>1. We already have a form that is circular (no waste) and
>with an accurately-positioned central hole.

Goodie...now you can make a 360 degree variable capacitor
with an extemely low minimum-to-maximum capacitance
ratio.

>2. There is a metallic film sandwiched between the plastic.

Not really. You can read all about it in free downloads from
the Philips people who developed the recording system.

If it were really conductive, you could measure it directly with
a simple Ohmmeter. [not exactly rocket science, old boy]

>3. Is this film to thin to stand up to the RF currents that
>will spread out across it when charging & discharging?

First you find out what you think is a "metallic film," then you
can conjecture all you want. Hint: What you see on plastic
is not necessarily "metal."

>4. How would we make metallic contact to the film without
>destroying the film at the point of contact?

Use metal-free solder? :-)

>5. Does anybody know the type of metal making up the film, i.e.,
>can we solder to it?

Do you have a soldering iron? Can you not use it?

Or are those FREE, no-cost-to-you CDs so valuable that you
cannot do a few-minutes-of-your-time experiment on your own?

>6. Is the plastic of a suitable quality? Will it arc-through?

Do you have the smarts to use a power supply to rig up a test to
prove this for everyone? Or is everything you have tied up in the

proposed vacuum-valve production line you've talked about?

========

Those free CDs that many receive have some redeeming features:
They can be coasters for placing drinking vessels on; they can be
"frisbees" for use in playing with a dog; they can make decorative
wind chimes to hang on a porch of those who don't like the sound
of wind chimes. If Paul Bunyan were alive today he might like to
use them as Christmas tree decorations. Other than that and
their excellent use as a time-stable data storage medium,
those left-over CDs are rather useless.

It would be nice if folks in here would share ACTUAL data and
information, not propose a lot of fantasy ideas.

CD blanks are nicely circular and MIGHT make some kind of edge-
friction-drive dial but the center (or centre) hole is non-standard at
about 7/16 inch diameter (1.11 cm). Yes, a moderate machine
shop could make a shaft adapter for it...but that same machine shop
could make a much-superior edge-drive dial out of metal in only
slightly more time. That same machine shop could also turn out
capacitor plates for a variable, the shafts for same, end bearings,
etc. Several firms on both sides of the Pond have done that for
over half a century. [Jackson Brothers in the UK, James Millen
et al in the USA]

Rather than get all fired-up in pipedreaming on the keyboard, try
searching for a "dielectric capacitor" on the Internet. There are
several hobbyist sites which explain how they can be made using
thin polymer sheet plates rotating between two metal plates.
Maximum chapacity change ratio is limited to the dielectric
constant of the polymer (that's "plastic" to you non-chemical
types). Withstanding voltage can be figured from dimensions
and plate spacings using pencil and paper (crayon and cardboard
can be used but not recommended).

Presuming that "ATU" is an acronym for Automatic Tuning Unit,
how in the silly blue heck are you going to make it "automatic"
presuming someone else already solves "your" questions? The
servotuning system needs far more thinking attention than gazing
at used CDs pondering the whichness of the what about them.

Hint: There's already been some very nice hobbyist work done
in regard to ATUs with much on the servotuning system (at least
one made from scratch) plus the sensing-detection system to
get the servotuning going in the desired "automatic" direction.
Another Hint: The detection-sensing was solved in 1955 by a
"Yank" surnamed Bruene who was then working at Collins Radio.
[that's in the middle of the USA, in the state of Iowa]

An even better ATU uses a microcontroller chip plus a Bruene
Detector, and some latching relays to switch stepped inductors

and capacitors in/out in a two-element L-C network. Both L and C step in the binary progression of 1-2-4-8-16-... sequence. That sort of network and its micro are at the heart of at least three commercial ATUs built and sold in the USA. It has the advantage of tuning memory, can return to the same setting by actually measuring the carrier's approximate operating frequency! In the U.S. Army such an ATU in incorporated in the backpack HF transceiver AN/PRC-104 (design by Hughes Aircraft Ground Systems, in operational use for nearly two decades). On the ARRL website you can find a reprint of a nice digital ATU construction article that used to be available frree for download but that may have been changed to members-only availability. At the Stoner Goral Company (SGC) website is much interesting information on their ready-built ATUs, installation and use on HF, plus operating manuals (those were free downloads).

www.sgc.com

Founders Don Stoner and Pierre Goral (both hams but sadly, both SK now) developed the SG-2020, a very small 20 W, full-frequency-range-on-HF SSB transceiver, back-pack size almost as small as the PRC-104 (also 20 W PEP).

The step-variable tuning system seems very strange to those accustomed to big handwheel-operated variable capacitors, but that is quite versatile in that you can use readily-available fixed (and sealed) capacitors and toroidal inductors. Toroids are easy enough to make, much much easier than trying to shape CDs into a semblance of capacitor dielectric blades. Toroids can be potted or well coated with varnish, enough to withstand outdoor environments in snow country or the tropics. Relays are generally expensive but Omron makes some nice relatively inexpensive relays (including latching types for built-in memory) for the higher withstanding voltages found with 100 W RF at 50 Ohms with up to 20:1 VSWR. All the big electronic distributors carry Omron products.

LenAnderson@ieee.org

383. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 20:55:52 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e6e0e5$1_2@127.0.0.1>
Source record: 21016
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Prometheus wrote:
> It was you in Message-ID: <41e4a9f2_2@127.0.0.1> who quoted from the
> article that "People with more than 10 years of cellphone use suffered
> twice as many tumors as non-cellphone users", ...

Again, It's more than obvious that I said absolutely nothing
about any "step" function. That you believe a tumor can appear
instantaneously as a step function is a mental problem for
which you probably should seek professional help.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

384. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 20:59:56 UTC
From: dplatt@radagast.org
Message-ID: <10udoac2u2eu685@corp.supernews.com>
Source record: 21017

In article <20050113154856.24384.00000024@mb-m03.aol.com>,
Len Over 21 <lenover21@aol.com> wrote:

>>2. There is a metallic film sandwiched between the plastic.
>
> Not really. You can read all about it in free downloads from
> the Philips people who developed the recording system.
>
> If it were really conductive, you could measure it directly with
> a simple Ohmmeter. [not exactly rocket science, old boy]

>>6. Is the plastic of a suitable quality? Will it arc-through?
>
> Do you have the smarts to use a power supply to rig up a test to
> prove this for everyone? Or is everything you have tied up in the
> proposed vacuum-valve production line you've talked about?

An interesting experiment can be performed by placing a CD on top of a
mug filled with water, in an ordinary kitchen microwave, and then
nuking it for about 10 seconds. The resulting "light show" is most
impressive, but also lets out one heck of a stink.

The vaccum-deposited aluminum layer burns up very quickly, and the
spin-coated lacquer on top of it is also damaged quite easily.

The result makes me quite pessimistic that the aluminumization is
robust enough to allow a CD to be used as part of a variable-plate
capacitor in a transmatch, except perhaps at QRP levels.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

385. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 21:11:37 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <34o6feF4e3f1eU1@individual.net>
Source record: 21018
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Nimrod wrote:
> "David Edmonds" <dedmonds73@yahoo.co.uk> wrote in message
> news:LFxFd.437$fd4.24@newsfe1-win.ntli.net...
>
>>Airy R.Bean wrote:
>>
>>
>>>I wonder if there is any mileage to be had from adapting
>>>the numerous junk-mail CD's as the vanes of ATU
>>>capacitors?
>>
>>So you've given up on using them to make 30 line television systems then?
>>
>
>
> Just like the TMC days. One daft idea after another.
>
>
>
I remember turning vinyl discs into flower pots, but some of us have
moved on since then.
--
;>)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

386. best non-electric soldering iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 21:58:54 UTC
From: alanh_27@yahoo.com
Message-ID: <1105653534.266393.235490@c13g2000cwb.googlegroups.com>
Source record: 21019
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

the requirement: perform solder joints outdoors, in the winter,
without electricity, up a radar mast.

and the nominations are?

P.S. could a resistance-soldering rig do it, on battery power,in a
form factor that's small/light enough to haul up a radar mast in a
basket?

387. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 22:03:12 UTC
From: Kevin R <dontemailme@ntlworld.com>
Message-ID: <AeCFd.1135$fv6.898@newsfe6-gui.ntli.net>
Source record: 21020
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

Gas powered Uk or Butane powered
<alanh_27@yahoo.com> wrote in message
news:1105653534.266393.235490@c13g2000cwb.googlegroups.com...
> the requirement: perform solder joints outdoors, in the winter,
> without electricity, up a radar mast.
>
> and the nominations are?
>
> P.S. could a resistance-soldering rig do it, on battery power,in a
> form factor that's small/light enough to haul up a radar mast in a
> basket?
>

388. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 22:13:37 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34oa47F4culmgU1@individual.net>
Source record: 21021
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Custos Custodum" <me@privacy.net> wrote in message
news:f8ndu0tga0t344cuc637r0luhlcv920bt6@4ax.com...
> On Thu, 13 Jan 2005 18:50:33 -0000, "Nimrod" <nospamfor@me.com> wrote:
>
> >
> >You can always tell when Gareth has lost the game and is wound up - lots
of
> >posts sent in anger.
> >
> >I love it.
> >
> >Just like the TMC days.
> >
> The reason for the multiple posts is that it's the only way he can
> top-post responses to individual points made in the previous post. I
> think his record is about 10 replies to one post. And still he thinks
> top-posting is the way to go.

Part of the problem is that people will respond to his rudeness, if you
can't ignore it kill file him. He does it to disrupt the group and he can
only do so IF WE LET HIM. If we don't let him he can't disrupt the group.
Standard behaviour management.

If we just ignore his rude posts (or the bits of his few other posts that
are rude), the problem would go away. Sometimes some of the stuff I seen
responded to recently hasn't been that bad- maybe his engineering skills are
wanting but this is a forum to ask questions. If he could just stop being so
rude and negative I'd happily try and help him learn.

Thing is, he seems to see every mention of failure as a reference to him. I
can only assume he has very low self esteem. This does make helping him a
challenge. Pity we don't have an SEN teacher in the group- they would be
ideal to advise us on the best plan. He could draw up an IEP for him.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

389. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 22:28:31 UTC
From: NSM <nowrite@to.me>
Message-ID: <jCCFd.99964$KO5.74309@clgrps13>
Source record: 21022
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

<alanh_27@yahoo.com> wrote in message
news:1105653534.266393.235490@c13g2000cwb.googlegroups.com...
| the requirement: perform solder joints outdoors, in the winter,
| without electricity, up a radar mast.
|
| and the nominations are?

Gas (butane) or similar. Don't bother with anything that runs on AAs.

| P.S. could a resistance-soldering rig do it, on battery power,in a
| form factor that's small/light enough to haul up a radar mast in a
| basket?

Why bother? Gas is light, cheap (dollar store) and you could even refill it
up there.

N

390. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 22:43:47 UTC
From: tox <nospam@nospamming.co.com>
Message-ID: <DQCFd.369$9P5.13@newsfe3-gui.ntli.net>
Source record: 21023
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34oa47F4culmgU1@individual.net...
> "Custos Custodum" <me@privacy.net> wrote in message
> news:f8ndu0tga0t344cuc637r0luhlcv920bt6@4ax.com...
> > On Thu, 13 Jan 2005 18:50:33 -0000, "Nimrod" <nospamfor@me.com> wrote:
> >
> > >
> > > Pity we don't have an SEN teacher in the group- they would be
> > > ideal to advise us on the best plan. He could draw up an IEP for him.
> >

ROTFLMAO

Priceless Brian, Priceless...

Regards
tox

391. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 23:19:23 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <85DxDSz7Hw5BFwS1@newbrain.demon.co.uk>
Source record: 21025
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <41e6e0e5$1_2@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com>
writes
>Prometheus wrote:
>> It was you in Message-ID: <41e4a9f2_2@127.0.0.1> who quoted from the
>>article that "People with more than 10 years of cellphone use suffered
>>twice as many tumors as non-cellphone users", ...
>
>Again, It's more than obvious that I said absolutely nothing
>about any "step" function. That you believe a tumor can appear
>instantaneously as a step function is a mental problem for
>which you probably should seek professional help.

If you believe stating "No tumors were associated with less than 10
years of cellphone use" and "People with more than 10 years of cellphone
use suffered twice as many tumors as non-cellphone users" as you have
does not describe a step at ten years then you are stupid. I do not
believe it can be a step function as you proposed.
--
Ian G8ILZ

392. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 23:26:12 UTC
From: Dan Richardson <dwr@mailinator.com>
Message-ID: <mo0eu01gmspg2kuohbb4tbjahsenb8iu3j@4ax.com>
Source record: 21024
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

On 13 Jan 2005 13:58:54 -0800, alanh_27@yahoo.com wrote:

>and the nominations are?

I use the Ultratorch model UT-1000si.

Info on it here: http://www.masterappliance.com/selfign.html

Be sure to check out the accessory tips!

Danny, K6MHE

393. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 23:54:23 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <41E70A2F.76333F15@rica.net>
Source record: 21026
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

alanh_27@yahoo.com wrote:
>
> the requirement: perform solder joints outdoors, in the winter,
> without electricity, up a radar mast.
>
> and the nominations are?
>
> P.S. could a resistance-soldering rig do it, on battery power,in a
> form factor that's small/light enough to haul up a radar mast in a
> basket?

I think I would look for something like this:
http://www.dansdata.com/portasol.htm

More punch per ounce of weight than battery powered units.

--
John Popelish

394. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-13 23:59:17 UTC
From: mikea@mikea.ath.cx
Message-ID: <cs720k$9nt$2@puck.litech.org>
Source record: 21027
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

In <DQCFd.369$9P5.13@newsfe3-gui.ntli.net> (rec.radio.amateur.homebrew), tox wrote:

> "Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
> news:34oa47F4culmgU1@individual.net...
> > "Custos Custodum" <me@privacy.net> wrote in message
> > news:f8ndu0tga0t344cuc637r0luhlcv920bt6@4ax.com...
> > > On Thu, 13 Jan 2005 18:50:33 -0000, "Nimrod" <nospamfor@me.com> wrote:
> > >
> > > >
> > > > Pity we don't have an SEN teacher in the group- they would be
> > > ideal to advise us on the best plan. He could draw up an IEP for him.
> > >

> ROTFLMAO

> Priceless Brian, Priceless...

I think it's well past time for everyone to go to Due Process on him
-- as in "killfile" and Please Do Not Feed The Troll.

--
Slow? Geological. Tectonic plates muttering about the slowpoke, that
sort of thing.
-- Michel Buijsman, in the Monastery

395. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 00:27:31 UTC
From: James Horn <jimhorn@svn.net>
Message-ID: <10ue4fjoah89dc@corp.supernews.com>
Source record: 21028
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

In rec.radio.amateur.antenna John Popelish <jpopelish@rica.net> wrote:

> I think I would look for something like this:
> http://www.dansdata.com/portasol.htm

I second that. I bought one of the early ones (their Technic model)
twenty years ago. It worked fine until a seal failed last weekend.

Gotta get another!

Jim Horn, WB9SYN/6

396. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 00:38:19 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e715c8$2_2@127.0.0.1>
Source record: 21030
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Prometheus wrote:
> If you believe stating "No tumors were associated with less than 10
> years of cellphone use" and "People with more than 10 years of cellphone
> use suffered twice as many tumors as non-cellphone users" as you have
> does not describe a step at ten years then you are stupid.

"No tumors were associated with less than 10 years of cellphone use."
Translation for feeble-minded people: The graph of brain tumors was
the same for users and non-users for the first ten years of use.

"People with more than 10 years of cellphone use suffered twice as
many tumors as non-cellphone users." Translation for feeble-minded
people: The graph of brain tumors for users and non-users started
to diverge after ten years with twice as many tumors in the user
group as there were in the non-user group.

Statement of fact for feeble-minded people: The above two graphs
were single-valued functions, i.e. no vertical steps existed.

Must be really hard for you to type with that straightjacket on.
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

397. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 00:38:58 UTC
From: TimPerry <timperry@noaspamadelphia.net>
Message-ID: <L4-dnX93zvk7iXrcRVn-3w@adelphia.com>
Source record: 21029
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

<alanh_27@yahoo.com> wrote in message
news:1105653534.266393.235490@c13g2000cwb.googlegroups.com...
> the requirement: perform solder joints outdoors, in the winter,
> without electricity, up a radar mast.
>
> and the nominations are?
>
> P.S. could a resistance-soldering rig do it, on battery power,in a
> form factor that's small/light enough to haul up a radar mast in a
> basket?

how big are the joints?

soldering in the cold can be exasperating.

i use a small oxy-MAP gas torch. it can be a pain dealing with 2 cylinders
but it certainly gets hot enough.

398. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 00:49:20 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <10ue5ofbru7p78c@corp.supernews.com>
Source record: 21031
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Airy R.Bean wrote:
> The Mongolian Hordes of CBers are present in Britland,
> particularly in the shape of the gangrenous degeneration that
> is the M3/CB Fools' Licence scheme.
>
> If we stand aside and let them take over, then who will
> speak out for the excellent technical pursuit that is Ham Radio?
>
> Yes - the NG uk.radio.amateur has become largely a CB
> group, not the least reason being the sometimes-vicious
> and always-infantile abusive tirades from those who
> are CBers in one guise or another, as overt CBers,
> as M3/CBers and as CBers-Masquerading-As-Radio-Hams.
>
> Do we let them sweep away all that is excellent about Ham Radio,
> or do we take a stand against them by staying in, and continuing to
> demonstrate our own standards in, the NG uk.radio.amateur?
>
> "J M Noeding" <la8ak@online.no> wrote in message
> news:hl8bu0ho8phohdso6cu7e98gfa2blcfbd8@4ax.com...
>
Oh, so sometimes-vicious and always-infantile abusive tirades are a sign
of a CB'er?

Well, 10-4 good buddy, and you can 10-3 for as long as you want.

I hope that helps, you don't seem to understand English on this point.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

399. Suction Pod

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 00:54:55 UTC
From: y2kvickyindia@yahoo.com
Message-ID: <7e7f2d7e.0501131654.7c9b3549@posting.google.com>
Source record: 21032

Can you please explain more about this suction pod thingy and where
can I buy it from. Please explain a little bit about the process tooo!

Thanks a Lot for replying

Cheers
Pankaj.

400. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 09:19:51 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34phfcF4c9ishU1@individual.net>
Source record: 21033
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Mr.Westcott continues with his rather silly and infantile
tirades, his Children's Broadcast (CB) below seeming
to classify him.....

"Tim Wescott" <tim@wescottnospamdesign.com> wrote in message
news:10ue5ofbru7p78c@corp.supernews.com...
> Oh, so sometimes-vicious and always-infantile abusive tirades are a sign
> of a CB'er?
> Well, 10-4 good buddy, and you can 10-3 for as long as you want.
> I hope that helps, you don't seem to understand English on this point.

401. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 09:29:46 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34phv4F4dm189U2@individual.net>
Source record: 21034
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Once again. Mr.Reay succeeds in scoring an own-goal.....

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34oa47F4culmgU1@individual.net...
> Part of the problem is that people will respond to his rudeness, if you
> can't ignore it kill file him. He does it to disrupt the group and he can
> only do so IF WE LET HIM. If we don't let him he can't disrupt the group.
> Standard behaviour management.
>
> If we just ignore his rude posts (or the bits of his few other posts that
> are rude), the problem would go away. If he could just stop being so
> rude and negative I'd happily try and help him learn.

402. Where do I buy large surface area single copper clad board in UK (or even US)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 10:27:47 UTC
From: Richard <nearlynews_email@ntlworld.com>
Message-ID: <34pl5bF4dqc4qU1@individual.net>
Source record: 21035

Hi. I'm trying to obtain single copper clad board that allows me to end up with a board 245mm x 348mm. I can do it with two pieces for sure, but I'd prefer one peice. Anybody know who sells in UK pieces large enough? Would buy from US or whatever if not available in UK. TIA.

403. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 10:55:58 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34pn43F4d7uhpU1@individual.net>
Source record: 21037

I have never trolled in any NG.

"Len Over 21" <lenover21@aol.com> wrote in message
news:20050113154856.24384.00000024@mb-m03.aol.com...
> In article <34nal2F4ak7h3U1@individual.net>, "Airy R.Bean"
<Me@privacy.net>
> writes:
> >I wonder if there is any mileage to be had from adapting
> >the numerous junk-mail CD's as the vanes of ATU
> >capacitors?
> Good grief...now there are "Technical TROLLS" from the person
> wanting amateurs to get into the vacuum valve fabrication. :-)

404. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 10:56:47 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34pn44F4d7uhpU2@individual.net>
Source record: 21036

Stupid boy. Perhaps it is you who is the troll?

"Len Over 21" <lenover21@aol.com> wrote in message
news:20050113154856.24384.00000024@mb-m03.aol.com...
> In article <34nal2F4ak7h3U1@individual.net>, "Airy R.Bean"
<Me@privacy.net>
> writes:
> >1. We already have a form that is circular (no waste) and
> >with an accurately-positioned central hole.
> Goodie...now you can make a 360 degree variable capacitor
> with an extemely low minimum-to-maximum capacitance
> ratio.

405. Re: Where do I buy large surface area single copper clad board in UK (or even US)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 12:08:04 UTC
From: Martin Farrell <martin.farrell@btconnect.com>
Message-ID: <POqwy9fZY75BFwGG@local.mail>
Source record: 21038

Richard wrote
>Hi. I'm trying to obtain single copper clad board that allows me to end up
>with a board 245mm x 348mm. I can do it with two pieces for sure, but I'd
>prefer one peice. Anybody know who sells in UK pieces large enough? Would
>buy from US or whatever if not available in UK. TIA.
>
I recommend http://www.megauk.com/ which sells much bigger sizes than
this but there is a ï¿½15 minimum order.

--
Martin G8ASG

406. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 12:55:20 UTC
From: default <none@defaulter.net>
Message-ID: <muffu0dlj3t2pt8oamo0unjp7svv12o7kb@4ax.com>
Source record: 21039
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On 12 Jan 2005 02:45:43 -0800, "G1LVN" <google@g1lvn.org.uk> wrote:

>Unlike heavy mobile phone use it has been proven that increasing
>Oxydisation of cell structures causes, cancer, aging and ultimately
>death. Doesn't stop anyone breathing though does it? If we al stopped
>breathing there would be no cancer, no aging.
>
>Seriously though, as an illustration, say that in 20 years time we find
>that the heating effect of RF from mobile phones provides a catalyst
>for increased oxydisation in the brain when combined with the
>inhilation of plastics vapour from the material used in cellphone keypd
>membranes to cause cancer of the nose (it could happen!!). This would
>be a totally unforseen risk to our health. What this report says that
>is as a precaution to unforseen health risks it is better not to let
>childern use mobile phones and audults only when absolutly necessary
>and to limit use. This is an example of the "precautionary principle",
>specifically used to limit or halt future crisis.
>
>see: http://en.wikipedia.org/wiki/Precautionary_principle
>http://www.spiked-online.com/Articles/00000006DE2F.htm
>http://www.emfacts.com/papers/newspeak.pdf
>http://www.chstm.man.ac.uk/outreach/mobile-phones.htm
>http://www.seas.upenn.edu/~kfoster/precautionary_foster.PDF

The "standards" for RF safety assume that heating is the only thing
that affects health.

The standard as tested and applied will prevent problems due to
heating - and make the world a safer place for Jello.

I seem to remember at least one case of a researcher in the US turning
up some evidence that low frequency magnetic fields inhibit a bodies
ability to either use or produce "T" cells.

Personally, I don't think there is enough research into it. (and
there isn't likely to be enough)

407. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 13:44:54 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <qtdfu01h11b5mqqrptf793ostopi6kb40p@4ax.com>
Source record: 21040
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Thu, 13 Jan 2005 22:13:37 -0000, "Brian Reay"
<brian.reay@(spamstopper)bigfoot.com> wrote:

>Part of the problem is that people will respond to his rudeness, if you
>can't ignore it kill file him. He does it to disrupt the group and he can
>only do so IF WE LET HIM. If we don't let him he can't disrupt the group.
>Standard behaviour management.

Very good points.

Having posted what appears to be on the surface a technical item
regarding the construction of capacitors for an ATU, it seems that
Bean has done no calculations whatsoever regarding the design.

Even simple back-of-the-envelope calculations would have pointed up
the the critical areas of component performance, which, together with
an appraisal of the limitations of his chosen resources, may have led
to a more realistic redesign. OTOH it may have indicated or confirmed
the correctness of his original approach. But we'll never know.

But did he respond accordingly? Instead of being an interesting
technical discussion, it has become yet another stick with which to
beat selected responders - the 'gentlemanly traditions' disappearing,
if they ever surfaced at all, very rapidly. One is left with the
strong impression that the original posting wasn't meant to be a
technical discussion at all, and another poster's comment elsewhere
about 'the cycle repeats' appears very apposite.

I note that you have already mentioned what could well be the achilles
heel of Bean's choice of components, and one which I was trying to
gently steer him to in my initial contribution. But it seems that it
is more fun to wield the stick rather than undertake any real design
studies. Ah well.
--
from
Aero Spike

408. FA: Aluminum Slope-Top Project Box NOS

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 14:14:18 UTC
From: Tom <tfarl@iowatelecom.net>
Message-ID: <_sQFd.6252$eT5.4760@attbi_s51>
Source record: 21041
Cross-posted to:
alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap

Ends Saturday 1/15 @ 13:12:35 PST (21:12:35 UTC)

A hard to find project box - N.O.S.
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5743172645

Still sealed in factory packaging.

Made of rigid 3/32" aluminum, the dimensions are roughly 7" wide x 6"
deep (front-to-back). The height is about 3" in back, sloping to about 1
3/4" in front. Two-piece construction, the side-bottom-side piece is
medium blue wrinkle, the back-top-front piece is a smooth off-white.
Bottom feet and attaching hardware are included.

Thanks for your time, and all the best in 2005,
theponyengine

409. Re: Where do I buy large surface area single copper clad board in UK (or even US)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 14:15:05 UTC
From: Old Macdonald <oeieio@hotmail.com>
Message-ID: <cs8jtaahj1@newstree.wise.edt.ericsson.se>
Source record: 21043

> Anybody know who sells in UK pieces large enough? Would
> buy from US or whatever if not available in UK. TIA.

I think that you will find them available from "RadioSpares", but they are not cheap. I bought one from them a few years ago. Today I would try Farnell in the UK, and I think they even have a catalogue on line :-)

If you do not succeed in the UK, then elsewhere inEurope you could try http://www.elfa.com , which is still in Europe, but not England. Search for product number 49-573-87, which is 1.55mm thick 35 u cu and is 300mm x 400mm. They have even bigger than that (49-573-95) which is 400mm x 600mm.

If you have difficulty getting it, or finding the page, then drop me a line via e-mail at oeieio@hotmail.com as I live just up the road from them.

Have a nice weekend - HM

410. Re: PS: Where do I buy large surface area single copper clad board in UK (or even US)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 14:17:02 UTC
From: Old Macdonald <oeieio@hotmail.com>
Message-ID: <cs8k0uamd1@newstree.wise.edt.ericsson.se>
Source record: 21042

> Anybody know who sells in UK pieces large enough? Would
> buy from US or whatever if not available in UK. TIA.

The Elfa URL is
http://www.elfa.se/elfa-bin/setpage.pl?http://www.elfa.se/elfa-bin/dyndok.pl?vat=0&dok=162098.htm
and all prices are in SEK (Swedish crown ?1 = SEK13).

HM

411. Re: Where do I buy large surface area single copper clad board in UK (or even US)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 14:54:10 UTC
From: Richard <nearlynews_email@ntlworld.com>
Message-ID: <34q4oiF4d6uo0U1@individual.net>
Source record: 21044

"Martin Farrell" <martin.farrell@btconnect.com> wrote in message
news:POqwy9fZY75BFwGG@local.mail...
> Richard wrote
> >Hi. I'm trying to obtain single copper clad board that allows me to end
up
> >with a board 245mm x 348mm. I can do it with two pieces for sure, but
I'd
> >prefer one peice. Anybody know who sells in UK pieces large enough?
Would
> >buy from US or whatever if not available in UK. TIA.
> >
> I recommend http://www.megauk.com/ which sells much bigger sizes than
> this but there is a ï¿½15 minimum order.
>
> --
> Martin G8ASG

Hi. Thanks.

If I changed the size that I was prepared to have to 9" x 12" I could get 2
uncoated FR4 (No. 16-21016, 18" x 24"). That comes to ï¿½35.84 (postage
included). So each would cost me ï¿½4.48. Don't know whether that cheap
or expensive not having bought any laminate before.

Think is, how do I cut this? Anyone developed a cheap solution for shearing
PCB laminate?

412. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 15:00:58 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <2enfu0ljmst9tau6igarkdrjbslpms245r@4ax.com>
Source record: 21045

On Fri, 14 Jan 2005 10:55:58 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>I have never trolled in any NG.
>

On Fri, 14 Jan 2005 09:29:46 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>Once again. Mr.Reay succeeds in scoring an own-goal

On Fri, 14 Jan 2005 10:56:47 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>Stupid boy. Perhaps it is you who is the troll?
>

Rather active CB-boy, but I am not convinced about his real interest
to participate in a technical amateur radio newsgroup

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

413. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 15:03:31 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34q5fpF4cbuunU1@individual.net>
Source record: 21046

Oh dear, oh dear, oh dear, you've tried and failed miserably to lead the field with your rather silly outbursts; you've been brought up short, and are now sulking with silly postings like that of yours below. Do you not think that childishly broadcast (CB) jibes such as, "Rather active CB-boy" are at odds with your further comment relating to "a technical amateur radio newsgroup"? Not only at odds, but hypocritical?

Insofar as this is a technical NG, do you not think, perhaps, that the personal attack originated by you below has all the characteristics of trolling?

Stupid Boy!

"J M Noeding" <la8ak@online.no> wrote in message news:2enfu0ljmst9tau6igarkdrjbslpms245r@4ax.com...
> On Fri, 14 Jan 2005 10:55:58 -0000, "Airy R.Bean" <Me@privacy.net>
> wrote:
> >I have never trolled in any NG.
> On Fri, 14 Jan 2005 09:29:46 -0000, "Airy R.Bean" <Me@privacy.net>
> wrote:
> >Once again. Mr.Reay succeeds in scoring an own-goal
> On Fri, 14 Jan 2005 10:56:47 -0000, "Airy R.Bean" <Me@privacy.net>
> wrote:
> >Stupid boy. Perhaps it is you who is the troll?
> Rather active CB-boy, but I am not convinced about his real interest
> to participate in a technical amateur radio newsgroup

414. Re: Where do I buy large surface area single copper clad board in UK (or even US)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 15:56:45 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <41e7ebbd$0$16588$cc9e4d1f@news-text.dial.pipex.com>
Source record: 21047

http://www.geocities.com/leon_heller
"Richard" <nearlynews_email@ntlworld.com> wrote in message
news:34q4oiF4d6uo0U1@individual.net...
>
> "Martin Farrell" <martin.farrell@btconnect.com> wrote in message
> news:POqwy9fZY75BFwGG@local.mail...
>> Richard wrote
>> >Hi. I'm trying to obtain single copper clad board that allows me to end
> up
>> >with a board 245mm x 348mm. I can do it with two pieces for sure, but
> I'd
>> >prefer one peice. Anybody know who sells in UK pieces large enough?
> Would
>> >buy from US or whatever if not available in UK. TIA.
>> >
>> I recommend http://www.megauk.com/ which sells much bigger sizes than
>> this but there is a £15 minimum order.
>>
>> --
>> Martin G8ASG
>
> Hi. Thanks.
>
> If I changed the size that I was prepared to have to 9" x 12" I could get
> 2
> uncoated FR4 (No. 16-21016, 18" x 24"). That comes to £35.84 (postage
> included). So each would cost me £4.48. Don't know whether that cheap
> or expensive not having bought any laminate before.
>
> Think is, how do I cut this? Anyone developed a cheap solution for
> shearing
> PCB laminate?
>

I score it deeply on both sides with a Stanley knife and snap it.

73, Leon
--
Leon Heller, G1HSM

415. Re: Where do I buy large surface area single copper clad board in UK (or even US)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 16:33:41 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <5ssfu01or66v7m6ek97r12bhu829q4vcks@4ax.com>
Source record: 20948

On Fri, 14 Jan 2005 15:56:45 -0000, "Leon Heller"
<leon_heller@hotmail.com> wrote:

>>
>> Hi. Thanks.
>>
>> If I changed the size that I was prepared to have to 9" x 12" I could get
>> 2
>> uncoated FR4 (No. 16-21016, 18" x 24"). That comes to ï¿½35.84 (postage
>> included). So each would cost me ï¿½4.48. Don't know whether that cheap
>> or expensive not having bought any laminate before.
>>
>> Think is, how do I cut this? Anyone developed a cheap solution for
>> shearing
>> PCB laminate?
>>
>
>I score it deeply on both sides with a Stanley knife and snap it.
>
>73, Leon

you cut it with plate scissors, and make the pattern with dentist
drill and a steel ruler, the latter is important support since the
dentist drill is almost impossible to steer without 60 degree angle
against the ruler. It improves the operation with a thin leather under
the ruler
Hope I made myself understandable in a foreign language, have some
remarks on my home-page

73
jan-martin

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

416. Re: Where do I buy large surface area single copper clad board in UK (or even US)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 17:01:55 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <3iufu0dk0hn0n0vqtabmfdbf54n0kl0kc9@4ax.com>
Source record: 20949

The pcb cutting pattern cut process is shown on
http://home.online.no/~la8ak/c21.htm as note 21.17

will try to write some better understandable text later (I have some
problems since there is two different parts here with the name "drill"
in English, and many other in other situations....

73, Jan-Martin, LA8AK

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

417. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 17:31:10 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34qdujF4dc60sU1@individual.net>
Source record: 20950
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Spike" <Aero.Spike@Speed.invalid> wrote in message
news:qtdfu01h11b5mqqrptf793ostopi6kb40p@4ax.com...
> On Thu, 13 Jan 2005 22:13:37 -0000, "Brian Reay"
> <brian.reay@(spamstopper)bigfoot.com> wrote:
>
> >Part of the problem is that people will respond to his rudeness, if you
> >can't ignore it kill file him. He does it to disrupt the group and he
can
> >only do so IF WE LET HIM. If we don't let him he can't disrupt the group.
> >Standard behaviour management.
>
> Very good points.
>
> Having posted what appears to be on the surface a technical item
> regarding the construction of capacitors for an ATU, it seems that
> Bean has done no calculations whatsoever regarding the design.
>
> Even simple back-of-the-envelope calculations would have pointed up
> the the critical areas of component performance, which, together with
> an appraisal of the limitations of his chosen resources, may have led
> to a more realistic redesign. OTOH it may have indicated or confirmed
> the correctness of his original approach. But we'll never know.
>
> But did he respond accordingly? Instead of being an interesting
> technical discussion, it has become yet another stick with which to
> beat selected responders - the 'gentlemanly traditions' disappearing,
> if they ever surfaced at all, very rapidly. One is left with the
> strong impression that the original posting wasn't meant to be a
> technical discussion at all, and another poster's comment elsewhere
> about 'the cycle repeats' appears very apposite.
>
> I note that you have already mentioned what could well be the achilles
> heel of Bean's choice of components, and one which I was trying to
> gently steer him to in my initial contribution. But it seems that it
> is more fun to wield the stick rather than undertake any real design
> studies. Ah well.

All signs of insecurity. If Gareth was sure of himself he could debate /
discuss at a technical level. I can't ever actually recall him doing this.

I'm sure there will be a name for his condition, probably even treatment.

--
Brian Reay

www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

418. Re: Where do I buy large surface area single copper clad board in UK (or even US)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 17:35:16 UTC
From: Richard <nearlynews_email@ntlworld.com>
Message-ID: <34qe75F4dah39U1@individual.net>
Source record: 20951

"Leon Heller" <leon_heller@hotmail.com> wrote in message
news:41e7ebbd$0$16588$cc9e4d1f@news-text.dial.pipex.com...
> http://www.geocities.com/leon_heller

> I score it deeply on both sides with a Stanley knife and snap it.

That's real cheap method. :c)

Well, I went ahead and bought 2 off 18" x 24" plain copper clad board from megaUK..com. Don't know why postage for 1 plate of laminate is is ï¿½2.50 and for 2 is ï¿½5.00. Otherwise competitive I think.

419. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 17:47:17 UTC
From: Micky Taker <micky.t@ker>
Message-ID: <FATFd.94324$C8.74689@fe3.news.blueyonder.co.uk>
Source record: 20952
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Brian Reay wrote:

>
>
> All signs of insecurity. If Gareth was sure of himself he could debate /
> discuss at a technical level. I can't ever actually recall him doing this.
>
> I'm sure there will be a name for his condition, probably even treatment.
>
Yes, it's called Antisocial Personality Disorder (APD).

Google will give you all the info.

Micky

--
E&OE (C) 2005 Micky Taker
Micky Taker accepts no responsibility for any personal injury or
emotional distress that may occur as a result of reading the contents of
this message.

420. Re: FA: Aluminum Slope-Top Project Box NOS

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 19:42:58 UTC
From: Al <no.spam@wanted.com>
Message-ID: <no.spam-CB9A53.14430114012005@news.verizon.net>
Source record: 20954
Cross-posted to:
alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap

In article <_sQFd.6252$eT5.4760@attbi_s51>,
"Tom" <tfarl@iowatelecom.net> wrote:

> Ends Saturday 1/15 @ 13:12:35 PST (21:12:35 UTC)
>
> A hard to find project box - N.O.S.
> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5743172645
>
> Still sealed in factory packaging.
>
> Made of rigid 3/32" aluminum, the dimensions are roughly 7" wide x 6"
> deep (front-to-back). The height is about 3" in back, sloping to about 1
> 3/4" in front. Two-piece construction, the side-bottom-side piece is
> medium blue wrinkle, the back-top-front piece is a smooth off-white.
> Bottom feet and attaching hardware are included.
>
> Thanks for your time, and all the best in 2005,
> theponyengine
>
>
>
>

Not hard to find. I have 4 in my cache.

Al

421. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 19:50:17 UTC
From: sofie <sofie@olypen.com>
Message-ID: <10ug8lhqkjdav7f@corp.supernews.com>
Source record: 20955
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

Jamie:
The (gas) butane soldering irons are the best for what you want..... the
problem with battery operated soldering irons is that they do not produce a
lot of heat for any length of time.... and usually when you only have a few
more joints to solder, the battery DIES. With a butane soldering iron,
when it runs out of gas you just refill it and you are ready to solder again
in a few minutes.and if more heat is needed just turn up the gas and install
a bigger tip.
--
Best Regards,
Daniel Sofie
Electronics Supply & Repair
- -

"Jamie" <jamie_5_not_valid_after_5_Please@charter.net> wrote in message
news:vjUFd.2799$uT.742@fe06.lga...
> alanh_27@yahoo.com wrote:
>
> > the requirement: perform solder joints outdoors, in the winter,
> > without electricity, up a radar mast.
> >
> > and the nominations are?
> >
> > P.S. could a resistance-soldering rig do it, on battery power,in a
> > form factor that's small/light enough to haul up a radar mast in a
> > basket?
> >
> look for "Cold heat soldering iron"
> battery operated and it very fast.
> its not good for very fine detailed work but
> may work well for your use.
>
> https://www.asseenontvnetwork.com/vcc/coldheat/coldheat/115785/
>

422. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 20:35:51 UTC
From: NSM <nowrite@to.me>
Message-ID: <H2WFd.94083$dv1.54666@edtnps89>
Source record: 20956
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

"Jamie" <jamie_5_not_valid_after_5_Please@charter.net> wrote in message
news:vjUFd.2799$uT.742@fe06.lga...

| look for "Cold heat soldering iron"
| battery operated and it very fast.
| its not good for very fine detailed work but
| may work well for your use.
|
| https://www.asseenontvnetwork.com/vcc/coldheat/coldheat/115785/

Buy one on eBay if you want to try it but it's a joke outside in a slight
breeze. Even a 25 W AC iron won't work there and these toys are no good at
all.

http://search.ebay.com/cold-heat_W0QQfromZR40QQsojsZ1

N

423. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 20:39:25 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34qp62F4fsr20U4@individual.net>
Source record: 20957
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Once again Mr.Reay has published something that has come home
to roost at his home. Remember the following bullshit from
yesterday?.....

"Part of the problem is that people will respond to his rudeness, if you
can't ignore it kill file him. He does it to disrupt the group and he can
only do so IF WE LET HIM. If we don't let him he can't disrupt the group.
Standard behaviour management."

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34qdujF4dc60sU1@individual.net...

> All signs of insecurity. If Gareth was sure of himself he could debate /
> discuss at a technical level. I can't ever actually recall him doing this.
> I'm sure there will be a name for his condition, probably even treatment.

424. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 20:45:13 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34qpgcF4eqmqtU1@individual.net>
Source record: 20958
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Once again, Mr.Reay is brandishing his card with
the "insecurity" sneer upon it.

That Mr.Reay feels the need to repeatedly initiate
personal remarks of an aggressive character, personal
remarks that cannot be taken as "debate / discussion at
a technical level", would seem to suggest that it is Mr.Reay
who is insecure, do you not think?

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34qdujF4dc60sU1@individual.net...

> All signs of insecurity. If Gareth was sure of himself he could debate /
> discuss at a technical level. I can't ever actually recall him doing this.
> I'm sure there will be a name for his condition, probably even treatment.

425. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-14 22:07:18 UTC
From: Jamie <jamie_5_not_valid_after_5_Please@charter.net>
Message-ID: <vjUFd.2799$uT.742@fe06.lga>
Source record: 20953
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

alanh_27@yahoo.com wrote:

> the requirement: perform solder joints outdoors, in the winter,
> without electricity, up a radar mast.
>
> and the nominations are?
>
> P.S. could a resistance-soldering rig do it, on battery power,in a
> form factor that's small/light enough to haul up a radar mast in a
> basket?
>
look for "Cold heat soldering iron"
battery operated and it very fast.
its not good for very fine detailed work but
may work well for your use.

https://www.asseenontvnetwork.com/vcc/coldheat/coldheat/115785/

426. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 00:59:54 UTC
From: Bill <spam@coqui.net>
Message-ID: <eWZFd.5634$J36.4078@fe39.usenetserver.com>
Source record: 20959
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

Jamie wrote:

> alanh_27@yahoo.com wrote:
>
>> the requirement: perform solder joints outdoors, in the winter,
>> without electricity, up a radar mast.
>>

> look for "Cold heat soldering iron"
> battery operated and it very fast.
> its not good for very fine detailed work but
> may work well for your use.

I don't think that will do. They barely work indoors.
Small little torch is the only way to go.

-Bill

427. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 01:01:18 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e86d57_1@127.0.0.1>
Source record: 20960
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

```
NSM wrote:
> "Jamie" <jamie_5_not_valid_after_5_Please@charter.net> wrote in message
> news:vjUFd.2799$uT.742@fe06.lga...
>
> | look for "Cold heat soldering iron"
> | battery operated and it very fast.
> | its not good for very fine detailed work but
> | may work well for your use.
> |
> | https://www.asseenontvnetwork.com/vcc/coldheat/coldheat/115785/
>
> Buy one on eBay if you want to try it but it's a joke outside in a slight
> breeze. Even a 25 W AC iron won't work there and these toys are no good at
> all.

And ... they are not non-electric.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---
```

428. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 02:15:37 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <d1%Fd.10618$wZ2.1680@newssvr13.news.prodigy.com>
Source record: 20961
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

Also, consider : low temperature solder-- can be melted with a match-
tho NOT advocating THAT technique, would recommend that with a butane
iron, or torch in inclemate weather! And, have used the butane irons
in blizzard conditions, in the Sierras (repairing equipment for the
railroad), useing these. highly recommend them for use in adverse wx!
Jim NN7K

Cecil Moore wrote:
> NSM wrote:
>
>> "Jamie" <jamie_5_not_valid_after_5_Please@charter.net> wrote in message
>> news:vjUFd.2799$uT.742@fe06.lga...
>>
>> | look for "Cold heat soldering iron"
>> | battery operated and it very fast.
>> | its not good for very fine detailed work but
>> | may work well for your use.
>> |
>> | https://www.asseenontvnetwork.com/vcc/coldheat/coldheat/115785/
>>
>> Buy one on eBay if you want to try it but it's a joke outside in a slight
>> breeze. Even a 25 W AC iron won't work there and these toys are no
>> good at
>> all.
>
>
> And ... they are not non-electric.

429. Shure 55s connector needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 02:34:23 UTC
From: Bob <bob91343@yahoo.com>
Message-ID: <b7mdnYQNAu3XHHXcRVn-jg@iswest.net>
Source record: 20962

Three pin, male side, with locking screw ring.

Anyone help with one?

Thanks, Bob

430. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 03:02:20 UTC
From: NSM <nowrite@to.me>
Message-ID: <0J%Fd.96549$dv1.26101@edtnps89>
Source record: 20963
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

"Jim - NN7K" <nn7kexk7zfg@NOSPAMsbcglobal.net> wrote in message
news:d1%Fd.10618$wZ2.1680@newssvr13.news.prodigy.com...
| Also, consider : low temperature solder-- can be melted with a match-
| tho NOT advocating THAT technique, would recommend that with a butane
| iron, or torch in inclemate weather! And, have used the butane irons
| in blizzard conditions, in the Sierras (repairing equipment for the
| railroad), useing these. highly recommend them for use in adverse wx!
| Jim NN7K

If you can use them in those conditions then no question they're the best.
Everything I have heard about the 4 AA irons is not confidence making!

N

431. Re: FA: Aluminum Slope-Top Project Box NOS

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 03:28:38 UTC
From: JOE <"Joe HATESspam"@hotmail.com>
Message-ID: <1105760573.11d6279fae8fb02f3e2709c812ba0611@meganetnews2>
Source record: 20964
Cross-posted to:
alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap

> Not hard to find. I have 4 in my cache.
>
> Al

Well aren't you the special one today. You won't be
bidding I assume. Glad to hear it Al. Have a great
day, and do enjoy your project boxes, Al, ok?

JOE

432. Re: WTB: RF Spectrum Analyxer - At least 1Ghz

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 08:07:09 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1c526f0a54e76d4898969d@news-central.giganews.com>
Source record: 20965

In article <jq79u09399oc2ve0h79mv3h5968p0m2svg@4ax.com>, d_h@nospam.com
says...
> greets all
>
> Just wanted to let everyone [who might read this] know that I am looking to purchase
> a spectrum analyzer. Make and model is not terribly important. Just looking for
> something that works reasonably well, has fairly good input sensitivity (measurements
> made from an antenna are prime objective) and has a top end of at least 1Ghz.
>
> I've looked on ebay. Most of these unit are running at least $1000.00 - $1500.00 or
> over. If anyone's recently purchased a new 6 or 22Ghz SA, and would like to get rid
> of that older one that might be sitting in the closet, I'd be interested. Thanks.
>
> Dave
>

You are unlikely to get one for free, at least one that works. :) Look
for a clean HP 141T / 8552B / 8554B or 8554L rig on eBay. It should be
possible to find a package like that for less than $600.00. Manuals are
usually available on CD from the same source.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam
---

433. K9YA Telegraph e-Zine - FREE Subscription!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 12:29:55 UTC
From: K9YA Telegraph <k9ya@qsl.net>
Message-ID: <718Gd.9470$Vj3.1654@newssvr17.news.prodigy.com>
Source record: 20966

Subscribe to the K9YA Telegraph e-Zine. It's hip! It's Wow! It's FREE!

The K9YA Telegraph is a general interest Ham Radio electronic magazine. It contains new-never before published articles and cartoons on topics of interest to all Amateur Radio operators. It's in full-color and delivered to your computer monthly as a PDF file.

Download sample issues or subscribe at: http://www.k9ya.org.

January 2005

A Shack Full of Resolutions And Happy Birthday to Us By Philip Cala-Lazar, K9PL

Amateur Radio Club of Trinity High School By Katelyn Murray, KB3LRN

www.kidshamradio.com By Andrew Kelly, K3ASK

SWL to Ham By George H. Morto, KN2GSJ

Cartoon Caption Contest By Dick Sylvan, W9CBT

New Year New Look | In The News | Straight Key Nite 2005

434. Re: Shure 55s connector needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 14:19:40 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <WN2dnY3vBcvju3TcRVn-ug@comcast.com>
Source record: 20967

"Bob" <bob91343@yahoo.com> wrote in message
news:b7mdnYQNAu3XHHXcRVn-jg@iswest.net...
> Three pin, male side, with locking screw ring.
>
> Anyone help with one?
>
> Thanks, Bob

Bob,

I believe that the microphone connector that you are looking for is Amphenol
MC3M (91-MC3M),
which is now manufactured by WPI (WirePro International at their Salem, NJ
manufacturing facility:
http://www.wpi-interconnect.com/salem.htm

The Series 80 & 91 connectors can be found on Page 17 of the WPI
Interconnect Resource Guide:
http://www.wpi-interconnect.com/Resource%20Guide/WPI%20Resource%20Guide.pdf

The Amphenol / WPI connectors are available through the normal electrical
distributor channels:
Allied, Newark, Arrow and ECCO (Chicago)
http://www.eccochicago.com/ecco/index.asp

Here are some sources, in addition to one listed above:
http://l7inc.us/part_91-MC3M

http://www.onlinecomponents.com/search4.cfm?part_number=91%2DMC3M&manufacturer=AMPHENOL&r=
&ref=sparts

This web page (for the JT-30 microphone) also sells the 91-MC3M connector ($
16)
http://www.jt30.com/jt30page/eacstore.html

The Shure 55SH Series II is the current production model:
http://www.shure.com/microphones/models/55sh.asp

Shure does have the data sheets for its discontinued products on-line (great
resource)
http://www.shure.com/datasheets/guides-discontinued.html

Shure 55S, FAQ:
"I have an old 55S, but can't seem to determine what year it was
manufactured. Also, there seems to be a difference in models produced from
1951-1971 and those produced after 1971. What is the difference? When was
the line discontinued?"

1. There is no definitive way to determine the year of manufacture nor does Shure offer that service.

2. There is no definitive list of the product differences over the years.

3. The model 55SH Series II is still made (current production model).

4. The model 55S was last sold in 1978 for $84; first sold in 1951 for $72.

5. A mic collector web site such as www.coolmicrophones.com may have more information.

6. View discontinued mic data sheets at:
http://www.shure.com/datasheets/guides-discontinued.html

7. Shure does not offer opinions on the values of vintage microphones. Value is determined by the collectors willing to buy the mic.

Here are the 1951 and 1971 data sheets:
http://www.shure.com/pdf/discontinued/55s_1951.pdf
http://www.shure.com/pdf/discontinued/55s.pdf

Shure stocks some parts for these earlier models.

Most replacement parts (and many accessories) for Shure products are available through the Shure Service Department, including selected replacement styli (needles) for phonograph cartridges. For information on purchasing these items, contact the Shure Service Department directly. Their phone number toll-free at 800-516-2525 or at 847-600-8688, or contact Shure by email at service@shure.com.
Shure Incorporated
Attn: Service Department
5800 West Touhy Avenue
Niles, IL 60714-4608
800-516-2525 (phone)
847-600-8686 (fax/service)
847-600-8688 (fax/parts)

435. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 14:25:40 UTC
From: "Wayne R." <wruffner@KomKast.net>
Message-ID: <cp7iu0ddd42fh2omlid1chiv6cdgujcdsk@4ax.com>
Source record: 20968
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

I do/have done a lot of both in telecom environments. Here's how I see
it:

Lacing:
Pros:
Looks good - only if you know what you're doing.
Keeps old farts happy
Cord is cheap
The few tools required are cheap & low tech
Cons:
Can look crappy after cable/hand 'abrasion'
Lots of labor
Learning curve can be long
Consistency of appearance is difficult,across crews especially
Can cut jackets/hands during installation
Gooey mess from excess wax
Cut ends on floor are sticky
QC inspections can be irrational

TyWraps:
Pros:
Fast
Easy
Looks good - especially if you know what you're doing
Only a single tool (tensioner/cutter) needed
Can be *very* strong
Cons:
Traditionalists don't like it
Shouldn't do it without the right tool
Wrong tension settings can damage jackets/guts
Cut ends on floor are slippery

Clearly, a single, appropriate tool with tywraps makes their only real
problems go away (dykes & pliers are not the right tools for nylon
ties). And while cord is cheap, its labor costs are very high. For me,
there's no choice - tywraps make the most sense.

On 8 Jan 2005 09:42:10 -0800, alanh_27@yahoo.com wrote:

>cable lacing... a lost art.
>
>Is there anything that a laced cable-bundle does better than a
>tie-wrapped cable-bundle?

436. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 15:03:33 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41e930ae.497318@news.iol.ie>
Source record: 20969
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote:

: Part of the problem is that people will respond to his rudeness, if you
: can't ignore it kill file him. He does it to disrupt the group and he can
: only do so IF WE LET HIM. If we don't let him he can't disrupt the group.
: Standard behaviour management.
said m3osn....

how do you spell NONSENSE anyway ?

437. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 15:14:46 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41e93317.1114466@news.iol.ie>
Source record: 20970
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Tim Wescott <tim@wescottnospamdesign.com> wrote:

: Oh, so sometimes-vicious and always-infantile abusive tirades are a sign
: of a CB'er?
yes they are.

two who fit the desription were mughurtz and dipstik.
both have displayed their cb roots on this+uk.cb.radio.

438. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 15:46:35 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41e93ac5.3081068@news.iol.ie>
Source record: 20971
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote:

: Part of the problem is that people will respond to his rudeness, if you
: can't ignore it kill file him. He does it to disrupt the group and he can
: only do so IF WE LET HIM. If we don't let him he can't disrupt the group.
: Standard behaviour management.

youve been reading LORD OF THE FLIES again.

havent you ?

439. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 16:31:40 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e94710_2@127.0.0.1>
Source record: 20972
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

ZZZPK wrote:
> youve been reading LORD OF THE FLIES again.

Heh, heh, after presenting the play, "Annie", this year
(I was FDR) the Madison County Arts Council asked for ideas
on a play for next year that would employ a bunch of kids.
I suggested, "Lord of the Flies", which met with a very
cool reception. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

440. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 16:46:24 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <l5iiu0pvkmuve8par6221cf3mi6qmcbc8j@4ax.com>
Source record: 20973
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sat, 15 Jan 2005 10:31:40 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:
>I suggested, "Lord of the Flies", which met with a very cool reception. :-)
Didn't Texas send that as a road show to D.C.?

441. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 17:31:11 UTC
From: CW <cmagers@earthlink.net>
Message-ID: <W9qdna7sUalOz3TcRVn-1Q@comcast.com>
Source record: 20974
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Did you notice the word "amature" in the newsgroup title? You might want to
consult a dictionary for the definition of that word.

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34nqn4F4ed6fqU1@individual.net...
Engineers who are driven by
> such a penny pinching approach usually end up bankrupting their company as
> their products are poor.
>
>
> --
> Brian Reay
> www.g8osn.org.uk
> www.amateurradiotraining.org.uk
> FP#898
>
>
>
>
>

442. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 17:37:08 UTC
From: CW <cmagers@earthlink.net>
Message-ID: <INKdnQIDc8ClyXTcRVn-tw@comcast.com>
Source record: 20975
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Right you are, Mr. bean. Some individuals can't seem to separate their personal from their business lives. They need to assign a dollar value to everything. Many of these people, when not at work, do nothing as they dismiss most leisure time activities as an inefficient waste of man-hours.

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34nssfF4borpmU4@individual.net...
> You don't seem to have the qualities that makes
> for a _REAL_ Radio Ham, OM!
>
> There are no labour costs when you do things for yourself!
>
> There are no machining costs in cutting up a CD with a pair of scissors.

443. Re: FA: Aluminum Slope-Top Project Box NOS

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 17:52:07 UTC
From: Al <no.spam@wanted.com>
Message-ID: <no.spam-41A462.12520915012005@news.verizon.net>
Source record: 20976
Cross-posted to:
alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap

In article <1105760573.11d6279fae8fb02f3e2709c812ba0611@meganetnews2>,
"JOE" <Joe HATESspam@hotmail.com> wrote:

> > Not hard to find. I have 4 in my cache.
> >
> > Al
>
> Well aren't you the special one today. You won't be
> bidding I assume. Glad to hear it Al. Have a great
> day, and do enjoy your project boxes, Al, ok?
>
> JOE
>
>

Sure do, already used 3 of the seven I started with.

Al

444. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 18:01:14 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34t42vF4eq7u6U1@individual.net>
Source record: 20977
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"CW" <cmagers@earthlink.net> wrote in message
news:W9qdna7sUalOz3TcRVn-1Q@comcast.com...
> Did you notice the word "amature" in the newsgroup title? You might want
to
> consult a dictionary for the definition of that word.
>

No. But, then again, it isn't there so I wouldn't have.

If you meant amateur, that work doesn't not mean 'bodger'. Just because you
are doing something for fun is no excuse not to do it well.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

445. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 18:23:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <baniu0lcv8i924fvlotpv9m2v6rn2emh88@4ax.com>
Source record: 20978
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sat, 15 Jan 2005 18:01:14 -0000, "Brian Reay"
<brian.reay@(spamstopper)bigfoot.com> wrote:

> doing something for fun is no excuse not to do it well.

Hi OM,

The Calvinists left Britain to form the Puritans in the new world more
than 300 years ago (of course, many stayed behind to sulk during the
Restoration). Did you miss the boat?

73's
Richard Clark, KB7QHC

446. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 18:40:46 UTC
From: Bill Janssen <billj9@ieee.org>
Message-ID: <OsdGd.157$H63.53@news02.roc.ny>
Source record: 20979
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

```
Jim - NN7K wrote:

> Also, consider : low temperature solder-- can be melted with a match-
> tho NOT advocating THAT technique, would recommend that with a butane
> iron, or torch in inclemate weather! And, have used the butane irons
> in blizzard conditions, in the Sierras (repairing equipment for the
> railroad), useing these. highly recommend them for use in adverse wx!
> Jim NN7K

I have a selction of different sizes of "soldering Coppers" that I heat
with a torch.
They work good and I can control where I put heat. They are however not
easy
to heat with the torch.

Bill K7NOM

>
> Cecil Moore wrote:
>
>> NSM wrote:
>>
>>> "Jamie" <jamie_5_not_valid_after_5_Please@charter.net> wrote in message
>>> news:vjUFd.2799$uT.742@fe06.lga...
>>>
>>> | look for "Cold heat soldering iron"
>>> | battery operated and it very fast.
>>> | its not good for very fine detailed work but
>>> | may work well for your use.
>>> |
>>> | https://www.asseenontvnetwork.com/vcc/coldheat/coldheat/115785/
>>>
>>> Buy one on eBay if you want to try it but it's a joke outside in a
>>> slight
>>> breeze. Even a 25 W AC iron won't work there and these toys are no
>>> good at
>>> all.
>>
>>
>>
>> And ... they are not non-electric.
>
```

447. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 18:45:05 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34t6l6F4f6mb7U1@individual.net>
Source record: 20980
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:baniu0lcv8i924fvlotpv9m2v6rn2emh88@4ax.com...
> On Sat, 15 Jan 2005 18:01:14 -0000, "Brian Reay"
> <brian.reay@(spamstopper)bigfoot.com> wrote:
>
> > doing something for fun is no excuse not to do it well.
>
> Hi OM,
>
> The Calvinists left Britain to form the Puritans in the new world more
> than 300 years ago (of course, many stayed behind to sulk during the
> Restoration). Did you miss the boat?
>
> 73's
> Richard Clark, KB7QHC

Well Richard, over the years I'm met many Americans (I am pleased to say).
I've always though they sought to do things well- even within their hobbies.
Clearly, you are the exception.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

448. Recent own-goals by Mr.Reay.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 18:50:50 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34t75tF4dqnkaU1@individual.net>
Source record: 20981
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

A couple of days ago Mr.Reay published a homily on the
undesirability of uttering rude remarks and the way in which
such remarks foment ill-feeling in the NG.....

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34t6l6F4f6mb7U1@individual.net...
> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:baniu0lcv8i924fvlotpv9m2v6rn2emh88@4ax.com...
> > On Sat, 15 Jan 2005 18:01:14 -0000, "Brian Reay"
> > <brian.reay@(spamstopper)bigfoot.com> wrote:
> > > doing something for fun is no excuse not to do it well.
> > The Calvinists left Britain to form the Puritans in the new world more
> > than 300 years ago (of course, many stayed behind to sulk during the
> > Restoration). Did you miss the boat?
> Well Richard, over the years I'm met many Americans (I am pleased to say).
> I've always though they sought to do things well- even within their
hobbies.
> Clearly, you are the exception.

449. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 18:51:52 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e9679a$1_2@127.0.0.1>
Source record: 20982
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

Bill Janssen wrote:
> I have a selction of different sizes of "soldering Coppers" that I heat
> with a torch.
> They work good and I can control where I put heat. They are however not
> easy
> to heat with the torch.

The "cold heat" soldering iron works on the same principle as
an electric welding machine. Thus, there is the germ of a good
idea there. How about a soldering iron using the same principle
as the "cold heat" soldering machine except run off of 110VAC?
It could be transformer isolated, run on low voltage, and thus
be perfectly safe, but with a nearly unlimited source of power
to overcome the battery power limitation.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

450. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 19:03:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <87qiu09tpo9gvseapbu120jfebjmb4e4l3@4ax.com>
Source record: 20983
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sat, 15 Jan 2005 18:45:05 -0000, "Brian Reay"
<brian.reay@(spamstopper)bigfoot.com> wrote:

>Clearly, you are the exception.

Thanx for the flowers.

73's
Richard Clark, KB7QHC

451. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 19:16:17 UTC
From: NSM <nowrite@to.me>
Message-ID: <5_dGd.99266$dv1.85134@edtnps89>
Source record: 20984
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:41e9679a$1_2@127.0.0.1...

| The "cold heat" soldering iron works on the same principle as
| an electric welding machine. Thus, there is the germ of a good
| idea there. How about a soldering iron using the same principle
| as the "cold heat" soldering machine except run off of 110VAC?
| It could be transformer isolated, run on low voltage, and thus
| be perfectly safe, but with a nearly unlimited source of power
| to overcome the battery power limitation.

Hmm, doing that up a pole in wet, cold weather. Why do I see a Homer Simpson
episode in my mind?

N

452. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 20:02:19 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <41E976CB.EDE8BEE5@rica.net>
Source record: 20985
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

Bill Janssen wrote:

> I have a selction of different sizes of "soldering Coppers" that I heat
> with a torch.
> They work good and I can control where I put heat. They are however not
> easy
> to heat with the torch.

Especially while hanging from a tower, 50 feet up. ;-)

--
John Popelish

453. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 20:04:32 UTC
From: "Jock." <real_class_a2003@yahoo.fr>
Message-ID: <sptiu01dkg29046dim1ncg01qenfa15qj4@4ax.com>
Source record: 20986
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sat, 15 Jan 2005 09:31:11 -0800, "CW" <cmagers@earthlink.net> wrote:

>Did you notice the word "amature" in the newsgroup title? You might want to
>consult a dictionary for the definition of that word.

Isn't in my dictionary.

Jock.

--

"The graveyards are full of indispensable men."
- Charles de Gaulle (1890-1970)

454. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 20:06:15 UTC
From: "Jock." <real_class_a2003@yahoo.fr>
Message-ID: <6ttiu0leja2dbgcnn6nvc11p8714pn0l1u@4ax.com>
Source record: 20987
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sat, 15 Jan 2005 18:45:05 -0000, "Brian Reay"
<brian.reay@(spamstopper)bigfoot.com> wrote:

>"Richard Clark" <kb7qhc@comcast.net> wrote in message
>news:baniu0lcv8i924fvlotpv9m2v6rn2emh88@4ax.com...
>> On Sat, 15 Jan 2005 18:01:14 -0000, "Brian Reay"
>> <brian.reay@(spamstopper)bigfoot.com> wrote:
>>
>> > doing something for fun is no excuse not to do it well.
>>
>> Hi OM,
>>
>> The Calvinists left Britain to form the Puritans in the new world more
>> than 300 years ago (of course, many stayed behind to sulk during the
>> Restoration). Did you miss the boat?
>>
>> 73's
>> Richard Clark, KB7QHC
>
>Well Richard, over the years I'm met many Americans (I am pleased to say).
>I've always though they sought to do things well- even within their hobbies.
>Clearly, you are the exception.

They are unerringly stupid - to a man.

Jock.

--

"The graveyards are full of indispensable men."
- Charles de Gaulle (1890-1970)

455. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 22:36:05 UTC
From: cabletieguy <cabletieguy@cabletie.com>
Message-ID: <41E99AD5.65283556@cabletie.com>
Source record: 20988
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

I cut the 'slicer' end flush with a standard finger nail clipper !

>
> If you find these 'slicers' in cables which you must handle, you can usually
> blunt the sharp edges by heating each with a lighter...or maybe a soldering
> iron with an old tip. (Some high-quality cable ties resist melting.)

456. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-15 23:41:56 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41e9a9e6.31533991@news.iol.ie>
Source record: 20989
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Richard Clark <kb7qhc@comcast.net> wrote:

: On Sat, 15 Jan 2005 18:45:05 -0000, "Brian Reay"
: <brian.reay@(spamstopper)bigfoot.com> wrote:
:
: >Clearly, you are the exception.
:
: Thanx for the flowers.
:
: 73's
: Richard Clark, KB7QHC

Hey Richard... if you try to put your side of the story any further he'll
'''threaten''' you with being put into his killfile.

something akin to a kindergard(t)en teacher putting the wayward kid
outside the door.

457. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 03:37:00 UTC
From: Doug Faunt N6TQS +1-510-655-8604 <faunt@panix.com>
Message-ID: <mfrmzvaqc2r.fsf@panix1.panix.com>
Source record: 20990
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

Wayne R. <wruffner@KomKast.net> writes:

> I do/have done a lot of both in telecom environments. Here's how I see
> it:
>
> Lacing:
> Pros:
> Looks good - only if you know what you're doing.
> Keeps old farts happy
> Cord is cheap
> The few tools required are cheap & low tech
> Cons:
> Can look crappy after cable/hand 'abrasion'
> Lots of labor
> Learning curve can be long
> Consistency of appearance is difficult,across crews especially
> Can cut jackets/hands during installation
> Gooey mess from excess wax
> Cut ends on floor are sticky
> QC inspections can be irrational
>

Since I find tie wraps user-unfriendly for cable that I actually have to handle, but shrinking the whole thing together can be awkward, and make for a very stiff assembly, I'm pleased to be reminded of cable lacing.

I've laced several cable assemblies together now, using dental floss, and that's accomplished exactly what I wanted.

73, doug

458. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 04:36:42 UTC
From: cvairwerks@tigerbyte.net
Message-ID: <1105850202.351032.137470@f14g2000cwb.googlegroups.com>
Source record: 20991
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

Wayne R. wrote:
> TyWraps:

> Cons:
> Traditionalists don't like it
> Shouldn't do it without the right tool
> Wrong tension settings can damage jackets/guts
> Cut ends on floor are slippery

You forgot a couple of biggies on the cons of TyWraps

1. They are not compatable with any fuels or lubricants or hydraulic fluids.

2. They do not survive well in enviroments that are high vibration or those that see very low temps or temps over 100F.

3. They do not age well. They start getting brittle within a couple of years unless they are in a stable office type enviroment.

4. They are totally incompatable with any small fiber F/O system. THey either crush the fiber on install or provide a nice sharp edge for the fiber to fracture against.

5. Cost....My one roll of lacing cord will do the same amount of cable as several thousand TyWraps.

6. Work areas....I can do my ties in locations that you couldn't begin to get a TyWrap gun into.

7. Lacing cord is a one size does it all. With TyWraps you have to size them for the bundle size and tension that you need at each location.
Craig C.
cvairwerks@ev1.net

459. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 04:58:01 UTC
From: Jim Carriere <jimcarriere@yahoo.nospam>
Message-ID: <cscthlogl1@news.chatlink.com>
Source record: 20992
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

cvairwerks@tigerbyte.net wrote:
> Wayne R. wrote:
>
>>TyWraps:
>
>> Cons:
>> Traditionalists don't like it
>> Shouldn't do it without the right tool
>> Wrong tension settings can damage jackets/guts
>> Cut ends on floor are slippery
>
>
> You forgot a couple of biggies on the cons of TyWraps
>
> 1. They are not compatable with any fuels or lubricants or hydraulic
> fluids.
>
> 2. They do not survive well in enviroments that are high vibration or
> those that see very low temps or temps over 100F.

Not to be argumentative, I think these are all good points, but these first two are not completely true. Tiewraps work fine under the hood of a car. They can survive a small amount of oil, and the temp is often easily over 100F.

Of course they don't last forever. As per your third point, they'll get brittle and fall apart eventually. You just replace them before that happens.

> 3. They do not age well. They start getting brittle within a couple of
> years unless they are in a stable office type enviroment.

<rest snipped>

I think the two best tools you can use, to avoid making them too tight, are your fingers and your brain :)

460. Re: Shure 55s connector needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 05:22:28 UTC
From: Bob <bob91343@yahoo.com>
Message-ID: <Efidnf8E4Y6sZ3TcRVn-rg@iswest.net>
Source record: 20993

gb wrote:
> "Bob" <bob91343@yahoo.com> wrote in message
> news:b7mdnYQNAu3XHHXcRVn-jg@iswest.net...
>
>>Three pin, male side, with locking screw ring.
>>
>>Anyone help with one?
>>
>>Thanks, Bob
>
>
> Bob,
>
> I believe that the microphone connector that you are looking for is Amphenol
> MC3M (91-MC3M),
> which is now manufactured by WPI (WirePro International at their Salem, NJ
> manufacturing facility:
> http://www.wpi-interconnect.com/salem.htm
>
> The Series 80 & 91 connectors can be found on Page 17 of the WPI
> Interconnect Resource Guide:
> http://www.wpi-interconnect.com/Resource%20Guide/WPI%20Resource%20Guide.pdf
>
> The Amphenol / WPI connectors are available through the normal electrical
> distributor channels:
> Allied, Newark, Arrow and ECCO (Chicago)
> http://www.eccochicago.com/ecco/index.asp
>
> Here are some sources, in addition to one listed above:
> http://l7inc.us/part_91-MC3M
>
> http://www.onlinecomponents.com/search4.cfm?part_number=91%2DMC3M&manufacturer=AMPHENOL&
r=&ref=sparts
>
> This web page (for the JT-30 microphone) also sells the 91-MC3M connector ($
> 16)
> http://www.jt30.com/jt30page/eacstore.html
>
> The Shure 55SH Series II is the current production model:
> http://www.shure.com/microphones/models/55sh.asp
>
> Shure does have the data sheets for its discontinued products on-line (great
> resource)
> http://www.shure.com/datasheets/guides-discontinued.html

>
> Shure 55S, FAQ:
> "I have an old 55S, but can't seem to determine what year it was
> manufactured. Also, there seems to be a difference in models produced from
> 1951-1971 and those produced after 1971. What is the difference? When was
> the line discontinued?"
>
> 1. There is no definitive way to determine the year of manufacture nor does
> Shure offer that service.
>
> 2. There is no definitive list of the product differences over the years.
>
> 3. The model 55SH Series II is still made (current production model).
>
> 4. The model 55S was last sold in 1978 for $84; first sold in 1951 for $72.
>
> 5. A mic collector web site such as www.coolmicrophones.com may have more
> information.
>
> 6. View discontinued mic data sheets at:
> http://www.shure.com/datasheets/guides-discontinued.html
>
> 7. Shure does not offer opinions on the values of vintage microphones. Value
> is determined by the collectors willing to buy the mic.
>
> Here are the 1951 and 1971 data sheets:
> http://www.shure.com/pdf/discontinued/55s_1951.pdf
> http://www.shure.com/pdf/discontinued/55s.pdf
>
> Shure stocks some parts for these earlier models.
>
> Most replacement parts (and many accessories) for Shure products are
> available through the Shure Service Department, including selected
> replacement styli (needles) for phonograph cartridges. For information on
> purchasing these items, contact the Shure Service Department directly.
> Their phone number toll-free at 800-516-2525 or at 847-600-8688, or contact
> Shure by email at service@shure.com.
> Shure Incorporated
> Attn: Service Department
> 5800 West Touhy Avenue
> Niles, IL 60714-4608
> 800-516-2525 (phone)
> 847-600-8686 (fax/service)
> 847-600-8688 (fax/parts)
>
>
Thanks so much! I guess it's a currently available part. I looked at
the specs and this is one great microphone; I now have two of them. I
need to make up a cable for the new one.

Bob

461. Re: Shure 55s connector needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 06:03:01 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <SsydneK0t-aomXfcRVn-iw@comcast.com>
Source record: 20994

"Bob" <bob91343@yahoo.com> wrote in message
news:Efidnf8E4Y6sZ3TcRVn-rg@iswest.net...
> gb wrote:
>>
>> Here are the 1951 and 1971 data sheets:
>> http://www.shure.com/pdf/discontinued/55s_1951.pdf
>> http://www.shure.com/pdf/discontinued/55s.pdf
>>
>> Shure stocks some parts for these earlier models.
>>
> Thanks so much! I guess it's a currently available part. I looked at the
> specs and this is one great microphone; I now have two of them. I need to
> make up a cable for the new one.
>
Bob -

The audio response from the 55s is very flat from 150 Hz to 6 kHz which
provides
great reproduction for voice work .... which is also why Shure still makes
this classic after 50 years.

I forgot to give you the restoration pages for this microphone (Shure did
make a version in a gold finish) ..
Darren Pallen Productions is probably best known for this microphone and his
restoration work (using red and blue silk for inserts).
http://www.darrenpallen.com/Shure.htm

History of the Shure 55 series goes back to just before WW2 (photos from
various collections)
http://www.k-bay106.com/shure55a.jpg (1939 - 1946)
http://www.k-bay106.com/shure55.jpg (1947 - 1951)
http://www.k-bay106.com/shure55s.jpg (1951 - 1978)

Ribbon microphone restoration (Larry King and David Letterman have them on
their talk show desks -
although an out of camera boom mic is usually used for audio pickup)
The late Jon R. Sank was the designer for many of the RCA ribbon mics
(highly prized).
http://www.thuntek.net/~bk11/bk11.htm
http://www.bigdmc.com/mic-repair.htm

gb

462. Re: WTB: RF Spectrum Analyxer - At least 1Ghz

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 06:17:44 UTC
From: The Eternal Squire <eternalsquire@comcast.net>
Message-ID: <2JSdnS81tbibmnfcRVn-ug@comcast.com>
Source record: 20995

You could always build one. The W7ZOI webpages offer links to one in
kit form.

John Miles wrote:
> In article <jq79u09399oc2ve0h79mv3h5968p0m2svg@4ax.com>, d_h@nospam.com
> says...
>
>>greets all
>>
>>Just wanted to let everyone [who might read this] know that I am looking to purchase
>>a spectrum analyzer. Make and model is not terribly important. Just looking for
>>something that works reasonably well, has fairly good input sensitivity (measurements
>>made from an antenna are prime objective) and has a top end of at least 1Ghz.
>>
>>I've looked on ebay. Most of these unit are running at least $1000.00 - $1500.00 or
>>over. If anyone's recently purchased a new 6 or 22Ghz SA, and would like to get rid
>>of that older one that might be sitting in the closet, I'd be interested. Thanks.
>>
>>Dave
>>
>
>
> You are unlikely to get one for free, at least one that works. :) Look
> for a clean HP 141T / 8552B / 8554B or 8554L rig on eBay. It should be
> possible to find a package like that for less than $600.00. Manuals are
> usually available on CD from the same source.
>
> -- jm
>
> --
> http://www.qsl.net/ke5fx
> Note: My E-mail address has been altered to avoid spam
> --

463. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 08:06:52 UTC
From: "R. F. Burns" <R.F.>
Message-ID: <poiju0hhch25dcccb6gkb0vabtdf82bgop@4ax.com>
Source record: 20996
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Fri, 14 Jan 2005 07:55:20 -0500, default <none@defaulter.net>
wrote:

>On 12 Jan 2005 02:45:43 -0800, "G1LVN" <google@g1lvn.org.uk> wrote:
>
>>Unlike heavy mobile phone use it has been proven that increasing
>>Oxydisation of cell structures causes, cancer, aging and ultimately
>>death. Doesn't stop anyone breathing though does it? If we al stopped
>>breathing there would be no cancer, no aging.
>>
>>Seriously though, as an illustration, say that in 20 years time we find
>>that the heating effect of RF from mobile phones provides a catalyst
>>for increased oxydisation in the brain when combined with the
>>inhilation of plastics vapour from the material used in cellphone keypd
>>membranes to cause cancer of the nose (it could happen!!). This would
>>be a totally unforseen risk to our health. What this report says that
>>is as a precaution to unforseen health risks it is better not to let
>>childern use mobile phones and audults only when absolutly necessary
>>and to limit use. This is an example of the "precautionary principle",
>>specifically used to limit or halt future crisis.
>>
>>see: http://en.wikipedia.org/wiki/Precautionary_principle
>>http://www.spiked-online.com/Articles/00000006DE2F.htm
>>http://www.emfacts.com/papers/newspeak.pdf
>>http://www.chstm.man.ac.uk/outreach/mobile-phones.htm
>>http://www.seas.upenn.edu/~kfoster/precautionary_foster.PDF
>
>
>The "standards" for RF safety assume that heating is the only thing
>that affects health.
>

Sunlight is Electromagnetic radiation and hardly anybody seems to
mention this when talking about cell phone sand RF safety. Sunlight
also causes heating effects and lots of it. (I know I enjoy it) 1000W
per square metre of radiation hitting the earth on a nice day. That's
a bit more than a cell phone emits I believe AND it contains the
ionizing type of radiation too which is known to cause cancer of
course.

I believe that if there is something to this cell phone thing that it
may be from the electric part of the near field.

I'm certainly not too worried because they seem to have too hard of a
time proving anything. Unlike smoking and lung cancer anyway.

my 2 cents.

R.F.

>The standard as tested and applied will prevent problems due to
>heating - and make the world a safer place for Jello.
>
>I seem to remember at least one case of a researcher in the US turning
>up some evidence that low frequency magnetic fields inhibit a bodies
>ability to either use or produce "T" cells.
>
>Personally, I don't think there is enough research into it. (and
>there isn't likely to be enough)

464. Re: battery specific-gravity = AmpHour capacity?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 08:08:07 UTC
From: "R. F. Burns" <R.F.>
Message-ID: <kfjju0hal9dfo12036b6cc1mbsk4rr5r77@4ax.com>
Source record: 20997
Cross-posted to: sci.chem.electrochem,sci.physics,sci.electronics.repair,rec.radio.amateur.homebrew

On Tue, 11 Jan 2005 10:22:51 +0800, budgie <me@privacy.net> wrote:

>On Tue, 11 Jan 2005 00:35:58 GMT, "NSM" <nowrite@to.me> wrote:
>
>>
>>><alanh_27@yahoo.com> wrote in message
>>>news:1105401818.678643.124190@c13g2000cwb.googlegroups.com...
>>>| does specific-gravity of a conventional lead-acid cell, linearly
>>>| measure its AmpHour capacity?
>>>|
>>>| If not, what exactly does it indicate with respect to the battery
>>>| user's needs?
>>
>>It's proportional to % of charge. I doubt it is linear. See
>>http://www.buchanan1.net/lead_acid.shtml
>
>It is close enough to linear that some battery manufacturers provide
>coefficients and/or graphs of SOC vs SG and temp.
>
>It does of course require "calibration" to accomodate the actual acid/water
>proportions at fill and any loss/replacement.

Battery terminal voltage is also an indication of specific gravity and
SOC.

R.F.

465. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 11:38:03 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <k9kku0h8hdc4qshmtcbkk4roef85govji4@4ax.com>
Source record: 20898
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

back to amateur radio and the theme "ATU capacitor",

see http://home.online.no/~la8ak/a1.htm for an idea how you can
convert an old BC capacitor to a high voltage variable capacitor for a
80 (40m) antenna tuner

LA8AK

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

466. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 11:42:38 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34v2f2F4gsrahU1@individual.net>
Source record: 20899
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

If you have something to contribute to the debate, then
discuss it. It is very poor debating to send your readers off
somewhere else.

Besides, I thought that you refused to participate in this NG,
uk.radio.amateur because it was populated only by those, who
in your terms, were CBers.

Are you now admitting to be a CBer?

Is, "LA8AK" some Norwidgian form of the gangrenous degeneration
that is the M3/CB Fools' Licence here in Britland?

"J M Noeding" <la8ak@online.no> wrote in message
news:k9kku0h8hdc4qshmtcbkk4roef85govji4@4ax.com...
> back to amateur radio and the theme "ATU capacitor",
>
> see http://home.online.no/~la8ak/a1.htm for an idea how you can
> convert an old BC capacitor to a high voltage variable capacitor for a
> 80 (40m) antenna tuner
>
> LA8AK
> ---
> J. M. Noeding, LA8AK, N-4623 Kristiansand
> http://home.online.no/~la8ak/c.htm

467. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 12:14:47 UTC
From: Morgans <jsmorgan@chJUarNKer.net>
Message-ID: <eUsGd.14782$pv6.14081@fe05.lga>
Source record: 20900
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

"Jim Carriere" <jimcarriere@yahoo.nospam>

> Not to be argumentative, I think these are all good points, but these
> first two are not completely true. Tiewraps work fine under the hood
> of a car. They can survive a small amount of oil, and the temp is
> often easily over 100F.
>
> Of course they don't last forever. As per your third point, they'll
> get brittle and fall apart eventually. You just replace them before
> that happens.
>
> > 3. They do not age well. They start getting brittle within a couple of
> > years unless they are in a stable office type enviroment.
>
> <rest snipped>
>
> I think the two best tools you can use, to avoid making them too
> tight, are your fingers and your brain :)
>

Alas, someone with some common sense!

Tie wraps not only will handle a small amount of oil, but will handle lots
of oil and heat! DAMHIK! <g>

In *some* places, you can't beat am occasional tie wrap. You just gotta
have common sense!
--
Jim in NC

468. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 12:41:35 UTC
From: Matt Whiting <whiting@chilitech.net>
Message-ID: <csdne002s3n@enews4.newsguy.com>
Source record: 20902
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

Doug Faunt N6TQS +1-510-655-8604 wrote:
> Wayne R. <wruffner@KomKast.net> writes:
>
>
>>I do/have done a lot of both in telecom environments. Here's how I see
>>it:
>>
>>Lacing:
>> Pros:
>> Looks good - only if you know what you're doing.
>> Keeps old farts happy
>> Cord is cheap
>> The few tools required are cheap & low tech
>> Cons:
>> Can look crappy after cable/hand 'abrasion'
>> Lots of labor
>> Learning curve can be long
>> Consistency of appearance is difficult,across crews especially
>> Can cut jackets/hands during installation
>> Gooey mess from excess wax
>> Cut ends on floor are sticky
>> QC inspections can be irrational
>>
>
>
> Since I find tie wraps user-unfriendly for cable that I actually have
> to handle, but shrinking the whole thing together can be awkward, and
> make for a very stiff assembly, I'm pleased to be reminded of cable
> lacing.
>
> I've laced several cable assemblies together now, using dental floss,
> and that's accomplished exactly what I wanted.

Isn't dental floss a little "sharp" (small diameter) for lacing? I'd be
afraid of it cutting into the wires over time.

Matt

469. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 12:49:42 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <9moku05gpfk0ojgg45javq8q6sf365rao4@4ax.com>
Source record: 20901
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sun, 16 Jan 2005 11:42:38 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>If you have something to contribute to the debate, then
>discuss it. It is very poor debating to send your readers off
>somewhere else.

But, of course, you have just done this very thing to someone else!

Sheesh.....
--
from
Aero Spike

470. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 12:51:41 UTC
From: Matt Whiting <whiting@chilitech.net>
Message-ID: <csdo0u0112a@enews1.newsguy.com>
Source record: 20903
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

cvairwerks@tigerbyte.net wrote:

> Wayne R. wrote:
>
>>TyWraps:
>
>
>> Cons:
>> Traditionalists don't like it
>> Shouldn't do it without the right tool
>> Wrong tension settings can damage jackets/guts
>> Cut ends on floor are slippery
>
>
> You forgot a couple of biggies on the cons of TyWraps
>
> 1. They are not compatable with any fuels or lubricants or hydraulic
> fluids.
>
> 2. They do not survive well in enviroments that are high vibration or
> those that see very low temps or temps over 100F.
>
> 3. They do not age well. They start getting brittle within a couple of
> years unless they are in a stable office type enviroment.

I disagree with the above. I have used tiewraps in the engine compartment of several cars and trucks I own (one that is now 11 years old) and they have held up well to gas, oil, power steering fluid, etc. They have seen temps from -20F to probably over 180F and are aging well.

> 4. They are totally incompatable with any small fiber F/O system. THey
> either crush the fiber on install or provide a nice sharp edge for the
> fiber to fracture against.
>
> 5. Cost....My one roll of lacing cord will do the same amount of cable
> as several thousand TyWraps.

Yes, good points.

> 6. Work areas....I can do my ties in locations that you couldn't begin
> to get a TyWrap gun into.

You don't have to use a gun, you can install them by hand, and for sensitive cables in tight areas that is preferred anyway. Much less chance of applying too much tension.

> 7. Lacing cord is a one size does it all. With TyWraps you have to size
> them for the bundle size and tension that you need at each location.

Matt

471. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 13:09:54 UTC
From: "Wayne R." <wruffner@KomKast.net>
Message-ID: <i3pku01inmg2uugdduaq2mqasa33inesj4@4ax.com>
Source record: 20904
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

I know tywraps are available in lots of different materials. From plain nylon to UV-resistant to Teflon to stainless steel - and everything in between. You're right, you have to make a good choice, and have them when you need them. And a bad selection is expensive, too.

I've only had polyester lacing cord in my hands, and have seen silk stuff for book binding. I can't begin to believe that one-flavor polyester cord is 'omnipotent' in the face of all the yuk and harshness the world offers. What other materials are there? And where can I get some?

I sorta addressed cost in my original list: Cord is cheap, but the labor (time) costs can be way high. Tyes cost more (ok, can be a *lot* more), but go in fast & easy.

And I'm sorry for that crack about the old farts, but you know what I mean.

On 15 Jan 2005 20:36:42 -0800, cvairwerks@tigerbyte.net wrote:

>1. They are not compatable with any fuels or lubricants or hydraulic
>fluids.
>
>2. They do not survive well in enviroments that are high vibration or
>those that see very low temps or temps over 100F.
>
>3. They do not age well. They start getting brittle within a couple of
>years unless they are in a stable office type enviroment.
>
>4. They are totally incompatable with any small fiber F/O system. THey
>either crush the fiber on install or provide a nice sharp edge for the
>fiber to fracture against.
>
>5. Cost....My one roll of lacing cord will do the same amount of cable
>as several thousand TyWraps.

472. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 13:15:23 UTC
From: huLLy <hully@despammed.com>
Message-ID: <34v7mtF4geg55U1@individual.net>
Source record: 20905
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Spike" <Aero.Spike@Speed.invalid> wrote in message
news:9moku05gpfk0ojgg45javq8q6sf365rao4@4ax.com...
> On Sun, 16 Jan 2005 11:42:38 -0000, "Airy R.Bean" <Me@privacy.net>
> wrote:
>
>>If you have something to contribute to the debate, then
>>discuss it. It is very poor debating to send your readers off
>>somewhere else.
>
> But, of course, you have just done this very thing to someone else!
>
> Sheesh.....

That doesn't register in the mind of the terminally insane...

--
huLLy
VOIP SIP Phone Number 4823176 on Global Village

473. Re: battery specific-gravity = AmpHour capacity?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 13:35:51 UTC
From: budgie <me@privacy.net>
Message-ID: <0arku0d37qm2b95m9cjoehcq5ts3pks3c0@4ax.com>
Source record: 20906
Cross-posted to: sci.chem.electrochem,sci.physics,sci.electronics.repair,rec.radio.amateur.homebrew

On 16 Jan 2005 02:08:07 -0600, R. F. Burns <R.F.> wrote:

>On Tue, 11 Jan 2005 10:22:51 +0800, budgie <me@privacy.net> wrote:
>
>>On Tue, 11 Jan 2005 00:35:58 GMT, "NSM" <nowrite@to.me> wrote:
>>
>>>
>>>><alanh_27@yahoo.com> wrote in message
>>>>news:1105401818.678643.124190@c13g2000cwb.googlegroups.com...
>>>>| does specific-gravity of a conventional lead-acid cell, linearly
>>>>| measure its AmpHour capacity?
>>>>|
>>>>| If not, what exactly does it indicate with respect to the battery
>>>>| user's needs?
>>>>
>>>>It's proportional to % of charge. I doubt it is linear. See
>>>>http://www.buchanan1.net/lead_acid.shtml
>>
>>It is close enough to linear that some battery manufacturers provide
>>coefficients and/or graphs of SOC vs SG and temp.
>>
>>It does of course require "calibration" to accomodate the actual acid/water
>>proportions at fill and any loss/replacement.
>
>
>
>Battery terminal voltage is also an indication of specific gravity and
>SOC.

Apart from being temperature-dependent, terminal voltage is very dependent on recent charge/discharge history. Unless a known regime is implemented before measurement, OCV can be very misleading as a SOC indicator.

474. It's the L.I.A.R. wot stokes the fire.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 13:57:49 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34vaicF45bke6U8@individual.net>
Source record: 20907
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34qdujF4dc60sU1@individual.net...
> All signs of insecurity. If Gareth was sure of himself he could debate /
> discuss at a technical level. I can't ever actually recall him doing this.
> I'm sure there will be a name for his condition, probably even treatment.

475. It's the L.I.A.R. wot stokes the fire.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 13:59:02 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34vaidF45bke6U9@individual.net>
Source record: 20908
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34oa47F4culmgU1@individual.net...
> Part of the problem is that people will respond to his rudeness, if you
> can't ignore it kill file him. He does it to disrupt the group and he can
> only do so IF WE LET HIM. If we don't let him he can't disrupt the group.
> Standard behaviour management.
> If we just ignore his rude posts (or the bits of his few other posts that
> are rude), the problem would go away. Sometimes some of the stuff I seen
> responded to recently hasn't been that bad- maybe his engineering skills
are
> wanting but this is a forum to ask questions. If he could just stop being
so
> rude and negative I'd happily try and help him learn.
> Thing is, he seems to see every mention of failure as a reference to him.
I
> can only assume he has very low self esteem. This does make helping him a
> challenge. Pity we don't have an SEN teacher in the group- they would be
> ideal to advise us on the best plan. He could draw up an IEP for him.

476. It's the L.I.A.R. wot stokes the fire.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 13:59:55 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34vaidF45bke6U10@individual.net>
Source record: 20909
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34nqn4F4ed6fqU1@individual.net...
> The CD idea falls flat as, while they may be cheap, the amount of
machining
> 'saved' is mininmal. I suppose if you are totally strapped for cash, out
of
> work and with time on your hands, they may offer some advantage, but you
> end up with a 'product' of inferior quality. Engineers who are driven by
> such a penny pinching approach usually end up bankrupting their company as
> their products are poor.

477. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 14:36:56 UTC
From: default <none@defaulter.net>
Message-ID: <cosku0prhhfhlqq3438sn1581pv35h5ptn@4ax.com>
Source record: 20910
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On 16 Jan 2005 02:06:52 -0600, R. F. Burns <R.F.> wrote:
snipped
>
>Sunlight is Electromagnetic radiation and hardly anybody seems to
>mention this when talking about cell phone sand RF safety. Sunlight
>also causes heating effects and lots of it. (I know I enjoy it) 1000W
>per square metre of radiation hitting the earth on a nice day. That's
>a bit more than a cell phone emits I believe AND it contains the
>ionizing type of radiation too which is known to cause cancer of
>course.
>
>I believe that if there is something to this cell phone thing that it
>may be from the electric part of the near field.
>
>I'm certainly not too worried because they seem to have too hard of a
>time proving anything. Unlike smoking and lung cancer anyway.
>
>my 2 cents.
>
>R.F.
>
>
Agreed. From my vague recollection, the researcher that was seeing
effects in the immune system from low frequency emf exposure
attributed it to the magnetic field, and was looking at power line
frequencies.

There is some epidemiological evidence that shows a positive
correlation between certain types of cancer, leukemia in children and
nervous system & brain cancers in adults, and Weak LF EMF.

The standard test when it comes to RF safety is for tissue heating - a
cube of gelatin is exposed to the field and heat rise measured. That
assumes that heating is the only ill effect of RF radiation
(forgetting for the moment obvious stuff like RF burns or ozone damage
etc.) - it is possible that there are other, less active, or slower
developing deleterious effects. And that was my point . . .

Like the new approach to pharmaceutical safety in the US - clinical
testing is expensive - it will turn up in the epidemiological evidence
or actuarial statistics eventually - after industry has a chance to
make a profit.

It is unrealistic to expect government to initiate the research until enough people become aware of a problem. That only happens when something is self-evident to a large number of people; and that, in turn, depends on the media to correctly report it.

478. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 15:53:00 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cse2kr$7vl$1@sparta.btinternet.com>
Source record: 20911
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

To Jan M Noeding, a fellow European.

In this international newsgroup -

Please accept an ordinary Englishman's apologies for the obnoxious behaviour of a fellow human being, a disgraceful citizen with democratic voting rights, of the United Kingdom, who writes here under the false name of Airy R Bean.

Yours, Reg, G4FGQ

"Obnoxious" = liable to harm or evil, or attack, offensive, objectionable, polluting, universally disliked, and more.

==========

479. Re: It's the L.I.A.R. wot stokes the fire.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 16:29:33 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <34vj32F4dobp1U1@individual.net>
Source record: 20912
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Airy R.Bean, village idiot added nothing to the following:
> "Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
> news:34nqn4F4ed6fqU1@individual.net...
>
>>The CD idea falls flat as, while they may be cheap, the amount of
>
> machining
>
>>'saved' is mininmal. I suppose if you are totally strapped for cash, out
>
> of
>
>>work and with time on your hands, they may offer some advantage, but you
>>end up with a 'product' of inferior quality. Engineers who are driven by
>>such a penny pinching approach usually end up bankrupting their company as
>>their products are poor.
>
>
>
Beanie, I'm sure I'm not alone in questioning your repeat of several
posts without adding ANYTHING, not even your usual crap.
...(_!_)...

480. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 17:09:16 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34vlmgF4genldU1@individual.net>
Source record: 20913
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Reg - I think that you need to be aware of Noedings
disparaging remarks about this NG that prompted my
critique of him.

You do not represent me in any way, BTW.

"Airy R.Bean" is not a false name, it is a pseudonym, and is
a practice to be commended to all who have dealings with
u.r.a because of the presence of several vicious and mentally
unstable characters who vent their CB spleens herein.

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cse2kr$7vl$1@sparta.btinternet.com...
> To Jan M Noeding, a fellow European.
> In this international newsgroup -
> Please accept an ordinary Englishman's apologies for the obnoxious
behaviour
> of a fellow human being, a disgraceful citizen with democratic voting
> rights, of the United Kingdom, who writes here under the false name of
Airy
> R Bean.

481. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 17:44:55 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <0r9lu0hh0e02un94ubm6fmi4dunmc90jcr@4ax.com>
Source record: 20914
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sun, 16 Jan 2005 17:09:16 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>"Airy R.Bean" is not a false name, it is a pseudonym

You forgot to mention that in your eyes you are the only one allowed
to use such a pseudonym.

You have spoken vituperatively about others who use them.

The technique is known idiomatically or colloquially as 'dog in a
manger'.
--
from
Aero Spike

482. Transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 17:47:16 UTC
From: KU4YP <ku4yp@verizon.net>
Message-ID: <EMxGd.5962$IP6.316@trnddc05>
Source record: 20915

hello all,

has any built, or considered building, just the transmitter section of the hw-8? i have a nice drake 2b and 2bq that i would like to build a low power cw transmitter to go with it. would like 80, 40 20 and 15 and possibly 10 included. i am gonna look through some handbooks but wanted to check here and not re-invent the wheel.

any help appreciated.

73 ku4yp mike

483. Re: WTB: RF Spectrum Analyxer - At least 1Ghz

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 17:54:23 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1c544a298ed9ba5298969e@news-central.giganews.com>
Source record: 20916

In article <2JSdnS81tbibmnfcRVn-ug@comcast.com>,
eternalsquire@comcast.net says...
> You could always build one. The W7ZOI webpages offer links to one in
> kit form.
>

The W7ZOI design doesn't go anywhere near 1 GHz, though.

There is another homebrew SA design that does, however. Good for the
hardcore builder: http://users4.ev1.net/~wsprowls/index.html

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam
---

484. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 18:41:37 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <34vqqmF4h9h4pU1@individual.net>
Source record: 20917
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Spike wrote:
> On Sun, 16 Jan 2005 17:09:16 -0000, "Airy R.Bean" <Me@privacy.net>
> wrote:
>
>
>>"Airy R.Bean" is not a false name, it is a pseudonym
>
>
> You forgot to mention that in your eyes you are the only one allowed
> to use such a pseudonym.
>
> You have spoken vituperatively about others who use them.
>
> The technique is known idiomatically or colloquially as 'dog in a
> manger'.
Airy R. Bean is known idiomatically or colloquially as a retarded twat.
--
;>)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

485. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 18:44:26 UTC
From: daestrom <daestrom@NO_SPAM_HEREtwcny.rr.com>
Message-ID: <eCyGd.142831$Uf.56522@twister.nyroc.rr.com>
Source record: 20918
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

<cvairwerks@tigerbyte.net> wrote in message
news:1105850202.351032.137470@f14g2000cwb.googlegroups.com...
> Wayne R. wrote:
>> TyWraps:
>
>> Cons:
>> Traditionalists don't like it
>> Shouldn't do it without the right tool
>> Wrong tension settings can damage jackets/guts
>> Cut ends on floor are slippery
>
> You forgot a couple of biggies on the cons of TyWraps
>
> 1. They are not compatable with any fuels or lubricants or hydraulic
> fluids.
>
> 2. They do not survive well in enviroments that are high vibration or
> those that see very low temps or temps over 100F.
>
> 3. They do not age well. They start getting brittle within a couple of
> years unless they are in a stable office type enviroment.
>
> 4. They are totally incompatable with any small fiber F/O system. THey
> either crush the fiber on install or provide a nice sharp edge for the
> fiber to fracture against.
>
> 5. Cost....My one roll of lacing cord will do the same amount of cable
> as several thousand TyWraps.
>
> 6. Work areas....I can do my ties in locations that you couldn't begin
> to get a TyWrap gun into.
>
> 7. Lacing cord is a one size does it all. With TyWraps you have to size
> them for the bundle size and tension that you need at each location.

One other one we've run into. Some brands/types of 'Ty-Wrap' use a small metal clip in the blunt end to ratchet against the tong's rack. This little metal clip can/has come out and become an FOD hazard. Ever try finding a tiny 1/8 x 1/16 metal clip in a large FME (Foreign Material Exclusion) area? Not at all fun.

daestrom

486. Re: Transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 20:05:31 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <iZSdnZrqqbWWVHfcRVn-pA@comcast.com>
Source record: 20919

"KU4YP" <ku4yp@verizon.net> wrote in message
news:EMxGd.5962$IP6.316@trnddc05...
> hello all,
>
> has any built, or considered building, just the transmitter section of the
> hw-8? i have a nice drake 2b and 2bq that i would like to build a low
> power cw transmitter to go with it. would like 80, 40 20 and 15 and
> possibly 10 included. i am gonna look through some handbooks but wanted to
> check here and not re-invent the wheel.
>
> any help appreciated.
>
> 73 ku4yp mike

Considering that I have seen Drake 2-NT .. which is the matching CW transmitter for this receiver .. sell for $ 40 to $ 50 (good condition) at recent hamfest and eBay .. why? The Drake 2NT and 2B combo was the premier Novice station in late 1960s and early 1970s

w9gb

487. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 20:57:16 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <LyAGd.2722$0B.312@fed1read02>
Source record: 20920
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34vlmgF4genldU1@individual.net...
> Reg - I think that you need to be aware of Noedings
> disparaging remarks about this NG that prompted my
> critique of him.
>
> You do not represent me in any way, BTW.
>
> "Airy R.Bean" is not a false name, it is a pseudonym, and is
> a practice to be commended to all who have dealings with
> u.r.a because of the presence of several vicious and mentally
> unstable characters who vent their CB spleens herein.

Spleens got vents?!

Ed
wb6wsn

488. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 21:06:02 UTC
From: Tony VE6MVP <tony@REMOVEve6mvp.com>
Message-ID: <7pllu0pal1dmi2r7rret7j5qpd6f7nn94f@4ax.com>
Source record: 20921

On Mon, 10 Jan 2005 14:27:08 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>The posting misquoted me as a bottom poster.

Ahh.

>Top-posting is the preferred option - you get to
>see the new content without having to page down
>through loads of already-seen quotations.

That's your opinion. Not mine.

Tony

489. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 21:12:27 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <3503v9F4fva6hU2@individual.net>
Source record: 20923
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Venting of one's spleen" is an idiomatic expression
of the English-speaking world, but not, apparently
of Yankland.

"Ed Price" <edprice@cox.net> wrote in message
news:LyAGd.2722$0B.312@fed1read02...
> "Airy R.Bean" <Me@privacy.net> wrote in message
> news:34vlmgF4genldU1@individual.net...
> > Reg - I think that you need to be aware of Noedings
> > disparaging remarks about this NG that prompted my
> > critique of him.
> > You do not represent me in any way, BTW.
> > "Airy R.Bean" is not a false name, it is a pseudonym, and is
> > a practice to be commended to all who have dealings with
> > u.r.a because of the presence of several vicious and mentally
> > unstable characters who vent their CB spleens herein.
> Spleens got vents?!

490. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 21:15:40 UTC
From: CW <cmagers@earthlink.net>
Message-ID: <KOmdnffjQo1yRXfcRVn-vg@comcast.com>
Source record: 20922
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

You have a defective dictionary.

"Jock." <real_class_a2003@yahoo.fr> wrote in message
news:sptiu01dkg29046dim1ncg01qenfa15qj4@4ax.com...
> On Sat, 15 Jan 2005 09:31:11 -0800, "CW" <cmagers@earthlink.net> wrote:
>
> >Did you notice the word "amature" in the newsgroup title? You might want
to
> >consult a dictionary for the definition of that word.
>
> Isn't in my dictionary.
>
>
> Jock.
>
> --
>
> "The graveyards are full of indispensable men."
> - Charles de Gaulle (1890-1970)

491. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 21:21:39 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <3504ddF4haitpU1@individual.net>
Source record: 20924

It's not just my opinion, it's the blatant truth that you get to
see the new content without having to page down
through loads of already-seen quotations.

"Tony VE6MVP" <tony@REMOVEve6mvp.com> wrote in message
news:7pllu0pal1dmi2r7rret7j5qpd6f7nn94f@4ax.com...
> On Mon, 10 Jan 2005 14:27:08 -0000, "Airy R.Bean" <Me@privacy.net>
> wrote:
>
> >The posting misquoted me as a bottom poster.
>
> Ahh.
>
> >Top-posting is the preferred option - you get to
> >see the new content without having to page down
> >through loads of already-seen quotations.
>
> That's your opinion. Not mine.
>
> Tony

492. WTB: Frequency Down Converter - 2.4GHZ to 1.0GHz

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 21:59:22 UTC
From: Stephan Clark <stephanclark001@hotmail.nospam.net>
Message-ID: <htolu014mdglkosbbkna75m54fkeb31fvb@4ax.com>
Source record: 20925

greetings,

I am looking to buy a microwave frequency down converter for my spectrum analyzer.

Avcom MFC-1700 (or equivalent), to convert 1.7GHZ - 2.7GHZ (input) down to 0 - 1000MHz (output). Something close will also work.

Frequency output of down convert must be 0 - 1000MHz (range of spectrum analyzer).

Please e-mail stephanclark001@yahoo.com

Thank you.

493. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 22:21:33 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <3507n1F4eseqdU1@individual.net>
Source record: 20926
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Airy R.Bean wrote:

> "Venting of one's spleen" is an idiomatic expression
> of the English-speaking world, but not, apparently
> of Yankland.
more likely an expression used on your planet, TheAnus, but not planet
Earth.
...(_!_)...

494. PIC operated FSK modem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 22:23:57 UTC
From: dave.harper@gmail.com
Message-ID: <1105914237.697946.128520@z14g2000cwz.googlegroups.com>
Source record: 20928
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

I'm interested in building a FSK modem around a PIC microcontroller,
and am wondering how most FSK receivers convert the frequency to bits.
I'm open to a unique solution, and I've seen some frequency to voltage
converters that may work, but would like to know what some current
techniques are that may be a lot more reliable and simpler.
Thanks in advance!
Dave

495. PIC operated FSK modem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 22:24:02 UTC
From: dave.harper@gmail.com
Message-ID: <1105914242.384378.10120@c13g2000cwb.googlegroups.com>
Source record: 20927
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

I'm interested in building a FSK modem around a PIC microcontroller,
and am wondering how most FSK receivers convert the frequency to bits.
I'm open to a unique solution, and I've seen some frequency to voltage
converters that may work, but would like to know what some current
techniques are that may be a lot more reliable and simpler.
Thanks in advance!
Dave

496. Re: It's the L.I.A.R. wot stokes the fire.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 22:30:56 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <10ulqop79i6h259@corp.supernews.com>
Source record: 20929
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Airy R.Bean wrote:

> "Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
> news:34qdujF4dc60sU1@individual.net...
>
>>All signs of insecurity. If Gareth was sure of himself he could debate /
>>discuss at a technical level. I can't ever actually recall him doing this.
>>I'm sure there will be a name for his condition, probably even treatment.
>
>
>
So when are you going to stop?

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

497. Re: Transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 22:43:14 UTC
From: Phil <Phil@letskillspam.be>
Message-ID: <66CGd.32877$I24.2672738@phobos.telenet-ops.be>
Source record: 20931

"KU4YP" <ku4yp@verizon.net> wrote in message
news:EMxGd.5962$IP6.316@trnddc05...
> hello all,
>
> has any built, or considered building, just the transmitter section of
> the hw-8? i have a nice drake 2b and 2bq that i would like to build a
> low power cw transmitter to go with it. would like 80, 40 20 and 15 and
> possibly 10 included. i am gonna look through some handbooks but wanted
> to check here and not re-invent the wheel.
>
> any help appreciated.
>
> 73 ku4yp mike

Hello Mike,

I have been thinking of modifying my HW8 to let it transceive with my Drake 4B for some time (for many years in fact).

There is a plug on the back of the Drake 4B where you get a signal you just have to mix with a fixed oscillator to get the output frequency you need to let the two rigs act as a transceiver. Is there a similar plug on the Drake 2b?

The required fixed oscillator can be realised just by soldering the appropriate Xtal in the HW8, make some changes in the band switching circuits and realign it.

I bought the right Xtal years ago but never took the time to make it work. Now I have a good reason to do so:

I just erected a huge log-periodic beam for all my neighbours to see; so for the next few months I will limit myself to QRP to avoid that they make the link between that huge "thing in the air" and the interferences they could possibly see on their tv-sets.

The toughest part of it will be to find my notes on the subject after all those years (HI), but I will keep you acquainted as soon as I find them.

Kind regards,

Phil

498. Re: PIC operated FSK modem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 22:44:34 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <R4-dnVtb-YvIc3fcRVn-sA@comcast.com>
Source record: 20930
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

<dave.harper@gmail.com> wrote in message
news:1105914237.697946.128520@z14g2000cwz.googlegroups.com...
> I'm interested in building a FSK modem around a PIC microcontroller,
> and am wondering how most FSK receivers convert the frequency to bits.

The cheap and sleazy route is what you see many people doing on PICs (and similar) for DTMF detection: To detect a frequency F1, using your ADC's digital output, multiply the digital word by sin(F1*t) and cos(F1*t). Square and add the result, so that you have (ADC_Out*sin(F1*t))^2+(ADC_Out*cos(F1*t))^2. Take the running average of what you get, and use a threshold detector to decide whether or not that frequency is prsent.

The 'cheap and sleazy' part of this comes in as follows:

1) Arrange the frequencies to be, e.g., F1 and F2=2*F1. Sample at 8*F1. Now, all the sine and cosines become +/-1 -- no multiplier needed.
2) Use 'abs' rather than squaring the results -- no multiplier needed.

This isn't particularly robust (it fails rapidly if the input frequencies are off -- the DTMF guys typically don't have to worry about this because DTMF generation is very well controlled), but it gets the job done when you have a relatively high SNR signal and it's very simple and fast to implement since you've gotten rid of the multiplications.

For more narrowly spaced FSK detection, this still works, although you start having to build up tables of sin/cosine values -- and perform the multiplication. If you do have a hardware multiplier around in your particular PIC, this is perhaps still the way to go. If not, you start looking at what resources you do have... you can design more 'proper' digital filters with coefficients of only +/-1 and zero, although sometimes the implementation ends up being more CPU intensive than just doing software multiplies.

Using a tool such as Matlab is very handy for trying our various filtering/detectoin techniques prior to having to sit down and code up the result in C or assembly for a system running in real time!

---Joel Kolstad

499. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 23:05:19 UTC
From: "Jock." <real_class_a2003@yahoo.fr>
Message-ID: <pmslu0ln941k97jtmv2u9a33lsp9cd0uvr@4ax.com>
Source record: 20932
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sun, 16 Jan 2005 13:15:40 -0800, "CW" <cmagers@earthlink.net> a cretinous
top-poster, wrote:

>"Jock." <real_class_a2003@yahoo.fr> wrote in message
>news:sptiu01dkg29046dim1ncg01qenfa15qj4@4ax.com...
>> On Sat, 15 Jan 2005 09:31:11 -0800, "CW" <cmagers@earthlink.net> wrote:
>>
>> >Did you notice the word "amature" in the newsgroup title? You might want
>to
>> >consult a dictionary for the definition of that word.
>>
>> Isn't in my dictionary.

>You have a defective dictionary.

Really? Suppose you tell us what it means to save me looking
it up.

Jock.

--

"Do not fear to be eccentric in opinion, for every
opinion now accepted was once eccentric."
- Bertrand Russell

500. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 23:30:32 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41eafa6b$1_2@127.0.0.1>
Source record: 20933
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

NSM wrote:
> "Cecil Moore" <w5dxp@hotmail.com> wrote in message
> news:41e9679a$1_2@127.0.0.1...
>
> | The "cold heat" soldering iron works on the same principle as
> | an electric welding machine. Thus, there is the germ of a good
> | idea there. How about a soldering iron using the same principle
> | as the "cold heat" soldering machine except run off of 110VAC?
> | It could be transformer isolated, run on low voltage, and thus
> | be perfectly safe, but with a nearly unlimited source of power
> | to overcome the battery power limitation.
>
> Hmm, doing that up a pole in wet, cold weather. Why do I see a Homer Simpson
> episode in my mind?

Completely transformer/shielded. Why would it be less safe than a
welding machine?
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

501. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 23:34:50 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41eafb6e$1_2@127.0.0.1>
Source record: 20935
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Jock. wrote:

> "Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote:
>>Well Richard, over the years I'm met many Americans (I am pleased to say).
>>I've always though they sought to do things well- even within their hobbies.
>>Clearly, you are the exception.
>
> They are unerringly stupid - to a man.

Stupid enough to save Europe's posterior at least nthree
times in 100 years at tremendous cost and sacrifice.
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

502. Re: PIC operated FSK modem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 23:36:09 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <10uluj85ucs4h32@corp.supernews.com>
Source record: 20934
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Joel Kolstad wrote:

> <dave.harper@gmail.com> wrote in message
> news:1105914237.697946.128520@z14g2000cwz.googlegroups.com...
>
>>I'm interested in building a FSK modem around a PIC microcontroller,
>>and am wondering how most FSK receivers convert the frequency to bits.
>
>
> The cheap and sleazy route is what you see many people doing on PICs (and
> similar) for DTMF detection: To detect a frequency F1, using your ADC's
> digital output, multiply the digital word by sin(F1*t) and cos(F1*t).
> Square and add the result, so that you have
> (ADC_Out*sin(F1*t))^2+(ADC_Out*cos(F1*t))^2. Take the running average of
> what you get, and use a threshold detector to decide whether or not that
> frequency is prsent.
>
> The 'cheap and sleazy' part of this comes in as follows:
>
> 1) Arrange the frequencies to be, e.g., F1 and F2=2*F1. Sample at 8*F1.
> Now, all the sine and cosines become +/-1 -- no multiplier needed.
> 2) Use 'abs' rather than squaring the results -- no multiplier needed.
>
> This isn't particularly robust (it fails rapidly if the input frequencies
> are off -- the DTMF guys typically don't have to worry about this because
> DTMF generation is very well controlled), but it gets the job done when you
> have a relatively high SNR signal and it's very simple and fast to implement
> since you've gotten rid of the multiplications.
>
> For more narrowly spaced FSK detection, this still works, although you start
> having to build up tables of sin/cosine values -- and perform the
> multiplication. If you do have a hardware multiplier around in your
> particular PIC, this is perhaps still the way to go. If not, you start
> looking at what resources you do have... you can design more 'proper'
> digital filters with coefficients of only +/-1 and zero, although sometimes
> the implementation ends up being more CPU intensive than just doing software
> multiplies.
>
> Using a tool such as Matlab is very handy for trying our various
> filtering/detectoin techniques prior to having to sit down and code up the
> result in C or assembly for a system running in real time!
>
> ---Joel Kolstad

>
>
You could also do this by coding up the digital filters using only shifts. This is not for the faint of heart if you haven't done DSP before, but it can be done and should get you fairly good results. I'd recommend prototyping the algorithm on a PC then making sure that you have enough horsepower in your target processor before you start building a board.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

503. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 23:42:41 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41eafd45$1_2@127.0.0.1>
Source record: 20936
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

R. F. Burns wrote:
> I'm certainly not too worried because they seem to have too hard of a
> time proving anything. Unlike smoking and lung cancer anyway.

How many years was it from the first smoke until the lung cancer link
was suspected? How many years was it from the first cellphone until
brain tumors were suspected? It is unlike only in the amount of time.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

504. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-16 23:45:30 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41eafdee$1_2@127.0.0.1>
Source record: 20937
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Reg Edwards wrote:
> Please accept an ordinary Englishman's apologies for the obnoxious behaviour
> of a fellow human being ...

I don't know about that, Reg. He doesn't seem to be the same
species as you.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

505. homebrew transmatch question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 00:26:40 UTC
From: wboas@nyx.net
Message-ID: <Pine.SUN.3.96.1050116172300.2055A-100000@nyx>
Source record: 20938

Folks,

I have a homebrew transmatch I got from my Elmer that the
builder provided an alligator clip jumper with.

My question is how is the jumper used?

I posted photos of the outside and inside of the tuner at:

www.nyx.net/~wboas/tuner.html

for your reference. Any advice would be warmly appreciated.
I use it with a Kenwood 440 and a random wire.

Bill, KC0IZI
wboas@nyx.net

506. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 01:20:07 UTC
From: NSM <nowrite@to.me>
Message-ID: <bpEGd.105296$dv1.35887@edtnps89>
Source record: 20939
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:41eafa6b$1_2@127.0.0.1...
| NSM wrote:

| > Hmm, doing that up a pole in wet, cold weather. Why do I see a Homer
Simpson
| > episode in my mind?
|
| Completely transformer/shielded. Why would it be less safe than a
| welding machine?

Homer and electricity. Not a good combination - ever <G>!

N

507. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 01:34:12 UTC
From: s falke <busbar@pacbell.net>
Message-ID: <oCEGd.12366$5R.544@newssvr21.news.prodigy.com>
Source record: 20940
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

"Wayne R." <wruffner@KomKast.net> wrote...
> ...I can't begin to believe that one-flavor
> polyester cord is 'omnipotent' in the face of all the yuk and
> harshness the world offers. What other materials are there?
> ...

Has anyone mentioned not to chew on black-striped lacing cord? It is supposed
to be rat-poison "enhanced."

s falke

508. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 01:38:00 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <350j7cF4g28eaU1@individual.net>
Source record: 20941
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Airy R.Bean, village idiot" <retarded@twat> wrote in message
news:34vlmgF4genldU1@individual.net...
>
> You do not represent me in any way, BTW.
Thanks Beanie, that must be a great relief to him.
>
> "Airy R.Bean" is not a false name, it is a pseudonym, and is
> a practice to be commended to all who have dealings with
> u.r.a because of the presence of several vicious and mentally
> unstable characters who vent their CB spleens herein.
>
but since everyone here (with the possible exception of yourself) knows your
real name, that won't work.
The sock puppet you use is an anagram of another contributor, a person of
whom you appear insanely jealous.
Grow up Mr Evans, at nearly 54 years old you should know better.
...(_!_)...

509. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 03:33:56 UTC
From: Clarence_A <no@No.com>
Message-ID: <EmGGd.11171$wZ2.3717@newssvr13.news.prodigy.com>
Source record: 20942

"Airy R.Bean" <Me@privacy.net> wrote in message
news:3504ddF4haitpU1@individual.net...
> It's not just my opinion, it's the blatant truth that you get to
> see the new content without having to page down
> through loads of already-seen quotations.
>
> "Tony VE6MVP" <tony@REMOVEve6mvp.com> wrote in message
> news:7pllu0pal1dmi2r7rret7j5qpd6f7nn94f@4ax.com...
> > On Mon, 10 Jan 2005 14:27:08 -0000, "Airy R.Bean"
<Me@privacy.net>
> > wrote:
> >
> > >The posting misquoted me as a bottom poster.
> >
> > Ahh.
> >
> > >Top-posting is the preferred option - you get to
> > >see the new content without having to page down
> > >through loads of already-seen quotations.
> >
> > That's your opinion. Not mine.
> >
> > Tony
>
Bad manners are no excuse! Learn to be polite and follow the
rules!

510. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 03:59:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bqdmu0phoebk2m9tf4mcqgpb319e55uqtq@4ax.com>
Source record: 20943
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

```
On Mon, 17 Jan 2005 01:20:07 GMT, "NSM" <nowrite@to.me> wrote:

>
>"Cecil Moore" <w5dxp@hotmail.com> wrote in message
>news:41eafa6b$1_2@127.0.0.1...
>| NSM wrote:
>
>| > Hmm, doing that up a pole in wet, cold weather. Why do I see a Homer
>Simpson
>| > episode in my mind?
>|
>| Completely transformer/shielded. Why would it be less safe than a
>| welding machine?
>
>Homer and electricity. Not a good combination - ever <G>!

Hmmm, the episode I see is from Married With Children where Al and
Jefferson are putting together a workbench.
```

511. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 05:38:20 UTC
From: Tony VE6MVP <tony@REMOVEve6mvp.com>
Message-ID: <1qjmu0d50rq27kc5vl1a3tv5vqoq990vjs@4ax.com>
Source record: 20944

On Sun, 16 Jan 2005 21:21:39 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>It's not just my opinion, it's the blatant truth that you get to
>see the new content without having to page down
>through loads of already-seen quotations.

However I also trim.

Tony

512. Re: PIC operated FSK modem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 08:40:42 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <rspmu05nl4dc1012b10l6n6bl18d3gh8cg@4ax.com>
Source record: 20945
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

On Sun, 16 Jan 2005 15:36:09 -0800, Tim Wescott
<tim@wescottnospamdesign.com> wrote:

>You could also do this by coding up the digital filters using only
>shifts. This is not for the faint of heart if you haven't done DSP
>before, but it can be done and should get you fairly good results.

With FIR filters and 100-200 bytes of RAM, the shifting needs to be done only once when the sample arrives, by saving each intermediate value after each shift into a table. When the next sample arrives, the old sample table (instead of the original sample value only) is shifted into the next position (tap) of the FIR. This shifting can be done either by block copying or pointer arithmetics.

Since all taps in the FIR have access to all shifted versions of the corresponding sample, all that needs to be done, is adding together those values selected by the coefficient multiplier.

If the tap multipliers are constant and there are sufficiently ROM to have a separate routine for each tap, the elements selected are known at compile time, so you do not have to shift and test the multiplier. Assuming the original sample value is in Shifted[0] and the left shifted values in Shifted[1..7] and the sample value needs to be multiplied e.g. by 19 (00010011) the multiply by 19 routine would be similar to

```
Mul_19:

Add Shifted[0]
Add Shifted[1]
Add Shifted[4]
return
```

Thus,even if the processor lacks the multiply instruction, you only need to make on average 4 additions (for 8 bit multipliers) at each tap. However, the additions must be 16 bit wide for 8 bit samples and coefficients.

Paul OH3LWR

513. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 10:14:25 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <fU2iVfABA56BFw98@g3ohx.demon.co.uk>
Source record: 20946
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In message <41eafd45$1_2@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com>
writes
>R. F. Burns wrote:
>> I'm certainly not too worried because they seem to have too hard of a
>> time proving anything. Unlike smoking and lung cancer anyway.
>
>How many years was it from the first smoke until the lung cancer link
>was suspected? How many years was it from the first cellphone until
>brain tumors were suspected? It is unlike only in the amount of time.

It is also 'unlike' in that the link between smoking and lung cancer is
a 100% proven fact (well known since the 1950s) whereas the link between
cellphones and brain tumours is at best tenuous.

Surprisingly, people are suing tobacco companies on the grounds that
'they didn't know' that smoking was bad for you. I suspect that these
are the same type of people who want to ban phone masts, but not the
phones themselves, of course, ie pretty thick!

Ian.
--

514. Re: battery specific-gravity = AmpHour capacity?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 10:38:01 UTC
From: Borek <borek@parts.bpp.to.com.remove.pl>
Message-ID: <opskqs5nbn584cds@borek>
Source record: 20947
Cross-posted to: sci.chem.electrochem,sci.physics,sci.electronics.repair,rec.radio.amateur.homebrew

On 16 Jan 2005 02:08:07 -0600, R. F. Burns <R.F.> wrote:

> Battery terminal voltage is also an indication of specific gravity and
> SOC.

AFAIR - no. But internal resistance of battery - yes.

Best,
Borek

515. Re: It's the L.I.A.R. wot stokes the fire.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 11:16:07 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <351lqrF4hkhpvU1@individual.net>
Source record: 20848
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Mr.Westcott continues with his series of vacuous and infantile posts.....

"Tim Wescott" <tim@wescottnospamdesign.com> wrote in message
news:10ulqop79i6h259@corp.supernews.com...
> Airy R.Bean wrote:
> > "Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
> > news:34qdujF4dc60sU1@individual.net...
> >>All signs of insecurity. If Gareth was sure of himself he could debate /
> >>discuss at a technical level. I can't ever actually recall him doing
this.
> >>I'm sure there will be a name for his condition, probably even
treatment.
> So when are you going to stop?

516. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 11:32:09 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <351m82F4h1qjtU1@individual.net>
Source record: 20849

Your outburst below seems to be self-referential
in terms of bad manners.

There is no association with manners in the free and
personal choice of whether to post at the top or at the bottom,
it's just that - a free choice.

There is nothing that it impolite in exercising a free choice as to
style of presentation - if you think that there is - then you condemn
yourself by being impolite to those of us who are top-posters.

That you choose to target those whose choice is not your own
would seem to suggest that if anybody be the habitu&#65533; of bad manners,
then it is you.

There are no rules on the matter.

Your post below is a shining example of why top-posting is the
better and preferred option, for, in order to read what you put,
a page down was necessary. Another example of bad manners
from you, in fact, because you inconvenience those who just sit
on the "next" button to thumb through a NG.

"Clarence_A" <no@No.com> wrote in message
news:EmGGd.11171$wZ2.3717@newssvr13.news.prodigy.com...
> "Airy R.Bean" <Me@privacy.net> wrote in message
> news:3504ddF4haitpU1@individual.net...
> > It's not just my opinion, it's the blatant truth that you get to
> > see the new content without having to page down
> > through loads of already-seen quotations.
> > "Tony VE6MVP" <tony@REMOVEve6mvp.com> wrote in message
> > news:7pllu0pal1dmi2r7rret7j5qpd6f7nn94f@4ax.com...
> > > On Mon, 10 Jan 2005 14:27:08 -0000, "Airy R.Bean"
> <Me@privacy.net>
> > > wrote:
> > > >The posting misquoted me as a bottom poster.
> > > Ahh.
> > > >Top-posting is the preferred option - you get to
> > > >see the new content without having to page down
> > > >through loads of already-seen quotations.
> > > That's your opinion. Not mine.
> Bad manners are no excuse! Learn to be polite and follow the
> rules!

517. RadCom G3WPO RX80 Receiver IC KB4412 and SL1621 data sought.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 13:49:42 UTC
From: homebrewpete@yahoo.co.uk
Message-ID: <1615de71.0501170549.18427858@posting.google.com>
Source record: 20850

Hi all,

I have, for many years, been making the RX80 amateur band receiver, as published by G3WPO in RadCom in 1980. OK, I know, I am a slow worker. This receiver has a main 3 to 4 MHz tuner module, switchable frequency convertors for the other bands, huff puff vco stabilizer, FM if, and more.

After years laying dorment, I have decided to debug the radio, starting with the main tuner module, and I would like to find some data on the following parts:-

1. Toko KB4412 multifunction receiver IC. This is the heart of the receiver, the part I bought is labelled Uniden, not Toko. It is a 16 pin DIL chip, integrating the mixer, IF amplifier, and detector sections.

2. Plessey SL1621C AGC controller. This is an 8 pin DIL IC which generates the AGC control voltage derived from the audio signal.

I have search the web high and low, and although I have found some references to these parts, I cannot find dats sheets for them. Can anyone point me to the right location, or have a paper copy?

Many Thanks

Pete

518. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 13:59:47 UTC
From: Clarence_A <no@No.com>
Message-ID: <nxPGd.12471$5R.649@newssvr21.news.prodigy.com>
Source record: 20851

"Airy R.Bean" <Me@privacy.net> wrote in message
news:351m82F4h1qjtU1@individual.net...

<snipped BS>
> "Clarence_A" <no@No.com> wrote in message
> news:EmGGd.11171$wZ2.3717@newssvr13.news.prodigy.com...
> > "Airy R.Bean" <Me@privacy.net> wrote in message
> > news:3504ddF4haitpU1@individual.net...

<snipped BS>
> > > "Tony VE6MVP" <tony@REMOVEve6mvp.com> wrote in message
> > > news:7pllu0pal1dmi2r7rret7j5qpd6f7nn94f@4ax.com...
> > > > On Mon, 10 Jan 2005 14:27:08 -0000, "Airy R.Bean"
> > <Me@privacy.net>
> > > > wrote:
> > > > >The posting misquoted me as a bottom poster.
> > > > Ahh.
> > > > >Top-posting is the preferred option - you get to
> > > > >see the new content without having to page down
> > > > >through loads of already-seen quotations.
> > > > That's your opinion. Not mine.

> > Bad manners are no excuse! Learn to be polite and follow the
> > rules!

Another bad mannered top poster made his insensitive obvious and
ignore good advice so attempt to prove his defective preference
for breaking rules and being a general pain!

What do you need to teach manners? I see your mother failed!
Also you are not even trying!

There are rules by convention. But you choose to ignore them.

Since we are all free to exercise one option. Finding a poster
where there is
no intelligence conveyed! PLONK!

BYE

519. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 14:23:02 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <35208rF4fs78tU1@individual.net>
Source record: 20852

For someone who is shouting the odds about
bad manners, your outburst below really takes
the biscuit. It is the most hypocritical of rudeness.

Conventions are not rules - if they were to be so, then
everyone, including you, would follow the convention
of top-posting.

As to your rather silly and infantile outburst below....

Firstly, it is random nonsense and complies with none
of the conventions (or, in your own logic, rules) of written
English - hypocrisy once again from you, it would seem.

Secondly, grow up, Clarence!

Stupid boy.

"Clarence_A" <no@No.com> wrote in message
news:nxPGd.12471$5R.649@newssvr21.news.prodigy.com...
> > "Clarence_A" <no@No.com> wrote in message
> > > Bad manners are no excuse! Learn to be polite and follow the
> > > rules!
> Another bad mannered top poster made his insensitive obvious and
> ignore good advice so attempt to prove his defective preference
> for breaking rules and being a general pain!
> What do you need to teach manners? I see your mother failed!
> Also you are not even trying!
> There are rules by convention. But you choose to ignore them.
> Since we are all free to exercise one option. Finding a poster
> where there is
> no intelligence conveyed! PLONK!

520. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 14:24:15 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41ebcbe4$1_1@127.0.0.1>
Source record: 20853
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Ian Jackson wrote:
> It is also 'unlike' in that the link between smoking and lung cancer is
> a 100% proven fact (well known since the 1950s) whereas the link between
> cellphones and brain tumours is at best tenuous.

That is only a time displacement. In 1900, after hundreds (thousands?)
of years of tobacco use, the link between smoking and lung cancer was
"at best tenuous".
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

521. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 15:54:45 UTC
From: KW <ken.g1itv@MTLworld.com>
Message-ID: <9dRGd.73$Om2.5@newsfe2-gui.ntli.net>
Source record: 20854
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:41ebcbe4$1_1@127.0.0.1...
> Ian Jackson wrote:
>> It is also 'unlike' in that the link between smoking and lung cancer is a
>> 100% proven fact (well known since the 1950s) whereas the link between
>> cellphones and brain tumours is at best tenuous.
>
> That is only a time displacement. In 1900, after hundreds (thousands?)
> of years of tobacco use, the link between smoking and lung cancer was
> "at best tenuous".

and at worst..... "Tumor(ous)"

KW

522. Alinco DR 590 modifications?????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 15:59:00 UTC
From: stryped@hotmail.com
Message-ID: <1105977540.872843.207050@f14g2000cwb.googlegroups.com>
Source record: 20855

As many of you know I am fairly new to ham and got a radio to use as a base station this weekend. It is an ALinco dr 590. The guy told me it had been modified to receive and transmit on extended frequercncies even cellular.

I do not intend or want to transmitt illegally but it would be nice to recieve the local police and aircraft if possible. When I plugged it up I could get the frequency of my local police at 452 mhz but did not have an antenna to see if I could hear anything or not. The vhf goes from 130-174 I think. The uhf displays to 500 mhz. How can I tell if this radio has been modified easily?

Also I thought cellular was 800 - 900 mhz. I could not get it to display that.

As a last note does anyone know how I can find online a free manual for htis book? I have looked but only been able to find the service manual. Thanks again!

523. Re: Alinco DR 590 modifications?????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 16:05:54 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <CnRGd.9605$ru.5323@fed1read07>
Source record: 20856

Your users manual and service manual for the DR 590 are at URL:
http://www.mods.dk/view.php?ListManuals=alinco

--
Caveat Lector

<stryped@hotmail.com> wrote in message
news:1105977540.872843.207050@f14g2000cwb.googlegroups.com...
> As many of you know I am fairly new to ham and got a radio to use as a
> base station this weekend. It is an ALinco dr 590. The guy told me it
> had been modified to receive and transmit on extended frequercncies
> even cellular.
>
>
> I do not intend or want to transmitt illegally but it would be nice to
> recieve the local police and aircraft if possible. When I plugged it up
> I could get the frequency of my local police at 452 mhz but did not
> have an antenna to see if I could hear anything or not. The vhf goes
> from 130-174 I think. The uhf displays to 500 mhz. How can I tell if
> this radio has been modified easily?
>
>
> Also I thought cellular was 800 - 900 mhz. I could not get it to
> display that.
>
>
> As a last note does anyone know how I can find online a free manual for
> htis book? I have looked but only been able to find the service manual.
> Thanks again!
>

524. Best place for power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 18:54:39 UTC
From: stryped@hotmail.com
Message-ID: <1105988079.039595.319100@f14g2000cwb.googlegroups.com>
Source record: 20857

Is there a best place to find or make a cheap power supply for a 50 watt mobile radio to use as a base station? Are computer power supply's good?

525. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 19:25:57 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <glO2UpGFFB7BFwQo@newbrain.demon.co.uk>
Source record: 20858
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <fU2iVfABA56BFw98@g3ohx.demon.co.uk>, Ian Jackson
<IanJacksonRemoveThisBit@g3ohx.demon.co.uk> writes
>In message <41eafd45$1_2@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com>
>writes
>>R. F. Burns wrote:
>>> I'm certainly not too worried because they seem to have too hard of a
>>> time proving anything. Unlike smoking and lung cancer anyway.
>>
>>How many years was it from the first smoke until the lung cancer link
>>was suspected? How many years was it from the first cellphone until
>>brain tumors were suspected? It is unlike only in the amount of time.
>
>It is also 'unlike' in that the link between smoking and lung cancer is
>a 100% proven fact (well known since the 1950s) whereas the link
>between cellphones and brain tumours is at best tenuous.
>
>Surprisingly, people are suing tobacco companies on the grounds that
>'they didn't know' that smoking was bad for you. I suspect that these
>are the same type of people who want to ban phone masts, but not the
>phones themselves, of course, ie pretty thick!

The are probably also quite happy to have a TV transmitting mast at a
thousand or more times the power.
--
Ian G8ILZ

526. Re: Best place for power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 19:33:02 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <10uo4n7aflj3oe5@corp.supernews.com>
Source record: 20859

stryped@hotmail.com wrote:

> Is there a best place to find or make a cheap power supply for a 50
> watt mobile radio to use as a base station? Are computer power supply's
> good?
>
Computer power supplys are designed to produce a heck of a lot of power
at the processor's voltage, which is 2.5, 1.8, 1.2 or some other
absurdly low figure, and not much at 12V.

Check the surplus places for power supplies: Marlin P Jones and All
Electronics are two good ones in the US.

http://www.mpja.com/
http://www.allelectronics.com/

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

527. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 19:35:54 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <352if3F4fc5a8U1@individual.net>
Source record: 20860
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Prometheus" <Prometheus@127.0.0.1> wrote in message
news:glO2UpGFFB7BFwQo@newbrain.demon.co.uk...
> >Surprisingly, people are suing tobacco companies on the grounds that
> >'they didn't know' that smoking was bad for you. I suspect that these
> >are the same type of people who want to ban phone masts, but not the
> >phones themselves, of course, ie pretty thick!
>
> The are probably also quite happy to have a TV transmitting mast at a
> thousand or more times the power.

It is a well know fact that RF modulated with naff TV (East Enders, Big
Brother etc) is rendered safe and has no adverse effects (unless you watch
the programmes).

For those with limited technical knowledge of EM radiation (eg at a level
where they believe in heat bands) the above is intended as humour.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

528. WTB: Avcom Frequency Extender MFC-1700 / MFC-1727

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 20:18:08 UTC
From: Stephan Clark <stephanclark001@hotmail.nospam.net>
Message-ID: <pb7ou01o8kci2cbngblq7kvf4cabm0tngi@4ax.com>
Source record: 20861

greetings all,

I am looking to buy a used Avcom MFC-1700 / MFC-1727 for my PSA-65A spectrum analyzer.

Please e-mail stephanclark001@yahoo.com

Thank you.

529. Low Band Transmitter for SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 20:30:44 UTC
From: servdave@aol.com
Message-ID: <20050117153044.15889.00000107@mb-m15.aol.com>
Source record: 20862

Its a Quintron QT-350 Watt Transmitter
30 to 50 mhz range - weighs 320 lbs
Metal cabinet - rack sections - locking doors
1 tube - crystal controlled phase modulated- 100% cont. duty
Complete for $500 - Contact for more details:
ServDave@aol.com

530. HQ-120 Receiver for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 20:33:14 UTC
From: servdave@aol.com
Message-ID: <20050117153314.15889.00000108@mb-m15.aol.com>
Source record: 20863

HQ-120 tube rec. for sale-Excellent working condition
contact: KB8QKE@Aol.com for details-looks great! works great-long wire

531. Re: Best place for power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 21:20:34 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <f0WGd.12078$W_7.3471@fe04.lga>
Source record: 20864

<stryped@hotmail.com> wrote in message
news:1105988079.039595.319100@f14g2000cwb.googlegroups.com...
> Is there a best place to find or make a cheap power supply for a 50
> watt mobile radio to use as a base station? Are computer power supply's
> good?

You may want to think through what you want longer term. There are a number of projects around to convert a computer power supply to 12 volts. Might be a bit of a push for a 50 watt radio, I'm not sure. Google for "St. Louis Switcher" or similar.

Supplies are pretty simple, so building one from scratch isn't impossible, but the transformers can be hard to come by.

A cheap commercial supply will give you days of good use. Seriously, there is a lot of pure junk out there, some of it not so cheap. Many of them are very noisy and can put hum on your transmitted signal or make it hard to hear. Some will work for a short while before dying.

Before you make the investment think about your future needs. A good supply can run well over $100 but can last you for decades. Are you going to get on HF and thus need more amps? Are you going to get interested in meteor scatter and need an amplifier for still more amps? Don't go buying a 10 amp supply only to discover that you need another 10 and then another 10. If you decide to go for a good supply go ahead and get 30 or 50 amps worth so your future needs are covered.

Many folks use a marine battery and a trickle charger. This not only gives them plenty of power for the shack, but it keeps them on the air when the lights go out. You need to take care about ventilation and battery leakage, but I don't know anyone who has done this and ever thought about going to a commercial supply. I'm pretty happy with my Astron, but when the lights go out, I'm limited to my HT.

..

532. Re: 2N3553 NPNs for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 21:31:03 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <r8WGd.189$ga2.69@newsfe6-win.ntli.net>
Source record: 20865

> I have a small supply of new old stock 2N3553 NPN transistors I'm
> offering for sale.
>
> You can see a datasheet on the 2N3553 at:
>
> http://www.oselectronics.com/downloads/2n3553.pdf
>
> I'm selling them in lots of 10 pieces for $22.00 INCLUDING DOMESTIC
> SHIPPING. There is an additional $2 charge for overseas shipping.
==========
In the UK the 2N3553 is available for GBP 0.95 each
,slightly cheaper than above with P+P paid.

Frank GM0CSZ / KN6WH

533. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-17 23:56:17 UTC
From: cvairwerks@tigerbyte.net
Message-ID: <1106006177.095721.268050@z14g2000cwz.googlegroups.com>
Source record: 20866
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

Most of the stuff that I use doesn't seem to care if it is awash in jet fuel, 5606, diesel fuel, Hydrazine or anything else.

As to time, I can generally have my tie run and be tightening it by the time you have selected the correct TyWrap to use.
Craig C.
cvairwerks@ev1.net

534. Re: Best place for power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-18 01:45:21 UTC
From: geir knutsen <ge-knuts@online.no>
Message-ID: <NSZGd.4900$IW4.100902@news2.e.nsc.no>
Source record: 20867

Here is the cheep and ham way of getting a psu. Try and get your hands on a
BIG 12v charger (a used of the kind used on service stations) 60 -70 amp.
This is the base for your psu. The rest you can find on the drawing.
http://www.qsl.net/yo5ofh/projects/power_supply.gif

Geir

<stryped@hotmail.com> wrote in message
news:1105988079.039595.319100@f14g2000cwb.googlegroups.com...
> Is there a best place to find or make a cheap power supply for a 50
> watt mobile radio to use as a base station? Are computer power supply's
> good?
>

535. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-18 04:22:12 UTC
From: mike <mike@mike42.com>
Message-ID: <pan.2005.01.18.04.26.35.474372@mike42.com>
Source record: 20868

On Mon, 17 Jan 2005 14:23:02 +0000, Airy R.Bean wrote:
> Conventions are not rules - if they were to be so, then everyone,
> including you, would follow the convention of top-posting.

RFC 1855 - Netiquette Guidelines

http://www.faqs.org/rfcs/rfc1855.html

- If you are sending a reply to a message or a posting be sure you
summarize the original at the top of the message, or include just
enough text of the original to give a context. This will make
sure readers understand when they start to read your response.
Since NetNews, especially, is proliferated by distributing the
postings from one host to another, it is possible to see a
response to a message before seeing the original. Giving context
helps everyone. But do not include the entire original!

It's just a guide - the rest of it is worth reading too....

- Mike

536. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-18 04:58:37 UTC
From: lenover21@aol.com
Message-ID: <20050117235837.25387.00000040@mb-m17.aol.com>
Source record: 20869

In article <p0olt0dt4veriks2vucuqkrds5l7acpdd5@4ax.com>, Bill Turner
<noway@nohow.com> writes:

>First of all, this anecdote has the ring of untruth.

Roughly about 12 bells all ringing out some jolly tune. :-)

First of all, Air Regulations are in place, have been in place
for decades, to handle aircraft without working radio
equipment. Those are lights in hand-held spotlights.

While it is an Air Regulation that aircraft operating into, over, and
out of air traffic controlled airports must have radios for normal
traffic guidance, there are also safety regulations which anticipate
that someone at some time might have equipment problems.
Flight instructors would surely know that.

In a real-life happening about two decades ago in Los Angeles,
a helicopter instructor's microphone somehow got stuck on
transmit on the normal tower frequency. Having had an aircraft
receiver on in my workshop one Saturday (house is about a mile
and a half from Bob Hope Airport - formerly the Burbank-Glendale-
Pasadena Airport in the east end of San Fernando Valley), I heard
the happening. All listeners could hear the the instructor advise
his student about helicopter hover flying. Somehow the mike
was connected to both the helo intercom and the aircraft radio.

Being AM, the stuck helo transmissions would block all weaker
signals on the BUR tower frequency. BUR tower could overpower
the helo's radio because it was higher power and had elevated
antennas of good size. However, all other traffic was blocked out
for the BUR tower and they had to get a temporary recording
going on other frequencies (approach, departure, radar vectoring)
plus advising VNY (Van Nuys, center of Valley) and LAX of the
problem. The radio blockage continued for about a half hour and
disrupted normal afternoon flying at BUR. How the helo was
informed isn't known but one circulating story has it that an FAA
van drove out to the end of the airport where the hovering took
place and signalled to the helo somehow, perhaps by lights.
The helicopter instructor apologized (apparently when signalled)
over the radio and the frustrated tower operators (at least two
voices) told him, also over the radio, to "report to the tower." :-)

>But even if true, this is a perfect example of the wrong way to solve a
>problem. Instead of relying on Morse for a backup, how about having a
>second radio, perhaps an HT, in the plane?

That's quite common in this area for general aviation aircraft who don't already have two comm radios installed. The Greater Los Angeles section has an extraordinary amount of aircraft traffic. IFR applies to some localized areas. Generally, the FAA can transmit voice over the VOR and/or Localizer in the adjacent radionavigation band (108 - 118 MHz, also AM). The major HT manufacturers all produce a civil aviation model for private aircraft use. Lacking that, the towers have fairly biright aimable spotlights which they can use to signal an aircraft; seldom used, they are there for emergencies. Lacking recognition by a "silent" aircraft, the FAA is prepared to handle it as best as other traffic allows. The FAA air controller's school does not have morse code cognition in its curriculum.

LenAnderson@ieee.org

Posted on 17 Jan 05

537. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-18 05:56:54 UTC
From: dplatt@radagast.org
Message-ID: <10up996nv49tqa1@corp.supernews.com>
Source record: 20870

In article <pan.2005.01.18.04.26.35.474372@mike42.com>,
mike <mike@mike42.com> wrote:
>On Mon, 17 Jan 2005 14:23:02 +0000, Airy R.Bean wrote:
>> Conventions are not rules - if they were to be so, then everyone,
>> including you, would follow the convention of top-posting.
>
>RFC 1855 - Netiquette Guidelines
>
>http://www.faqs.org/rfcs/rfc1855.html
>
>- If you are sending a reply to a message or a posting be sure you
> summarize the original at the top of the message, or include just
> enough text of the original to give a context. This will make
> sure readers understand when they start to read your response.
> Since NetNews, especially, is proliferated by distributing the
> postings from one host to another, it is possible to see a
> response to a message before seeing the original. Giving context
> helps everyone. But do not include the entire original!
>
>It's just a guide - the rest of it is worth reading too....

That's correct.

The convention on USENET, and on ARPANET mailing lists such as "info-mac" (the first I ever read), has long been one of "quote the material you are responding to, and put your response after it". That's been the case since at least 1980, and I believe that it dates back even further than that - probably to the first Unix email systems and likely back to the days of email on PDP-11s and TOPS-10/TOPS-20/TENEX systems. In other words, it's a deeply rooted Internet tradition.

I believe this tradition is probably derived from older written-English traditions, such as the "letters to the editor" tradition in which a writer's letter would be printed in whole or part, and an editor's responses to the points made therein being printed after, or interspersed with the letter. I've never seen an editor's rejoinders printed *before* the letter writer's text.

Footnotes and other clarifying comments inserted by a book's editor are likewise printed beneath the text to which they refer.

On the Internet, the use of "top posting" is a much more recent phenomenon. It seems to date to the first arrival of Internet-capable email software authored by Microsoft, a company whom many seem to feel takes delight in ignoring prevailing standards.

One might say that the Internet's "gentleman's tradition" (no disrespect to the ladies being intended by the use of that phrase) is one of interspersed or "bottom" posting, and that those who understand the Internet technical culture and who value "gentlemanly" behavior would choose to respect that tradition.

In an absolute sense, one can argue that neither top nor bottom posting is inherently superior. Howeve, bottom/interspersed posting "got here first" and has been part of Internet tradition for longer than there has been an Internet (big "I").

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

538. It's the L.I.A.R. wot stokes the fire.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-18 10:31:04 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <35479nF4i72ilU1@individual.net>
Source record: 20871
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:352if3F4fc5a8U1@individual.net...
> For those with limited technical knowledge of EM radiation (eg at a level
> where they believe in heat bands) the above is intended as humour.

539. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-18 11:08:01 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <35499vF4ftkcrU1@individual.net>
Source record: 20873

The comma in "top of the message, or include just" shows that
two suggestions are being made, one suggestion is
bottom-posting and the other suggestion is not.

As you say, "It's just a guide" - not rules, but just a guide.

I see that you conveniently forgot to quote the author's
comments that the quoted bit below was just his own
personal preference and not a rule.

"mike" <mike@mike42.com> wrote in message
news:pan.2005.01.18.04.26.35.474372@mike42.com...
> On Mon, 17 Jan 2005 14:23:02 +0000, Airy R.Bean wrote:
> > Conventions are not rules - if they were to be so, then everyone,
> > including you, would follow the convention of top-posting.
> RFC 1855 - Netiquette Guidelines
>
> - If you are sending a reply to a message or a posting be sure you
> summarize the original at the top of the message, or include just
> enough text of the original to give a context. This will make
> sure readers understand when they start to read your response.
> Since NetNews, especially, is proliferated by distributing the
> postings from one host to another, it is possible to see a
> response to a message before seeing the original. Giving context
> helps everyone. But do not include the entire original!
> It's just a guide - the rest of it is worth reading too....

540. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-18 11:08:26 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1106046506.089375.22190@f14g2000cwb.googlegroups.com>
Source record: 20872
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

Mmm, cant figure out this new format, so will let fly with probably already said. Lacing looks lovely, and is a skill used to distinguish old techs from young techs, cable ties can cut cable, and can cut fingers as well. Unless there is controlled tension in the cable tie gun, pressure is too variable. Cable ties can start fires, especially when someone puts then round a convenient sharp edged bracket which then cuts into the conductor carrying current. Not nice - very impressive, but not nice.

Lacing should be done with plastic solid core tubing, not waxed nylon or string or anthing else that was used for lead sheath cables in 1930. Phenomena known as "cold flow" where the lacing material can displace the insulation of the bundle. A well done laced cable run is a thing of beauty, and if dressed properly you can virtually trace a conductor from one end to the other. It used to be a trade skill, along with choosing the correct size hammer for "minor adjustments" Ah, the good old days......

73 de VK3BFA Andrew

541. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-18 11:10:01 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <3549a1F4ftkcrU2@individual.net>
Source record: 20874

The style in which one posts has nothing to do
with gentlemanliness.

"Dave Platt" <dplatt@radagast.org> wrote in message
news:10up996nv49tqa1@corp.supernews.com...
> One might say that the Internet's "gentleman's tradition" (no
> disrespect to the ladies being intended by the use of that phrase) is
> one of interspersed or "bottom" posting, and that those who understand
> the Internet technical culture and who value "gentlemanly" behavior
> would choose to respect that tradition.

542. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-18 14:09:13 UTC
From: Clarence_A <no@No.com>
Message-ID: <dM8Hd.3055$8Z1.997@newssvr14.news.prodigy.com>
Source record: 20875

"Airy R.Bean" <Me@privacy.net> wrote in message
news:3549a1F4ftkcrU2@individual.net...
> The style in which one posts has nothing to do
> with gentlemanliness.
>
> "Dave Platt" <dplatt@radagast.org> wrote in message
> news:10up996nv49tqa1@corp.supernews.com...
> > One might say that the Internet's "gentleman's tradition" (no
> > disrespect to the ladies being intended by the use of that
phrase) is
> > one of interspersed or "bottom" posting, and that those who
understand
> > the Internet technical culture and who value "gentlemanly"
behavior
> > would choose to respect that tradition.
>

Obviously the man is unaware of what a gentleman is!

Plonk!

543. Kenwood PS-40 switching PS ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-18 15:26:10 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <mU9Hd.19989$iC4.2906@newssvr30.news.prodigy.com>
Source record: 20876
Cross-posted to: sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

This is a 20 amp switching power supply for their 12 volt ham transceivers. I used to leave it on 24 hours a day on receive pulling less than an amp with no problems but about a month ago it started to shut off. You have to turn it off first and wait about 15 minutes and it'll come back on, sometimes for an hour or longer and other times for 5 to 10 minutes. After it goes down you have to turn it off and then wait 10 to 15 and it'll come back for an unpredictable time. It doesn't seem matter if it been on for an hour or sometime 5 minutes, it'll shut down. It doesn't seem to be a cold or heat problem and flexing the board or tapping components won't turn it off or make it come on quicker. I don't have a schematic and can't find one. It must have some kind of logic that senses something and makes it shut down and then time out. One thing I have noticed is that if I turn it on when its not ready to come on I can hear a very, very faint noise (like static discharge) that goes away as soon as the switch is turned off. It has a TL494CN. Any tips appreciated.

--

73
Hank WD5JFR

544. Re: Kenwood PS-40 switching PS ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-18 18:59:52 UTC
From: sofie <sofie@olypen.com>
Message-ID: <10uqn75tb4oc77f@corp.supernews.com>
Source record: 20877
Cross-posted to: sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Henry:
As long as it is still w"working" the problem is not likely anything more
than either cold or cracked solder connection OR electrolytics that have
dried out or have developed high ESR. If you do not have an ESR meter then
you will have to use the "one by one" substitution method... or just replace
all of the electrolytics at once. Just about all other methods of testing
electrolytics will not provide the crucial ESR test needed especially for
electrolytics in switching power supplies and other high frequency or
critical circuitry.
DO NOT keep running your power supply with this problem.... it will only get
worse to the point that it will fail all together and be a much more
involved repair.
--
Best Regards,
Daniel Sofie
Electronics Supply & Repair
- -

"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
news:mU9Hd.19989$iC4.2906@newssvr30.news.prodigy.com...
> This is a 20 amp switching power supply for their 12 volt ham
transceivers.
> I used to leave it on 24 hours a day on receive pulling less than an amp
> with no problems but about a month ago it started to shut off. You have
to
> turn it off first and wait about 15 minutes and it'll come back on,
> sometimes for an hour or longer and other times for 5 to 10 minutes.
After
> it goes down you have to turn it off and then wait 10 to 15 and it'll come
> back for an unpredictable time. It doesn't seem matter if it been on for
an
> hour or sometime 5 minutes, it'll shut down. It doesn't seem to be a cold
or
> heat problem and flexing the board or tapping components won't turn it
off
> or make it come on quicker. I don't have a schematic and can't find one.
> It must have some kind of logic that senses something and makes it shut
down
> and then time out. One thing I have noticed is that if I turn it on when
> its not ready to come on I can hear a very, very faint noise (like static
> discharge) that goes away as soon as the switch is turned off. It has a
> TL494CN. Any tips appreciated.
>

> --
>
> 73
> Hank WD5JFR
>
>

545. Re: FS: 8877 & 3CX3000A7

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-18 19:02:01 UTC
From: plasma05 <ian@rfglobalsolutions.co.uk>
Message-ID: <9b877c47d76f87f0fae45b19ecf0a4ae@localhost.talkaboutradio.com>
Source record: 20878

I am looking for a 3cx3000a7 if you still have one can afford about $500 at the moment

546. 3cx3000a7 power tube

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-18 19:08:20 UTC
From: plasma05 <ian@rfglobalsolutions.co.uk>
Message-ID: <36773067319b3ff1c86b8a8487f398f7@localhost.talkaboutradio.com>
Source record: 20879

Looking for a 3cx3000a7 power tube at a reasonable price
anyone got any lying spare

547. Re: Kenwood PS-40 switching PS ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-18 19:40:10 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <uCdHd.20046$iC4.15802@newssvr30.news.prodigy.com>
Source record: 20880
Cross-posted to: sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

The power supply was turned on this morning at 8 am and shut down in less
than 10 minutes. I turned it back on about 9:30 and it is still on, that's
over 4 hours. I'm not that versed on ESR but I have a tester and cm
curious if high ESR can be an intermittent condition and if so what would
the physics of that phenomena be? At this point I'm not willing to do a
shotgun replacement of all the caps. I do keep running the power supply and
the condition is not getting worse. I wish it would fail so I might find
the failed component. The way it is now it's impossible to troubleshoot
without shotgunning.

--

73
Hank WD5JFR
"sofie" <sofie@olypen.com> wrote in message
news:10uqn75tb4oc77f@corp.supernews.com...
> Henry:
> As long as it is still w"working" the problem is not likely anything more
> than either cold or cracked solder connection OR electrolytics that have
> dried out or have developed high ESR. If you do not have an ESR meter
> then
> you will have to use the "one by one" substitution method... or just
> replace
> all of the electrolytics at once. Just about all other methods of
> testing
> electrolytics will not provide the crucial ESR test needed especially for
> electrolytics in switching power supplies and other high frequency or
> critical circuitry.
> DO NOT keep running your power supply with this problem.... it will only
> get
> worse to the point that it will fail all together and be a much more
> involved repair.
> --
> Best Regards,
> Daniel Sofie
> Electronics Supply & Repair
> -
>
>
>
> "Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
> news:mU9Hd.19989$iC4.2906@newssvr30.news.prodigy.com...
>> This is a 20 amp switching power supply for their 12 volt ham
> transceivers.

>> I used to leave it on 24 hours a day on receive pulling less than an amp
>> with no problems but about a month ago it started to shut off. You have
> to
>> turn it off first and wait about 15 minutes and it'll come back on,
>> sometimes for an hour or longer and other times for 5 to 10 minutes.
> After
>> it goes down you have to turn it off and then wait 10 to 15 and it'll
>> come
>> back for an unpredictable time. It doesn't seem matter if it been on for
> an
>> hour or sometime 5 minutes, it'll shut down. It doesn't seem to be a cold
> or
>> heat problem and flexing the board or tapping components won't turn it
> off
>> or make it come on quicker. I don't have a schematic and can't find one.
>> It must have some kind of logic that senses something and makes it shut
> down
>> and then time out. One thing I have noticed is that if I turn it on when
>> its not ready to come on I can hear a very, very faint noise (like static
>> discharge) that goes away as soon as the switch is turned off. It has a
>> TL494CN. Any tips appreciated.
>>
>> --
>>
>> 73
>> Hank WD5JFR
>>
>>
>
>

548. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-18 20:21:37 UTC
From: phil-news-nospam@ipal.net
Message-ID: <csjr4h21ct4@news2.newsguy.com>
Source record: 20882
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

In alt.engineering.electrical Andrew VK3BFA <ablight@alphalink.com.au> wrote:

| Mmm, cant figure out this new format, so will let fly with probably
| already said. Lacing looks lovely, and is a skill used to distinguish
| old techs from young techs, cable ties can cut cable, and can cut
| fingers as well. Unless there is controlled tension in the cable tie
| gun, pressure is too variable. Cable ties can start fires, especially
| when someone puts then round a convenient sharp edged bracket which
| then cuts into the conductor carrying current. Not nice - very
| impressive, but not nice.

I use cable ties for a number of wires (usually power) inside PC's I build.
But one thing I do is make sure I offset the wires from the attached metal.
If the metal is at about a 90 degree angle, then I use 2 cable ties that
wrap each other. If the metal is parallel to the wiring, then 3 cable ties
are used. Lacing would not be very practical inside a PC unless it is part
of a designed manufacturing process where you would have a pre-built harness
or something.

--

| Phil Howard KA9WGN | http://linuxhomepage.com/ http://ham.org/ |
| (first name) at ipal.net | http://phil.ipal.org/ http://ka9wgn.ham.org/ |
----

549. Re: Kenwood PS-40 switching PS ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-18 20:27:10 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <10uqs8mp7ml5qc4@corp.supernews.com>
Source record: 20881
Cross-posted to: sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Henry Kolesnik wrote:

> The power supply was turned on this morning at 8 am and shut down in less
> than 10 minutes. I turned it back on about 9:30 and it is still on, that's
> over 4 hours. I'm not that versed on ESR but I have a tester and cm
> curious if high ESR can be an intermittent condition and if so what would
> the physics of that phenomena be? At this point I'm not willing to do a
> shotgun replacement of all the caps. I do keep running the power supply and
> the condition is not getting worse. I wish it would fail so I might find
> the failed component. The way it is now it's impossible to troubleshoot
> without shotgunning.
>

A dried out cap is not an intermittent problem, but if the supply turns
off when some threshold is reached and that threshold has lowered
because of the cap's high ESR then the actual trigger would be caused by
power line fluctuations, temperature changes, etc.

A cold solder joint would be quite intermittent, but it would show up
with board flexing and other "wiggling" kind of diagnostics.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

550. Re: Kenwood PS-40 switching PS ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-18 20:47:57 UTC
From: "Jerry G." <jerryg50@hotmail.com>
Message-ID: <355d41F4i8iebU5@uni-berlin.de>
Source record: 20883
Cross-posted to: sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Do an ESR test on the caps. Chances are you will only have a number of bad caps. Sometimes it is best to cool and heat the caps under test. I use a heatgun, and freeze spray to cool and heat them.

--

Jerry G.
======

"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message news:mU9Hd.19989$iC4.2906@newssvr30.news.prodigy.com...
This is a 20 amp switching power supply for their 12 volt ham transceivers. I used to leave it on 24 hours a day on receive pulling less than an amp with no problems but about a month ago it started to shut off. You have to turn it off first and wait about 15 minutes and it'll come back on, sometimes for an hour or longer and other times for 5 to 10 minutes. After it goes down you have to turn it off and then wait 10 to 15 and it'll come back for an unpredictable time. It doesn't seem matter if it been on for an hour or sometime 5 minutes, it'll shut down. It doesn't seem to be a cold or heat problem and flexing the board or tapping components won't turn it off or make it come on quicker. I don't have a schematic and can't find one. It must have some kind of logic that senses something and makes it shut down and then time out. One thing I have noticed is that if I turn it on when its not ready to come on I can hear a very, very faint noise (like static discharge) that goes away as soon as the switch is turned off. It has a TL494CN. Any tips appreciated.

--

73
Hank WD5JFR

551. Re: Kenwood PS-40 switching PS ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-18 23:07:49 UTC
From: sofie <sofie@olypen.com>
Message-ID: <10ur5o2afue2r1c@corp.supernews.com>
Source record: 20884
Cross-posted to: sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Henry:
It is your power supply and your pocket book. If you continue to run it
until it quits altogether the repair will be more involved and probably much
more expensive than just replacing electrolytics or resoldering connections.
It might not gradually get "worse" than it is now, But rather it might have
a catastrophic failure of other parts that are stressed by the high ESR
electrolytic(s) or cracked board connections.... parts like diodes,
switching transistors, integrated circuits, opto-isolator, etc, etc.
Takes your choice and pays your money.
--
Best Regards,
Daniel Sofie
Electronics Supply & Repair
- -

\
"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
news:uCdHd.20046$iC4.15802@newssvr30.news.prodigy.com...
> The power supply was turned on this morning at 8 am and shut down in less
> than 10 minutes. I turned it back on about 9:30 and it is still on,
that's
> over 4 hours. I'm not that versed on ESR but I have a tester and cm
> curious if high ESR can be an intermittent condition and if so what would
> the physics of that phenomena be? At this point I'm not willing to do a
> shotgun replacement of all the caps. I do keep running the power supply
and
> the condition is not getting worse. I wish it would fail so I might find
> the failed component. The way it is now it's impossible to troubleshoot
> without shotgunning.
>
> --
>
> 73
> Hank WD5JFR
> "sofie" <sofie@olypen.com> wrote in message
> news:10uqn75tb4oc77f@corp.supernews.com...
> > Henry:
> > As long as it is still w"working" the problem is not likely anything
more
> > than either cold or cracked solder connection OR electrolytics that have
> > dried out or have developed high ESR. If you do not have an ESR meter
> > then
> > you will have to use the "one by one" substitution method... or just

> > replace
> > all of the electrolytics at once. Just about all other methods of
> > testing
> > electrolytics will not provide the crucial ESR test needed especially
for
> > electrolytics in switching power supplies and other high frequency or
> > critical circuitry.
> > DO NOT keep running your power supply with this problem.... it will only
> > get
> > worse to the point that it will fail all together and be a much more
> > involved repair.
> > --
> > Best Regards,
> > Daniel Sofie
> > Electronics Supply & Repair
> > -
> >
> >
> >
> > "Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
> > news:mU9Hd.19989$iC4.2906@newssvr30.news.prodigy.com...
> >> This is a 20 amp switching power supply for their 12 volt ham
> > transceivers.
> >> I used to leave it on 24 hours a day on receive pulling less than an
amp
> >> with no problems but about a month ago it started to shut off. You
have
> > to
> >> turn it off first and wait about 15 minutes and it'll come back on,
> >> sometimes for an hour or longer and other times for 5 to 10 minutes.
> > After
> >> it goes down you have to turn it off and then wait 10 to 15 and it'll
> >> come
> >> back for an unpredictable time. It doesn't seem matter if it been on
for
> > an
> >> hour or sometime 5 minutes, it'll shut down. It doesn't seem to be a
cold
> > or
> >> heat problem and flexing the board or tapping components won't turn it
> > off
> >> or make it come on quicker. I don't have a schematic and can't find
one.
> >> It must have some kind of logic that senses something and makes it shut
> > down
> >> and then time out. One thing I have noticed is that if I turn it on
when
> >> its not ready to come on I can hear a very, very faint noise (like
static
> >> discharge) that goes away as soon as the switch is turned off. It has

a
> >> TL494CN. Any tips appreciated.
> >>
> >> --
> >>
> >> 73
> >> Hank WD5JFR
> >>
> >>
> >
> >
>
>

552. FS: Coaxial Connectors, Adapters & Microwave Components.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-18 23:30:36 UTC
From: Murray Pasternack <w6krc@arrl.net>
Message-ID: <zZgHd.5938$Nu.3978@fed1read04>
Source record: 20885
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Please email w6krc@arrl.net for a detailed list.

553. Re: Kenwood PS-40 switching PS ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 00:01:15 UTC
From: electricitym@yahoo.com
Message-ID: <1106092875.223262.299020@z14g2000cwz.googlegroups.com>
Source record: 20886
Cross-posted to: sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Henry Kolesnik wrote:
snipped:
> At this point I'm not willing to do a
> shotgun replacement of all the caps. I do keep running the power
supply and
> the condition is not getting worse. I wish it would fail so I might
find
> the failed component. The way it is now it's impossible to
troubleshoot
> without shotgunning.
>

Henry:
Looking for cracked circuit board connections AND testing the electrolytics with an ESR meter (or substituting electrolytics if you do not have an ESR meter) is NOT "shotgunning".... it is real troubleshooting advice as a result of the symptoms you posted. If you continue to use it with the problem you reported it may fail completely and be a bigger repair job.
Pay a little now Or pay a lot later.
electricitym

554. automotive noise detector

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 01:59:50 UTC
From: pdrunen@aol.com
Message-ID: <20050118205950.02052.00000111@mb-m14.aol.com>
Source record: 20887

Hi Group,

I am working on a project which will detect if a automobile is running. My thoughts are to use a common 455KHz IF filter and amplitude detect or a 10.7 MHz IF filter and do the same.

Which frequency would be better or easier? (455KHz or 10.7MHz)

I would expect that with 455KHz, I could use common op-amps to get the gain up to a good level to detect the noise from the spark plug?

Any thoughts and direction for a direct conversion to something that would turn on an LED?

How about a super-reg? It has a wideband width?

Anyone recall any articles on simple receivers?

How about other frequencies like VHF?

555. Re: automotive noise detector

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 03:46:46 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <GKkHd.7405$u_1.1792@edtnps91>
Source record: 20888

Behold, PDRUNEN signalled from keyed 4-1000A filament:

> I would expect that with 455KHz, I could use common op-amps to get the
> gain up to a good level to detect the noise from the spark plug?

What if the vehicle is a diesel?

--
Gregg t3h g33k
"Ratings are for transistors....tubes have guidelines"
http://geek.scorpiorising.ca

556. Re: Best place for power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 03:48:05 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <bp-dnQnU5eTrRXDcRVn-sw@comcast.com>
Source record: 20889

<stryped@hotmail.com> wrote in message
news:1105988079.039595.319100@f14g2000cwb.googlegroups.com...
> Is there a best place to find or make a cheap power supply for a 50
> watt mobile radio to use as a base station? Are computer power supply's
> good?
>

I prefer linear power supplies for this size of radio, such as the Astron
RS-12A. Plentiful at hamfest, surplus and eBay.

IF you find an Astron that is broken and is offered to you for free (GRAB
IT) .. its like being handed money !
Astrons are easy to repair (unless transformer failed - very rare), skip the
Pyramids (many models have under rated heat sinks or electrolytic
capacitors)

Web sites for linear power supply repair and home built designs:

http://www.kbt-dc-supplies.com/index.php

http://www.seits.org/features/pwrsup.htm

gb

557. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 04:27:41 UTC
From: Don Kelly <dhky@peeshaw.ca>
Message-ID: <1llHd.120362$6l.62120@pd7tw2no>
Source record: 20890
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

<phil-news-nospam@ipal.net> wrote in message
news:csjr4h21ct4@news2.newsguy.com...
> In alt.engineering.electrical Andrew VK3BFA <ablight@alphalink.com.au>
wrote:
>
> | Mmm, cant figure out this new format, so will let fly with probably
> | already said. Lacing looks lovely, and is a skill used to distinguish
> | old techs from young techs, cable ties can cut cable, and can cut
> | fingers as well. Unless there is controlled tension in the cable tie
> | gun, pressure is too variable. Cable ties can start fires, especially
> | when someone puts then round a convenient sharp edged bracket which
> | then cuts into the conductor carrying current. Not nice - very
> | impressive, but not nice.
>
> I use cable ties for a number of wires (usually power) inside PC's I
build.
> But one thing I do is make sure I offset the wires from the attached
metal.
> If the metal is at about a 90 degree angle, then I use 2 cable ties that
> wrap each other. If the metal is parallel to the wiring, then 3 cable
ties
> are used. Lacing would not be very practical inside a PC unless it is
part
> of a designed manufacturing process where you would have a pre-built
harness
> or something.
>
> --
> --

> | Phil Howard KA9WGN | http://linuxhomepage.com/
http://ham.org/ |
> | (first name) at ipal.net | http://phil.ipal.org/
http://ka9wgn.ham.org/ |
> --

Cable lacing was (and is?) common for control wiring in control panels etc.
in the power industry. In that case the signals involved were either 60Hz or
DC and electromechanical relays and meters were used. coupling between
circuits was a non-issue. However, with the advent of solid state devices,
coupling became a problem. One major manufacturer considered a "diode tester
to be a 15 ft lead to a switch or contactor cabled with a lead tied to the

diode. - Open the switch- blow the diode. Wiring was neat and elegant and easy to follow. Circuit diagrams were accompanied by "back of panel" diagrams of the wiring to facilitate maintenance/repairs.
Automotive wiring uses cables for a different purpose- pre-bundle the wires- any jack ass can then push it into place and connect the red wire here, the yellow wire there , etc. Cheap and easy. Maintenance and trouble shooting is the customer's worry -particularly as faults generally appear after the warranty expires (been there) and simply replacing the bundle after the vehicle is built is not that easy.
In PC's etc, it appears that the aim is to cut down clutter- no more -no less- Note that lacing is pretty well confined to the DC side of things (+/-12V, +/-5V, Ground, etc.) - not signal lines.
--
Don Kelly
dhky@peeshaw.ca
remove the urine to answer

558. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 04:46:46 UTC
From: mike <mike@mike42.com>
Message-ID: <pan.2005.01.19.04.53.06.975408@mike42.com>
Source record: 20891

On Tue, 18 Jan 2005 09:02:54 -0800, Bill Turner wrote:
> On Tue, 18 Jan 2005 05:56:54 -0000, dplatt@radagast.org (Dave Platt)
> wrote:
>>In an absolute sense, one can argue that neither top nor bottom posting
>>is inherently superior. Howeve, bottom/interspersed posting "got here
>>first" and has been part of Internet tradition for longer than there has
>>been an Internet (big "I").
> It's good to re-evaluate so-called traditions from time to time.
>
> In the business world, top posting is nearly universal due to use of
> Microsoft Office, which defaults that way. Given that many more people
> use Office than use Usenet (I think), shouldn't the majority rule? If
> not, why not?
>
> The following reasons are NOT valid, IMO:
>
> 1. Tradition.
>
> 2. English is read from top to bottom. I've ALREADY read the quoted
> part, I don't need to do it again, usually. It is nice to have it
> available to refer to if needed, but the NEW part is what I'm really
> interested in.
>
> I am bottom posting here (tradition) but I'm thinking of changing.
> Convince me otherwise if you can. Mind is open.

Imagine someone coming into the middle of the conversation (posting
exchange) and not having already read the quoted part. With bottom posting
they (in particular me) can get up to speed on the thread easier.

Server load, net traffic, etc, can cause news msgs and email to arrive out
of sync with other replies. With top posting you can never be sure of the
order of things you are reading without scrolling up and down a lot. Mix
this with msgs that are part top and part bottom posted and you have a
maze to try to figure out. (I/you/we could argue that however a msg comes
to you - top or bottom posted - you and others who may reply to it should
follow that style for that msg and not mix top/bottom posting)

I'm babbling and probably not making sense. Let me try this - This is how
I see top posting -

Answer

> Question
>> Answer
>> Comment

>>> Reply
>>>> Question
>>>>> Answer
>> Comment
>>> Reply
>>>> Question
>>>>> Answer
>> Comment
>>> Reply
>> Question

Hope I've not conviently left out some things. ;-)
Now that I've butted in and caused this thread to drag on longer than it should - Hey! - How about some homebrew radio content!? (technically this should be the start of a new thread with a new subject, maybe I'll do that when I test my antenna some more) I just built a discone style antenna with a lot of radials from 36 inch lengths of wire welding rod. I put it on top of a pole that used to have a bird house on it in my backyard. My neighbors grandfather says it looks like a "sputnic" landed and abducted the bird house.

- Mike

559. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 07:19:46 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10us2gn9dgup6f6@corp.supernews.com>
Source record: 20892
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

Don Kelly wrote:
> -------
> Cable lacing was (and is?) common for control wiring in control panels etc.
> in the power industry. In that case the signals involved were either 60Hz or
> DC and electromechanical relays and meters were used. coupling between
> circuits was a non-issue. However, with the advent of solid state devices,
> coupling became a problem. . .

Reminds me of a horror story I heard at an EMC short course. There was a problem with EMI getting in (or out -- I don't recall) of some equipmant via the 60 Hz power line. So a filter was mounted somewhere in the middle of the device where there was room, and the 60 Hz power was routed through it. Went into production, where they neatly bundled and laced the 60 Hz power leads with a bunch of other wires. The bundle was routed along the side of the filter as it went by. The power leads broke out of the bundle to connect to one side of the filter, and the leads on the other side of the filter rejoined the bundle.

Roy Lewallen, W7EL

560. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 11:46:43 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <35708tF4isuttU1@individual.net>
Source record: 20896

You were the one to introduce the concept of
bad manners into this discussion, but it is you
who persists with rudeness.

Therefore you illustrate why top-posting is
the preferred style amongst civilised people,
because bottom-posters are characterised
by bad manners.

"Clarence_A" <no@No.com> wrote in message
news:dM8Hd.3055$8Z1.997@newssvr14.news.prodigy.com...
> "Airy R.Bean" <Me@privacy.net> wrote in message
> news:3549a1F4ftkcrU2@individual.net...
> > The style in which one posts has nothing to do
> > with gentlemanliness.
>
> Obviously the man is unaware of what a gentleman is!
>
> Plonk!
>
>

561. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 11:48:28 UTC
From: Lawrence Glickman <Lawrence_Glickman@comcast.net>
Message-ID: <lrhsu0dg58vfut0no95c8h2u3ue2cmtvoc@4ax.com>
Source record: 20893
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.autos.tech,alt.engineering.electrical,rec.aviation.homebuilt

On Tue, 18 Jan 2005 23:19:46 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Don Kelly wrote:
>> -------
>> Cable lacing was (and is?) common for control wiring in control panels etc.
>> in the power industry. In that case the signals involved were either 60Hz or
>> DC and electromechanical relays and meters were used. coupling between
>> circuits was a non-issue. However, with the advent of solid state devices,
>> coupling became a problem. . .
>
>Reminds me of a horror story I heard at an EMC short course. There was a
>problem with EMI getting in (or out -- I don't recall) of some equipmant
>via the 60 Hz power line. So a filter was mounted somewhere in the
>middle of the device where there was room, and the 60 Hz power was
>routed through it. Went into production, where they neatly bundled and
>laced the 60 Hz power leads with a bunch of other wires. The bundle was
>routed along the side of the filter as it went by. The power leads broke
>out of the bundle to connect to one side of the filter, and the leads on
>the other side of the filter rejoined the bundle.
>
>Roy Lewallen, W7EL

Many low power circuits now use ribbon cables, and in some instances,
if you are not careful about what wire carries what signal, there can
be intermittent cross-talk which can really screw things up. I had 1
case in 10 years where an Engineer had to come over from Germany to
end up building a filter into a ribbon cable that carried a low
frequency pulse. It took him about a week to find the problem because
of its intermittency.

In fact, IIRC, the engineer ended up routing separate wires out of the
ribbon cable to keep the crosstalk out of them. The odd thing about
this case, is out of the hundreds and hundreds of similar machines
with similar circuitry, this was the only unit that had the problem.

It has been my observation that for pc boards and backplanes, ribbon
cable is the way to go, no lacing required. Which leads me to the
question of why automotive companies don't use it in the engine
compartment. It must have to do with the environmental conditions in
there, it isn't *rugged* enough to withstand the heat and abrasion.

Lg

562. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 11:49:28 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <35708uF4isuttU2@individual.net>
Source record: 20894

You do not need to be convinced one way or the
other. Whether to post at the top or at the bottom
is a matter of free style and free choice.

It is not an issue of gentlemanliness nor of manners.

Rudeness and personal remarks are perhaps of those issues.

Not replying at all is perhaps of those issues.

"Bill Turner" <noway@nohow.com> wrote in message
news:omfqu0l108d2kuomhmgcmbpv6qnvet8bks@4ax.com...
> I am bottom posting here (tradition) but I'm thinking of changing.
> Convince me otherwise if you can. Mind is open.

563. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 11:54:04 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <35708uF4isuttU3@individual.net>
Source record: 20895

If someone comes upon a posting in the middle of the
conversation, and wished to follow the conversation,
then he can go to his news server and review the history.

If the posting that he has come across whets his appetite,
then it is most likely to be the NEW contribution that is
responsible for the whetting, and the best place for
this new material is at the top.

If, however, it is the OLD material that whets his appetite,
then, by other practices that are vaunted as conventions, the
old material will have been much reduced by snipping, and the
someone will be motivated to go back to that older posting, and
so it will be irrelevant to him whether that old material is quoted
at the top or the bottom of the new posting.

"mike" <mike@mike42.com> wrote in message
news:pan.2005.01.19.04.53.06.975408@mike42.com...
> Imagine someone coming into the middle of the conversation (posting
> exchange) and not having already read the quoted part. With bottom posting
> they (in particular me) can get up to speed on the thread easier.

564. Re: Best place for power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 15:18:07 UTC
From: john graesser <graesser@tca.net>
Message-ID: <10usuhtgqliimb0@corp.supernews.com>
Source record: 20897

"gb" <onw9mapsgb@no.arrl.spam.net> wrote in message
news:bp-dnQnU5eTrRXDcRVn-sw@comcast.com...
> <stryped@hotmail.com> wrote in message
> news:1105988079.039595.319100@f14g2000cwb.googlegroups.com...
> > Is there a best place to find or make a cheap power supply for a 50
> > watt mobile radio to use as a base station? Are computer power supply's
> > good?
> >
>
> I prefer linear power supplies for this size of radio, such as the Astron
> RS-12A. Plentiful at hamfest, surplus and eBay.
>
> IF you find an Astron that is broken and is offered to you for free (GRAB
> IT) .. its like being handed money !
> Astrons are easy to repair (unless transformer failed - very rare), skip
the
> Pyramids (many models have under rated heat sinks or electrolytic
> capacitors)

Of course then there are the Pyramids that can function 24 hours a day 7
days a week from the day you buy it. Mine has been on (except for the
occasional blackout) for over 6 years.

At this apt I turned it on when I moved in and haven't touched it since.

565. Re: advantages of cable lacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 16:18:54 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <pnvsu0d2knqn0hq7idk5c1m12aa4cdppun@4ax.com>
Source record: 20798

On Wed, 19 Jan 2005 04:27:41 GMT, "Don Kelly" <dhky@peeshaw.ca> wrote:
[snip]
|Cable lacing was (and is?) common for control wiring in control panels etc.
|in the power industry. In that case the signals involved were either 60Hz or
|DC and electromechanical relays and meters were used. coupling between
|circuits was a non-issue. However, with the advent of solid state devices,
|coupling became a problem. One major manufacturer considered a "diode tester
|to be a 15 ft lead to a switch or contactor cabled with a lead tied to the
|diode. - Open the switch- blow the diode. Wiring was neat and elegant and
|easy to follow. Circuit diagrams were accompanied by "back of panel"
|diagrams of the wiring to facilitate maintenance/repairs.

At Hughes, we didn't do "lacing", but used "lacing cord" (flat, waxed, nylon) by the mile. We used spot ties, a precursor to today's cable ties. These were clove hitches around the wire bundle, secured with a square knot. In the production (missile) area, the ends had to be cut, but in the engineering and test equipment area, we would "neaten things up" by melting the ends into the knot with a soldering iron.

Since all the wire was teflon insulated, the ties could be slid along the wire bundles during construction. While still a technician, I once wired a programmer for some TOW missile test equipment. This was back when the highest level integrated circuit was a 7490 decade counter. The unit was basically a timing generator that had four PC board card cages, 30 cards per cage, 44 pins per board, six 72-pin cable connectors and a 24-column x 48-row patch panel. Damn near every pin was used. Timing sequences were determined by ANDing and ORing signals together via the patch panel and then setting or resetting J-K flip-flops. So there was a lot of redundant wiring, ie. one card cage might have 30 identical NAND gate boards.

We used ten wire colors, same as the resistor code, and prided ourselves on having every wire bundle identical throughout its length and to its neighbor. Black wire next to the brown wire next to the red wire.....

566. Re: Kenwood PS-40 switching PS ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 17:05:39 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <DrwHd.20927$iC4.978@newssvr30.news.prodigy.com>
Source record: 20799
Cross-posted to: sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

As of this moment it has run over 26 hours without shutting down. I've never seen any evidence that ESR can be an intermittent phenomena. Can someone please tell me how intermittent ESR comes about?

--

73
Hank WD5JFR
<electricitym@yahoo.com> wrote in message
news:1106092875.223262.299020@z14g2000cwz.googlegroups.com...
> Henry Kolesnik wrote:
> snipped:
>> At this point I'm not willing to do a
>> shotgun replacement of all the caps. I do keep running the power
> supply and
>> the condition is not getting worse. I wish it would fail so I might
> find
>> the failed component. The way it is now it's impossible to
> troubleshoot
>> without shotgunning.
>>
>
>
>
> Henry:
> Looking for cracked circuit board connections AND testing the
> electrolytics with an ESR meter (or substituting electrolytics if you
> do not have an ESR meter) is NOT "shotgunning".... it is real
> troubleshooting advice as a result of the symptoms you posted. If you
> continue to use it with the problem you reported it may fail completely
> and be a bigger repair job.
> Pay a little now Or pay a lot later.
> electricitym
>

567. Re: automotive noise detector

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 17:16:41 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncut5fp.tag.bit-bucket@shell.config.com>
Source record: 20800

```
On Wed, 19 Jan 2005 03:46:46 GMT, Gregg wrote:
> Behold, PDRUNEN signalled from keyed 4-1000A filament:
>
>> I would expect that with 455KHz, I could use common op-amps to get the
>> gain up to a good level to detect the noise from the spark plug?
>
> What if the vehicle is a diesel?

I would just put it in gear and see if it moves.... :-)
```

568. Re: Kenwood PS-40 switching PS ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 17:34:58 UTC
From: Sam Goldwasser <sam@saul.cis.upenn.edu>
Message-ID: <6wu0pdnwzh.fsf@saul.cis.upenn.edu>
Source record: 20801
Cross-posted to: sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

You should at least test the electrolytic caps in the startup circuit.

Since as I recall, it blows up only when applying AC power suddenly, something funny is going on during startup.

--- sam | Sci.Electronics.Repair FAQ Mirror: http://repairfaq.ece.drexel.edu/Repair | Main Table of Contents: http://repairfaq.ece.drexel.edu/REPAIR/+Lasers | Sam's Laser FAQ: http://repairfaq.ece.drexel.edu/sam/lasersam.htm | Mirror Sites: http://repairfaq.ece.drexel.edu/REPAIR/F_mirror.html

Note: These links are hopefully temporary until we can sort out the excessive traffic on Repairfaq.org.

Important: Anything sent to the email address in the message header above is ignored unless my full name is included in the subject line. Or, you can contact me via the Feedback Form in the FAQs.

"Henry Kolesnik" <kolesnik@sbcglobal.net> writes:

> As of this moment it has run over 26 hours without shutting down. I've
> never seen any evidence that ESR can be an intermittent phenomena. Can
> someone please tell me how intermittent ESR comes about?
>
> --
>
> 73
> Hank WD5JFR
> <electricitym@yahoo.com> wrote in message
> news:1106092875.223262.299020@z14g2000cwz.googlegroups.com...
> > Henry Kolesnik wrote:
> > snipped:
> >> At this point I'm not willing to do a
> >> shotgun replacement of all the caps. I do keep running the power
> > supply and
> >> the condition is not getting worse. I wish it would fail so I might
> > find
> >> the failed component. The way it is now it's impossible to
> > troubleshoot
> >> without shotgunning.
> >>
> >
> >
> >
> > Henry:
> > Looking for cracked circuit board connections AND testing the

> > electrolytics with an ESR meter (or substituting electrolytics if you
> > do not have an ESR meter) is NOT "shotgunning".... it is real
> > troubleshooting advice as a result of the symptoms you posted. If you
> > continue to use it with the problem you reported it may fail completely
> > and be a bigger repair job.
> > Pay a little now Or pay a lot later.
> > electricitym
> >

569. Re: Best place for power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 18:34:35 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <md6dnYmmzZyhNXPcRVn-iA@comcast.com>
Source record: 20802

"john graesser" <graesser@tca.net> wrote in message
news:10usuhtgqliimb0@corp.supernews.com...
>
> "gb" <onw9mapsgb@no.arrl.spam.net> wrote in message
> news:bp-dnQnU5eTrRXDcRVn-sw@comcast.com...
>> <stryped@hotmail.com> wrote in message
>> news:1105988079.039595.319100@f14g2000cwb.googlegroups.com...
>> > Is there a best place to find or make a cheap power supply for a 50
>> > watt mobile radio to use as a base station? Are computer power supply's
>> > good?
>> >
>>
>> I prefer linear power supplies for this size of radio, such as the Astron
>> RS-12A. Plentiful at hamfest, surplus and eBay.
>>
>> IF you find an Astron that is broken and is offered to you for free (GRAB
>> IT) .. its like being handed money !
>> Astrons are easy to repair (unless transformer failed - very rare), skip
> the
>> Pyramids (many models have under rated heat sinks or electrolytic
>> capacitors)
>
> Of course then there are the Pyramids that can function 24 hours a day 7
> days a week from the day you buy it. Mine has been on (except for the
> occasional blackout) for over 6 years.
>
> At this apt I turned it on when I moved in and haven't touched it since.

John -

I have heard that recent Pyramid linear models have addressed these design
issues.
(I have no "hands-on" personal experience to verify these design changes by
Pyramid).
Unfortunately, the used models I see at the hamfests are the earlier models
that I have repair experience with and had these design problems. Possibly
someone will eventually have a web based differentiation guide for these
Pyramid models.

gb

570. Re: Kenwood PS-40 switching PS ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 18:35:48 UTC
From: sofie <sofie@olypen.com>
Message-ID: <10uta649dsnvhf9@corp.supernews.com>
Source record: 20803
Cross-posted to: sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Henry Kolesnik:
It is NOT "intermittent ESR" that is the problem, rather it is that maybe some electrolytics have developed high ESR and are operating just at or near the threshold of the circuitry operating correctly... (see the reply post from Tim Wescott).
At this point you have been given sound technical advice to check for circuit board solder connections and to suspect the electrolytics......
until you perform this important initial suggested troubleshooting there is not much more that you can do ??? Get this fixed right away before it fails completely as you have previously been cautioned.
electricitym

"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
news:DrwHd.20927$iC4.978@newssvr30.news.prodigy.com...
> As of this moment it has run over 26 hours without shutting down. I've
> never seen any evidence that ESR can be an intermittent phenomena. Can
> someone please tell me how intermittent ESR comes about?

571. Re: Kenwood PS-40 switching PS ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 18:51:38 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <10utb1d41cfnab6@corp.supernews.com>
Source record: 20804
Cross-posted to: sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Henry Kolesnik wrote:

> As of this moment it has run over 26 hours without shutting down. I've
> never seen any evidence that ESR can be an intermittent phenomena. Can
> someone please tell me how intermittent ESR comes about?
>
Who ever said ESR had to be intermittent to cause intermittent problems?

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

572. Re: Kenwood PS-40 switching PS ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 19:01:46 UTC
From: electricitym@yahoo.com
Message-ID: <1106161306.819234.89740@z14g2000cwz.googlegroups.com>
Source record: 20805
Cross-posted to: sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Henry Kolesnik wrote:
> As of this moment it has run over 26 hours without shutting down.
I've
> never seen any evidence that ESR can be an intermittent phenomena.
Can
> someone please tell me how intermittent ESR comes about?

The measured ESR of an electrolytic capacitor changes with
temperature.... usually ESR decreases slightly. If the power supply
circuit is just at the threshold of operating correctly then very
slight changes in the ESR of critical capacitors will certainly affect
how the power supply operates and sometimes it can cause a catastrophic
failure of other components. Cold or cracked solder connections can
also cause similar intermittent symptoms.
The repair suggestion replies you have been getting to your original
posting are your FIRST troubleshooting and testing steps; otherwise we
are all guessing here.

573. Re: Kenwood PS-40 switching PS ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 19:03:46 UTC
From: Lou <lf08357@Yahoo.Com>
Message-ID: <vcyHd.36509$NC6.25230@newsread1.mlpsca01.us.to.verio.net>
Source record: 20806
Cross-posted to: sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

<electricitym@yahoo.com> wrote in message
news:1106161306.819234.89740@z14g2000cwz.googlegroups.com...
> Henry Kolesnik wrote:
>> As of this moment it has run over 26 hours without shutting down.
> I've
>> never seen any evidence that ESR can be an intermittent phenomena.
> Can
>> someone please tell me how intermittent ESR comes about?
>
>
> The measured ESR of an electrolytic capacitor changes with
> temperature.... usually ESR decreases slightly. If the power supply
> circuit is just at the threshold of operating correctly then very
> slight changes in the ESR of critical capacitors will certainly affect
> how the power supply operates and sometimes it can cause a catastrophic
> failure of other components. Cold or cracked solder connections can
> also cause similar intermittent symptoms.
> The repair suggestion replies you have been getting to your original
> posting are your FIRST troubleshooting and testing steps; otherwise we
> are all guessing here.
>

Just a guess here, as I may have missed a post or two, but does the unit
shut down "completely" to where nothing can be traced through to see where
it stops? IF not, maybe try that too. I agree with the rest otherwise.

L.

574. ANyoen ever make a "slim Jim" antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 20:25:06 UTC
From: stryped@hotmail.com
Message-ID: <1106166306.644996.24370@f14g2000cwb.googlegroups.com>
Source record: 20807

Do they work very well for a base antenna?

575. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 20:50:23 UTC
From: Tony VE6MVP <tony@REMOVEve6mvp.com>
Message-ID: <tvhtu0dm6mn8ahm4hr8of68pr33i3ci89k@4ax.com>
Source record: 20808

On Wed, 19 Jan 2005 11:46:43 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>You were the one to introduce the concept of
>bad manners into this discussion, but it is you
>who persists with rudeness.
>
>Therefore you illustrate why top-posting is
>the preferred style amongst civilised people,
>because bottom-posters are characterised
>by bad manners.

Generalization and rubbish.

Tony

576. Re: ANyoen ever make a "slim Jim" antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 21:28:49 UTC
From: geir knutsen <ge-knuts@online.no>
Message-ID: <biAHd.5178$IW4.106542@news2.e.nsc.no>
Source record: 20809

I have one running perfectly on APRS for over 6 months.

<stryped@hotmail.com> wrote in message
news:1106166306.644996.24370@f14g2000cwb.googlegroups.com...
> Do they work very well for a base antenna?
>

577. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 22:21:40 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <35851nF4fvd0hU1@individual.net>
Source record: 20810

QED.

"Tony VE6MVP" <tony@REMOVEve6mvp.com> wrote in message
news:tvhtu0dm6mn8ahm4hr8of68pr33i3ci89k@4ax.com...
> On Wed, 19 Jan 2005 11:46:43 -0000, "Airy R.Bean" <Me@privacy.net>
> wrote:
>
> >You were the one to introduce the concept of
> >bad manners into this discussion, but it is you
> >who persists with rudeness.
> >
> >Therefore you illustrate why top-posting is
> >the preferred style amongst civilised people,
> >because bottom-posters are characterised
> >by bad manners.
>
> Generalization and rubbish.
>
> Tony

578. need IF strip

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 22:53:10 UTC
From: pdrunen@aol.com
Message-ID: <20050119175310.11862.00000105@mb-m03.aol.com>
Source record: 20811

Hi Group,

Does anyone have either a 455KHz or 10.7MHz or other IF strip I could have?

de KJ4UO

579. Re: Best place for power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 23:26:06 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <i0CHd.141$hd1.122@newsfe4-gui.ntli.net>
Source record: 20812

"> Many folks use a marine battery and a trickle charger. This not only
gives
> them plenty of power for the shack, but it keeps them on the air when the
> lights go out. You need to take care about ventilation and battery
leakage,
> but I don't know anyone who has done this and ever thought about going to
a
> commercial supply. I'm pretty happy with my Astron, but when the lights
go
> out, I'm limited to my HT.
==========
A marine battery is fine ,simple and reliable . However if 'trickle charger
' is really a trickle charger ,when operating on FM (with full carrier) the
voltage when battery was fully charged might drop from say 13.8 to 12.8 V
,with battery still being 80 % charged. This means the power input and hence
RF ouput will probably be less than the transceiver's rated power
.............although that probably won't matter much signal wise.
If the transceiver is multimode and when operated on SSB ,the average
current on transmit will be lower resulting in an average output voltage
much closer to 13.8 Volt., even when using a trickle charger.

Frank GM0CSZ / KN6WH

580. Re: Where do I buy large surface area single copper clad board in UK (or even US)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-19 23:47:11 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <3kCHd.148$hd1.130@newsfe4-gui.ntli.net>
Source record: 20813

> Think is, how do I cut this? Anyone developed a cheap solution for
shearing
> PCB laminate?
==========
Score the sheet with a heavy duty blade knive as often used by people laying carpets. You can then easily break-off the unwanted bit .
After that you can smoothen the edges with fine water proof amaril paper (the grey sheet stuff) or simply with a file.

Has worked fine for me.

BTW At radio flea markets on the european continent ,for example in Germany , Belgium and the Netherlands ,large sheets of (usually double-sided) PCB are available for a few Euros. Cut-offs are often sold by weight. There will be a big fleamarket in the Netherlands at Rosmalen at the Autotron Exhibition Centre , date 19 March 2005. Perhaps you can find a Dutch Ham going there to get the stuff for you. This year I won't be going .

Frank GM0CSZ / KN6WH

581. Re: ANyoen ever make a "slim Jim" antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-20 00:02:39 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <zyCHd.149$hd1.93@newsfe4-gui.ntli.net>
Source record: 20814

> Do they work very well for a base antenna?
==========
It all depends on your type of use .
The 'Slim Jim' is a simple good omni-directional (base)antenna for local comms ,either simplex or via repeater or for local datacomms like Packet Radio and APRS.
The antenna can be easily home-brewed.

Frank GM0CSZ / KN6WH

582. Re: Best place for power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-20 03:43:58 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <nPFHd.234$li3.60@fe03.lga>
Source record: 20815

"Highland Ham" <abcgm0csz.kn6whxyz@abcntlworldxyz.com> wrote in message news:i0CHd.141$hd1.122@newsfe4-gui.ntli.net...

> A marine battery is fine ,simple and reliable . However if 'trickle charger
> ' is really a trickle charger ,when operating on FM (with full carrier) the
> voltage when battery was fully charged might drop from say 13.8 to 12.8 V
> ,with battery still being 80 % charged. This means the power input and hence
> RF ouput will probably be less than the transceiver's rated power

You make a good point, Frank. A couple of years ago I bought a relatively cheap battery charger (for the car, not for the radio), and was surprised at what microprocessors have done to these things. Float charging, which is basically what you want, is available from these things pretty commonly now, as well as a myriad of other features. I guess the engineers put a $2 PIC into one of these things and now they got to make excuses to use it. They can't charge a lot less than the next guy so they need to out-feature them. Anyway, the modern automotive battery charger has all nature of features. It has become another of these devices with an impenetrable manual!

..

583. Re: ANyoen ever make a "slim Jim" antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-20 06:04:28 UTC
From: Larry Gagnon <lagagnon@fakeuniserve.com>
Message-ID: <pan.2005.01.20.06.04.28.564220@fakeuniserve.com>
Source record: 20816

On Wed, 19 Jan 2005 12:25:06 -0800, stryped wrote:

> Do they work very well for a base antenna?

Yes they do. But if you want a much better, very inexpensive and easy to
build base antenna ($10) try out this 2M colinear design:

http://home.comcast.net/~buck0/5-8thx2j.htm

I have built this for about $12 canadian and it is excellent!

Larry VE7EA
--
****
to reply via email remove "fake"
Microsoft will soon release their newest product: a vacuum cleaner.
It will be their only product which doesn't suck.

584. Coax question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-20 13:23:23 UTC
From: stryped@hotmail.com
Message-ID: <1106227403.374257.103160@c13g2000cwb.googlegroups.com>
Source record: 20817

ALl I have available in my areas is RG 6 or RG58. I know 58 is 50 ohm
and 6 is 75. SOmeone said using 75 ohm would cause my swr meter not to
read right. I only need about 10 feet of cable to "test" some antennas
I am going to build this weekend. It is for 2 meters and 440.
Should I just use rg 58?

585. Re: ANyoen ever make a "slim Jim" antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-20 13:37:40 UTC
From: stryped@hotmail.com
Message-ID: <1106228260.954140.203430@z14g2000cwz.googlegroups.com>
Source record: 20818

DOes this antenna have gain? WIll high winds mess uo the tuning section
or other part of the antenna?

586. Re: ANyoen ever make a "slim Jim" antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-20 13:38:38 UTC
From: stryped@hotmail.com
Message-ID: <1106228318.967531.267160@f14g2000cwb.googlegroups.com>
Source record: 20819

I am a nebie. What is aprs? Did you make the antenna? How far away from the mast did you place it. I read they have to be at least 20 inches away from anything metal.

587. Can I use rg6 connector on rg8 cable?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-20 14:21:44 UTC
From: stryped@hotmail.com
Message-ID: <1106230904.693811.114610@f14g2000cwb.googlegroups.com>
Source record: 20820

Is there a way to make it work or do I need to take the pl 259
connectors back? I found some r6 8/u but it is 78 cents a foot! I am
just wanting something to test some antennas but am afraid of inacurate
swr readings.

588. Re: ANyoen ever make a "slim Jim" antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-20 14:39:10 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <359uacF4ii1q7U1@individual.net>
Source record: 20821

I wonder why I am forming the impression that "stryped" is a troll?

<stryped@hotmail.com> wrote in message
news:1106228318.967531.267160@f14g2000cwb.googlegroups.com...
> I am a nebie. What is aprs? Did you make the antenna? How far away from
> the mast did you place it. I read they have to be at least 20 inches
> away from anything metal.
>

589. Re: Coax question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-20 14:44:09 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <VA.00000090.004fd205@btinternet.com>
Source record: 20822

Hi,

> ALl I have available in my areas is RG 6 or RG58. I know 58 is 50 ohm
> and 6 is 75. SOmeone said using 75 ohm would cause my swr meter not to
> read right. I only need about 10 feet of cable to "test" some antennas
> I am going to build this weekend. It is for 2 meters and 440.
> Should I just use rg 58?

You are between a rock and a 'hard place' as both RG-6 and RG-58 will cause incorrect readings on your SWR meter. The first, simply because it will introduce a mismatch and the second because higher cable losses will make the SWR appear to be lower than it actually is. However, if you are just interested in seeing how well you can communicate, use the lower loss RG-6 and work out what the meter readings mean later. Of course, any matching adjustments at the antenna end will have to be remade when you get some low-loss 50-ohm cable. If you were to make the 75-ohm feeder an odd number of half wavelengths down to the bridge though, the antenna's impedance would be roughly duplicated there.

You can calculate the effect that feeder losses have on SWR from the equations in the ARRL Handbook. If you are just going for a minimum then these won't matter as long as you take the final figures with a pinch of salt. Remember that cable losses act twice as far as SWR is concerned and that mismatch loss is higher than straight cable loss.

Cheers - Joe, G3LLV

590. Clang !!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-20 14:55:11 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <VA.00000091.0059edca@btinternet.com>
Source record: 20823

> ... If you were to make the
> 75-ohm feeder an odd number of half wavelengths down to the bridge
> though, the antenna's impedance would be roughly duplicated there.

OOPS - That should read 'A MULTIPLE' of half wavelengths...

Cheers - Joe :-(

591. Re: ANyoen ever make a "slim Jim" antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-20 15:10:48 UTC
From: stryped@hotmail.com
Message-ID: <1106233848.238947.314970@f14g2000cwb.googlegroups.com>
Source record: 20824

Airy R.Bean wrote:
> I wonder why I am forming the impression that "stryped" is a troll?
>
> <stryped@hotmail.com> wrote in message
> news:1106228318.967531.267160@f14g2000cwb.googlegroups.com...
> > I am a nebie. What is aprs? Did you make the antenna? How far away
from
> > the mast did you place it. I read they have to be at least 20
inches
> > away from anything metal.
> >

I am not a troll I just ask alot of questions.

I printed off that copy of the 5/8 wave. It looks interesting but I am
having trouble undertanding its construction.

592. Re: Coax question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-20 16:24:15 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <10uvmpfkq670a17@corp.supernews.com>
Source record: 20825

Joe McElvenney wrote:

> Hi,
>
>
>>ALl I have available in my areas is RG 6 or RG58. I know 58 is 50 ohm
>>and 6 is 75. SOmeone said using 75 ohm would cause my swr meter not to
>>read right. I only need about 10 feet of cable to "test" some antennas
>>I am going to build this weekend. It is for 2 meters and 440.
>>Should I just use rg 58?
>
>
> You are between a rock and a 'hard place' as both RG-6 and RG-58 will
> cause incorrect readings on your SWR meter. The first, simply because it
> will introduce a mismatch and the second because higher cable losses
> will make the SWR appear to be lower than it actually is. However, if
> you are just interested in seeing how well you can communicate, use the
> lower loss RG-6 and work out what the meter readings mean later. Of
> course, any matching adjustments at the antenna end will have to be
> remade when you get some low-loss 50-ohm cable. If you were to make the
> 75-ohm feeder an odd number of half wavelengths down to the bridge
> though, the antenna's impedance would be roughly duplicated there.
>
> You can calculate the effect that feeder losses have on SWR from the
> equations in the ARRL Handbook. If you are just going for a minimum then
> these won't matter as long as you take the final figures with a pinch of
> salt. Remember that cable losses act twice as far as SWR is concerned
> and that mismatch loss is higher than straight cable loss.
>
>
> Cheers - Joe, G3LLV
>
>
>
>
>
10 feet of good quality RG58 shouldn't make too much difference,
particularly on 2 meters, but even 70cm should be OK.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

593. Re: Coax question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-20 16:33:42 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <10uvnb72981jnef@corp.supernews.com>
Source record: 20826

I absolutely agree with Tim. 10 feet of RG-58 coax isn't going to mean squat for loss on either 2 or 440. The only difficulty I see is that 10 feet doesn't get YOU too far out of the picture to make a difference in the VSWR readings, especially on 2 meters. Lessee now, 2 meters is about 6 feet, so you are much less than 2 wavelengths away from what you are trying to measure. If you are just looking for rough cut, it may not be too bad, but if you are looking for some fine grain detail, I'd get a bit further away -- like 3 or 4 wavelengths if you have the space.

Jim

"Tim Wescott" <tim@wescottnospamdesign.com> wrote in message news:10uvmpfkq670a17@corp.supernews.com...
> Joe McElvenney wrote:
>
>> Hi,

I only need about 10 feet of cable to "test" some antennas
>>>I am going to build this weekend. It is for 2 meters and 440.
>>>Should I just use rg 58?

>> You are between a rock and a 'hard place' as both RG-6 and RG-58 will
>> cause incorrect readings on your SWR meter. >>
> 10 feet of good quality RG58 shouldn't make too much difference,
> particularly on 2 meters, but even 70cm should be OK.
>
> --
>
> Tim Wescott
> Wescott Design Services
> http://www.wescottdesign.com

594. Re: ANyoen ever make a "slim Jim" antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-20 17:22:32 UTC
From: Larry Gagnon <lagagnon@fakeuniserve.com>
Message-ID: <pan.2005.01.20.17.22.32.608003@fakeuniserve.com>
Source record: 20827

On Thu, 20 Jan 2005 05:37:40 -0800, stryped wrote:

> DOes this antenna have gain? WIll high winds mess uo the tuning section or
> other part of the antenna?

It is a stacked colinear antenna so has about 6.2dB of gain. Very
impressive. I have it on the roof of my house. We live 150metres from Juan
de Fuca Strait and often catch some very strong SW winds head on. The
antenna is still up and the tuning section hasn't moved!

Larry VE7EA

--
****
to reply via email remove "fake"
Microsoft will soon release their newest product: a vacuum cleaner.
It will be their only product which doesn't suck.

595. Image freqs & IQ demods?????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-20 17:31:54 UTC
From: Michael Dunn <president@whitehouse.gov>
Message-ID: <2001200512315432 33%president@whitehouse.gov>
Source record: 20828

Basic dumb question:

I read this in passing and am not sure I understood correctly. It seemed to say that you can do image rejection with a quadrature demodulator (by summing the outputs).

For example, feed 11MHz to an IQ demod running at 1MHz. The I & Q outputs will each have 10MHz & 12MHz components in them. Sum the outputs. One of the frequencies will phase-cancel, the other will add constructively. Is this correct?

thx
Michael
mdunn **at** cantares.on.ca

596. Re: Can I use rg6 connector on rg8 cable?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-20 17:40:45 UTC
From: fmmck@aol.communicate
Message-ID: <20050120124045.11909.00000117@mb-m03.aol.com>
Source record: 20829

<< Is there a way to make it work or do I need to take the pl 259 connectors back? I found some r6 8/u but it is 78 cents a foot! I am just wanting something to test some antennas but am afraid of inacurate swr readings. >>

Stryped-

AOL doesn't have your other message about RG-6 vs RG-58, so I'll try to address both.

When testing antennas, one measure is standing wave ratio (SWR), often read using a "reflectometer" SWR bridge, that actually measures relative forward and reflected power but has a scale calibrated in SWR. You may find more information about this at the Bird Electronics web site, http://www.bird-electronic.com/.

Such an instrument is accurate only if the cable between the bridge and the antenna has the same characteristic impedance as the bridge. For 50 Ohm cable, you need a 50 Ohm bridge. In this case, a resonant antenna with an impedance of 50 Ohms, has an SWR of 1.00:1 (one-to-one).

If you do not have 50 Ohm co-ax, simply make your measurements with the SWR bridge AT the antenna. Even if you have 50 Ohm co-ax, loss due to heating of the cable at higher frequencies will cause the SWR to look better than it really is. Moving the bridge closer to the antenna has an advantage in that case as well. However, using relatively short lengths should not cause much of a problem up to about 150 MHz.

I don't know how to attach PL-259 connectors to RG-6. To attach them to RG-58, you need an adapter that matches the outer diameter of the cable to the inner diameter of the connector. Since the PL-259 is so commonly used with radio equipment, I suggest you keep them and learn about attaching them to RG-58 and RG-8 cables.

The RG-6 is a low-loss cable commonly used in the cable TV industry. As nice as it is, its 75 Ohm impedance will cause serious errors in your antenna measurements if used between the instruments and the antenna. I suggest you steer clear of it for your experimental work. (If you have a 75 Ohm bridge and are working with a 75 Ohm antenna, that is another story!)

73, Fred, K4DII

597. Re: ANyoen ever make a "slim Jim" antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-20 19:25:26 UTC
From: stryped@hotmail.com
Message-ID: <1106249126.823830.121970@f14g2000cwb.googlegroups.com>
Source record: 20830

Larry Gagnon wrote:
> On Thu, 20 Jan 2005 05:37:40 -0800, stryped wrote:
>
> > DOes this antenna have gain? WIll high winds mess uo the tuning
section or
> > other part of the antenna?
>
> It is a stacked colinear antenna so has about 6.2dB of gain. Very
> impressive. I have it on the roof of my house. We live 150metres from
Juan
> de Fuca Strait and often catch some very strong SW winds head on. The
> antenna is still up and the tuning section hasn't moved!
>
> Larry VE7EA
>
> --
> ******************************
> to reply via email remove "fake"
> Microsoft will soon release their newest product: a vacuum cleaner.
> It will be their only product which doesn't suck.

I am having a little troubel understanding how to construct it. Can you
explain it to me? I am confused about the tuning section and how the
thing generally goes togther.

598. Another coax question and update!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-20 19:27:37 UTC
From: stryped@hotmail.com
Message-ID: <1106249257.708235.131200@f14g2000cwb.googlegroups.com>
Source record: 20831

Well, I just got rg 8 cable about 20 feet for free! The thing about it it has two pl259 connectors on it. I need to have one end free so i can wire up the slim jim or j pole I build this weekend. I really do not eant to cut the cable as I would like to use it when I put the permanent station up. See any way around this?

Can I use copper house wire 12/ 2 or so to connect to the points on the j pole then bring them to a so connector Then screw the rg8 pl connector into that? Will this through off the swr? What ohms is 12/2 wire?

He also gave me a short cable with two pl 259 connectors to connect between my radio and the swr meter. It was a guy at a motorola dealer. This cable is pretty thin and not rg8 but he said it was 50 ohms.
I plan on hooking the 20 feet from the swr to the antenna.

599. Re: Can I use rg6 connector on rg8 cable?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-20 19:48:54 UTC
From: stryped@hotmail.com
Message-ID: <1106250534.853001.224160@z14g2000cwz.googlegroups.com>
Source record: 20832

Fred McKenzie wrote:
> << Is there a way to make it work or do I need to take the pl 259
> connectors back? I found some r6 8/u but it is 78 cents a foot! I am
> just wanting something to test some antennas but am afraid of
inacurate
> swr readings. >>
>
> Stryped-
>
> AOL doesn't have your other message about RG-6 vs RG-58, so I'll try
to address
> both.
>
> When testing antennas, one measure is standing wave ratio (SWR),
often read
> using a "reflectometer" SWR bridge, that actually measures relative
forward and
> reflected power but has a scale calibrated in SWR. You may find more
> information about this at the Bird Electronics web site,
> http://www.bird-electronic.com/.
>
> Such an instrument is accurate only if the cable between the bridge
and the
> antenna has the same characteristic impedance as the bridge. For 50
Ohm cable,
> you need a 50 Ohm bridge. In this case, a resonant antenna with an
impedance
> of 50 Ohms, has an SWR of 1.00:1 (one-to-one).
>
> If you do not have 50 Ohm co-ax, simply make your measurements with
the SWR
> bridge AT the antenna. Even if you have 50 Ohm co-ax, loss due to
heating of
> the cable at higher frequencies will cause the SWR to look better
than it
> really is. Moving the bridge closer to the antenna has an advantage
in that
> case as well. However, using relatively short lengths should not
cause much of
> a problem up to about 150 MHz.
>
> I don't know how to attach PL-259 connectors to RG-6. To attach them
to RG-58,
> you need an adapter that matches the outer diameter of the cable to

the inner
> diameter of the connector. Since the PL-259 is so commonly used with
radio
> equipment, I suggest you keep them and learn about attaching them to
RG-58 and
> RG-8 cables.
>
> The RG-6 is a low-loss cable commonly used in the cable TV industry.
As nice
> as it is, its 75 Ohm impedance will cause serious errors in your
antenna
> measurements if used between the instruments and the antenna. I
suggest you
> steer clear of it for your experimental work. (If you have a 75 Ohm
bridge and
> are working with a 75 Ohm antenna, that is another story!)
>
> 73, Fred, K4DII
Forgive my ignormance, but what are you calling "bridge" the radio?

600. Re: RadCom G3WPO RX80 Receiver IC KB4412 and SL1621 data sought.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-20 20:07:49 UTC
From: Lasse SM5GLC <no_email@today.sri>
Message-ID: <en30v0pog2st8ctphv4f5ue79mnc29pme6@4ax.com>
Source record: 20833

Pete,
I have full doc on the 1621, can copy and send as a PDF...

Just let me know!
Not sure, have some old TOKO stuff but chances are slim for anything
on the 4412 though.

/Lasse

lasse [at] sm5glc dot co m
On 17 Jan 2005 05:49:42 -0800, homebrewpete@yahoo.co.uk (Pete) wrote:

>Hi all,
>
>I have, for many years, been making the RX80 amateur band receiver, as
>published by G3WPO in RadCom in 1980. OK, I know, I am a slow worker.
>This receiver has a main 3 to 4 MHz tuner module, switchable frequency
>convertors for the other bands, huff puff vco stabilizer, FM if, and
>more.
>
>After years laying dorment, I have decided to debug the radio,
>starting with the main tuner module, and I would like to find some
>data on the following parts:-
>
>1. Toko KB4412 multifunction receiver IC. This is the heart of the
>receiver, the part I bought is labelled Uniden, not Toko. It is a 16
>pin DIL chip, integrating the mixer, IF amplifier, and detector
>sections.
>
>2. Plessey SL1621C AGC controller. This is an 8 pin DIL IC which
>generates the AGC control voltage derived from the audio signal.
>
>I have search the web high and low, and although I have found some
>references to these parts, I cannot find dats sheets for them. Can
>anyone point me to the right location, or have a paper copy?
>
>Many Thanks
>
>Pete

601. Re: Coax question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-20 23:18:11 UTC
From: Paul <paul@m0eme.freeserve.co.uk>
Message-ID: <cspe7o$3cs$1@newsg1.svr.pol.co.uk>
Source record: 20834

most car mag mounts come with about 10 feet of RG58 on so it must be ok?

m0eme

"RST Engineering" <jim@rstengineering.com> wrote in message
news:10uvnb72981jnef@corp.supernews.com...
>I absolutely agree with Tim. 10 feet of RG-58 coax isn't going to mean
>squat for loss on either 2 or 440. The only difficulty I see is that 10
>feet doesn't get YOU too far out of the picture to make a difference in the
>VSWR readings, especially on 2 meters. Lessee now, 2 meters is about 6
>feet, so you are much less than 2 wavelengths away from what you are trying
>to measure. If you are just looking for rough cut, it may not be too bad,
>but if you are looking for some fine grain detail, I'd get a bit further
>away -- like 3 or 4 wavelengths if you have the space.
>
> Jim
>
>
>
> "Tim Wescott" <tim@wescottnospamdesign.com> wrote in message
> news:10uvmpfkq670a17@corp.supernews.com...
>> Joe McElvenney wrote:
>>
>>> Hi,
>
> I only need about 10 feet of cable to "test" some antennas
>>>>I am going to build this weekend. It is for 2 meters and 440.
>>>>Should I just use rg 58?
>
>>> You are between a rock and a 'hard place' as both RG-6 and RG-58 will
>>> cause incorrect readings on your SWR meter. >>
>> 10 feet of good quality RG58 shouldn't make too much difference,
>> particularly on 2 meters, but even 70cm should be OK.
>>
>> --
>>
>> Tim Wescott
>> Wescott Design Services
>> http://www.wescottdesign.com
>
>

602. Re: Image freqs & IQ demods?????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-20 23:35:43 UTC
From: laura halliday <marsgal42@hotmail.com>
Message-ID: <1106264143.267619.212240@f14g2000cwb.googlegroups.com>
Source record: 20835

Yep. It's called an image-reject mixer, and is well-covered in all the
usual references.

Why they are not more widely used in ham radio remains a mystery.

Laura Halliday VE7LDH "Que les nuages soient notre
Grid: CN89mg pied a terre..."
ICBM: 49 16.05 N 122 56.92 W - Hospital/Shafte

603. Re: Image freqs & IQ demods?????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 01:10:02 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <KDYHd.18400$IV5.10280@attbi_s54>
Source record: 20836

Yep. It's called an image-reject mixer, and is well-covered in all the
> usual references.
>
> Why they are not more widely used in ham radio remains a mystery.
>
> Laura Halliday VE7LDH

Usually has something to do with providing quadrature LO without going to 4X frequency.

W4ZCB

604. Re: Image freqs & IQ demods?????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 01:26:21 UTC
From: Verizon News <joe@roccis.com>
Message-ID: <1TYHd.8614$Dz2.234@trndny09>
Source record: 20837

Yes, that is correct.

However, the choice of frequencies in your demod example is likely to give you other problems not obvious from the basic theory. Harmonics of the 1 MHz are likely to show up in the 10 (or 12 Mhz) output. There are also likely to be many mixing products of all of the harmonics of 1 MHz and any other frequency that can mix with 1 Mhz to produce a 10 (or 12) Mhz output. In general, it's problematic to make a frequency conversion (mixer) process where the LO is substantially lower than the output frequency, and especially so if the LO is an exact sub-multiple of the output.

Joe
W3JDR

"Michael Dunn" <president@whitehouse.gov> wrote in message
news:20012005123154323 3%president@whitehouse.gov...
> Basic dumb question:
>
> I read this in passing and am not sure I understood correctly. It
> seemed to say that you can do image rejection with a quadrature
> demodulator (by summing the outputs).
>
> For example, feed 11MHz to an IQ demod running at 1MHz. The I & Q
> outputs will each have 10MHz & 12MHz components in them. Sum the
> outputs. One of the frequencies will phase-cancel, the other will add
> constructively. Is this correct?
>
> thx
> Michael
> mdunn **at** cantares.on.ca

605. Re: Image freqs & IQ demods?????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 01:28:07 UTC
From: Michael Dunn <president@whitehouse.gov>
Message-ID: <2001200520280794 19%president@whitehouse.gov>
Source record: 20838

In article <1106264143.267619.212240@f14g2000cwb.googlegroups.com>,
laura halliday <marsgal42@hotmail.com> wrote:

> Yep. It's called an image-reject mixer, and is well-covered in all the
> usual references.
>
> Why they are not more widely used in ham radio remains a mystery.

Maybe now that monolithic implementations are a dime-a-dozen they
will be...?

606. Re: Coax question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 02:20:26 UTC
From: geek <nospam@unknown.org>
Message-ID: <KFZHd.133246$KO5.88643@clgrps13>
Source record: 20839

On Thu, 20 Jan 2005 15:18:11 -0800, Paul wrote:

> most car mag mounts come with about 10 feet of RG58 on so it must be ok?

They do that because they're cheap ;-)

--
Gregg "t3h g33k"

607. Re: Can I use rg6 connector on rg8 cable?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 05:32:03 UTC
From: fmmck@aol.communicate
Message-ID: <20050121003203.27405.00000149@mb-m17.aol.com>
Source record: 20840

<< Forgive my ignormance, but what are you calling "bridge" the radio? >>

Stryped-

You said you wanted to make SWR readings. An instrument used to read SWR is also called an SWR Bridge.

Perhaps it is a misnomer based on the use of a simple "balanced bridge" circuit for measuring unknown resistances by comparing them with known standard resistors.

73, Fred, K4DII

608. Re: Another coax question and update!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 05:49:16 UTC
From: fmmck@aol.communicate
Message-ID: <20050121004916.27405.00000151@mb-m17.aol.com>
Source record: 20841

<< Can I use copper house wire 12/ 2 or so to connect to the points on the j pole then bring them to a so connector Then screw the rg8 pl connector into that? Will this through off the swr? What ohms is 12/2 wire? >>

Stryped-

I suggest you obtain an SO-239 connector that mates with the PL-259 connector on the cables. Connect it as close to the antenna terminals as possible.

Once you finish building and testing it, you need some way to connect to it. Why not just make an SO-239 part of the antenna? Otherwise you would need a piece of co-ax to connect permanently to the antenna.

The 12/2 wire's impedance can be calculated, but you would need a handbook to find the formula. It depends on the diameter of the wires and spacing between them. Insulation on the wires may affect the impedance, but probably not very much unless they were twisted together. I think it would be best to keep any such connecting wires as short as possible.

<< This cable is pretty thin and not rg8 but he said it was 50 ohms. I plan on hooking the 20 feet from the swr to the antenna. >>

Smaller cable might be RG-58 if it is a little less than a quarter inch in diameter. If it is around an eighth of an inch, it might be RG-174. If you examine it closely you may find some markings.

73, Fred, K4DII

609. Re: Image freqs & IQ demods?????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 06:10:58 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <10v177h6rv4kh52@corp.supernews.com>
Source record: 20842

```
laura halliday wrote:
> Yep. It's called an image-reject mixer, and is well-covered in all the
> usual references.
>
> Why they are not more widely used in ham radio remains a mystery.
>
> Laura Halliday VE7LDH "Que les nuages soient notre
> Grid: CN89mg pied a terre..."
> ICBM: 49 16.05 N 122 56.92 W - Hospital/Shafte
>
The fact that it's difficult to get image rejection better than 40dB
perhaps? Or am I behind the times?

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com
```

610. Re: Another coax question and update!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 06:35:32 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <41F0A2AC.9050800@invalid.invalid>
Source record: 20843

stryped@hotmail.com wrote:
> Well, I just got rg 8 cable about 20 feet for free! The thing about it
> it has two pl259 connectors on it. I need to have one end free so i can
> wire up the slim jim or j pole I build this weekend. I really do not
> eant to cut the cable as I would like to use it when I put the
> permanent station up. See any way around this?
>
> Can I use copper house wire 12/ 2 or so to connect to the points on the
> j pole then bring them to a so connector Then screw the rg8 pl
> connector into that?

Yep, that's the right way to do it. Keep the copper wires as short as possible. Try to find a way to physically fasten the shell of the SO239 connector directly to the point where the shield side of the coax would go, eliminating the house wire on that side altogether if possible.

>Will this through off the swr?

It will, but if you keep the wire short the difference will be negligible. Try to keep it shorter than 2 inches if at all possible.

>What ohms is 12/2 wire?

The wire itself has no impedance.

Two pieces of wire in proximity, and near the rest of the antenna, will exhibit a characteristic impedance. This will be difficult to predict - and unimportant if the length of the wires is kept short.

> He also gave me a short cable with two pl 259 connectors to connect
> between my radio and the swr meter. It was a guy at a motorola dealer.
> This cable is pretty thin and not rg8 but he said it was 50 ohms.
> I plan on hooking the 20 feet from the swr to the antenna.

For the purposes of setting up the match, the "thickness" of the cable between the radio and the SWR meter is not very important. It may cause power loss, but as long as there's enough power to operate the SWR meter it doesn't matter. It may cause the SWR at the radio to be lower than that at the antenna, but it won't affect the SWR at the SWR meter which is where you're measuring it.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

611. Re: PIC operated FSK modem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 06:55:11 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1c5a4715cf579e5f98969f@news-central.giganews.com>
Source record: 20844
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

In article <1105914242.384378.10120@c13g2000cwb.googlegroups.com>,
dave.harper@gmail.com says...
> I'm interested in building a FSK modem around a PIC microcontroller,
> and am wondering how most FSK receivers convert the frequency to bits.
> I'm open to a unique solution, and I've seen some frequency to voltage
> converters that may work, but would like to know what some current
> techniques are that may be a lot more reliable and simpler.
> Thanks in advance!
> Dave
>
>

Honestly, the way I'd do (and have done) this is by selecting an RF/IF
circuit (which you'll need anyway) that includes a quadrature
discriminator. The Philips SA604/605 family is ideal for that purpose,
but there are plenty of other choices. Quadrature tank components for
common IF frequencies are available off-the-shelf.

My suspicion is that PICs are a bit underpowered for all the DSP hackery
that the other guys are talking about. I could be wrong, though; I have
limited experience with them.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam
---

612. Alternate material j pole and questions about dimensions

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 13:37:58 UTC
From: stryped@hotmail.com
Message-ID: <1106314678.400005.255680@f14g2000cwb.googlegroups.com>
Source record: 20845

I am experimenting making a j pole out of 1/2 inch conduit. What I am thinking of doing is making it like a "u" in that each piece, the radiator, stub and shorting bar are cut at 45 degree angles and welded togther. I have the dimensions using the 1/2 inch copper. How do i measure each pieces "length"? I mean in the copper plan they use t fittings and measure the radiator length starting incide the t fitting where it is lower than the shorting bar.

My ides was to just measure the end of the angled piece where I cut it to the top, but not sure if this is right. What do you think?

Also, since an antenna constructed this way will not have an "extended leg" to mount to a mast, would it be acceptable to mount the shorted horizontal section to the mast? Will this cause problems?
Any help is appreciated. I hope to work on this tomorrow.

613. Re: Another coax question and update!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 13:46:06 UTC
From: stryped@hotmail.com
Message-ID: <1106315166.189534.120060@z14g2000cwz.googlegroups.com>
Source record: 20846

Hey, I am in Kentucky not real far from Nashville. Do you know anything about the 440 mhz repeaters used for Skywarn and how far their coverage is? I am trying to decide what I need to reach those from my house in terms of equipment.

ALso, what is your web page about it says something abotu tv dxing. How does that work?

614. 455KHZ or 10.7 MHz IF

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 14:07:17 UTC
From: pdrunen@aol.com
Message-ID: <20050121090717.11154.00000147@mb-m18.aol.com>
Source record: 20847

Hi Group,

Any one have an IF strip that they can give, trade or, swap?

Needs to be transistor type.

De KJ4UO

615. Re: Another coax question and update!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 14:55:25 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <41F1177E.2060505@invalid.invalid>
Source record: 20748

stryped@hotmail.com wrote:
> Hey, I am in Kentucky not real far from Nashville. Do you know anything
> about the 440 mhz repeaters used for Skywarn and how far their coverage
> is? I am trying to decide what I need to reach those from my house in
> terms of equipment.

Where in Kentucky are you?

I have to be honest not been all that impressed by the coverage of the
Nashville Skywarn repeaters. But I don't have a very high UHF antenna.
I'd think if you could get something 25-30 feet in the air you ought
to be able to hear at least one of them reasonably well. Assuming you
aren't any further north than Russellville or Hopkinsville.

> ALso, what is your web page about it says something abotu tv dxing. How
> does that work?

Are you the same guy who asked that question in private email this
morning? (if not, then let me know & I'll answer here)

--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

616. Re: Another coax question and update!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 15:17:13 UTC
From: stryped@hotmail.com
Message-ID: <1106320632.988163.6040@f14g2000cwb.googlegroups.com>
Source record: 20749

Doug Smith W9WI wrote:
> stryped@hotmail.com wrote:
> > Hey, I am in Kentucky not real far from Nashville. Do you know
anything
> > about the 440 mhz repeaters used for Skywarn and how far their
coverage
> > is? I am trying to decide what I need to reach those from my house
in
> > terms of equipment.
>
> Where in Kentucky are you?
>
> I have to be honest not been all that impressed by the coverage of
the
> Nashville Skywarn repeaters. But I don't have a very high UHF
antenna.
> I'd think if you could get something 25-30 feet in the air you
ought
> to be able to hear at least one of them reasonably well. Assuming
you
> aren't any further north than Russellville or Hopkinsville.
>
> > ALso, what is your web page about it says something abotu tv dxing.
How
> > does that work?
>
> Are you the same guy who asked that question in private email this
> morning? (if not, then let me know & I'll answer here)
>
> --
> Doug Smith W9WI
> Pleasant View (Nashville), TN EM66
> http://www.w9wi.com

Yea that was me. I did not know if that address worked or not.

I live about 10 miles north of Russellville. I would have my antenna
25-30 feet. Was going to try a gain yagi for 440.

617. Re: PIC operated FSK modem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 16:38:56 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <Ltidnd_F7sS4rWzcRVn-ow@comcast.com>
Source record: 20750
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

"John Miles" <jmiles@pop.removethistomailme.net> wrote in message
news:MPG.1c5a4715cf579e5f98969f@news-central.giganews.com...
> My suspicion is that PICs are a bit underpowered for all the DSP hackery
> that the other guys are talking about. I could be wrong, though; I have
> limited experience with them.

It's true that 'regular old PICs' are pretty slow, but for a low speed
(couple thousand bits per second) FSK modem, a processor with a MIP or so
could do the job using the 'cheap and sleazy' approach I outlined.

Ubicom does has some PIC clones that run at >=50MIPS, although I'm not sure
if they have hardware multipliers. The TI MSP430 line of microcontrollers
have models that, while they're running at some tens of MIPS, have a
slightly weird but completely workable hardware multiplier/accumulator and a
many channel ADC and duals DACs -- a very nice 'hacker's modem on a chip' if
I've ever seen one.

Hmm... I wonder if there's anyone doing QRP PSK31 work out there...

---Joel Kolstad

618. TT Scout 555 interface cable

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 18:08:21 UTC
From: "G. Doughty" <ki4bbl@cox.net>
Message-ID: <pybId.28091$sf5.19309@lakeread05>
Source record: 20751

I have done some research but cannot find a schematic for a computer to 555 interface. I would like to use a winkey kit and do some contesting. Has anyone ever built one of these or at least know which inputs and outputs to connect etc? Is there some kind of "known" pins to use for the serial port and then for the mic jack on the rig? Thanks for any replies

G. Doughty
ki4bbl@cox.net

619. FA: Hammarlund HQ-129X Main and Bandspread Knobs

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 19:30:07 UTC
From: Tom <tfarl@iowatelecom.net>
Message-ID: <3LcId.19678$IV5.10362@attbi_s54>
Source record: 20752
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

FA: HQ-129X Main and Bandspread Tuning knobs. These are originals and correct for restoration.

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5744998569

Ends Sunday Jan-23-05 17:50:50 PST (1/24/05 01:50:50 UTC)

Thanks for your time

620. RTTY format

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 19:37:19 UTC
From: dave.harper@gmail.com
Message-ID: <1106336239.772565.19000@z14g2000cwz.googlegroups.com>
Source record: 20753

I'm trying to write a program (for my own education) that will transmit RTTY. I'm having some difficulty determining the exact format. From what I've observed from MMTTY, an idle keyboard has a 22ms space tone followed by a mark tone until the next space tone. I would have assumed that a standard letter/8bit transmit would last 196ms (22*8), but after recording it with a wav recorder and viewing it, it appears to be shorter (168ms or so, +/- 10). I'm not sure if the recorder is not accurate with timekeeping, or if I don't fully understand the format.

I would like to believe the standard format for a letter/8bit transmit is a start bit (space), data bits (marks/spaces), and two stop bits (space), *ALL* of which are 22ms long. Is this statement correct?
Thanks in advance,
Dave

621. Re: RTTY format

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 20:34:32 UTC
From: Jack Smith <Jack.Smith@cox.net>
Message-ID: <cnp2v05d9vd8v8v88kuplqqod6iqfg3n2q@4ax.com>
Source record: 20754

On 21 Jan 2005 11:37:19 -0800, dave.harper@gmail.com wrote:

>I'm trying to write a program (for my own education) that will transmit
>RTTY. I'm having some difficulty determining the exact format. From
>what I've observed from MMTTY, an idle keyboard has a 22ms space tone
>followed by a mark tone until the next space tone. I would have
>assumed that a standard letter/8bit transmit would last 196ms (22*8),
>but after recording it with a wav recorder and viewing it, it appears
>to be shorter (168ms or so, +/- 10). I'm not sure if the recorder is
>not accurate with timekeeping, or if I don't fully understand the
>format.
>
>I would like to believe the standard format for a letter/8bit transmit
>is a start bit (space), data bits (marks/spaces), and two stop bits
>(space), *ALL* of which are 22ms long. Is this statement correct?
>Thanks in advance,
>Dave

No. It's a 5-bit code, plus start/stop bits. google for Baudot and you
can find a code chart.

The stop bit may be 1.0, 1.42 or 1.5 units long, with 1.42 being the
value based on the most common mechanical printers.

Hence, you will often see it called a 7.42 unit code.

Jack K8ZOA

622. Re: RTTY format

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 20:45:11 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <3TdId.5946$Pv2.2837@fe03.lga>
Source record: 20755

<dave.harper@gmail.com> wrote in message
news:1106336239.772565.19000@z14g2000cwz.googlegroups.com...

> I would like to believe the standard format for a letter/8bit transmit
> is a start bit (space), data bits (marks/spaces), and two stop bits
> (space), *ALL* of which are 22ms long. Is this statement correct?

As Jack pointed out, it is a five bit code. Even more interesting, it is a stateful code. There are two shift characters, LTRS and FIGS, which change the meaning of the codes that follow.

Years ago I was teaching a college assembly class and the Baudot code made for an interesting exercise <g>

..

623. Re: PIC operated FSK modem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 21:03:35 UTC
From: NM3R <dj_wang@yahoo.com>
Message-ID: <1106341415.258071.173830@f14g2000cwb.googlegroups.com>
Source record: 20756
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Check out Mike Berg's website, he has an interesting modem detector
using zero-crossing principle.
http://www.ringolake.com/pic_proj/zcd/zcdmodem.html

624. Re: PIC operated FSK modem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 22:38:58 UTC
From: Anthony Fremont <spam@anywhere.com>
Message-ID: <6wfId.53088$Z%.48051@fe1.texas.rr.com>
Source record: 20757
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

"NM3R" <dj_wang@yahoo.com> wrote

> Check out Mike Berg's website, he has an interesting modem detector
> using zero-crossing principle.
> http://www.ringolake.com/pic_proj/zcd/zcdmodem.html

I did something like this a few months ago on a 16F628. I was attempting to build a line-powered caller-id box. I got it real close, but could never quite get 100% copy on the data. I could get better than 99%, but even one bit error is one too many. Since I couldn't use an o-scope (no isolation transformer or probe set), I don't know for sure what the problem was. I do know one thing, it was the busiest PIC program I ever wrote. ;-) I really need a logic analyzer or DSO to debug this thing. It's possible (due to a recent project having issues that I resolved) that my bit errors were due solely to noise coming from the LCD. Sometimes it would get the data copy perfect, but most of the time there was 1 or 2 bit errors in the burst. Very occaisionally, you couldn't make anything out. :-(

I used the CCP module and TMR1 to measure the width of the top-half of the incoming sound. Based upon the width, I would toggle a PIC pin effectively ouputing a 1200 baud serial stream on that pin. That didn't look to good (0 vs 1 bit width distortion because of my technique), so I retimed the bits using another timer (TMR2). I then fed that pin to another pin that was a bit-banged serial receiver (RB0 int for start bit, tmr0 for the rest) that stuffed the received bytes into a circular queue. The main level code only looked for data to appear in the circular buffer and then printed it on an LCD. >90% of the time was spent in ISR routines. The whole thing consumed like 3mA. The PIC ran at 4Mhz and 5V using a Zener diode for regulation. IME, 2400 BAUD would not have been possible without using a higher speed crystal.

I have never tried sending modem tones from a PIC, but AIUI it's entirely possible.

625. Re: 455KHZ or 10.7 MHz IF

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 22:52:20 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <tq13v0tkthuo1a27q1vqvlga16ia455oa5@4ax.com>
Source record: 20758

On 21 Jan 2005 14:07:17 GMT, pdrunen@aol.com (PDRUNEN) wrote:

>Hi Group,
>
>Any one have an IF strip that they can give, trade or, swap?
>
>Needs to be transistor type.
>
>De KJ4UO

Ah, your request is still far from specific enough to answer.

Is the IF to be used for AM, FM, SSB, ISB or some other?
It does make a difference.

Allison
KB1GMX

626. Re: RTTY format

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-21 23:57:08 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <VA.00000093.0026d19f@btinternet.com>
Source record: 20759

Hi,

Further - the RTTY code is asynchronous where the stop bit may be any length over the standard 1.42 or 1.5 bit minimum. It is therefore almost standard practice to pass the key-strokes into a buffer and to output them from there so that the final result is almost synchronous. If this buffer should be emptied then some neutral character such as a 'letters shift' is continually output (called I think, 'diddling') to keep the circuit alive and to remove any DC component caused by a constant mark during 'hunt and peck' keying.

Don't forget to include the other common commercial standard of a 20ms bit-size (50 baud) in your program.

Cheers - Joe

627. Re: RTTY format

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-22 01:26:06 UTC
From: Tom <noname@noprovider.nodomain>
Message-ID: <OYhId.11772$HT6.5757@trnddc04>
Source record: 20760

In both Baudot and ASCII an idle keyboard produces a constant MARK signal (loop current 'on' for a TTY machine), thus no signalling changes. In Baudot/RTTY
it's common practice however to periodically emit what is called a 'diddle' when
the keyboard is idle. Normally a LTRS character is used as the 'diddle'. This
helps the receiver stay better synchronized to transmitter. Different software
can be programmed to emit constant 'diddles' or to emit them about once a second.

-- Tom

<dave.harper@gmail.com> wrote in message
news:1106336239.772565.19000@z14g2000cwz.googlegroups.com...
> I'm trying to write a program (for my own education) that will transmit
> RTTY. I'm having some difficulty determining the exact format. From
> what I've observed from MMTTY, an idle keyboard has a 22ms space tone
> followed by a mark tone until the next space tone. I would have
> assumed that a standard letter/8bit transmit would last 196ms (22*8),
> but after recording it with a wav recorder and viewing it, it appears
> to be shorter (168ms or so, +/- 10). I'm not sure if the recorder is
> not accurate with timekeeping, or if I don't fully understand the
> format.
>
> I would like to believe the standard format for a letter/8bit transmit
> is a start bit (space), data bits (marks/spaces), and two stop bits
> (space), *ALL* of which are 22ms long. Is this statement correct?
> Thanks in advance,
> Dave
>

628. Eimac 3-500Z Data Sheets available - FREE

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-22 04:01:18 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <10v3jt4m41c6i41@news.supernews.com>
Source record: 20761
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

View individual data sheets and save the ones you want or download a single zip file that contains all 8 sheets. Tech specs, application notes, and a dual 3-500Z amp schematic are included.

1. http://www.ad5th.com/3-500Z.html

--

Charlie
Ham Radio - AD5TH
www.ad5th.com

629. Re: 455KHZ or 10.7 MHz IF

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-22 05:30:32 UTC
From: RCM <rkmr15203@yahoo.com>
Message-ID: <cssobg$1s87$1@news.aspstation.net>
Source record: 20762

nospam@nouce.bellatlantic.net wrote:
> On 21 Jan 2005 14:07:17 GMT, pdrunen@aol.com (PDRUNEN) wrote:
>
>
>>Hi Group,
>>
>>Any one have an IF strip that they can give, trade or, swap?
>>
>>Needs to be transistor type.
>>
>>De KJ4UO
>
>
> Ah, your request is still far from specific enough to answer.
>
> Is the IF to be used for AM, FM, SSB, ISB or some other?
> It does make a difference.
>
> Allison
> KB1GMX
Says IF strip...not detector...

630. Re: 455KHZ or 10.7 MHz IF

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-22 07:18:56 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <cssup0$9nk$1@theodyn.ncf.ca>
Source record: 20763

RCM (rkmr15203@yahoo.com) writes:
> nospam@nouce.bellatlantic.net wrote:
>> On 21 Jan 2005 14:07:17 GMT, pdrunen@aol.com (PDRUNEN) wrote:
>>
>>
>>>Hi Group,
>>>
>>>Any one have an IF strip that they can give, trade or, swap?
>>>
>>>Needs to be transistor type.
>>>
>>>De KJ4UO
>>
>>
>> Ah, your request is still far from specific enough to answer.
>>
>> Is the IF to be used for AM, FM, SSB, ISB or some other?
>> It does make a difference.
>>
>> Allison
>> KB1GMX
> Says IF strip...not detector...

No, an IF strip tends to mean including the detector. If he
meant "IF amplifier" he would have said that.

Even if the detector is not included, the modulation mode is needed to
define the solution. An FM strip will include limiter stages, which
you don't want for AM modes. Bandwidth selectivity is usually part of the IF
strip, and bandwidth depends on type of modulation, and indeed can vary
widely on the same type of mode.

The original poster sounds like he expects to find a module, and that's
not likely the case.

If someone needs an FM broadcast band IF strip, the obvious solution
is an FM broadcast receiver of some sort. A portable, a stereo receiver,
a car radio. There'll be the needed ceramic filter(s), and at this
point an IC that does the work. It won't be a module, but one could
either chop out the section, or trace it and then desolder the parts
and then rebuild it elsewhere.

Narrow deviation FM, an obvious solution is an existing two-way radio.
I've pulled actual modules out of older (and clunky) cellphones, but
they tend to have a first IF in the 45MHz range, or higher, and then
convert down to 455KHz. 49MHz superhet walkie talkies can supply

an IF strip for this, and most of them were 10.7MHz first IF and then 455KHz. But some dropped down to 455KHz. Old cordless phones operated at 49MHz, and again many use the same conversion scheme. The walkie talkies, and many of the cordless phones, that I've taken apart use one of the (now old) Motorola FM IF strip ICs, the included the conversion stage from 10.7MHz to 455KHz. Again, these won't be modules, but the walkie talkie boards are fairly small and one just needs to feed the signal in around the front end.

AM IF strips, the obvious solution is an AM broadcast radio. For narrower selectivity, a CB set will offer up narrower filters, and many will be double conversion with a 10.7MHz first IF and a 455KHz second IF.

CW, well there isn't likely to be anything floating around in consumer equipment. Either you live with wider bandwidth for AM, and then add a BFO, or you build from scratch.

Same with SSB. While some firms over the years have offered SSB IF strip modules, that's a rarity. And there's not much one can extract an IF strip from where the whole unit is not just useable to start with.

So for SSB and CW, one likely has to build from scratch.

But until we see a more detailed response, there really can't be an answer.

Michael VE2BVW

631. Re: 455KHZ or 10.7 MHz IF

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-22 16:15:07 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <iou4v0t5h22ndcfucgb7k3q6c36udllhd1@4ax.com>
Source record: 20764

On Sat, 22 Jan 2005 00:30:32 -0500, RCM <rkmr15203@yahoo.com> wrote:

>Says IF strip...not detector...

Still makes a difference.

If you were to use a 455 if from say a Motrac RX for ssb you'd find
the lack of AGC (and easy way to do it) as it was designed to limit
would make for very poor results. Also an IF intended for SSB
use may not have enough gain and poor limiting for a FM RX use.

So the answer is that the intended use is important. Usually the
detector is part of the IF "strip" asssembly.

Allison
KB1GMX

632. Wanted: HBR receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-22 20:16:51 UTC
From: Floyd Sense <fsense@copper.net>
Message-ID: <41f2b4fb_4@newsfeed.slurp.net>
Source record: 20765

Looking for a nice HBR-16 or other receiver of the HBR line to continue some work I was doing 35 years ago. All leads appreciated.

--
73, Floyd - K8AC

633. Re: Eimac 3-500Z Data Sheets available - FREE

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-22 21:14:38 UTC
From: Ottar <ok_nothere@online.no>
Message-ID: <41f2c244@news.broadpark.no>
Source record: 20766
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Charlie wrote:

>
> View individual data sheets and save the ones you want or download a
> single zip file that contains all 8 sheets. Tech specs, application notes,
> and a dual 3-500Z amp schematic are included.
>
> 1. http://www.ad5th.com/3-500Z.html
>
>
>

To cut&paste try http://www.kvindesland.no/la9iha/pa/3-500z.html

73 de ottar, la9iha

634. EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-23 05:40:27 UTC
From: radio913@aol.com
Message-ID: <1106458827.638312.138480@c13g2000cwb.googlegroups.com>
Source record: 20770

Hi,

I'm quite comfortable impedance matching to large signal series equivalent impedances, when i get them in data sheets. No problem, even when i have to extrapolate a bit.

However, sometimes you only get scattering parameters. So we could use this formula:

Z11=((1+s11)*(1-s22)+s12*s21)/((1-s11) *(1-s22)-s12*s21)

Etcetera. But i don't wanna do vector math all the time. And i also don't wanna graph this gamma on the Smith chart by hand.

So i was wondering if there was a program out there, that will do this calculation for you?

Thanks in advance!

Dr. Slick

635. EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-23 05:40:39 UTC
From: radio913@aol.com
Message-ID: <1106458839.658882.205690@z14g2000cwz.googlegroups.com>
Source record: 20767

Hi,

I'm quite comfortable impedance matching to
large signal series equivalent impedances, when i
get them in data sheets. No problem, even when i
have to extrapolate a bit.

However, sometimes you only get scattering
parameters. So we could use this formula:

Z11=((1+s11)*(1-s22)+s12*s21)/((1-s11)
*(1-s22)-s12*s21)

Etcetera. But i don't wanna do vector
math all the time. And i also don't wanna
graph this gamma on the Smith chart by hand.

So i was wondering if there was a program
out there, that will do this calculation
for you?

Thanks in advance!

Dr. Slick

636. EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-23 05:41:05 UTC
From: radio913@aol.com
Message-ID: <1106458865.198387.140930@c13g2000cwb.googlegroups.com>
Source record: 20772

Hi,

I'm quite comfortable impedance matching to large signal series equivalent impedances, when i get them in data sheets. No problem, even when i have to extrapolate a bit.

However, sometimes you only get scattering parameters. So we could use this formula:

Z11=((1+s11)*(1-s22)+s12*s21)/((1-s11) *(1-s22)-s12*s21)

Etcetera. But i don't wanna do vector math all the time. And i also don't wanna graph this gamma on the Smith chart by hand.

So i was wondering if there was a program out there, that will do this calculation for you?

Thanks in advance!

Dr. Slick

637. EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-23 05:41:06 UTC
From: radio913@aol.com
Message-ID: <1106458866.607986.207430@z14g2000cwz.googlegroups.com>
Source record: 20771

Hi,

I'm quite comfortable impedance matching to large signal series equivalent impedances, when i get them in data sheets. No problem, even when i have to extrapolate a bit.

However, sometimes you only get scattering parameters. So we could use this formula:

Z11=((1+s11)*(1-s22)+s12*s21)/((1-s11) *(1-s22)-s12*s21)

Etcetera. But i don't wanna do vector math all the time. And i also don't wanna graph this gamma on the Smith chart by hand.

So i was wondering if there was a program out there, that will do this calculation for you?

Thanks in advance!

Dr. Slick

638. EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-23 05:41:08 UTC
From: radio913@aol.com
Message-ID: <1106458868.586216.207550@z14g2000cwz.googlegroups.com>
Source record: 20768

Hi,

I'm quite comfortable impedance matching to
large signal series equivalent impedances, when i
get them in data sheets. No problem, even when i
have to extrapolate a bit.

However, sometimes you only get scattering
parameters. So we could use this formula:

Z11=((1+s11)*(1-s22)+s12*s21)/((1-s11)
*(1-s22)-s12*s21)

Etcetera. But i don't wanna do vector
math all the time. And i also don't wanna
graph this gamma on the Smith chart by hand.

So i was wondering if there was a program
out there, that will do this calculation
for you?

Thanks in advance!

Dr. Slick

639. EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-23 05:41:09 UTC
From: radio913@aol.com
Message-ID: <1106458869.448543.141200@c13g2000cwb.googlegroups.com>
Source record: 20769

Hi,

I'm quite comfortable impedance matching to large signal series equivalent impedances, when i get them in data sheets. No problem, even when i have to extrapolate a bit.

However, sometimes you only get scattering parameters. So we could use this formula:

Z11=((1+s11)*(1-s22)+s12*s21)/((1-s11)*(1-s22)-s12*s21)

Etcetera. But i don't wanna do vector math all the time. And i also don't wanna graph this gamma on the Smith chart by hand.

So i was wondering if there was a program out there, that will do this calculation for you?

Thanks in advance!

Dr. Slick

640. EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-23 05:41:24 UTC
From: radio913@aol.com
Message-ID: <1106458884.453837.121230@f14g2000cwb.googlegroups.com>
Source record: 20773

Hi,

I'm quite comfortable impedance matching to large signal series equivalent impedances, when i get them in data sheets. No problem, even when i have to extrapolate a bit.

However, sometimes you only get scattering parameters. So we could use this formula:

Z11=((1+s11)*(1-s22)+s12*s21)/((1-s11) *(1-s22)-s12*s21)

Etcetera. But i don't wanna do vector math all the time. And i also don't wanna graph this gamma on the Smith chart by hand.

So i was wondering if there was a program out there, that will do this calculation for you?

Thanks in advance!

Dr. Slick

641. Re: EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-23 06:06:19 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <TbGdnWYBrPJBo27cRVn-pA@comcast.com>
Source record: 20774

<radio913@aol.com> wrote in message
news:1106458827.638312.138480@c13g2000cwb.googlegroups.com...
> Etcetera. But i don't wanna do vector
> math all the time. And i also don't wanna
> graph this gamma on the Smith chart by hand.
>
> So i was wondering if there was a program
> out there, that will do this calculation
> for you?

Not that I'm aware of, but it'd be trivial to code up in MatLab, MathCAD, or
even Excel if you wanted to...

Heck, even 'Windows Scripting,' which is really Visual BASIC, would work.
In the *NIX word, there's PERL, Rexx, etc...

642. JVC GZ-S3 camera connector

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-23 08:52:38 UTC
From: Angel Vilaseca <avilaseca@bluewin.ch>
Message-ID: <Xns95E764977D553rayomaticcom@212.35.34.213>
Source record: 20775

Hi,

A friend gave me a JVC GZ-S3 camera and I want to use it for ATV.

This camera has a 10-pin connector to its power supply and VCR.
Unfortunately, I don't have any of the original units, so I cannot do
anything with it.

I want to homebrew a power supply or adapt one of the units I already have
and use the video signal for my ATV xmitter.

Does someone have some data about the GZ-S3 connector wiring?

This camera is a nice unit, with expensive optics, it was state-of-the art
back in the '80s. I hate the idea of ripping it away for parts.

73

Angel HB9SLV

643. Re: EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-23 11:05:12 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <VA.00000095.002808f6@btinternet.com>
Source record: 20776

Hi,

Agilent's (HP) AppCAD may be what you are looking for. The
current version is 3.02, I believe, and it is free.

Cheers - Joe

644. Re: EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-23 11:42:45 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <V4MId.24238$IV5.16993@attbi_s54>
Source record: 20777

Here is a suggestion to provide terrific help with all kinds of math calculations. Mathcad is an excellent program that I have used for many years. It should be easy to find an older version such as 4.0 or 6.0 at very low cost which will do just about anything you can think of (I have version 12.0). This software is easy to get started with and can be learned more deeply with experience. Be sure to get the User Manual also. The equation that you illustrated is a piece of cake using Mathcad and complex S parameters. And the complex values of Z11 can be graphed on a polar or xy plot by the program over a wide frequency range.

Amazon.Com has a 6.0 version for $40 at this time (Sunday mornng). Be sure to get the User Manual.

Bill W0IYH

<radio913@aol.com> wrote in message
news:1106458884.453837.121230@f14g2000cwb.googlegroups.com...
> Hi,
>
> I'm quite comfortable impedance matching to
> large signal series equivalent impedances, when i
> get them in data sheets. No problem, even when i
> have to extrapolate a bit.
>
> However, sometimes you only get scattering
> parameters. So we could use this formula:
>
> Z11=((1+s11)*(1-s22)+s12*s21)/((1-s11)
> *(1-s22)-s12*s21)
>
> Etcetera. But i don't wanna do vector
> math all the time. And i also don't wanna
> graph this gamma on the Smith chart by hand.
>
> So i was wondering if there was a program
> out there, that will do this calculation
> for you?
>
> Thanks in advance!
>
>
> Dr. Slick
>

645. Re: Alternate material j pole and questions about dimensions

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-23 17:23:58 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <c7n7v09o5vtsfqkkvhu5kk9b4qntfova8l@4ax.com>
Source record: 20778

On 21 Jan 2005 05:37:58 -0800, stryped@hotmail.com wrote:

>I am experimenting making a j pole out of 1/2 inch conduit. What I am
>thinking of doing is making it like a "u" in that each piece, the
>radiator, stub and shorting bar are cut at 45 degree angles and welded
>togther. I have the dimensions using the 1/2 inch copper. How do i
>measure each pieces "length"? I mean in the copper plan they use t
>fittings and measure the radiator length starting incide the t fitting
>where it is lower than the shorting bar.
>
>My ides was to just measure the end of the angled piece where I cut it
>to the top, but not sure if this is right. What do you think?
>
>Also, since an antenna constructed this way will not have an "extended
>leg" to mount to a mast, would it be acceptable to mount the shorted
>horizontal section to the mast? Will this cause problems?
>Any help is appreciated. I hope to work on this tomorrow.

Best method is to cut the length slightly over, then test on an SWR
meter, and trim a little at a time to optimize.

Different materials, different wall thickness, and different diameter
will all affect the apparent electrical length.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

646. Re: EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-23 18:06:31 UTC
From: Bob Stein <bobXstein@sbcglobal.net>
Message-ID: <35i7c1F4hnqb3U1@individual.net>
Source record: 20779

radio913@aol.com wrote:
> Hi,
>
> I'm quite comfortable impedance matching to
> large signal series equivalent impedances, when i
> get them in data sheets. No problem, even when i
> have to extrapolate a bit.
>
> However, sometimes you only get scattering
> parameters. So we could use this formula:
>
> Z11=((1+s11)*(1-s22)+s12*s21)/((1-s11)
> *(1-s22)-s12*s21)
>
> Etcetera. But i don't wanna do vector
> math all the time. And i also don't wanna
> graph this gamma on the Smith chart by hand.
>
> So i was wondering if there was a program
> out there, that will do this calculation
> for you?
>
> Thanks in advance!
>
>
> Dr. Slick
>
Years ago I wrote a program in Basic which does exactly that. If I can
find it I will be happy to email it to you.

bob, w6nbi

--
Remove spam-suppression X from my address

647. Re: EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-23 20:04:38 UTC
From: lenover21@aol.com
Message-ID: <20050123150438.11141.00000117@mb-m02.aol.com>
Source record: 20780

In article <V4MId.24238$IV5.16993@attbi_s54>, "William E. Sabin"
<w.sabin@mchsi.com> writes:

>Here is a suggestion to provide terrific help with all kinds of math
>calculations. Mathcad is an excellent program that I have used for many
>years. It should be easy to find an older version such as 4.0 or 6.0 at
>very low cost which will do just about anything you can think of (I have
>version 12.0). This software is easy to get started with and can be learned
>more deeply with experience. Be sure to get the User Manual also. The
>equation that you illustrated is a piece of cake using Mathcad and complex S
>parameters. And the complex values of Z11 can be graphed on a polar or xy
>plot by the program over a wide frequency range.
>
>Amazon.Com has a 6.0 version for $40 at this time (Sunday mornng). Be sure
>to get the User Manual.

Mathcad is a nice - but EXPENSIVE - computer program.

For conversion of S Parameters into any other form, a simple
handheld pocket-size scientific calculator would seem a better
investment. The Hewlett-Packard Model 33 calculator cost less
than $100 and can do complex quantity calculations (add,
subtract, multiply, divide, some transcendental functions) as
easily as single-quantity (scalar) calculations...and with a choice
of notation of fixed-point, scientific, or engineering exponent
formats. It is very useful for simpler calculations and the internal
battery lasts a long time thanks to internal CMOS electronics.
[my older HP 32S II has been going along on the original batteries
for nearly five years now] Since it is programmable, the 32 or
33 models can do formulas and a host of other pre-programmed
functions.

HP's marketing strategy for calculators seems to be sales
through its website or, possibly, if in-stock, at Staples, CompUSA,
Best Buy, or Wal-Mart. Easy enough to order on-line via -

www.hpshopping.com

Click on "hand-helds and calculators." On-line price for the 33s
is $50. The simpler, algebraic notation 30s is only $15, but that
one cannot handle complex quantities directly.

LenAnderson@ieee.org
LenAnderson@ieee.org

648. looking for rf sysnthesizer chip, or chips...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-23 20:29:21 UTC
From: larry <larya@rogers.com>
Message-ID: <kIKdne2JWNsDlGncRVn-qQ@rogers.com>
Source record: 20781

Greetings

In looking through my junk? box, I have found a number of crystal transmitter strips that I had collected over the 70's with plans to put various projects to practical use...

Unfortunately, time has a way changing ones directions in life...

I now find myself with these transmitter strips and would like to turn them into useful variable frequency transmitters. I also have one or two receiver strips using crystals.

When I see the police and other portable radio users, I often wonder how they get several frequencies in their handhelds. I also suspect that the various services, like police, ambulance, etc, have one handheld board and they have similar chips which are program for their particular bands or channels in mind...

I am looking through search engines, like google, but I wonder if anyone reading this might know of a company which produces rf synthesizer chips in particular that I could take a look at...

Larry ve3fxq larya@rogers.com

649. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-23 20:49:27 UTC
From: Tony VE6MVP <tony@REMOVEve6mvp.com>
Message-ID: <3d38v05rpj4eit7prqhpcqucb71b3snbj3@4ax.com>
Source record: 20782

On Wed, 19 Jan 2005 22:21:40 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>> >Therefore you illustrate why top-posting is
>> >the preferred style amongst civilised people,
>> >because bottom-posters are characterised
>> >by bad manners.
>>
>> Generalization and rubbish.

>QED.

I'll let you have the last word.

Tony

650. Re: 12V Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-23 20:49:48 UTC
From: larry <larya@rogers.com>
Message-ID: <zq-dne0EF8n0k2ncRVn-qQ@rogers.com>
Source record: 20783

May I ask, first, what components, for your power supply, do you currently
have...
I gather you have the transformer.. what other components do you have...

I gather the transformer is 32 volts across the full secondary, with a
center tap??

Larry ve3fxq
larya@rogers.com

"beerbarrel" <beerbarrel@cox.net> wrote in message
news:sq81u0dbpcdjvc9cdm2oebs6vbe8s39tff@4ax.com...
> On Sat, 08 Jan 2005 20:42:35 -0500, John Popelish <jpopelish@rica.net>
> wrote:
>
> >beerbarrel wrote:
> >>
> >> Anyone have a source for a schematic for a 12v around 20 to 30 amp
> >> power supply that makes use of a full wave rectifier? I've found quite
> >> a few for a bridge rectifier but I'm not really sure how to mod them
> >> to use a full wave rectifier. I have a nice 32v 30 amp center tapped
> >> at 16v transformer that I would like to make use of.
> >>
> >> Thanks...
> >
> >You can use half of your bridge with this transformer to produce
> >something like 22 volts DC at the filter cap. Connect each end ot the
> >secondary to one of the AC inputs ot the bridge and connect the cap
> >and load between one of the DC connections of the bridge and the
> >center tap. If you use the + terminal of the bridge, it will be the
> >positive output. If you use the - terminal of the bridge, the center
> >tap will be the positive output.
> >
> >The bridges will handle a bit more current than they are rated for,
> >because only two of the 4 rectifiers will be getting hot. They will
> >certainly need a heat sink for anything like 20 amperes out, though.
> >
> >After you get that working and running a couple 12 volt headlights in
> >series (at least), you can start thinking about how to regulate this
> >down to 12 volts.
>
>
> Thanks John...
>
> I saw that particular setup somewhere while I was looking for a

> schematic. I would really like to try to use the transformer as
> designed if I could. It would be nice to throw it into some of the
> good schematics that I've seen on the net. I might wind up using the
> one secondary and the centertap if I can find something.

651. Re: Wanted: HBR receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-23 21:32:45 UTC
From: Roger and Ute Brown <rogerbrown@gci.net>
Message-ID: <10v8rq8gb4a3v3c@corp.supernews.com>
Source record: 20795

Just saw one on e-bay listed under HBR I think.
Roger Brown, KL7Q

Floyd Sense <fsense@copper.net> wrote in message
news:41f2b4fb_4@newsfeed.slurp.net...
> Looking for a nice HBR-16 or other receiver of the HBR line to continue
some
> work I was doing 35 years ago. All leads appreciated.
>
> --
> 73, Floyd - K8AC
>
>

652. Re: looking for rf sysnthesizer chip, or chips...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-23 21:38:25 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <jRUId.4133$Wo7.236@fe03.lga>
Source record: 20784

Larry

There are a number of synthesizer chips ... probably the most popular for amateur use are those from Analog Devices. There are a large number of projects using the AD9850, which is kind of long in the tooth now, but still it works quite well for HF. It's main downside is that it needs a high frequency oscillator, and package crystal oscillators in the 100 to 120 MHz range tend to be kind of power hungry.

Check out http://www.amqrp.org and look at the DDS daughter card. It is about the simplest way to apply one of these. The daughter card provides pretty much the minimum you need to use a 9850. There are lots of other projects out there, including a couple of boards from Far Circuits, but most of them presume that you want to do something specific. The daughtercard has the basics and nothing more. If you basically want a VFO, there is a Far Circuits board that is pretty much the same as the DDS Daughtercard but adds a PIC, encoder and LCD to make a complete DC-30MHz VFO. AmQRP also has an IQ-VFO project currently that, I think, uses a 9854.

TI also has some nice synthesizers. Look into the TRF4400/4900 and also their TRF2050/51/52. They are cheaper than the AD parts, but AD is easy with samples. In fact, they make it pretty hard to buy one or two of their chips. Seems like they would rather give them away. The TI chips are generally UHF parts, but with a prescaler they can be used down in the HF range. The 4x00 parts are called "transmitters" but they are nothing more than DDS chips with a little more power out.

..

"larry" <larya@rogers.com> wrote in message
news:kIKdne2JWNsDlGncRVn-qQ@rogers.com...
> Greetings
>
> In looking through my junk? box, I have found a number of crystal
> transmitter strips that I had collected over the 70's with plans to put
> various projects to practical use...
>
> Unfortunately, time has a way changing ones directions in life...
>
> I now find myself with these transmitter strips and would like to turn
them
> into useful variable frequency transmitters. I also have one or two
> receiver strips using crystals.
>
> When I see the police and other portable radio users, I often wonder how
> they get several frequencies in their handhelds. I also suspect that

the
> various services, like police, ambulance, etc, have one handheld board and
> they have similar chips which are program for their particular bands or
> channels in mind...
>
> I am looking through search engines, like google, but I wonder if anyone
> reading this might know of a company which produces rf synthesizer chips
in
> particular that I could take a look at...
>
> Larry ve3fxq larya@rogers.com
>
>

653. Re: EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-23 22:37:52 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <4HVId.25618$eT5.18992@attbi_s51>
Source record: 20785

"Len Anderson" <lenover21@aol.com> wrote in message
news:20050123150438.11141.00000117@mb-m02.aol.com...
> In article <V4MId.24238$IV5.16993@attbi_s54>, "William E. Sabin"
> <w.sabin@mchsi.com> writes:
>
>>Here is a suggestion to provide terrific help with all kinds of math
>>calculations. Mathcad is an excellent program that I have used for many
>>years. It should be easy to find an older version such as 4.0 or 6.0 at
>>very low cost which will do just about anything you can think of (I have
>>version 12.0). This software is easy to get started with and can be
>>learned
>>more deeply with experience. Be sure to get the User Manual also. The
>>equation that you illustrated is a piece of cake using Mathcad and complex
>>S
>>parameters. And the complex values of Z11 can be graphed on a polar or xy
>>plot by the program over a wide frequency range.
>>
>>Amazon.Com has a 6.0 version for $40 at this time (Sunday mornng). Be sure
>>to get the User Manual.

> Mathcad is a nice - but EXPENSIVE - computer program.

$40 for a program as powerful and multi-faceted as Mathcad 6.0 seems to me
to be quite a bargain and a gateway to a whole world of applied mathematics.

Bill W0IYH

654. 2m VCO?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 00:10:08 UTC
From: James Bond <justmereally@hotmail.com>
Message-ID: <ct1ed0qnv1@sparta.btinternet.com>
Source record: 20786

i'm after a circuit for a 2m VCO.

basically i'm planning to homebrew a kind of tracking generator, where I can sweep across 2m to look at filter shapes, etc.

my plan is to sweep, using a vco, across 2m using a sawtooth waveform. this waveform will also be amplified and fed to an oscilliscope, to give me a horizontal sweep.

the output from the filter will then be fed to a RF millivoltmeter circuit (again, anyone got any good circuits?) and this will then be fed into a logarithmic converter then be put onto the Y deflection, to give me amplitude.

calibration will be by putting the system into "manual" mode and connecting to a frequency counter, then sweeping up and down until get specific frequency, then the x-centering be used to set this on a known point.

basically anything that having say 1-6V in giving a 140 to 150mhz sweep would be grand, then i can play with amplifiers to get it just as i want.

thanks all!

dr. x

655. Re: 2m VCO?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 01:16:37 UTC
From: Verizon News <joe@roccis.com>
Message-ID: <V%XId.17294$Vx2.219@trndny01>
Source record: 20787

Check out this circuit:

http://www.edn.com/archives/1998/111998/pdfs/23DI2294.pdf

It will easily tune an octave with just a few volts of tuning voltage.

Joe
W3JDR

"James Bond" <justmereally@hotmail.com> wrote in message
news:ct1ed0qnv1@sparta.btinternet.com...
> i'm after a circuit for a 2m VCO.
>
> basically i'm planning to homebrew a kind of tracking generator, where I
> can sweep across 2m to look at filter shapes, etc.
>
>
> my plan is to sweep, using a vco, across 2m using a sawtooth waveform.
> this waveform will also be amplified and fed to an oscilliscope, to give
> me a horizontal sweep.
>
> the output from the filter will then be fed to a RF millivoltmeter circuit
> (again, anyone got any good circuits?) and this will then be fed into a
> logarithmic converter then be put onto the Y deflection, to give me
> amplitude.
>
>
> calibration will be by putting the system into "manual" mode and
> connecting to a frequency counter, then sweeping up and down until get
> specific frequency, then the x-centering be used to set this on a known
> point.
>
>
>
> basically anything that having say 1-6V in giving a 140 to 150mhz sweep
> would be grand, then i can play with amplifiers to get it just as i want.
>
>
> thanks all!
>
> dr. x
>

656. Homebrew 3kV Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 01:39:41 UTC
From: Jason Dugas <kb5urq@hotmail.com>
Message-ID: <10v8kep4ais1317@corp.supernews.com>
Source record: 20788

I recently got a high voltage transformer that I'm going to use to build a HV power supply for some future homebrew tube amps.

I'm curious if I'll need a high voltage voltmeter? I'm new to the high voltage world and so need some guidance or 'tips' in building HV circuits. I have already consulted the ARRL Handbook for all of the safety precautions, so I'm not so much looking for that sort of information, as I am practical tips in putting together the circuit and having some sort of meter to use in order to check various voltages throughout the circuit & on the output.

If I do need a voltmeter capable of measuring kV level voltages, what brands/models should I be looking for? If not, what equipment will I need?

Thanks,

Jason
KB5URQ

657. detector diode conduction question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 01:47:29 UTC
From: hexter@blazenet.net
Message-ID: <10v8kthpu9flm6e@corp.supernews.com>
Source record: 20789

Hello all,

I want to try to detect signal levels of 50mv to 200mv peak to peak. I need a passive circuit with no amplifiers, and I will be feeding a DVM with .01v resolution. The problem I am having is that a 1N34 will not conduct very well at these low levels. Is there a more suitable diode? Can you give me a part number, or a simple way to get just one or two of these diodes? What the diode is looking at is a 50 ohm port on a 30 to 60 mhz I.F. chassis.

Thank you for your time.

658. Re: 2m VCO?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 01:49:29 UTC
From: budgie <me@privacy.net>
Message-ID: <jsk8v098c8sfs79ev7irvgu1c4li0dptp6@4ax.com>
Source record: 20790

On Mon, 24 Jan 2005 00:10:08 +0000 (UTC), "James Bond"
<justmereally@hotmail.com> wrote:

>i'm after a circuit for a 2m VCO.
>
>basically i'm planning to homebrew a kind of tracking generator, where I can
>sweep across 2m to look at filter shapes, etc.
>
>my plan is to sweep, using a vco, across 2m using a sawtooth waveform. this
>waveform will also be amplified and fed to an oscilliscope, to give me a
>horizontal sweep.
>
>the output from the filter will then be fed to a RF millivoltmeter circuit
>(again, anyone got any good circuits?) and this will then be fed into a
>logarithmic converter then be put onto the Y deflection, to give me
>amplitude.

That's called a spectrum analyser ...>

>calibration will be by putting the system into "manual" mode and connecting
>to a frequency counter, then sweeping up and down until get specific
>frequency, then the x-centering be used to set this on a known point.

Another way to provide cal information is with a comb generator. Add a
controlled amount of this to your detector input and you get blips on the screen
at comb spacings. Obviously have this switchable.

>basically anything that having say 1-6V in giving a 140 to 150mhz sweep
>would be grand, then i can play with amplifiers to get it just as i want.

Pinch the Tx VCO out of a highband mobile.

659. Re: EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 02:13:49 UTC
From: radio913@aol.com
Message-ID: <1106532829.965281.314450@z14g2000cwz.googlegroups.com>
Source record: 20791

Bob Stein wrote:
> radio913@aol.com wrote:
> > Hi,
> >
> > I'm quite comfortable impedance matching to
> > large signal series equivalent impedances, when i
> > get them in data sheets. No problem, even when i
> > have to extrapolate a bit.
> >
> > However, sometimes you only get scattering
> > parameters. So we could use this formula:
> >
> > Z11=((1+s11)*(1-s22)+s12*s21)/((1-s11)
> > *(1-s22)-s12*s21)
> >
> > Etcetera. But i don't wanna do vector
> > math all the time. And i also don't wanna
> > graph this gamma on the Smith chart by hand.
> >
> > So i was wondering if there was a program
> > out there, that will do this calculation
> > for you?
> >
> > Thanks in advance!
> >
> >
> > Dr. Slick
> >
> Years ago I wrote a program in Basic which does exactly that. If I
can
> find it I will be happy to email it to you.
>
> bob, w6nbi
>

Thanks Bob, that would be excellent.

As i understand the Z11 formula
i stated, you will still get a vector
solution, so in essence the Z11 will
be a gamma reflection coefficient, or magnitude
(from 0 to 1) with an angle. So on top of that, you
will need to convert this gamma to
the complex series equivalent impedance,
which you can do graphically on the Smith, or

by using:

Gamma(Z11) = (ZL-Zo) / (ZL+Zo)

And letting Zo=characteristic impedance (assume
real! Usually 50 ohms), and then solving for ZL.

Slick

660. Re: EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 02:18:56 UTC
From: radio913@aol.com
Message-ID: <1106533136.510425.85160@f14g2000cwb.googlegroups.com>
Source record: 20792

Joel Kolstad wrote:
> <radio913@aol.com> wrote in message
> news:1106458827.638312.138480@c13g2000cwb.googlegroups.com...
> > Etcetera. But i don't wanna do vector
> > math all the time. And i also don't wanna
> > graph this gamma on the Smith chart by hand.
> >
> > So i was wondering if there was a program
> > out there, that will do this calculation
> > for you?
>
> Not that I'm aware of, but it'd be trivial to code up in MatLab,
MathCAD, or
> even Excel if you wanted to...
>
> Heck, even 'Windows Scripting,' which is really Visual BASIC, would
work.
> In the *NIX word, there's PERL, Rexx, etc...

Well, i've never used Excel for vector algebra.

Could you throw something together on Excel, and send
me the file, so i know what you mean? If you could,
include the bi-linear transformation:

As i understand the Z11 formula
i stated, you will still get a vector
solution, so in essence the Z11 will
be a gamma reflection coefficient, or magnitude
(from 0 to 1) with an angle. So on top of that, you
will need to convert this gamma to
the complex series equivalent impedance,
which you can do graphically on the Smith, or
by using:

Gamma(Z11) = (ZL-Zo) / (ZL+Zo)

And letting Zo=characteristic impedance (assume
real! Usually 50 ohms), and then solving for ZL.

Slick

661. Re: EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 03:25:59 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <bVZId.26196$eT5.3281@attbi_s51>
Source record: 20793

Z11 is the complex input impedance of a two-port network that has an
open-circuit at the output port. That is, the output current is zero.

v1=Z11* i1 + Z12 * i2
v2=Z21* i1 + Z22 * i2

Z11= v1 / i1 when i2=0
Z22= v2 / i2 when i1=0
Z12= v1 / i2 when i1=0
Z21= v2 / i1 when i2=0

Z11 should be confused with S11, which is the reflection coefficient at the
input port.

S11=[(Z11-1)(Z22+1)-Z12*Z21]
/ [(Z11+1)(Z22+1)-Z12*Z21]

Bill W0IYH

<radio913@aol.com> wrote in message
news:1106533136.510425.85160@f14g2000cwb.googlegroups.com...
>
> Joel Kolstad wrote:
>> <radio913@aol.com> wrote in message
>> news:1106458827.638312.138480@c13g2000cwb.googlegroups.com...
>> > Etcetera. But i don't wanna do vector
>> > math all the time. And i also don't wanna
>> > graph this gamma on the Smith chart by hand.
>> >
>> > So i was wondering if there was a program
>> > out there, that will do this calculation
>> > for you?
>>
>> Not that I'm aware of, but it'd be trivial to code up in MatLab,
> MathCAD, or
>> even Excel if you wanted to...
>>
>> Heck, even 'Windows Scripting,' which is really Visual BASIC, would
> work.
>> In the *NIX word, there's PERL, Rexx, etc...
>
>
> Well, i've never used Excel for vector algebra.
>
> Could you throw something together on Excel, and send
> me the file, so i know what you mean? If you could,

> include the bi-linear transformation:
>
> As i understand the Z11 formula
> i stated, you will still get a vector
> solution, so in essence the Z11 will
> be a gamma reflection coefficient, or magnitude
> (from 0 to 1) with an angle. So on top of that, you
> will need to convert this gamma to
> the complex series equivalent impedance,
> which you can do graphically on the Smith, or
> by using:
>
> Gamma(Z11) = (ZL-Zo) / (ZL+Zo)
>
> And letting Zo=characteristic impedance (assume
> real! Usually 50 ohms), and then solving for ZL.
>
>
> Slick
>

662. Re: EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 03:38:17 UTC
From: radio913@aol.com
Message-ID: <1106537897.327962.103000@c13g2000cwb.googlegroups.com>
Source record: 20794

Joe McElvenney wrote:
> Hi,
>
> Agilent's (HP) AppCAD may be what you are looking for. The
> current version is 3.02, I believe, and it is free.
>
>
> Cheers - Joe

That's a good program, and there is tons of
stuff there.

But i'm not certain I can get large
signal impedances out of it. I mean,
when they give large signal impedances on
a data sheet, it's usually done by matching
the input and output on the bench, with
cut-and-try techniques, and then removing
the DUT, and using a VNA to measure the
what the transistor "sees" on both sides,
and then taking the conjugate of this, and
calling this the large signal impedance.
Matching to these usually gives you
good results.

How close Z11=((1+s11)*(1-s22)+s12*s21)/((1-s11)
*(1-s22)-s12*s21) will be to the stated large signal
impedances after you convert
it to a series equivalent impedance on the Smith
chart, I don't really know. It won't surpise me
if it doesn't come too close, as the s-parameters
are small signal.

Slick

663. Re: EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 04:28:47 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <3Q_Id.25241$OF5.16530@attbi_s52>
Source record: 20796

Corrections to my previous: input:

In place of Z11, Z12, Z21, Z22 use
Z11/Z0, Z12/Z0, Z21/Z0 and Z22/Z0

I was not careful enough (as usual).

With these corrections :

S11=[(Z11-Z0)(Z22+Z0)-Z12 Z21]
/ [(Z11+Z0)(Z22+Z0)-Z12 Z21]

Now I have it right. As before, Z11 and S11 are not the same thing. But if the product Z21Z12 is very small, as in certain uni-directional amplifier circuits, then

S11 = approximately [Z11-Z0] / [Z11+Z0]
which is the familiar Gamma.

Reference: Gonzalez "Microwave Amplifiers" Second
Edition, page 62.

Bill W0IYH

"William E. Sabin" <w.sabin@mchsi.com> wrote in message
news:bVZId.26196$eT5.3281@attbi_s51...
> Z11 is the complex input impedance of a two-port network that has an
> open-circuit at the output port. That is, the output current is zero.
>
> v1=Z11* i1 + Z12 * i2
> v2=Z21* i1 + Z22 * i2
>
> Z11= v1 / i1 when i2=0
> Z22= v2 / i2 when i1=0
> Z12= v1 / i2 when i1=0
> Z21= v2 / i1 when i2=0
>
> Z11 should be confused with S11, which is the reflection coefficient at
> the input port.
>
> S11=[(Z11-1)(Z22+1)-Z12*Z21]
> / [(Z11+1)(Z22+1)-Z12*Z21]
>
> Bill W0IYH
>
> <radio913@aol.com> wrote in message
> news:1106533136.510425.85160@f14g2000cwb.googlegroups.com...

>>
>> Joel Kolstad wrote:
>>> <radio913@aol.com> wrote in message
>>> news:1106458827.638312.138480@c13g2000cwb.googlegroups.com...
>>> > Etcetera. But i don't wanna do vector
>>> > math all the time. And i also don't wanna
>>> > graph this gamma on the Smith chart by hand.
>>> >
>>> > So i was wondering if there was a program
>>> > out there, that will do this calculation
>>> > for you?
>>>
>>> Not that I'm aware of, but it'd be trivial to code up in MatLab,
>> MathCAD, or
>>> even Excel if you wanted to...
>>>
>>> Heck, even 'Windows Scripting,' which is really Visual BASIC, would
>> work.
>>> In the *NIX word, there's PERL, Rexx, etc...
>>
>>
>> Well, i've never used Excel for vector algebra.
>>
>> Could you throw something together on Excel, and send
>> me the file, so i know what you mean? If you could,
>> include the bi-linear transformation:
>>
>> As i understand the Z11 formula
>> i stated, you will still get a vector
>> solution, so in essence the Z11 will
>> be a gamma reflection coefficient, or magnitude
>> (from 0 to 1) with an angle. So on top of that, you
>> will need to convert this gamma to
>> the complex series equivalent impedance,
>> which you can do graphically on the Smith, or
>> by using:
>>
>> Gamma(Z11) = (ZL-Zo) / (ZL+Zo)
>>
>> And letting Zo=characteristic impedance (assume
>> real! Usually 50 ohms), and then solving for ZL.
>>
>>
>> Slick
>>
>
>

664. Re: EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 04:44:10 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <u2%Id.26349$eT5.5885@attbi_s51>
Source record: 20797

<radio913@aol.com> wrote in message
news:1106537897.327962.103000@c13g2000cwb.googlegroups.com...
>
> How close Z11=((1+s11)*(1-s22)+s12*s21)/((1-s11)
> *(1-s22)-s12*s21) will be to the stated large signal
> impedances after you convert
> it to a series equivalent impedance on the Smith
> chart, I don't really know.

Note:

In the above formula Z11 should be replaced by
Z11 / Z0. In other words Z11 is "normalized" with respect to Z0 in this
formula. See the Gonzalez reference.

In a "normalized" Smith chart Z0=1.0.

Bill W0IYH

665. Re: EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 04:55:13 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <VMKdnW8p_eMr4mncRVn-ig@comcast.com>
Source record: 20648

>> Well, i've never used Excel for vector algebra.

It's certainly nowhere near as clean as, e.g., Matlab or MathCAD, but it can certainly do it. Look up the 'COMPLEX' function; it'll tell you you need to install the 'Analysis ToolPak add-in' and under 'see also' point you to the functions you'll need (e.g., IMSUM for complex arithmetic, etc.)

>> As i understand the Z11 formula
>> i stated, you will still get a vector
>> solution, so in essence the Z11 will
>> be a gamma reflection coefficient, or magnitude
>> (from 0 to 1) with an angle.

Right, or... just a regular old complex number. You can use IMABS and IMARGUMENT to obtain the maginutde and angle of your complex number.

---Joel

666. Re: detector diode conduction question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 07:27:17 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <41f4a356$0$16589$cc9e4d1f@news-text.dial.pipex.com>
Source record: 20649

"gudmundur" <hexter@blazenet.net> wrote in message
news:10v8kthpu9flm6e@corp.supernews.com...
> Hello all,
>
> I want to try to detect signal levels of 50mv to 200mv peak to peak.
> I need a passive circuit with no amplifiers, and I will be feeding a
> DVM with .01v resolution. The problem I am having is that a 1N34 will
> not conduct very well at these low levels. Is there a more suitable
> diode? Can you give me a part number, or a simple way to get just one
> or two of these diodes? What the diode is looking at is a 50 ohm port
> on a 30 to 60 mhz I.F. chassis.

This might be useful:

http://engphys.mcmaster.ca/~elmer101/sqlaw/sqlaw.html

Leon
--
Leon Heller, G1HSM
http://www.geocities.com/leon_heller

667. Re: detector diode conduction question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 09:20:48 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <Q53Jd.48870$06.2762@clgrps12>
Source record: 20650

Behold, gudmundur scribed on tube chassis:

> Hello all,
>
> I want to try to detect signal levels of 50mv to 200mv peak to peak.
> I need a passive circuit with no amplifiers, and I will be feeding a DVM
> with .01v resolution. The problem I am having is that a 1N34 will not
> conduct very well at these low levels. Is there a more suitable diode?

6AL5?

Just input from a tubehead ;-)

--
Gregg "t3h g33k"
http://geek.scorpiorising.ca
Ratings are for transistors, tubes have guidelines

668. Re: EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 10:13:39 UTC
From: radio913@aol.com
Message-ID: <1106561619.473071.264510@f14g2000cwb.googlegroups.com>
Source record: 20651

William E. Sabin wrote:
> <radio913@aol.com> wrote in message
> news:1106537897.327962.103000@c13g2000cwb.googlegroups.com...
> >
> > How close Z11=((1+s11)*(1-s22)+s12*s21)/((1-s11)
> > *(1-s22)-s12*s21) will be to the stated large signal
> > impedances after you convert
> > it to a series equivalent impedance on the Smith
> > chart, I don't really know.
>
> Note:
>
> In the above formula Z11 should be replaced by
> Z11 / Z0. In other words Z11 is "normalized" with respect to Z0 in
this
> formula. See the Gonzalez reference.
>
> In a "normalized" Smith chart Z0=1.0.
>
> Bill W0IYH

You're correct according to Pozar.

I'm gonna assume that this was just a
typo on Gottlieb's part (pg.131, Practical
RF power Design Tech.), and what he really
meant to type was lowercase "z11", to show
it was normalized. (I have a feeling Gottlieb
just copied this out of another book, just like
i copied it from him! heheh...)

But you bring up a good point:
I might be barking up the wrong tree here if
Z11 or z11 is defined as the input impedance
when port 2 is open circuited.
This shouldn't be the same as the large
signal input impedance, when the output is
approximately conjugately matched.

Slick

669. Re: NIST Makes Astounding Discovery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 11:45:59 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <35k5s0F4keg43U3@individual.net>
Source record: 20652

Deliberate mis-representation of what you said I posted
having been corrected; thank-you. It is this....

Top-posting is preferable to bottom-posting because
you get to see the new material without having first
to page down through tedious tracts of material that
you would otherwise have had to read before (frequently
several times)

"Tony VE6MVP" <tony@REMOVEve6mvp.com> wrote in message
news:3d38v05rpj4eit7prqhpcqucb71b3snbj3@4ax.com...
> On Wed, 19 Jan 2005 22:21:40 -0000, "Airy R.Bean" <Me@privacy.net>
> wrote:
> >QED.
> >> >Therefore you illustrate why top-posting is
> >> >the preferred style amongst civilised people,
> >> >because bottom-posters are characterised
> >> >by bad manners.
> >> Generalization and rubbish.
> I'll let you have the last word.

670. Re: EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 12:16:00 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <4G5Jd.27143$eT5.9790@attbi_s51>
Source record: 20653

>> Note:
>>
>> In the above formula Z11 should be replaced by
>> Z11 / Z0. In other words Z11 is "normalized" with respect to Z0 in
> this
>> formula. See the Gonzalez reference.
>>
>> In a "normalized" Smith chart Z0=1.0.
>>
>> Bill W0IYH

If the output is terminated with a 50 ohm pure resistance load then S11 is the complex input reflection coefficient, 0 to 1.0. In an active circuit (amplifier or oscillator) S11 can be outside these limits due to positive internal DUT feedback.

Bill W0IYH

671. Re: detector diode conduction question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 12:26:17 UTC
From: Verizon News <joe@roccis.com>
Message-ID: <JP5Jd.17418$Vx2.3810@trndny01>
Source record: 20654

Another method would be to transform the 50 ohm source impedance to
something higher before applying it to the detector. Each quadrupling of the
source impedance will double the RF voltage. This could be done with an RF
transformer, or a loosely coupled resonant tank circuit.

Joe
W3JDR

"Gregg" <nospam@unknown.org> wrote in message
news:Q53Jd.48870$06.2762@clgrps12...
> Behold, gudmundur scribed on tube chassis:
>
>> Hello all,
>>
>> I want to try to detect signal levels of 50mv to 200mv peak to peak.
>> I need a passive circuit with no amplifiers, and I will be feeding a DVM
>> with .01v resolution. The problem I am having is that a 1N34 will not
>> conduct very well at these low levels. Is there a more suitable diode?
>
> 6AL5?
>
> Just input from a tubehead ;-)
>
> --
> Gregg "t3h g33k"
> http://geek.scorpiorising.ca
> *Ratings are for transistors, tubes have guidelines*

672. Re: Homebrew 3kV Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 12:49:46 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <35k9e6F4me7v6U1@individual.net>
Source record: 20655

I'd add a caveat that when dropping down from
the high voltage, do it with a chain of series resistors,
each physically separated from its neighbour so that you
don't get flash-over. i.e., restrict the voltage over each resistor to
less than a couple of hundred.

"Bill Turner" <noway@nohow.com> wrote in message
news:5mp9v050i1ana4lu3s2b7cuj65bd4ro3ed@4ax.com...
> On Sun, 23 Jan 2005 19:39:41 -0600, "Jason Dugas" <kb5urq@hotmail.com>
> wrote:
> >If I do need a voltmeter capable of measuring kV level voltages, what
> >brands/models should I be looking for? If not, what equipment will I
need?
> You don't really need a high voltage meter per se. If you think about
> it, the current through the bleeder resistors is directly proportional
> to the total HV, so all you need is a low-value 'sense' resistor at the
> bottom of the string, and then measure the voltage across it. The only
> tricky part is compensating for the loading effect of the voltmeter
> across the sense resistor, but even that is basic ohm's law.

673. Alinco radio weird problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 13:41:20 UTC
From: stryped@hotmail.com
Message-ID: <1106574080.432077.105170@c13g2000cwb.googlegroups.com>
Source record: 20657

I bought an ALinco DR 590 dual band amature radio at a hamfest. It is a mobile. Got it home, hooked it up, everything on the display lit up. I mean everything, even things that were not supposed to. The frequency number has stange lines in it. It was not usable.

Came back later and it started working fine even made soem contacts with it. Used it for about 20 minutes, no problem. Put the radio away inside.

Hooked it up last night to try out some antennas and it did the same thing. I played with it for an hour to no avail. Took it inside and took it part way apart, did not see anything, maybe soem pinch wires to the display but could not tell. Put it back togther. Hooked it up and it worked fine. left it in the garage last night. Hooked it back up this morning before going to work. It worked fine.
Am I crazy? What could this be?

674. Re: Homebrew 3kV Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 13:42:08 UTC
From: John Walton <jdwalton@comcast.net>
Message-ID: <gMqdnejRW9ZLZGncRVn-sw@comcast.com>
Source record: 20656

Carbon composition resistors are not linear above a few hundred volts.
There are resistors specifically designed for this purpose.

You can also purchase Fluke, Heath or Eico HV probe on EBay for about $20.

If you are building a high voltage supply I would strongly urge you to take
a look at some of the supplies manufactured by Collins, Heath, Hallicraftes,
Drake etc. in the 1960's and 1970's -- there are several layers of
protection, failsafe and redundancy in all the power supplies for their
amplifier so that the operator wouldn't fry themselves.

"Airy R.Bean" <Me@privacy.net> wrote in message
news:35k9e6F4me7v6U1@individual.net...
> I'd add a caveat that when dropping down from
> the high voltage, do it with a chain of series resistors,
> each physically separated from its neighbour so that you
> don't get flash-over. i.e., restrict the voltage over each resistor to
> less than a couple of hundred.
>
> "Bill Turner" <noway@nohow.com> wrote in message
> news:5mp9v050i1ana4lu3s2b7cuj65bd4ro3ed@4ax.com...
> > On Sun, 23 Jan 2005 19:39:41 -0600, "Jason Dugas" <kb5urq@hotmail.com>
> > wrote:
> > >If I do need a voltmeter capable of measuring kV level voltages, what
> > >brands/models should I be looking for? If not, what equipment will I
> need?
> > You don't really need a high voltage meter per se. If you think about
> > it, the current through the bleeder resistors is directly proportional
> > to the total HV, so all you need is a low-value 'sense' resistor at the
> > bottom of the string, and then measure the voltage across it. The only
> > tricky part is compensating for the loading effect of the voltmeter
> > across the sense resistor, but even that is basic ohm's law.
>
>

675. Alinco radio coax connector

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 13:44:11 UTC
From: stryped@hotmail.com
Message-ID: <1106574251.126645.116040@c13g2000cwb.googlegroups.com>
Source record: 20658

My Dr 590 has two connectors one for vhf one for uhf. WHile hooking an antenna up the connector actually came out of the vhf. I looked but could not see any wires in there. I put it back in and at least according to my swr it was putting out wattage.

How do these things go on and do I need to do something different? DOes it need to be soldered?

676. Re: detector diode conduction question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 14:56:28 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <41F50C9C.4A89173A@rica.net>
Source record: 20659

gudmundur wrote:
>
> Hello all,
>
> I want to try to detect signal levels of 50mv to 200mv peak to peak.
> I need a passive circuit with no amplifiers, and I will be feeding a
> DVM with .01v resolution. The problem I am having is that a 1N34 will
> not conduct very well at these low levels. Is there a more suitable
> diode? Can you give me a part number, or a simple way to get just one
> or two of these diodes? What the diode is looking at is a 50 ohm port
> on a 30 to 60 mhz I.F. chassis.
>
> Thank you for your time.

For peak voltage under 100 mV, tunnel diodes produce more output than
other diodes, but are hard to find.
http://www.americanmicrosemi.com/tutorials/tunneldiode.htm
http://margo.student.utwente.nl/el/componen/diodefaq.html#IV.3 - Tu
--
John Popelish

677. Re: Homebrew 3kV Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 15:21:26 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <35kia2F4ou60jU1@individual.net>
Source record: 20660

That's news to me! Would you care to expand on it?

If one could look at a carbon atom in isolation, how is
the conduction mechanism changed by the size of the
applied electric field?

"John Walton" <jdwalton@comcast.net> wrote in message
news:gMqdnejRW9ZLZGncRVn-sw@comcast.com...
> Carbon composition resistors are not linear above a few hundred volts.
> There are resistors specifically designed for this purpose.
>

> "Airy R.Bean" <Me@privacy.net> wrote in message
> news:35k9e6F4me7v6U1@individual.net...
> > I'd add a caveat that when dropping down from
> > the high voltage, do it with a chain of series resistors,
> > each physically separated from its neighbour so that you
> > don't get flash-over. i.e., restrict the voltage over each resistor to
> > less than a couple of hundred.

678. Improvements for using Kw.E.a on SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 16:41:15 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <639av09eclfheq5n4msv7823l39o4osh23@4ax.com>
Source record: 20661

Have shown some improvements for RF/AF gain controls for more optimum
operation on SSB (with AGC), see http://home.online.no/~la8ak/22b.htm
and further improvements for receiving SSB on
http://home.online.no/~la8ak/22b.htm

73,
-jm

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

679. Improvements for using Kw.E.a on SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 16:43:34 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <3d9av0dflbm99qftdoudmaqajc1le3uenc@4ax.com>
Source record: 20662

Have shown some improvements for RF/AF gain controls for more optimum
operation on SSB (with AGC), see http://home.online.no/~la8ak/22b.htm
and further improvements for receiving SSB on
http://home.online.no/~la8ak/22r.htm

73,
-jm

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

680. Re: need IF strip

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 17:14:43 UTC
From: Stan the man <nospamatthistime@yahoo.com>
Message-ID: <ct3ae3$nk3$1@skeeter.ucdavis.edu>
Source record: 20663

You might also need to say what bandwidth requirement you plan to use the strip for/with.

s.

www.radiowrench.com/sonic

: PDRUNEN <pdrunen@aol.com> wrote:
: Hi Group,

: Does anyone have either a 455KHz or 10.7MHz or other IF strip I could have?

: de KJ4UO

681. Re: EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 18:38:21 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <VA.00000096.003a986d@btinternet.com>
Source record: 20664

Hi,

In reply to your first posting, I must have been half asleep when I suggested AppCAD as a solution to your problem because large signal impedances and s-parameters are like 'chalk and cheese'. There isn't (as far as I know) a simple way to translate one into the other because of the intrinsic non-linearity of DUT parameters with respect to operating point and drive level. On the web you should find papers dealing with this problem but the parameters generated by the methods employed are not just a simple mapping from S to Z.

Cheers - Joe

682. Re: Alinco radio weird problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 19:21:13 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <VA.00000098.000c92cf@btinternet.com>
Source record: 20665

Hi,

> I bought an ALinco DR 590 dual band amature radio at a hamfest. It is a
> mobile. Got it home, hooked it up, everything on the display lit up. I
> mean everything, even things that were not supposed to. The frequency
> number has stange lines in it. It was not usable.

Some items of test equipment have a display 'test mode' where every digit and LED/LCD segment are switched on either in sequence or at the same time as a function check. I have three items of test equipment that do just that on demand, so it could be that your rig was simply strutting its stuff.

As for the socket coming away, again it may be meant to. Perhaps the terminal plugs into the assembly just behind it.

Cheers - Joe

683. Re: Alinco radio weird problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 20:58:01 UTC
From: stryped@hotmail.com
Message-ID: <1106600281.129397.32820@c13g2000cwb.googlegroups.com>
Source record: 20666

Joe McElvenney wrote:
> Hi,
>
> > I bought an ALinco DR 590 dual band amature radio at a hamfest. It
is a
> > mobile. Got it home, hooked it up, everything on the display lit
up. I
> > mean everything, even things that were not supposed to. The
frequency
> > number has stange lines in it. It was not usable.
>
> Some items of test equipment have a display 'test mode' where
every
> digit and LED/LCD segment are switched on either in sequence or at
the
> same time as a function check. I have three items of test equipment
that
> do just that on demand, so it could be that your rig was simply
strutting
> its stuff.
>
> As for the socket coming away, again it may be meant to. Perhaps
the
> terminal plugs into the assembly just behind it.
>
>
> Cheers - Joe

If this was a "test" mode then why did it stay in test mode? The radio
was completly not usable.

684. How is your antenna wire ran to the shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 21:02:07 UTC
From: stryped@hotmail.com
Message-ID: <1106600527.493677.306570@f14g2000cwb.googlegroups.com>
Source record: 20668

I am going to make an upstairs base station. How do you have your antenna wire coming into your shack? Can I make a plug in by drilling a metal outlet cover? What would look the best and perform the best? If I have alot of connection would that degrade the signal?

685. Re: Alinco radio weird problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 22:05:46 UTC
From: Lou <lf08357@Yahoo.Com>
Message-ID: <imeJd.38597$NC6.25261@newsread1.mlpsca01.us.to.verio.net>
Source record: 20667

<stryped@hotmail.com> wrote in message
news:1106600281.129397.32820@c13g2000cwb.googlegroups.com...
>
> Joe McElvenney wrote:
>> Hi,
>>
>> > I bought an ALinco DR 590 dual band amature radio at a hamfest. It
> is a
>> > mobile. Got it home, hooked it up, everything on the display lit
> up. I
>> > mean everything, even things that were not supposed to. The
> frequency
>> > number has stange lines in it. It was not usable.
>>
>> Some items of test equipment have a display 'test mode' where
> every
>> digit and LED/LCD segment are switched on either in sequence or at
> the
>> same time as a function check. I have three items of test equipment
> that
>> do just that on demand, so it could be that your rig was simply
> strutting
>> its stuff.
>>
>> As for the socket coming away, again it may be meant to. Perhaps
> the
>> terminal plugs into the assembly just behind it.
>>
>>
>> Cheers - Joe
>
>
> If this was a "test" mode then why did it stay in test mode? The radio
> was completly not usable.
>

You said something to the effect of having it in your garage. Not sure if heated or not, but the temperature changes could be doing this - if wide in nature - cold to warm - etc. Could be a bad solder joint. Display may be going flaky. You bought it used, who knows what ales it. A copy of the owners manual if you don't have one - would be a good start.

Lou

686. Racal RA17 SSB modifications

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-24 23:58:14 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <tq2bv0pb27sm2a1bg7su6j4orh3estaj9b@4ax.com>
Source record: 20669

Have thought of some mods for Racal RA17, see
http://home.online.no/~la8ak/b73.htm

73
Jan-Martin

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

687. Re: Homebrew 3kV Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 00:58:54 UTC
From: Jason Dugas <kb5urq@hotmail.com>
Message-ID: <10vb6ebo299apa1@corp.supernews.com>
Source record: 20670

Are these "HV probes" simply high voltage voltmeters?

"John Walton" <jdwalton@comcast.net> wrote in message
news:gMqdnejRW9ZLZGncRVn-sw@comcast.com...
> Carbon composition resistors are not linear above a few hundred volts.
> There are resistors specifically designed for this purpose.
>
> You can also purchase Fluke, Heath or Eico HV probe on EBay for about
> $20.
>
> If you are building a high voltage supply I would strongly urge you to
> take
> a look at some of the supplies manufactured by Collins, Heath,
> Hallicraftes,
> Drake etc. in the 1960's and 1970's -- there are several layers of
> protection, failsafe and redundancy in all the power supplies for their
> amplifier so that the operator wouldn't fry themselves.
>
> "Airy R.Bean" <Me@privacy.net> wrote in message
> news:35k9e6F4me7v6U1@individual.net...
>> I'd add a caveat that when dropping down from
>> the high voltage, do it with a chain of series resistors,
>> each physically separated from its neighbour so that you
>> don't get flash-over. i.e., restrict the voltage over each resistor to
>> less than a couple of hundred.
>>
>> "Bill Turner" <noway@nohow.com> wrote in message
>> news:5mp9v050i1ana4lu3s2b7cuj65bd4ro3ed@4ax.com...
>> > On Sun, 23 Jan 2005 19:39:41 -0600, "Jason Dugas" <kb5urq@hotmail.com>
>> > wrote:
>> > >If I do need a voltmeter capable of measuring kV level voltages, what
>> > >brands/models should I be looking for? If not, what equipment will I
>> need?
>> > You don't really need a high voltage meter per se. If you think about
>> > it, the current through the bleeder resistors is directly proportional
>> > to the total HV, so all you need is a low-value 'sense' resistor at the
>> > bottom of the string, and then measure the voltage across it. The only
>> > tricky part is compensating for the loading effect of the voltmeter
>> > across the sense resistor, but even that is basic ohm's law.
>>
>>
>
>

688. Re: JVC GZ-S3 camera connector

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 01:44:35 UTC
From: John <noaddress@noaddress.invalid>
Message-ID: <FKWdnddMLJwKOWjcRVn-3Q@comcast.com>
Source record: 20671

"Angel Vilaseca" <avilaseca@bluewin.ch> wrote in message
news:Xns95E764977D553rayomaticcom@212.35.34.213...
> Hi,
>
> A friend gave me a JVC GZ-S3 camera and I want to use it for ATV.
>
> This camera has a 10-pin connector to its power supply and VCR.
> Unfortunately, I don't have any of the original units, so I cannot do
> anything with it.
>
> I want to homebrew a power supply or adapt one of the units I already have
> and use the video signal for my ATV xmitter.
>
> Does someone have some data about the GZ-S3 connector wiring?
>
> This camera is a nice unit, with expensive optics, it was state-of-the art
> back in the '80s. I hate the idea of ripping it away for parts.
>
>
> 73
>
> Angel HB9SLV
>

I have a JVC GX-S9U camera that has a 10 pin connector. The wiring for
it is:

1 - video
2 - video shield
3 - ????
4 - ground (possibly for the remote control or the channel 2 audio shield)
5 - channel 2 (right) audio (camera has a jack for a second mike)
6 - remote control (pause)
7 - channel 1 (left) audio (built-in mike)
8 - audio shield
9 - ground (for +12 volts)
10 - +12 volts

I would expect yours to be wired the same but you never know.
Measure between pins 4 and 9 to see if they are shorted together.

John WA3TSW

689. Re: EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 03:38:20 UTC
From: radio913@aol.com
Message-ID: <1106624300.260857.118100@c13g2000cwb.googlegroups.com>
Source record: 20672

Joe McElvenney wrote:
> Hi,
>
> In reply to your first posting, I must have been half asleep
> when I suggested AppCAD as a solution to your problem because
> large signal impedances and s-parameters are like 'chalk and
> cheese'. There isn't (as far as I know) a simple way to translate
> one into the other because of the intrinsic non-linearity of DUT
> parameters with respect to operating point and drive level. On
> the web you should find papers dealing with this problem but the
> parameters generated by the methods employed are not just a
> simple mapping from S to Z.
>

This is true. Especially if you are dealing with
highly non-linear, saturated PAs and such.

Ok, but let's say i wanna design a linear, class A PA, and
i need to know Zin and Zout, so i know what to
conjugately match too. I should be able to do this
with ADS using a *.s2p file, but i haven't figured
out how to do this yet! There should be a freeware
program out there...

S.

690. Re: How is your antenna wire ran to the shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 08:12:48 UTC
From: Old Macdonald <oeieio@hotmail.com>
Message-ID: <ct4upm$m91$1@newstree.wise.edt.ericsson.se>
Source record: 20673

> How do you have your
> antenna wire coming into your shack?

About the best method would be to replace a small window with a metal panel. Earth (ground) the panel well and fit back-to-back chassis-mount connectors. You can stuff in more connectors than you need, for future use.

Ground the shack internal equipment to the same panel, especially if you have high antennas/masts or long HF antennas. A good ground can save a lot of tears if you ever have a lightning strike. Of course, you can never protect against a direct strike, but you can protect against an indorect strike.

With this method you will reduce the risk of indirect lightning damage as well have a connection panel on the inside so you can swap plugs around easily. You can easily unplug equipment in stormy weather.

Don't forget to add a "drip loop" to all external cables terminated to the panel, or rain-water could be guided by cables to the face of the panel.

Do not be tempted to use a simple perspex, or other insulated panel. You could bring static into the shack, or even feed volts out (non-grouded equipment - mains leakage), which can give you a bit of a shock when working on antennas and you are well grounded :-(.

691. Re: detector diode conduction question - zero-bias schotky diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 08:15:56 UTC
From: Old Macdonald <oeieio@hotmail.com>
Message-ID: <ct4uvimba1@newstree.wise.edt.ericsson.se>
Source record: 20674

> I want to try to detect signal levels of 50mv to 200mv peak to peak.
> I need a passive circuit with no amplifiers, and I will be feeding a
> DVM with .01v resolution. The problem I am having is that a 1N34 will
> not conduct very well at these low levels. Is there a more suitable
> diode? Can you give me a part number, or a simple way to get just one
> or two of these diodes? What the diode is looking at is a 50 ohm port
> on a 30 to 60 mhz I.F. chassis.

You can use "Zero-bias schotky diodes" for detecting small signals, but you can also pass a small bias current through an ordinary diode to overcome the forward conduction voltage.

692. Re: 2m VCO?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 09:32:37 UTC
From: Anthony Fremont <spam@anywhere.com>
Message-ID: <VmoJd.65674$Z%.15563@fe1.texas.rr.com>
Source record: 20675

"Verizon News" <joe@roccis.com> wrote
> Check out this circuit:
>
> http://www.edn.com/archives/1998/111998/pdfs/23DI2294.pdf
>
> It will easily tune an octave with just a few volts of tuning voltage.

I am extremely interested in this article. I signed up with EDN over 12 hours ago, but the only thing I've gotten is that my "subscription is processing", whatever that means. So far it means that I don't have the required password to access the archive. :-(

Since the subscription is free, and I've already tried completing it, can someone please e-mail me this file?

'n5qmg' 'at' 'houston.rr.com'

693. Re: Homebrew 3kV Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 13:52:49 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1106661168.983180.137940@f14g2000cwb.googlegroups.com>
Source record: 20676

Airy R.Bean wrote:
> That's news to me! Would you care to expand on it?
>
> If one could look at a carbon atom in isolation, how is
> the conduction mechanism changed by the size of the
> applied electric field?
>
>
The paint on the resitors is not a perfect insulator - it breaks down
as the voltage increases. This is why there are high voltage resistors.
Not rocket science exactly.

And if you are going to stuff around with HV, make sure there is
someone aound who can do CPR when you fry yourself......
73 de VK3BFA Andrew

694. Re: How is your antenna wire ran to the shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 14:02:06 UTC
From: stryped@hotmail.com
Message-ID: <1106659185.414321.7730@f14g2000cwb.googlegroups.com>
Source record: 20678

beerbarrel wrote:
> On 24 Jan 2005 13:02:07 -0800, stryped@hotmail.com wrote:
>
> >I am going to make an upstairs base station. How do you have your
> >antenna wire coming into your shack? Can I make a plug in by
drilling a
> >metal outlet cover? What would look the best and perform the best?
If I
> >have alot of connection would that degrade the signal?
>
>
> I have a piece of plexi glass inserted between a partially open
> window. It allows me to come inside with all sorts of stuff just by
> drilling and mounting connectors. I put some rubber around the edge
of
> the plexiglass to seal out weather. Water pipe insulation works well
> for this.

But can you close and latch the window this way?

695. Re: How is your antenna wire ran to the shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 14:02:12 UTC
From: stryped@hotmail.com
Message-ID: <1106659499.319606.28670@f14g2000cwb.googlegroups.com>
Source record: 20677

I am so confused about how to properly ground a system. I will have a two meter and a 440 on the roof of my house. I will run the coax down to my sofit vents or whatever they are called and run the coax inside the vents to my shack. Behind the wall where my rquipment will be is a storage space that I can acess. (This is a finished attic). I will be using a mobile radio that has two antenna outputs, one for 2 meter and one for 440.

How do I ground the radio and does it need it? Should the coax itself be grounded and how? Do I have to purchase one of those surge things that screws into the coax?

Any advice is appreciated!

696. Re: Alinco radio weird problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 14:03:59 UTC
From: stryped@hotmail.com
Message-ID: <1106661839.185172.183810@f14g2000cwb.googlegroups.com>
Source record: 20679

Lou wrote:
> <stryped@hotmail.com> wrote in message
> news:1106600281.129397.32820@c13g2000cwb.googlegroups.com...
> >
> > Joe McElvenney wrote:
> >> Hi,
> >>
> >> > I bought an ALinco DR 590 dual band amature radio at a hamfest.
It
> > is a
> >> > mobile. Got it home, hooked it up, everything on the display lit
> > up. I
> >> > mean everything, even things that were not supposed to. The
> > frequency
> >> > number has stange lines in it. It was not usable.
> >>
> >> Some items of test equipment have a display 'test mode' where
> > every
> >> digit and LED/LCD segment are switched on either in sequence or at
> > the
> >> same time as a function check. I have three items of test
equipment
> > that
> >> do just that on demand, so it could be that your rig was simply
> > strutting
> >> its stuff.
> >>
> >> As for the socket coming away, again it may be meant to.
Perhaps
> > the
> >> terminal plugs into the assembly just behind it.
> >>
> >>
> >> Cheers - Joe
> >
> >
> > If this was a "test" mode then why did it stay in test mode? The
radio
> > was completly not usable.
> >
>
> You said something to the effect of having it in your garage. Not
sure if
> heated or not, but the temperature changes could be doing this - if

wide in
> nature - cold to warm - etc. Could be a bad solder joint. Display may
be
> going flaky. You bought it used, who knows what ales it. A copy of
the
> owners manual if you don't have one - would be a good start.
>
> LC'

Could the 3 v lithiam battery be going bad?

697. Diplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 14:05:33 UTC
From: stryped@hotmail.com
Message-ID: <1106661933.547773.102670@z14g2000cwz.googlegroups.com>
Source record: 20680

I have an older ALinco DR 590 radio with two antenna outputs, one for vhf and one for uhf.

What is the cheapest way to be able to use on dual coverage antenna? Can I use a satellite diplexer, can I make one? ANy advice is appreciated!

698. Re: Homebrew 3kV Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 14:56:22 UTC
From: default <none@defaulter.net>
Message-ID: <7elcv0lbg1r70eldj0vgnn32kmkpjn3shp@4ax.com>
Source record: 20681

On 25 Jan 2005 05:52:49 -0800, "Andrew VK3BFA"
<ablight@alphalink.com.au> wrote:

>
>Airy R.Bean wrote:
>> That's news to me! Would you care to expand on it?
>>
>> If one could look at a carbon atom in isolation, how is
>> the conduction mechanism changed by the size of the
>> applied electric field?
>>
>>
>The paint on the resitors is not a perfect insulator - it breaks down
>as the voltage increases. This is why there are high voltage resistors.
>Not rocket science exactly.
>
>And if you are going to stuff around with HV, make sure there is
>someone aound who can do CPR when you fry yourself......
>73 de VK3BFA Andrew

I don't buy the paint theory much . . . The original answer specified
a few hundred volts per resistor and that isn't exactly high voltage .
. . The common radio shack flame proof 1/2 or 1 watt sizes would be
my choice for ruggedness.

A long time ago I repaired vacuum tube TV sets. I'd find an
occasional high value resistor with a short in it, or very lower than
tolerance reading. These were usually high value resisters with
relatively low current, across higher voltages ~400-500 and up.

When I asked about it, I was told that when resistors dropped high
voltage DC (these were carbon comp 10%'rs - back then) for long
periods of time, the copper in the leads migrated into the carbon and
lowered the resistance. In the case of something like a screen
resistor - it could go for quite some time before it caused a
noticeable problem - or at least severe enough for the customer to
have the set looked at.

It was a frequent problem in the old tube type CB transmitter output
stages - so RF may have accelerated the problem?

I have an old "boat anchor" style variable HV supply I picked up at a
ham fest. It has a 100 ua meter on the front measuring the 1 KV
output. The dropping resistor is part of the bleeder string - six one
watt resistors.

Stay safe. If it can kill you - respect it.

I saw one of my colleagues take a hit from an ancient high power Navy AM transmitter. The thing had every safety device imaginable on it (in fact the safety interlocks were the most troublesome part of the devices). He followed protocol and picked up the shorting bar in the compartment and put it to the HV caps - no arc so he assumed it was safe (it had crowbar relays that short the supply when the covers are removed, the shorting bar was extra safety).

He took it from his hand on the shorting bar (the ground was broken). A spark shot from his ass to the scope cart behind him. He suffered no physical damage - but he went into shock and wouldn't go near that transmitter again.

699. Re: Alinco radio weird problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 15:14:37 UTC
From: Lou <lf08357@Yahoo.Com>
Message-ID: <KptJd.38655$NC6.29731@newsread1.mlpsca01.us.to.verio.net>
Source record: 20682

<stryped@hotmail.com> wrote in message
news:1106661839.185172.183810@f14g2000cwb.googlegroups.com...
>
> Lou wrote:
>> <stryped@hotmail.com> wrote in message
>> news:1106600281.129397.32820@c13g2000cwb.googlegroups.com...
>> >
>> > Joe McElvenney wrote:
>> >> Hi,
>> >>
>> >> > I bought an ALinco DR 590 dual band amature radio at a hamfest.
> It
>> > is a
>> >> > mobile. Got it home, hooked it up, everything on the display lit
>> > up. I
>> >> > mean everything, even things that were not supposed to. The
>> > frequency
>> >> > number has stange lines in it. It was not usable.
>> >>
>> >> Some items of test equipment have a display 'test mode' where
>> > every
>> >> digit and LED/LCD segment are switched on either in sequence or at
>> > the
>> >> same time as a function check. I have three items of test
> equipment
>> > that
>> >> do just that on demand, so it could be that your rig was simply
>> > strutting
>> >> its stuff.
>> >>
>> >> As for the socket coming away, again it may be meant to.
> Perhaps
>> > the
>> >> terminal plugs into the assembly just behind it.
>> >>
>> >>
>> >> Cheers - Joe
>> >
>> >
>> > If this was a "test" mode then why did it stay in test mode? The
> radio
>> > was completly not usable.
>> >
>>

>> You said something to the effect of having it in your garage. Not
> sure if
>> heated or not, but the temperature changes could be doing this - if
> wide in
>> nature - cold to warm - etc. Could be a bad solder joint. Display may
> be
>> going flaky. You bought it used, who knows what ales it. A copy of
> the
>> owners manual if you don't have one - would be a good start.
>>
>> LC'
>
> Could the 3 v lithiam battery be going bad?
>

It could be, a good sign of that would also be loss of memory of other functions.

L.

(don't know where the C' came from!)

700. Re: Homebrew 3kV Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 15:25:59 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <35n6ucF47np4jU1@individual.net>
Source record: 20683

The original rectum-frier, no doubt.

Which reminds me of the article I found and appended.....

"default" <none@defaulter.net> wrote in message
news:7elcv0lbg1r70eldj0vgnn32kmkpjn3shp@4ax.com...

> A spark shot from his ass to the scope cart behind him.

-----OOOOO-----

>In article <34438934.391ABB4C@technologist.com>, ianho@technologist.com
>writes...
>Hi,
> Would you please tell me what transistor do and how to do
>so? What is the difference between PNP transistor and NPN
>transistor? What is the concept of using a transistor as a
>switch? Thanks a lot.

SemiConductor Theory

(c) 1997 by Gareth Alun Evans

A transistor is rather like the human alimentary canal, after the
typical USA diet of burgers and chips; - it constipates, as do
semiconductor diodes with no applied bias - the available holes get
filled in and nothing can move.
The base current is like a small application of laxative; some of
the constipation passes through, until the effect of the laxative wears
off. The total throughput depends upon the Mobility. By applying a
continuous feed of laxative, then a continuous current passes through.
Applying too much laxative results in saturation - ie, there is a limit
to the maximum throughput, depending on the external circuit; in this
case, the maximum rate at which you can feed in the burgers at one end.
(If you are a customer of MacDonalds's, here in Chippenham, Wiltshire,
UK then this rate is very low - I have been there twice, and both times,
the service was *APPALLING*.)
The difference between PNP and NPN is the direction. In the old
days, PNP was used, whereby one injected from the rear end, using a sort
of huge syringe - hence PNP - "Put-in Near Poo". More recently NPN is
more common, where the laxative is entered via a carrier of some sort,
usually chocolate and so we have NPN - "Now Pleasant Nutrient".
Despite the adverse effects, the USA diet of burgers and chips
carries on, and recourse has to be made once again to the chocolate. Now
the ratio of the carriers of the constipation, the burgers and chips, is
much higher than that of the chocolate. Thus they are referred to as the

Majority Carriers and the Minority Carriers. If you indulge too much, you find that the vendor will provide you with a paper bag, known as an Excess Carrier.
More recently, there are problems with impurities and you find that the opposite effect occurs. You have no time to reach home before diarrhoea takes over. You have no option but to stop the car and nip over a gate into a field. Hence the Field Effect Transistor. This time you have to inject something to STOP the flow. Now, assuming that there was a certain control over events; nothing happened until the Gate was encountered, you then became the Source of flow, and the field itself acted as the Drain. What was originally dirt, became grass, was consumed by the Cow, you ate it as a burger, and it has now returned to the topsoil, an effect known in the trade as Surface Recombination.
(Incidentally, did you know that Diarrhoea is hereditary? Apparently it runs in the jeans.)
Some of the impurities accumulate in your rear end, and no matter how valiently you try, you cannot rid yourself of them. Hence In-de-Bum is known as a Try-Valient Impurity. In the same way, Arse-nic, well known for its ill-effects and accumulation in the body tissues is known as a Pent-Up-Valient Impurity.

--
73's etc de Gareth G4SDW (nee G8DXY) GQRP 3339

701. Yaesu FT-707 problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 15:35:38 UTC
From: Krzysztof <kryho@mitr.p.lodz.pl>
Message-ID: <ct5p0d$450$1@kujawiak.man.lodz.pl>
Source record: 20684

Hi all,
I have a problem with VFO unit in my FT-707 - no output signal 5,0-5,5 MHz
from unit. Does anybody know how to drag out this unit from the transceiver
? What VFO output amplitude (mVpp) is assumed to be OK ?

Many thanks
73's de Krzysztof (Chris) sp7ice

702. Replacement 2SC2694

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 15:54:34 UTC
From: Peter Thoms <nospam.DL6LAT@DARC.de>
Message-ID: <ct5q8tlmf03$1@news.t-online.com>
Source record: 20685

Hi NG,

is there in the world a chance to get a more gainful linear
SSB-Transistor than my both 2SC2694?

two Transistors parallel: 100W PEP; 13,8 Volt
Freq.: 1800kHz to 60000kHz

vy 73 de Peter, DL6LAT

703. AMTOR-B protocol

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 16:00:55 UTC
From: dave.harper@gmail.com
Message-ID: <1106668855.476923.282790@z14g2000cwz.googlegroups.com>
Source record: 20686
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Where can I get a detailed description of AMTOR-B's protocol? I'm not looking for just basics, but rather enough information I could actually write a program to decode and encode an AMTOR-B transmission. I've done several searches on google (and other sites), but haven't found anything that really covers the low-level details.
Thanks in advance!
Dave

704. Re: AMTOR-B protocol

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 16:12:20 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <35n9lkF4nkkiaU1@individual.net>
Source record: 20687
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Sorry, I don't have the info that you need, but I'd like
to compliment you for having a go yourself, in the
true Ham Spirit (Unlike the CB types who even
buy/copy software!)

<dave.harper@gmail.com> wrote in message
news:1106668855.476923.282790@z14g2000cwz.googlegroups.com...
> Where can I get a detailed description of AMTOR-B's protocol? I'm not
> looking for just basics, but rather enough information I could actually
> write a program to decode and encode an AMTOR-B transmission. I've
> done several searches on google (and other sites), but haven't found
> anything that really covers the low-level details.
> Thanks in advance!
> Dave
>

705. Re: EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 16:38:37 UTC
From: Paul Burridge <pb@notthisbit.osiris1.co.uk>
Message-ID: <metcv0tbvi9dig4a5r8e5nhlgr7fr1vi7u@4ax.com>
Source record: 20688

On 24 Jan 2005 19:38:20 -0800, radio913@aol.com wrote:

>Ok, but let's say i wanna design a linear, class A PA, and
>i need to know Zin and Zout, so i know what to
>conjugately match too. I should be able to do this
>with ADS using a *.s2p file, but i haven't figured
>out how to do this yet! There should be a freeware
>program out there...

Checkout RFSim99. That should do what you want. Type it into Google to
find it.
--

"What is now proved was once only imagin'd." - William Blake, 1793.

706. Re: Alinco radio weird problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 17:13:23 UTC
From: stryped@hotmail.com
Message-ID: <1106673203.164309.11100@f14g2000cwb.googlegroups.com>
Source record: 20689

Lou wrote:
> <stryped@hotmail.com> wrote in message
> news:1106661839.185172.183810@f14g2000cwb.googlegroups.com...
> >
> > Lou wrote:
> >> <stryped@hotmail.com> wrote in message
> >> news:1106600281.129397.32820@c13g2000cwb.googlegroups.com...
> >> >
> >> > Joe McElvenney wrote:
> >> >> Hi,
> >> >>
> >> >> > I bought an ALinco DR 590 dual band amature radio at a
hamfest.
> > It
> >> > is a
> >> >> > mobile. Got it home, hooked it up, everything on the display
lit
> >> > up. I
> >> >> > mean everything, even things that were not supposed to. The
> >> > frequency
> >> >> > number has stange lines in it. It was not usable.
> >> >>
> >> >> Some items of test equipment have a display 'test mode'
where
> >> > every
> >> >> digit and LED/LCD segment are switched on either in sequence or
at
> >> > the
> >> >> same time as a function check. I have three items of test
> > equipment
> >> > that
> >> >> do just that on demand, so it could be that your rig was simply
> >> > strutting
> >> >> its stuff.
> >> >>
> >> >> As for the socket coming away, again it may be meant to.
> > Perhaps
> >> > the
> >> >> terminal plugs into the assembly just behind it.
> >> >>
> >> >>
> >> >> Cheers - Joe
> >> >
> >> >

> >> > If this was a "test" mode then why did it stay in test mode? The
> > radio
> >> > was completly not usable.
> >> >
> >>
> >> You said something to the effect of having it in your garage. Not
> > sure if
> >> heated or not, but the temperature changes could be doing this -
if
> > wide in
> >> nature - cold to warm - etc. Could be a bad solder joint. Display
may
> > be
> >> going flaky. You bought it used, who knows what ales it. A copy of
> > the
> >> owners manual if you don't have one - would be a good start.
> >>
> >> LC'
> >
> > Could the 3 v lithiam battery be going bad?
> >
>
> It could be, a good sign of that would also be loss of memory of
other
> functions.
>
> L.
>
> (don't know where the C' came from!)

It stays on the frequency I left it when I unplugged it. I guess this means the battery is ok?

707. Re: How is your antenna wire ran to the shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 17:25:25 UTC
From: mcalhoun@ksu.edu
Message-ID: <ct5ve5$72c@unix2.cc.ksu.edu>
Source record: 20690

>I am going to make an upstairs base station. How do you have your
>antenna wire coming into your shack? Can I make a plug in by drilling a
>metal outlet cover? What would look the best and perform the best? If I
>have alot of connection would that degrade the signal?

For a new basement installation, I drilled an approximate 2-inch-diameter hole through the sill (would have just drilled through both walls if I had been on a higher floor) and inserted a 2-inch piece of PVC pipe with a downward-pointing elbow on the outside end; lots of coax cables will fit through the PVC pipe.

I had a Ufer ground installed when the basement was built, and all my equipment is grounded to that inside the basement. My tower is also connected to that Ufer ground and to a ring-ground that goes around the outside of the basement at foundation level.

--Myron, W0PBV.
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

708. SHould this be grounded or not?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 18:59:33 UTC
From: stryped@hotmail.com
Message-ID: <1106679573.830927.114400@z14g2000cwz.googlegroups.com>
Source record: 20691

Should a dual band open stub j pole like the one arrow makes be
grounded or not? Seems like someone told me no j polls should be
grounded according to their nec program. The website says it can be
grounded or not.
If it should not, then how do you protect from lightening?

709. Re: How is your antenna wire ran to the shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 19:02:35 UTC
From: mcalhoun@ksu.edu
Message-ID: <ct654b$8n9@unix2.cc.ksu.edu>
Source record: 20692

Regarding using

>... [through-the-wall] PVC pipe with a downward-pointing elbow
>on the outside end [for running cables into the house]....

I should add that, after threading coax cables through the pipe, I stuff
either fiberglas or steel wool into any left-over holes between/around
the cables in the pipe to keep critters out and heat in.
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

710. Re: SHould this be grounded or not?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 21:34:44 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <UXyJd.2582$fL5.2191@newsfe1-gui.ntli.net>
Source record: 20693

> Should a dual band open stub j pole like the one arrow makes be
> grounded or not? Seems like someone told me no j polls should be
> grounded according to their nec program. The website says it can be
> grounded or not.
> If it should not, then how do you protect from lightening?
==========
Earthing any antenna does not protect against a lightning strike.
The best way to protect equipment attached to any antenna is to disconnect the feeder near the radio equipment , keeping the feeder metal connections away from any other metal.

When I go away from home expecting 'static' activity and lightning ,I always disconnect the antenna feeders and 'park' the connectors inside a plastic box

However ,earthing an antenna does help preventing static charge build-up .
Hence following a feeder disconnect ,before reconnecting it to radio equipment , I briefly 'touch' the feeder connection(s) to earth.
My double ZEPP or Doublet wire dipole with balanced ribbon feeder has 2 ea composite 47 kOhms resistor at the matching unit (tuner if you wish) connected to chassis/earth.

Frank GM0CSZ / KN6WH

711. Re: SHould this be grounded or not?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 22:11:30 UTC
From: stryped@hotmail.com
Message-ID: <1106691090.039506.22730@f14g2000cwb.googlegroups.com>
Source record: 20694

But what if something happens and your away from home, like a freak thunderstorm?

Should a j pole like this be grounded or not?

712. Re: AMTOR-B protocol

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 22:30:35 UTC
From: Chris Jewell <chrisj@puffin.com>
Message-ID: <sw651lta44.fsf@horned.puffin.com>
Source record: 20695
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

dave.harper@gmail.com writes:

> Where can I get a detailed description of AMTOR-B's protocol?

The 2005 ARRL Handbook, p. 9-19, in the bibliography for the section on AMTOR, contains the following:

CCIR recommendation 476-3, "Direct-Printing Telegraph Equipment in the Maritime Mobile Service." Reprint available from ARRL Headquarters as part of the Proceedings of the Third ARRL Amateur Radio Computer Networking Conference.

With that hint, typing 'CCIR 476-3' into a search engine might turn up a copy of the official definition online somewhere. "SITOR-B" or "NAVTEX" might be other good search terms to try, since SITOR is what the protocol is called in the maritime mobile service, and NAVTEX is the service that the US Coast Guard provides using SITOR.

I realize that you want to write your own program, rather than copy or use an existing one, but you might find the source code of hfterm instructive. http://hfterm.sourceforge.net. It's a Linux program that implements AMTOR, PACTOR, GTOR, and some other digital modes.

--
Chris Jewell chrisj@puffin.com Gualala CA USA
(No call sign yet: I'm taking elements 1, 2, and 3 in February.)

713. Re: SHould this be grounded or not?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-25 22:59:13 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <fmjdv01v50jr2ocf0hsibhe1vfe5vf6jab@4ax.com>
Source record: 20696

On 25 Jan 2005 14:11:30 -0800, stryped@hotmail.com wrote:

>But what if something happens and your away from home, like a freak
>thunderstorm?
>
>Should a j pole like this be grounded or not?

It should be grounded for lightening (for RF there is no need). Also
A spark gap or similar device should be on the coax as the fed element
is not grounded (all the arrow OSJs). It is sufficient to bond its
mounting to the metal mast (or tower) and the mast to the earth
ground.

Allison

714. Re: detector diode conduction question - zero-bias schotky diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-26 00:30:07 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <thldv05of51p492llsjrhj9ego8a1hfcnv@4ax.com>
Source record: 20697

On Tue, 25 Jan 2005 09:15:56 +0100, "Old Macdonald"
<oeieio@hotmail.com> wrote:

>> I want to try to detect signal levels of 50mv to 200mv peak to peak.
>> I need a passive circuit with no amplifiers, and I will be feeding a
>> DVM with .01v resolution. The problem I am having is that a 1N34 will
>> not conduct very well at these low levels. Is there a more suitable
>> diode? Can you give me a part number, or a simple way to get just one
>> or two of these diodes? What the diode is looking at is a 50 ohm port
>> on a 30 to 60 mhz I.F. chassis.
>
>You can use "Zero-bias schotky diodes" for detecting small signals, but you
>can also pass a small bias current through an ordinary diode to overcome the
>forward conduction voltage.
>

An 1N270 germanium diode is very good for the purpose - up to at least
1GHz. If linearity is interesting, it is easy to construct network to
keep accuracy withing 10% http://home.online.no/~la8ak/m2.htm

jm

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

715. Re: SHould this be grounded or not?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-26 01:04:53 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <c4rdv0daqfpoa0lastc4i6nib5lor73qfq@4ax.com>
Source record: 20698

On Tue, 25 Jan 2005 21:34:44 GMT, "Highland Ham"
<abcgm0csz.kn6whxyz@abcntlworldxyz.com> wrote:

>> Should a dual band open stub j pole like the one arrow makes be
>> grounded or not? Seems like someone told me no j polls should be
>> grounded according to their nec program. The website says it can be
>> grounded or not.
>> If it should not, then how do you protect from lightening?
>==========
>Earthing any antenna does not protect against a lightning strike.
>The best way to protect equipment attached to any antenna is to disconnect
>the feeder near the radio equipment , keeping the feeder metal connections
>away from any other metal.
>
>When I go away from home expecting 'static' activity and lightning ,I always
>disconnect the antenna feeders and 'park' the connectors inside a plastic
>box
>
>However ,earthing an antenna does help preventing static charge build-up .
>Hence following a feeder disconnect ,before reconnecting it to radio
>equipment , I briefly 'touch' the feeder connection(s) to earth.
>My double ZEPP or Doublet wire dipole with balanced ribbon feeder has 2 ea
>composite 47 kOhms resistor at the matching unit (tuner if you wish)
>connected to chassis/earth.
>
>Frank GM0CSZ / KN6WH
>
>

You don't put the end of the cable in a pickle jar filled with water?

73
Gary K4FMX

716. Re: detector diode conduction question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-26 01:36:35 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <DuCJd.29213$EG1.9865@attbi_s53>
Source record: 20699

If you have a fairly strong local broadcast station an auxiliary diode receiver will create the DC bias voltage for the diode in your application. That detector and your application can operate simultaneously.

Bill W0IYH

"gudmundur" <hexter@blazenet.net> wrote in message news:10v8kthpu9flm6e@corp.supernews.com...
> Hello all,
>
> I want to try to detect signal levels of 50mv to 200mv peak to peak.
> I need a passive circuit with no amplifiers, and I will be feeding a
> DVM with .01v resolution. The problem I am having is that a 1N34 will
> not conduct very well at these low levels. Is there a more suitable
> diode? Can you give me a part number, or a simple way to get just one
> or two of these diodes? What the diode is looking at is a 50 ohm port
> on a 30 to 60 mhz I.F. chassis.
>
> Thank you for your time.
>

717. Re: SHould this be grounded or not?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-26 05:12:19 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <qzq0FHCzay9BFABF@ifwtech.co.uk>
Source record: 20700

Gary Schafer wrote:
>
>You don't put the end of the cable in a pickle jar filled with water?
>
Totally ineffective. The proper way earth your cable is into the nearest available plant-pot.

People did this in the days of Mr Marconi and aspidistra plants, so it must be all right... maybe you'd better talk to the plant first, to make sure the pot is filled with genuine earth.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

718. Re: SHould this be grounded or not?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-26 06:53:09 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10vefiqfstb8ead@corp.supernews.com>
Source record: 20701

Ian White, G3SEK wrote:
> Gary Schafer wrote:
>
>>
>> You don't put the end of the cable in a pickle jar filled with water?
>>
> Totally ineffective. The proper way earth your cable is into the nearest
> available plant-pot.
>
> People did this in the days of Mr Marconi and aspidistra plants, so it
> must be all right... maybe you'd better talk to the plant first, to make
> sure the pot is filled with genuine earth.

I've heard of using an "artificial ground". Is this where you fill the
pot with vermiculite or styrofoam?

Roy Lewallen, W7EL

719. Re: SHould this be grounded or not?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-26 12:09:13 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <easpv6Oph49BFAFs@ifwtech.co.uk>
Source record: 20702

Roy Lewallen wrote:
>Ian White, G3SEK wrote:
>> Gary Schafer wrote:
>>
>>>
>>> You don't put the end of the cable in a pickle jar filled with water?
>>>
>> Totally ineffective. The proper way earth your cable is into the
>>nearest available plant-pot.
>> People did this in the days of Mr Marconi and aspidistra plants, so
>>it must be all right... maybe you'd better talk to the plant first, to
>>make sure the pot is filled with genuine earth.
>
>I've heard of using an "artificial ground". Is this where you fill the
>pot with vermiculite or styrofoam?

Exactly. You're really getting the hang of it now.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

720. Re: SHould this be grounded or not?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-26 13:45:12 UTC
From: stryped@hotmail.com
Message-ID: <1106747112.807655.131790@f14g2000cwb.googlegroups.com>
Source record: 20703

I think I just had an ephihony,

A regular j pole uses a shorted stub, so, If the regular j pole was grounded, no need to cround the coax?

721. Make your own coax supresso

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-26 15:56:33 UTC
From: stryped@hotmail.com
Message-ID: <1106754993.438657.182830@c13g2000cwb.googlegroups.com>
Source record: 20704

Are there plans on the net for making your own coax surge supressor?
(Lightening protection)? I cannot seem to find any but hear there are.

722. Re: Make your own coax supresso

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-26 17:30:12 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <vgkfv0tmho20v2hdjb9gip1uk637llcok9@4ax.com>
Source record: 20705

On 26 Jan 2005 07:56:33 -0800, stryped@hotmail.com wrote:

>Are there plans on the net for making your own coax surge supressor?
>(Lightening protection)? I cannot seem to find any but hear there are.

Find a copy of an older Radio Amateurs Handbook in the pre 1980 circa
and there is more coverage on the subject there.

However, The basic idea is a spark gap from the center conductor to
shield (and ground). At HF to interrupt the shield of the coax is
trivial and of minimal effect of the transmission like
characteristics. As one reaches the VHF/UHF range higher it becomes
significant to critical as even small changes in the coax and
interconnects are measurable at UHF. So as frequency goes up the
mechanical shapes and connectors are important and less readily home
brewed without a lathe and other tools.

Besides there are excellent products with known characteristice
available for reasonable prices from I.C.E., PolyPhaser and others.

Allison

723. Re: SHould this be grounded or not?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-26 17:49:44 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <6vkfv09rv4ha3v39tadndi28mgu607r8kg@4ax.com>
Source record: 20706

On 26 Jan 2005 05:45:12 -0800, stryped@hotmail.com wrote:

>I think I just had an ephihony,
>
>A regular j pole uses a shorted stub, so, If the regular j pole was
>grounded, no need to cround the coax?

Ah not quite. The coax shold be grounded also. See the PolyPhaser site about lightining protection. It makes little difference as to the type of antenna from a practical standpoint of lightining protection.

The key issue around lightining is what are best described as sneak paths. Due to the imense current (in excess of 10,000 Amps) even a fraction of an ohm resistance difference between the strike point and ground allows a significant voltage to develope (10,000A* 0.1ohm=1000V). I might add that in that example a resistance of 0.1 ohm is likely an unrealisticly low number. Also since it's a pulse of energy it induces currents just like the magnetic field in a transformer or generator so even nearby conductive objects can have currents and voltages induced on them. This gives rise to those sneak paths. So this means if you want tp prevent a lightining hit (or near miss!) from finding its way into the shack you will have to pay attention to details. This includes phone and power lines. I've not gone into a lot of explanation here and I've glossed over much as well so please research it deeper.

As side note: I've been hear missed three times and all three times the greatest destruction came via the phone lines! I've lost phones, computers because the spike was propagated from the phone to the computer that was connected to it via an external modem. This can give an idea of sneak paths. To truly effect a Lightining protection plan you have to address the antenna system (antenna, tower, feedlines), the power system (what the radio runs off of) and the phone system (you may have a computer with DSL, cable modem or Phone modem connected to the radio). It's not difficult but, attention to small details and following known guidelines is important. Oh and don't scrimp, a good system is cheap compared to damaged electronis or a house fire.

Allison
KB1GMX

724. Re: AMTOR-B protocol

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-26 17:58:34 UTC
From: Dave <dave.harper@gmail.com>
Message-ID: <1106762314.634162.57780@c13g2000cwb.googlegroups.com>
Source record: 20707
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Chris,
Thanks for the info... that gave me some help in narrowing down my
search.

I think I found what I need:

http://www.universal-radio.com/catalog/books/1912.html

I'm sure this is out there somewhere on the net (or in a library), but
it might actually be worth buying instead of spending time looking.

Thanks again,
Dave

Chris Jewell wrote:
> dave.harper@gmail.com writes:
>
> > Where can I get a detailed description of AMTOR-B's protocol?
>
> The 2005 ARRL Handbook, p. 9-19, in the bibliography for the section
> on AMTOR, contains the following:
>
> CCIR recommendation 476-3, "Direct-Printing Telegraph Equipment in
the
> Maritime Mobile Service." Reprint available from ARRL Headquarters
as
> part of the Proceedings of the Third ARRL Amateur Radio Computer
> Networking Conference.
>
> With that hint, typing 'CCIR 476-3' into a search engine might turn
up
> a copy of the official definition online somewhere. "SITOR-B" or
> "NAVTEX" might be other good search terms to try, since SITOR is what
> the protocol is called in the maritime mobile service, and NAVTEX is
> the service that the US Coast Guard provides using SITOR.
>
> I realize that you want to write your own program, rather than copy
or
> use an existing one, but you might find the source code of hfterm
> instructive. http://hfterm.sourceforge.net. It's a Linux program
> that implements AMTOR, PACTOR, GTOR, and some other digital modes.
>
> --
> Chris Jewell chrisj@puffin.com Gualala CA USA
> (No call sign yet: I'm taking elements 1, 2, and 3 in February.)

725. Radio Data Code Manual?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-26 18:18:56 UTC
From: Dave <dave.harper@gmail.com>
Message-ID: <1106763536.808799.148880@c13g2000cwb.googlegroups.com>
Source record: 20708
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Can anyone recommend a good source (aka cheap) to get the Radio Data
Code Manual by Klingenfuss (or an equivalent book)? Or better yet,
does anyone have a used copy they'd like to sell?
Thanks in advance!
Dave

726. Re: detector diode conduction question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-26 20:00:29 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1106769629.722291.277470@c13g2000cwb.googlegroups.com>
Source record: 20709

There really should be no problem detecting such large signals with an unbiased diode. I use Agilent zero-bias Schottky detector diodes, but your 1N34 should work about as well. The key is realizing that you simply don't get much output from the diode detector at low input levels, but I'm quite able to detect signals below 100uV -- yes, 100 microvolts -- with mine. Your signals are actually quite large, and start to get into a transition region between response at low signal levels, where the output voltage is proportional to input power level (into a resistive load), and response at high signal levels, where the output voltage is proportional to the input voltage. So you may need to calibrate at several points. Be aware, too, that the response depends on temperature. I believe you will be able to find some application notes on the Agilent web site in the components section.

Although there are some really nice RF level detector ICs now from places like Analog Devices and Linear Technology, a simple passive diode detector can still be useful in many cases.

Cheers,
Tom

727. Re: Diplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-26 20:05:24 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1106769924.292116.268550@z14g2000cwz.googlegroups.com>
Source record: 20710

You should be able to find plans for a diplexer through a web search.
Here's one I found right away:
http://home.datacomm.ch/hb9abx/duplexer.html

Cheers,
Tom

728. Re: Make your own coax supresso

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-26 20:19:58 UTC
From: Yukio <yano@shaw.ca>
Message-ID: <OXSJd.181664$6l.136750@pd7tw2no>
Source record: 20711

for Single Frequency operation , a Quarter-Wave Shorted stub can be
"Tee-ed" anywhere into the feedline and wired directly to a suitable Ground
point . For DC it appears as a Dead Short on the Transmission Line and a
Open Circuit at the Operating Frequency ..

yukio YANO
<stryped@hotmail.com> wrote in message
news:1106754993.438657.182830@c13g2000cwb.googlegroups.com...
> Are there plans on the net for making your own coax surge supressor?
> (Lightening protection)? I cannot seem to find any but hear there are.
>

729. VHF Buffer for Oscillator measurement

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-27 07:49:06 UTC
From: David <david@orbitcoms.com>
Message-ID: <S11Kd.136497$K7.84356@news-server.bigpond.net.au>
Source record: 20712

Can someone please recommend a circuit I could build to act as a high
impedance
probe or buffer to enable connection to the 50 Ohm input of my frequency
counter
and for viewing the waveforms on a 300MHz scope.

Thanks.

730. 60Khz transmitter/repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-27 17:21:03 UTC
From: Victor Lick <aaa@bbb.com>
Message-ID: <q8udnVQWF-5iv2TcRVn-1g@comcast.com>
Source record: 20713

Hi folks,

I have several "radio controlled" clocks in the house and all but one won't receive WWVB tranismissions. They work OK but they are below ground. I was wondering if I can buy a repeater, build a repeater, or build a transmitter. I'm thinking I could put a repeater where the signal is always strong and rebroadcast the signal a little stronger so that the entire house is covered.

Another thought I had was a transmitter. All the PC's in my house use Internet time servers. I can easily build an interface to create the WWVB time code from PC time. If I had a transmitter, I could broadcast throughout the house.

Can anyone help? By the way, I've been working in electronics since the mid-70's but my knowledge of RF is limited to tuning the radio in my car - and that stuff is pre-programmed!

Thanks in advance.

Vic

731. Re: American QRP

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-27 21:57:54 UTC
From: Brian Short <bshort4@cox.net>
Message-ID: <bshort4-7FA891.14575427012005@news.central.cox.net>
Source record: 20714

In article <h2gru010fb3v48fb72m4k6897pvppiaj51@4ax.com>,
beerbarrel <beerbarrel@cox.net> wrote:

> Anyone subscribe to American homebrewer magazine? If so, what do you
> think of the new CDROM format? I'm going to take a few days to look it
> over good and see what I think. I was curious as to what everyone else
> thinks. I would really prefer printed matter but I'll see.

Personally, I only subscribed because they DID switch
to CDROM and lowered the cost (to $15/yr in US now).

732. Re: 60Khz transmitter/repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-27 23:13:33 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <xAeKd.44641$Ob.28447@edtnps84>
Source record: 20715

Hey, something I can answer intelligently! :-)

In your attic, make a resonant loop of wire as big as possible (think magnetic loop design without the feed coupler - lotsa programs out there to design one). That will enhance the field throughout your house.

I've tested and used them for AM radio and cellular phones with success.

You'll need a radio receiver in your basement (or wherever "undergound" is in your home and someone to confirm peak strength as you tune. FRS talkies come in handy for this ;-)

--
Gregg "t3h g33k"
http://geek.scorpiorising.ca
Ratings are for transistors, tubes have guidelines

733. Re: Radio Data Code Manual?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-28 00:49:58 UTC
From: Brian Short <bshort4@cox.net>
Message-ID: <bshort4-1FC3DF.17495827012005@news.central.cox.net>
Source record: 20716
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew

In article <1106763536.808799.148880@c13g2000cwb.googlegroups.com>,
"Dave" <dave.harper@gmail.com> wrote:

> Can anyone recommend a good source (aka cheap) to get the Radio Data
> Code Manual by Klingenfuss (or an equivalent book)? Or better yet,
> does anyone have a used copy they'd like to sell?
> Thanks in advance!
> Dave

Some libraries will arrange inter-library loans at no cost.

Here, at the Tempe Public Library, each patron may have
up to 3 such requests active at a time.

Sometimes, there is a small charge if they have to go out
of state (Arizona) or whatever.

734. WR-90 X-Band aperature attenuator question??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-28 05:26:09 UTC
From: hexter@blazenet.net
Message-ID: <10vjj7hjn5lk224@corp.supernews.com>
Source record: 20717

Hi folks,

I needed to produce some referance power levels that were 'down' from my calibrated 0DbM generator. (It's output power is auto leveled, and non-adjustable) 9445mhz, center of one of the maritine radar bands.

I built two little aperature plates that look like a waveguide cover, but have a hole drilled in the exact center. A .185" hole provides about 45db of reduction, and a .310" hole provides about 25db of reduction.

There are some differances of exact gain reduction depending on where in the waveguide system I place these plates. (Close to source, or close to receiver) Perhaps up to about 3 db difference, not a big worry for me.

Do the numbers sound correct? Should I have attenuated in a differant way? Like perhaps a slot, instead of a round hole??

If I want to make some more of these plates, is there some math to help me predict the size of the hole for 10db?

Thanks for your help and comments. I am exploring some new areas here.

735. Re: WR-90 X-Band aperature attenuator question??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-28 05:52:35 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <41F9D323.5080009@nettally.com>
Source record: 20718

You might google for "waveguide vane attenuator". That is the device
used to measure fade margin on microwave links. A company called ARRA
makes them, so did HP at one time. There is a lossy vane which rotates
into the waveguide, turned by a calibrated knob and scale. Might be
worth your while to check e-bay to see if you can find exactly what you
want. Also some old microwave radios had these attached to the output
waveguide. Of course you need to find X-band.
The-RFI-EMI-GUY

gudmundur wrote:

> Hi folks,
>
> I needed to produce some referance power levels that were 'down' from
>my calibrated 0DbM generator. (It's output power is auto leveled, and
>non-adjustable) 9445mhz, center of one of the maritine radar bands.
>
> I built two little aperature plates that look like a waveguide cover,
>but have a hole drilled in the exact center. A .185" hole provides about
>45db of reduction, and a .310" hole provides about 25db of reduction.
>
> There are some differances of exact gain reduction depending on where
>in the waveguide system I place these plates. (Close to source, or close
>to receiver) Perhaps up to about 3 db differance, not a big worry for me.
>
> Do the numbers sound correct? Should I have attenuated in a differant
>way? Like perhaps a slot, instead of a round hole??
>
> If I want to make some more of these plates, is there some math to help
>me predict the size of the hole for 10db?
>
> Thanks for your help and comments. I am exploring some new areas here.
>
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"

The Lost Deep Thoughts By: Jack Handey
Before a mad scientist goes mad, there's probably a time
when he's only partially mad. And this is the time when he's
going to throw his best parties.

736. Re: VHF Buffer for Oscillator measurement

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-28 06:07:44 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <t4hjv0ll7n3hrrlf3b02eoffkj6gqkako3@4ax.com>
Source record: 20719

On Thu, 27 Jan 2005 07:49:06 GMT "David" <david@orbitcoms.com> wrote:

>Can someone please recommend a circuit I could build to act as a high
>impedance
>probe or buffer to enable connection to the 50 Ohm input of my frequency
>counter
>and for viewing the waveforms on a 300MHz scope.

Some of the older Tek 400 series scopes had an amplified output from
one vertical input channel. This could be left connected to a
frequency counter if you wanted.

What kind of scope do you have? Have you checked to see if it has such
an output?

-

Jim Adney jadney@vwtype3.org
Madison, WI 53711 USA
---

737. Radiotech on the newsgroup

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-28 09:30:41 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <t61kv05otlbm3motif1jp8p2mdhcq1v7jb@4ax.com>
Source record: 20720

Since I have my home page I receive a lot of technical questions which I know little about, but believe W7EL, W0IYH, K7ITM, KE5FX, G3SEK and others know very much about, and I've experienced that they post a lot of replies on the matters.....

Have proposed they try newsgroups which I listed, but somebody gets very insulted and tell me strange things, it seems that only a smaller fraction of those who access has any idea about newsgroups and how to access them

73,
JM

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

738. Re: ANyoen ever make a "slim Jim" antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-28 10:33:09 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2005.01.20.09.04.49.697907@oceanfree.net>
Source record: 20721

On Wed, 19 Jan 2005 12:25:06 -0800, stryped wrote:

> Do they work very well for a base antenna?

Yes and yes.

73, Ed. EI9GQ.

--
Linux 2.6.10

739. Re: Can I use rg6 connector on rg8 cable?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-28 12:38:46 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <qnqKd.81$nQ1.33@newsfe4-gui.ntli.net>
Source record: 20723

> I don't know how to attach PL-259 connectors to RG-6. To attach them to
RG-58,
> you need an adapter that matches the outer diameter of the cable to the
inner
> diameter of the connector. Since the PL-259 is so commonly used with
radio
> equipment, I suggest you keep them and learn about attaching them to RG-58
and
> RG-8 cables.
==========
There are also PL259 connectors with internal thread to suit RG58 coax
directly .
For fitting coax strip a short length of sheath ,fold braid back over
sheath ,strip polyethylene to say 1mm from braid end ,screw coax end covered
with braid into connector ,solder centre conductor to connector tip.
I prefer this type of connector over a PL259 for 10mm (3/8inch) coax with a
screwed adaptor.

I use RG58 coax for short patch leads only.

Frank GM0CSZ / KN6WH

740. Re: SHould this be grounded or not?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-28 12:39:45 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10vkckisg1bfj46@corp.supernews.com>
Source record: 20722

beerbarrel wrote:
>
> Can you use moon dirt? Would that still be an Earth ground?

No. That won't work for antennas that need to be earthed. It's used for antennas that need to be mooned (|).

Roy Lewallen, W7EL

741. Re: Radiotech on the newsgroup

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-28 14:55:04 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <cnsKd.3324$5t.223@fed1read07>
Source record: 20724

JM, I also have a popular mega website on Amateur Radio and receive numerous questions.
I answer those that I can and like you refer them to the news groups.

The greater majority of folks do not know how to use news groups or are even aware of their existence.

So I refer them to URL:
http://www.blackviper.com/Articles/WWW/usenet/how2newsOE6_01.htm

I also have instructions for accessing the NG's on my website.

Many come back with "I have to subscribe, so declined"
As you and I know it is not a subscription per se, only setting up your browser.
One has to subscribe to a mail list or reflector - but not the NG's.
Seems folks avoid anything that involves a setup or registration.

Others come back to me stating that when they viewed the NG's -- they were so full of junk and obscenities that they wouldn't return.

Sad as many experts frequent the NG's and they can be a very valuable resource.

In several instances, I posted queries for them and often someone would reply.

--
Caveat Lector --- Anon by necessity on the NG's -- thus avoiding your problem of "somebody gets
very insulted and tell me strange things"

"J M Noeding" <la8ak@online.no> wrote in message
news:t61kv05otlbm3motif1jp8p2mdhcq1v7jb@4ax.com...
> Since I have my home page I receive a lot of technical questions which
> I know little about, but believe W7EL, W0IYH, K7ITM, KE5FX, G3SEK and
> others know very much about, and I've experienced that they post a lot
> of replies on the matters.....
>
> Have proposed they try newsgroups which I listed, but somebody gets
> very insulted and tell me strange things, it seems that only a smaller
> fraction of those who access has any idea about newsgroups and how to
> access them
>
> 73,
> JM
> ---

> J. M. Noeding, LA8AK, N-4623 Kristiansand
> http://home.online.no/~la8ak/c.htm

742. Re: Radiotech on the newsgroup

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-28 14:58:41 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <VA.0000009b.00256899@btinternet.com>
Source record: 20725

Hi,

> Have proposed they try newsgroups which I listed, but somebody gets
> very insulted and tell me strange things, it seems that only a smaller
> fraction of those who access has any idea about newsgroups and how to
> access them

There are two main reasons I think. Firstly that newsreaders aren't generally integrated into browsers so that many people don't know that these groups exist. And secondly, posting to a newsgroup exposes you to public view and thus possible criticism which is never easy to handle even with the thickest of skins.

Consider the postings which start off "I don't know much about electronics but..." which is unnecessary as most people are only to happy to help if they can. Or those from the abusive ones in our midst who hide behind a "nom de guerre" and add little to the sum-total of human knowledge.

A great web site you have by the way.

Cheers - Joe

743. Re: 60Khz transmitter/repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-28 17:22:33 UTC
From: Victor Lick <aaa@bbb.com>
Message-ID: <tZmdnQZXBIVH6WfcRVn-oA@comcast.com>
Source record: 20726

Thanks for the info, Gregg. In my original post I indicated that RF knowledge is very limited (FM does not mean frequency modulation to me). Your response was intelligent - my understanding is not.

I gather I can build a loop of wire that resonates at 60KHz, put it in my attic, and it will reradiate the signal. Does that sound right? Won't it have to be big - the wavelength at 60KHz is 5000 meters!

I did do a search on the Internet and found a lot of stuff about magnetic loop design but most of it appears to be connected to transmitters. Do you have good links I can review?

Thanks again for the reply!

Vic

744. Re: WR-90 X-Band aperature attenuator question??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-28 19:01:02 UTC
From: fmmck@aol.communicate
Message-ID: <20050128140102.15549.00000339@mb-m02.aol.com>
Source record: 20727

<< I needed to produce some referance power levels that were 'down' from my calibrated 0DbM generator. (It's output power is auto leveled, and non-adjustable) 9445mhz, center of one of the maritine radar bands. >>

I've never worked in this band, but recall that some lower-frequency signal generators use a "waveguide beyond cutoff" attenuator. If you can find some waveguide sections designed for a sufficiently higher band, the attenuation will be proportional to their length.

This doesn't address impedance mismatch, but neither does your method.

73, Fred, K4DII

745. Re: detector diode conduction question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-28 23:02:23 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1106952884.118850.60120@f14g2000cwb.googlegroups.com>
Source record: 20728

Ooops, in my first reply I missed that your DVM has only 0.01V
resolution. Wow! Even a 3.5 digit one at 2V FS resolves millivolts.
So to keep things passive, use an RF transformer to step up the voltage
to the detector diode(s). I trust your DVM has a high input
resistance, so the RF loading by the detector and its DVM load should
be quite small. You might be aided by using a voltage doubler scheme,
in addition to the transformer stepup.

Cheers,
Tom

gudmundur wrote:
> Hello all,
>
> I want to try to detect signal levels of 50mv to 200mv peak to peak.
> I need a passive circuit with no amplifiers, and I will be feeding a
> DVM with .01v resolution. The problem I am having is that a 1N34 will
> not conduct very well at these low levels. Is there a more suitable
> diode? Can you give me a part number, or a simple way to get just one
> or two of these diodes? What the diode is looking at is a 50 ohm port
> on a 30 to 60 mhz I.F. chassis.
>
> Thank you for your time.

746. New Hunting reality show

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-28 23:17:33 UTC
From: thruthewoods32@yahoo.com
Message-ID: <1106954253.538391.165390@f14g2000cwb.googlegroups.com>
Source record: 20729

Have you heard about this new hunting reality TV show that's seeking participants? It's called "Hunting for Bambi" and it's like Fear Factor meets Girls Gone Wild. 6 guys get to hunt 12 naked women in the woods with paintball guns. Sounds like it should be a new Olympic sport if you ask me! Definitely better than hunting deer. lol! Go to www.huntingforbambi.com if you're interested in signing up.

747. Re: 60Khz transmitter/repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-28 23:21:32 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <0OzKd.75544$Qb.71914@edtnps89>
Source record: 20730

Behold, Victor Lick scribed on tube chassis:

> Thanks for the info, Gregg. In my original post I indicated that RF
> knowledge is very limited (FM does not mean frequency modulation to me).
> Your response was intelligent - my understanding is not.

Oh, OK ;-)

> I gather I can build a loop of wire that resonates at 60KHz, put it in
> my attic, and it will reradiate the signal. Does that sound right?
> Won't it have to be big - the wavelength at 60KHz is 5000 meters!

It will create a resonant field and concentrate the 60KHz energy in your
house.

You can use a multi-turn loop. Square, 4-turns, maybe 2M per side and an
AM tuning capacitor.

> I did do a search on the Internet and found a lot of stuff about
> magnetic loop design but most of it appears to be connected to
> transmitters. Do you have good links I can review?

The program you want is called MLOOP31.EXE (exact filename). That will
help you find it easier. All you need to know is the physical dimensions
of the antenna, like 2M/side, 1cm spacing, etc., physical dimensions of
the wire (alarm wire is 1mm in diameter for example) and so on. Just
ignore the dimensions for the feedloop.

Tell ya what - when I reboot into Windows, I'll use my copy to make some
calculations of some dimensions for you :-)

But you might want a copy for yourself, 'cause it's a real neat proggie!

Come to think of it, it's redistributable freeware - I can post it on
ABSE (alt.binaries.schematics.electronic) tonight.

--
Gregg "t3h g33k"
http://geek.scorpiorising.ca
Ratings are for transistors, tubes have guidelines

748. Re: New Hunting reality show

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-29 00:32:23 UTC
From: Nick <nobody@home.net>
Message-ID: <FPAKd.124$ar2.115@fe39.usenetserver.com>
Source record: 20731

Just another fucking SPAMMER!

<thruthewoods32@yahoo.com> wrote in message
news:1106954253.538391.165390@f14g2000cwb.googlegroups.com...
> Have you heard about this new hunting reality TV show that's seeking
> participants? It's called "Hunting for Bambi" and it's like
> Fear Factor meets Girls Gone Wild. 6 guys get to hunt 12 naked women in
> the woods with paintball guns. Sounds like it should be a new Olympic
> sport if you ask me! Definitely better than hunting deer. lol! Go to
> www.huntingforbambi.com if you're interested in signing up.
>

749. Re: New Hunting reality show

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-29 03:16:30 UTC
From: drwxr-xr-x <bit-bucket@config.com>
Message-ID: <slrncvm00e.18g8.bit-bucket@shell.config.com>
Source record: 20732

```
On Fri, 28 Jan 2005 19:32:23 -0500, Nick wrote:
> Just another fucking SPAMMER!

And, _you_ decided to followup to the spammer's Write
Only post by including _all_ of his original content?

Sort of puts you in the same category...
```

750. Re: 60Khz transmitter/repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-29 06:40:50 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <SdGKd.164695$KO5.12648@clgrps13>
Source record: 20733

Some calcs for you Victor,

4-turn loop, 2M each side, seperated by 1cm. The following tuning
capacitance is required for 60 KHz:

1mm dia. wire: 60,180p
1.5 and 2mm dia. wire: 65,580p

That's an awful lot and the tuning will be only a few tens of Hz wide.

If you have the capacitors, go for it.

If not, maybe an active antenna for your underground receivers?

BTW - the program is posted to ABSE. It won't go down to 60KHz, but you
can scale 1MHz results accurately.

--
Gregg "t3h g33k"
http://geek.scorpiorising.ca
Ratings are for transistors, tubes have guidelines

751. Please Help! BYTEK S15-F Multiprogrammer...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-29 06:53:39 UTC
From: Scott Goss <scott.goss@earthlink.net>
Message-ID: <0vcmv0l36bl8hv57l8fiqqv1jsqnqehro4@4ax.com>
Source record: 20734

I have a BYTEK S15-F Multiprogrammer, but cannot find a source for manuals/software. Does anyone know where these can be downloaded, or does anyone have originals they could copy for me? I'd really appreciate it and I would be more than willing to paypal you a few bucks for your trouble.

Please use scott.goss <at> earthlink.net if replying as I don't check this group all the time.

Thanks, Scott

752. HV Feed through caps - ID?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-29 11:09:32 UTC
From: UnoWhoo <NE1@jfdi.net>
Message-ID: <ctfqr6gif1@newsg2.svr.pol.co.uk>
Source record: 20735

Hello all
I have just obtained some surplus F/T Caps which look as if they may be
suitable for some HV applications - looking for some to do heaters on GS35.
I can't work out all the markings on them. Appreciate any ideas...
T
CK70AW
102M
89 25
I'm OK on the 102M and I assume that the 89 25 is date coding, but the rest
stumps me.
Anybody help please?
Thanks
U W

753. Re: 60Khz transmitter/repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-29 12:44:30 UTC
From: Victor Lick <aaa@bbb.com>
Message-ID: <yMudnRcccteyGGbcRVn-qQ@comcast.com>
Source record: 20736

Thanks for the numbers, Gregg. I managed to find the program as a ZIP file all over the Internet but everyone I downloaded wouldn't install.

The antenna you calculated is big, way too big to go in the attic. It was a cool idea though. Imagine giving people of a tour of my house. "...And up here we have the WWVB reradiating magnetic loop antenna with a resonant frequency of 60 KHz and a bandwidth of 56.2 Hz." I can hear them now, "Geez, Vic, you are a major geek."

Anyway, a 2M wide antenna is a bit big so I need to find another way. Active antennas won't do either. One clock sits on my desk in my office and the other one hangs on the wall. Antennas on those will have a very low wife acceptance factor.

Can I build a repeater? The receiving antenna in these clocks is small. Maybe a small low power transimitter with the same size antenna? Can I buy a repeater? Can I buy a transmitter?

Thanks for all your help on this,

Vic

754. Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-29 16:35:10 UTC
From: Stephen <atkinss@shaw.ca>
Message-ID: <pan.2005.01.29.16.31.45.994582@shaw.ca>
Source record: 20737

Hello everyone. I recently purchased the book "Build Your Own Intelligent Amateur Radio Transceiver" and was wondering if anyone knows of a site that has an errata. I've done some looking on google groups but all the sites are no longer around.

I don't want to start any flame wars but I just have to ask if any one has any suggestions on building this rig. I don't have a ham license yet but thats not the point of building this thing. I just want to jump into the deep end a bit. I've done all kinds of kits both big and small and just want to do everything from scratch and learn something in the process.

Thanks

Stephen

755. Re: Please Help! BYTEK S15-F Multiprogrammer... - 4e_1_b.jpg (0/1)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-29 16:53:52 UTC
From: Scott Goss <scott.goss@earthlink.net>
Message-ID: <k4gnv0di9q4pv75i1ei9sn3rc7ugqp9da0@4ax.com>
Source record: 20738

Here's a pic in case it helps:

-Scott

On Sat, 29 Jan 2005 06:53:39 GMT, Scott Goss
<scott.goss@earthlink.net> wrote:

>I have a BYTEK S15-F Multiprogrammer, but cannot find a source for
>manuals/software. Does anyone know where these can be downloaded, or
>does anyone have originals they could copy for me? I'd really
>appreciate it and I would be more than willing to paypal you a few
>bucks for your trouble.
>
>Please use scott.goss <at> earthlink.net if replying as I don't check
>this group all the time.
>
>Thanks, Scott

756. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-29 17:00:46 UTC
From: Larry Gagnon <lagagnon@fakeuniserve.com>
Message-ID: <pan.2005.01.29.17.00.45.681529@fakeuniserve.com>
Source record: 20739

On Sat, 29 Jan 2005 16:35:10 +0000, Stephen wrote:

> Hello everyone. I recently purchased the book "Build Your Own Intelligent
> Amateur Radio Transceiver" and was wondering if anyone knows of a site
> that has an errata.

Have you checked the publisher's website? They often have errata or they
will send it to you if you request it.

> I don't want to start any flame wars but I just have to ask if any one has
> any suggestions on building this rig. I don't have a ham license yet but
> thats not the point of building this thing. I just want to jump into the
> deep end a bit. I've done all kinds of kits both big and small and just
> want to do everything from scratch and learn something in the process.

The only problem I would have with doing it is what you have hinted at:
you do not have any evidence that the thing works! So definetely I would
find out first as you are attempting to, if the thing has ever been
constructed and does it work properly. Secondly, unless you have a very
good box of parts getting all the bits and pieces could nickle and dime
you to death. That is one advantage of going out and buying a Elecraft K2
kit instead!

Larry VE7EA

757. Re: Alinco radio weird problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-29 17:21:00 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <0CPKd.112264$w62.34002@bgtnsc05-news.ops.worldnet.att.net>
Source record: 20740

Not necessarily.....

<stryped@hotmail.com> wrote in message
news:1106673203.164309.11100@f14g2000cwb.googlegroups.com...
>
> Lou wrote:
>> <stryped@hotmail.com> wrote in message
>> news:1106661839.185172.183810@f14g2000cwb.googlegroups.com...
>> >
>> > Lou wrote:
>> >> <stryped@hotmail.com> wrote in message
>> >> news:1106600281.129397.32820@c13g2000cwb.googlegroups.com...
>> >> >
>> >> > Joe McElvenney wrote:
>> >> >> Hi,
>> >> >>
>> >> >> > I bought an ALinco DR 590 dual band amature radio at a
> hamfest.
>> > It
>> >> > is a
>> >> >> > mobile. Got it home, hooked it up, everything on the display
> lit
>> >> > up. I
>> >> >> > mean everything, even things that were not supposed to. The
>> >> > frequency
>> >> >> > number has stange lines in it. It was not usable.
>> >> >>
>> >> >> Some items of test equipment have a display 'test mode'
> where
>> >> > every
>> >> >> digit and LED/LCD segment are switched on either in sequence or
> at
>> >> > the
>> >> >> same time as a function check. I have three items of test
>> > equipment
>> >> > that
>> >> >> do just that on demand, so it could be that your rig was simply
>> >> > strutting
>> >> >> its stuff.
>> >> >>
>> >> >> As for the socket coming away, again it may be meant to.
>> > Perhaps
>> >> > the
>> >> >> terminal plugs into the assembly just behind it.

>> >> >>
>> >> >>
>> >> >> Cheers - Joe
>> >> >
>> >> >
>> >> > If this was a "test" mode then why did it stay in test mode? The
>> > radio
>> >> > was completly not usable.
>> >> >
>> >>
>> >> You said something to the effect of having it in your garage. Not
>> > sure if
>> >> heated or not, but the temperature changes could be doing this -
> if
>> > wide in
>> >> nature - cold to warm - etc. Could be a bad solder joint. Display
> may
>> > be
>> >> going flaky. You bought it used, who knows what ales it. A copy of
>> > the
>> >> owners manual if you don't have one - would be a good start.
>> >>
>> >> LC'
>> >
>> > Could the 3 v lithiam battery be going bad?
>> >
>>
>> It could be, a good sign of that would also be loss of memory of
> other
>> functions.
>>
>> L.
>>
>> (don't know where the C' came from!)
>
> It stays on the frequency I left it when I unplugged it. I guess this
> means the battery is ok?
>

758. Re: Alinco radio weird problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-29 17:27:25 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <1IPKd.112292$w62.103@bgtnsc05-news.ops.worldnet.att.net>
Source record: 20742

That's the problem with second hand radios.....if yours is having
that problem. Most of the stuff I've seen lately has been junk. It seems
that many of the hamfest folks (not all of them) are following eBay's
tradition. At the last hamfest I attended (Radio Expo), I ended up with a
100% average.....I had to repair everything. Of course,
everything was misrepresented as "working fine". On the subject of your
radio, I have purchased radios over the years that do hold their memory, but
they did have some of those weird problems. Replacing the backup battery
cured the problem. And then, there is the other side of the
coin.....this is the one where somebody replaces the backup battery
and subjects the uP to ESD. End of story, unless you are adept at replacing
quad flat-pack ICs (not too hard, but you need the right technique). It also
helps if you have a stereo microscope when replacing one of these devices.

Pete

<stryped@hotmail.com> wrote in message
news:1106673203.164309.11100@f14g2000cwb.googlegroups.com...
>
> Lou wrote:
>> <stryped@hotmail.com> wrote in message
>> news:1106661839.185172.183810@f14g2000cwb.googlegroups.com...
>> >
>> > Lou wrote:
>> >> <stryped@hotmail.com> wrote in message
>> >> news:1106600281.129397.32820@c13g2000cwb.googlegroups.com...
>> >> >
>> >> > Joe McElvenney wrote:
>> >> >> Hi,
>> >> >>
>> >> >> > I bought an ALinco DR 590 dual band amature radio at a
> hamfest.
>> > It
>> >> > is a
>> >> >> > mobile. Got it home, hooked it up, everything on the display
> lit
>> >> > up. I
>> >> >> > mean everything, even things that were not supposed to. The
>> >> > frequency
>> >> >> > number has stange lines in it. It was not usable.
>> >> >>
>> >> >> Some items of test equipment have a display 'test mode'
> where
>> >> > every
>> >> >> digit and LED/LCD segment are switched on either in sequence or

> at
>> >> > the
>> >> >> same time as a function check. I have three items of test
>> > equipment
>> >> > that
>> >> >> do just that on demand, so it could be that your rig was simply
>> >> > strutting
>> >> >> its stuff.
>> >> >>
>> >> >> As for the socket coming away, again it may be meant to.
>> > Perhaps
>> >> > the
>> >> >> terminal plugs into the assembly just behind it.
>> >> >>
>> >> >>
>> >> >> Cheers - Joe
>> >> >
>> >> >
>> >> > If this was a "test" mode then why did it stay in test mode? The
>> > radio
>> >> > was completly not usable.
>> >> >
>> >>
>> >> You said something to the effect of having it in your garage. Not
>> > sure if
>> >> heated or not, but the temperature changes could be doing this -
> if
>> > wide in
>> >> nature - cold to warm - etc. Could be a bad solder joint. Display
> may
>> > be
>> >> going flaky. You bought it used, who knows what ales it. A copy of
>> > the
>> >> owners manual if you don't have one - would be a good start.
>> >>
>> >> LC'
>> >
>> > Could the 3 v lithiam battery be going bad?
>> >
>>
>> It could be, a good sign of that would also be loss of memory of
> other
>> functions.
>>
>> L.
>>
>> (don't know where the C' came from!)
>
> It stays on the frequency I left it when I unplugged it. I guess this
> means the battery is ok?

>

759. Re: 60Khz transmitter/repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-29 17:32:21 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <41FBC8A5.647279D6@rica.net>
Source record: 20741

Victor Lick wrote:
>
> Thanks for the numbers, Gregg. I managed to find the program as a ZIP file
> all over the Internet but everyone I downloaded wouldn't install.
>
> The antenna you calculated is big, way too big to go in the attic. It was a
> cool idea though. Imagine giving people of a tour of my house. "...And up
> here we have the WWVB reradiating magnetic loop antenna with a resonant
> frequency of 60 KHz and a bandwidth of 56.2 Hz." I can hear them now,
> "Geez, Vic, you are a major geek."
>
> Anyway, a 2M wide antenna is a bit big so I need to find another way.
> Active antennas won't do either. One clock sits on my desk in my office and
> the other one hangs on the wall. Antennas on those will have a very low
> wife acceptance factor.
>
> Can I build a repeater? The receiving antenna in these clocks is small.
> Maybe a small low power transimitter with the same size antenna? Can I buy
> a repeater? Can I buy a transmitter?
>
> Thanks for all your help on this,
>
> Vic

For a wall clock, I would try adding a field concentrator antenna all
around the back edge of the clock, to put most of the field that
passes through that area, mostly through the clock's antenna. For a
small table clock, this approach is not so tenable, unless you can
paste it on the under side of the table, and produce the concentration
where you normally sit the clock.
--
John Popelish

760. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-29 19:06:03 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <3625asF4u2rgqU1@individual.net>
Source record: 20743
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Presumably if the transceiver is considered to be intelligent then
the intended owner must be an M3/CB Fools' Licensee?

"Stephen" <atkinss@shaw.ca> wrote in message
news:pan.2005.01.29.16.31.45.994582@shaw.ca...
> Hello everyone. I recently purchased the book "Build Your Own Intelligent
> Amateur Radio Transceiver"

761. Re: WR-90 X-Band aperature attenuator question??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-29 21:02:41 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <r8unv0p2tbmcjmirmmph1sde397kgubacf@4ax.com>
Source record: 20744

On 28 Jan 2005 19:01:02 GMT, fmmck@aol.communicate (Fred McKenzie)
wrote:

>>< I needed to produce some referance power levels that were 'down' from
>my calibrated 0DbM generator. (It's output power is auto leveled, and
>non-adjustable) 9445mhz, center of one of the maritine radar bands. >>
>
>I've never worked in this band, but recall that some lower-frequency signal
>generators use a "waveguide beyond cutoff" attenuator. If you can find some
>waveguide sections designed for a sufficiently higher band, the attenuation
>will be proportional to their length.
>
>This doesn't address impedance mismatch, but neither does your method.
>
>73, Fred, K4DII

but another case is that while normal attenuation may be 0.15dB/m for
a waveguide within the specified band, it may become 0.1dB/m below the
cutoff frequency, it seems that the lower limit is not for
attenuation, but for phase relationship, so it may be difficult to
predict phase along the cable and it is a question of narrowband
contra wideband applications

73, LA8AK

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

762. Re: 60Khz transmitter/repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-29 21:35:30 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <CkTKd.71180$Ob.15558@edtnps84>
Source record: 20745

Behold, John Popelish scribed on tube chassis:

> Victor Lick wrote:
>>
>> Thanks for the numbers, Gregg. I managed to find the program as a ZIP
>> file all over the Internet but everyone I downloaded wouldn't install.
>>
>> The antenna you calculated is big, way too big to go in the attic. It
>> was a cool idea though. Imagine giving people of a tour of my house.
>> "...And up here we have the WWVB reradiating magnetic loop antenna with
>> a resonant frequency of 60 KHz and a bandwidth of 56.2 Hz." I can hear
>> them now, "Geez, Vic, you are a major geek."
>>
>> Anyway, a 2M wide antenna is a bit big so I need to find another way.
>> Active antennas won't do either. One clock sits on my desk in my
>> office and the other one hangs on the wall. Antennas on those will
>> have a very low wife acceptance factor.
>>
>> Can I build a repeater? The receiving antenna in these clocks is
>> small. Maybe a small low power transimitter with the same size antenna?
>> Can I buy a repeater? Can I buy a transmitter?
>>
>> Thanks for all your help on this,
>>
>> Vic
>
> For a wall clock, I would try adding a field concentrator antenna all
> around the back edge of the clock, to put most of the field that passes
> through that area, mostly through the clock's antenna.

Oh, yes!

This reminds me of an old PopComm article, where someone re-wound a
ferrite loop antenna and tuned it as a concentrator. They are only 6"
long!

--
Gregg "t3h g33k"
http://geek.scorpiorising.ca
Ratings are for transistors, tubes have guidelines

763. Re: Alinco radio weird problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-30 01:28:25 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <a9qdnaR9Ar-lpWHcRVn-gA@adelphia.com>
Source record: 20746

Pete KE9OA wrote:
> That's the problem with second hand radios.....if yours is having
> that problem. Most of the stuff I've seen lately has been junk. It seems
> that many of the hamfest folks (not all of them) are following eBay's
> tradition. At the last hamfest I attended (Radio Expo), I ended up with a
> 100% average.....I had to repair everything. Of course,
> everything was misrepresented as "working fine". On the subject of your
> radio, I have purchased radios over the years that do hold their memory, but
> they did have some of those weird problems. Replacing the backup battery
> cured the problem. And then, there is the other side of the
> coin.....this is the one where somebody replaces the backup battery
> and subjects the uP to ESD. End of story, unless you are adept at replacing
> quad flat-pack ICs (not too hard, but you need the right technique). It also
> helps if you have a stereo microscope when replacing one of these devices.
>

Here is my take on the likely problem with the radio. I have a Kenwood TM241a mobile radio that had a similar problem. It turns out that a LOT of them did. The connector from the main board to the display has problems in this unit. I took the unit apart, cleaned the connector, with DeOxit, and after reassembly, it works fine. Some people have written about using a soldering iron to beef up the connector pins on the circuit board. I suspect that this may be your problem. It is about a half hour job, if that.

Hope this helps!

- Mike KB3EIA -

764. Re: Radiotech on the newsgroup

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-30 03:50:53 UTC
From: hexter@blazenet.net
Message-ID: <10vomct8dads700@corp.supernews.com>
Source record: 20747

In article <t61kv05otlbm3motif1jp8p2mdhcq1v7jb@4ax.com>, la8ak@online.no says...
>
>Since I have my home page I receive a lot of technical questions which
>I know little about, but believe W7EL, W0IYH, K7ITM, KE5FX, G3SEK and
>others know very much about, and I've experienced that they post a lot
>of replies on the matters.....
>
>Have proposed they try newsgroups which I listed, but somebody gets
>very insulted and tell me strange things, it seems that only a smaller
>fraction of those who access has any idea about newsgroups and how to
>access them
>

I have found your statement to be very true indeed. I have learned so much from several of the N.G.'s that I post to. Learned a long time ago to use a bogus return address however. I hate being spammed, although I really don't mind being flamed, as everyone has an opinion, good, or bad. I have purchased some equipment from folks in the scuba newsgroup. They actually gave me business referances to check them out beforehand.

It amazes me how many of my 'techie' freinds have no clue about N.G.'s. Totally unaware! I thought newsgroups were around before www webpages. Yikes, showing my age. So much useful information to share, and so much bandwidth wasted on commercial marketing racketeers, and spammers. Personally, I think webcasting is a waste of bandwidth. I am living in the U.S.A., but when I desire to hear Utvarp Reykjavik, I sat down and built a 6AJ5 tube type low noise convertor for 15.770mhz, and feed it's output to a 1964 Pontiac car radio. That rig is hot! Listening to an Icelandic broadcast via webcasting would be like shooting my engineering talent in the foot.

Best wishes all, from a viking in the states.

765. Megger Bridge (Similar to Wheatstone) to a good home?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-30 11:19:42 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <363ucgF4s97jeU1@individual.net>
Source record: 20598
Cross-posted to: uk.radio.amateur,alt.engineering.electrical,rec.radio.amateur.homebrew

POSTING REPEATED DUE TO CHILDISH RESPONSE FROM
A NUMBER OF PEOPLE WHO SHOWED THEMSELVES UP
FOR WHAT THEY REALLY ARE.

LAST DAY OF OFFER! MUST END TOMORROW!!!!

(BIN MAN COMES TUESDAY MORNING)

(The person who donated it to me was going to bin it anyway)

"Airy R.Bean" <Me@privacy.net> wrote in message
news:35v4t7F4n65euU1@individual.net...
> I've been given a Megger (500V Hand Generator), it's not
> actually a Wheatstone bridge, but it does do the Varley
> Bridge measurement.
>
> Resistance measurement from MegOhms to MilliOhms!
>
> I've already got one, which I use for accurate resistance
> measurement (Box is about 9" cube) and I don't
> need another!
>
> Free to a good home!
>
>

766. Re: WR-90 X-Band aperature attenuator question??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-30 14:33:44 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <5dnpv0le0oe50gsb5oeaonemkjjbs9g7aj@4ax.com>
Source record: 20600

On Fri, 28 Jan 2005 05:26:09 -0000, hexter@blazenet.net (gudmundur)
wrote:

> Hi folks,
>
> I needed to produce some referance power levels that were 'down' from
>my calibrated 0DbM generator. (It's output power is auto leveled, and
>non-adjustable) 9445mhz, center of one of the maritine radar bands.
>
> I built two little aperature plates that look like a waveguide cover,
>but have a hole drilled in the exact center. A .185" hole provides about
>45db of reduction, and a .310" hole provides about 25db of reduction.
>
> There are some differances of exact gain reduction depending on where
>in the waveguide system I place these plates. (Close to source, or close
>to receiver) Perhaps up to about 3 db differance, not a big worry for me.
>
> Do the numbers sound correct? Should I have attenuated in a differant
>way? Like perhaps a slot, instead of a round hole??

According to the one reference I can lay my hands on at the moment
(MIT Rad Lab Report No.43, Feb. 1944), a round aperature in a W/G is
equivalent to a shunt inductance.

The reference gives the data in graphical form. I put a few data
points into Excel and let it solve for the normalized susceptance v.
iris diameter.

For WR-90 guide (0.4" x 0.9") at 9.445 GHz, the formula is:

-Y' ~ 0.2838 * (d/0.9) ^ -3.1635

Where Y' is the normalized susceptance and with the iris centered in
the W/G "d" is the iris diameter in inches.

The reference doesn't specify a thickness of the iris plate, but I
would assume it's for plates << lambda.

After writing the foregoing, I remembered Steve Adam's book,
"Microwave Theory and Applications" (I should have remembered it
sooner, he signed it for me).

He references H. Atwater's, "Introduction to Microwave Theory" for the
following equation:

Z/Zo = j (2 * pi * d^3) / (3 * a * b * lambda_g)

Where for WR-90:

Zo = W/G impedance
a = 0.9
b = 0.4
d = iris diameter in inches
lambda_g = guide wavelength.

Whether these two references give the same answer will be, as they say, left for an exercise for the reader.

What you're getting with these reactive elements is mismatch loss. If you want true loss in your W/G, you must introduce resistance.

767. Re: Megger Bridge (Similar to Wheatstone) to a good home?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-30 15:01:55 UTC
From: Spike <Aero.Spike@Solutions.invalid>
Message-ID: <oltpv0h9fdp9rpta0kbcoaia96b169kake@4ax.com>
Source record: 20601
Cross-posted to: uk.radio.amateur,alt.engineering.electrical,rec.radio.amateur.homebrew

On Sun, 30 Jan 2005 11:19:42 -0000, Airy R.Bean wrote:

>POSTING REPEATED DUE TO CHILDISH RESPONSE FROM
>A NUMBER OF PEOPLE WHO SHOWED THEMSELVES UP
>FOR WHAT THEY REALLY ARE.
>
>LAST DAY OF OFFER! MUST END TOMORROW!!!!
>
>(BIN MAN COMES TUESDAY MORNING)

IT WILL BE COMPANY FOR THE FETTLED CASTING.
--
from
Aero Spike

768. Re: Megger Bridge (Similar to Wheatstone) to a good home?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-30 15:14:47 UTC
From: Steve Cothran <fake@fake.com>
Message-ID: <fdupv0d5crsh8v352nadtvetqsg9t4kvq3@4ax.com>
Source record: 20599
Cross-posted to: uk.radio.amateur,alt.engineering.electrical,rec.radio.amateur.homebrew

On Sun, 30 Jan 2005 11:19:42 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>POSTING REPEATED DUE TO CHILDISH RESPONSE FROM
>A NUMBER OF PEOPLE WHO SHOWED THEMSELVES UP
>FOR WHAT THEY REALLY ARE.

My sister has an electric razor with a curly cord. Do you like
sunflowers?

769. Re: Megger Bridge (Similar to Wheatstone) to a good home?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-30 15:29:43 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <364cqbF4ui8adU2@individual.net>
Source record: 20602
Cross-posted to: uk.radio.amateur,alt.engineering.electrical,rec.radio.amateur.homebrew

Spike wrote:

> On Sun, 30 Jan 2005 11:19:42 -0000, Airy R.Bean wrote:
>
>
>>POSTING REPEATED DUE TO CHILDISH RESPONSE FROM
>>A NUMBER OF PEOPLE WHO SHOWED THEMSELVES UP
>>FOR WHAT THEY REALLY ARE.
>>
>>LAST DAY OF OFFER! MUST END TOMORROW!!!!
>>
>>(BIN MAN COMES TUESDAY MORNING)
>
>
> IT WILL BE COMPANY FOR THE FETTLED CASTING.
ROTFLMAO!
--
;>)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

770. Re: 60Khz transmitter/repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-30 18:01:16 UTC
From: lenover21@aol.com
Message-ID: <20050130130116.14151.00000002@mb-m04.aol.com>
Source record: 20603

In article <yMudnRcccteyGGbcRVn-qQ@comcast.com>, "Victor Lick" <aaa@bbb.com>
writes:

>Thanks for the numbers, Gregg. I managed to find the program as a ZIP file
>all over the Internet but everyone I downloaded wouldn't install.
>
>The antenna you calculated is big, way too big to go in the attic. It was a
>cool idea though. Imagine giving people of a tour of my house. "...And up
>here we have the WWVB reradiating magnetic loop antenna with a resonant
>frequency of 60 KHz and a bandwidth of 56.2 Hz." I can hear them now,
>"Geez, Vic, you are a major geek."
>
>Anyway, a 2M wide antenna is a bit big so I need to find another way.
>Active antennas won't do either. One clock sits on my desk in my office and
>the other one hangs on the wall. Antennas on those will have a very low
>wife acceptance factor.
>
>Can I build a repeater? The receiving antenna in these clocks is small.
>Maybe a small low power transimitter with the same size antenna? Can I buy
>a repeater? Can I buy a transmitter?

Some suggestions -

A two-meter loop antenna isn't needed. You could try one the
size that I made to receive WWVB in southern California from
Fort Collins. That one is 58 1/2 turns of #14 solid electrical wire
wound over a wooden former to a maximum diameter of 33 inches
(83.8 cm). That size was dictated by a trap door to the small
attic in my house. An electrostatic shield made from aluminum
foil went over that, the whole bound together by jute twine which
was varnished several times to hold it together. A single piece
of 1" diameter PVC plumbing pipe provides support for hanging
from a beam and maintain circularity.

Measured loop inductance is about 5.7 mHy so the 60 KHz
resonating capacity should be about 1230 pFd. But, with
high distributed capacity (measured by two-frequency method)
of about 395 pFd, the required parallel capacity would be
about 840 pFd. Q, measured as delta-f between -3 db
points around resonance is about 44. That results in a
bandwidth of 1.3 KHz but that can be narrowed by tuned
amplifiers.

Note: Those are actual measurements, not textbook data.
Ordinary THHN type insulated solid electrical wire was used
to reduce cost (in a 500 foot roll that is cheaper than buying

enameled solid magnet wire).

Signal strength in volts is proportional to the number of turns
in the loop. At this location, roughly a kilomile from Fort Collins,
the induced voltage was about 400 uV. That is less than WWVB
reports of higher field levels at San Diego, a slight increase in
distance from Colorado. My location is hampered, perhaps, by
a mile-plus of 100-foot higher hills in the direction of WWVB.
Two manufactured radio clocks have been working just fine here
for four years. My attic is about at the same height as my
uphill neighbor's ground level.

I've got a differential input first-stage amplifier, J310 FETs as
source followers into an MC1350P differential video amplifier.
The loop connections are brought in by RG-59 TV cable with
about 210 pFd per cable. A two-gang variable at the WWVB
receiver tunes for peak. Differential input helps reduce some
common-mode noise pickup (such as from "high efficiency"
switcher power supply lamps).

My use is just to extract the 60 KHz WWVB carrier. That is
done by additional MC1350P stages, that IC effectively working
as a limiter at high input levels. Tuned amplifiers without
limiting will work fine to preserve the two-level AM time code.

It is very difficult to arrange a 60 KHz "repeater" without inducing
feedback. I would suggest using one or two lengths of cheap
75 Ohm TV cable from an attic location to the basement level.
Normal 20.5 pFd per foot RG-59 will hold fairly stable despite
temperature variations. A long length of coax, even 500 feet,
wouldn't matter much relative to the long wavelength of 60 KHz.
Two lengths into a differential input amplifier to reduce stray
pickup from appliances and lamps over a long run.

A wired amplified 60 KHz signal can be coupled inductively to
a radio clock with a turn or two (perhaps) around the case or
even capacitively. That would depend on the internals of the
radio clocks.

Trying to make an on-frequency wireless repeater is a setup for
feedback and oscillation unless there's lots of space between
pickup antenna and the repeater transmit antenna. Not
recommended but it might work if the pickup is in the attic and
repeater transmitter is in the basement with low power output.

There's no such thing as a passive amplifier. One might narrow
the effective beamwidth of an internal radio clock loopstick with
an external loopstick but, in all probability, just orienting the radio
clock itself would help.

LenAnderson@ieee.org

retired (from regular hours) electronic engineer person

LenAnderson@ieee.org

771. Re: Megger Bridge (Similar to Wheatstone) to a good home?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-30 19:56:44 UTC
From: tox <nospam@nospamming.co.com>
Message-ID: <0_aLd.1176$q22.127@newsfe1-gui.ntli.net>
Source record: 20604
Cross-posted to: uk.radio.amateur,alt.engineering.electrical,rec.radio.amateur.homebrew

"Spike" <Aero.Spike@Solutions.invalid> wrote in message
news:oltpv0h9fdp9rpta0kbcoaia96b169kake@4ax.com...
> On Sun, 30 Jan 2005 11:19:42 -0000, Airy R.Bean wrote:
>
> >POSTING REPEATED DUE TO CHILDISH RESPONSE FROM
> >A NUMBER OF PEOPLE WHO SHOWED THEMSELVES UP
> >FOR WHAT THEY REALLY ARE.
> >
> >LAST DAY OF OFFER! MUST END TOMORROW!!!!
> >
> >(BIN MAN COMES TUESDAY MORNING)
>
> IT WILL BE COMPANY FOR THE FETTLED CASTING.

ROTFLMAO

Regards
tox

772. TS-450 PA (power amp) assembly $100 shipped

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-30 19:58:52 UTC
From: DOUGLAS SNOWDEN <SNOWDEN@peoplepc.com>
Message-ID: <00bLd.2810$S3.2378@newsread2.news.atl.earthlink.net>
Source record: 20605
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

Includes the filter/switch board and Fan assembly.

$100 shipped toCONUS

Doug, N4IJ

773. FS: Radio Shack 21-524

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-30 20:25:55 UTC
From: ars_wa8mea@netzero.com
Message-ID: <1107116755.020633.317690@c13g2000cwb.googlegroups.com>
Source record: 20606

For Sale: Radio Shack "SWR/Power Tester". HF. 2000/200/20 watt settings. Average AND P.E.P power settings. Almost MINT! Comes with jumber. $19.95 and I'll pay for the shipping.
First e-mail gets it!

73, Bill - WA8MEA - ars_wa8mea@netzero.com
REALLY COOL STUFF at: http://qth.com/dwm

774. Any difference in durability of two models of Fluke multimeters?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-30 20:50:50 UTC
From: tunesandballoons@yahoo.com
Message-ID: <1270ed33.0501301250.70dada9@posting.google.com>
Source record: 20607

Hi, I'm looking for a multimeter that will be
used 24/7 on DC and mA readings. Are there,
in your opinion/experience, any difference in
long-term durability between the Fluke 87
(series 80) and the Fluke 81438 multimeters?

775. Re: Any difference in durability of two models of Fluke multimeters?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-30 22:08:09 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <10vqmmcs9q75422@corp.supernews.com>
Source record: 20608

I've had one of the Harbor Freight multimeters on a monitoring point 24/7 for six months and (except to change batteries) not a whimper. My students have bought somewhere on the order of 100-150 of them and as yet, not a casualty.

They are on sale for $2.99 right now.

Jim

"fancy nospam tunes" <tunesandballoons@yahoo.com> wrote in message news:1270ed33.0501301250.70dada9@posting.google.com...
> Hi, I'm looking for a multimeter that will be
> used 24/7 on DC and mA readings. Are there,
> in your opinion/experience, any difference in
> long-term durability between the Fluke 87
> (series 80) and the Fluke 81438 multimeters?

776. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-30 23:52:03 UTC
From: KW <ken.g1itv@MTLworld.com>
Message-ID: <DqeLd.435$CF5.329@newsfe1-win.ntli.net>
Source record: 20609
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"G1LVN" <google@g1lvn.org.uk> wrote in message
news:1107125695.735520.275940@c13g2000cwb.googlegroups.com...
> intelligent amateur radeo? Is that like a rodeo?
>

You could get horse with talking too much!

KW

777. Radio battery installation

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-31 13:16:17 UTC
From: stryped@hotmail.com
Message-ID: <1107177377.752452.219630@z14g2000cwz.googlegroups.com>
Source record: 20610

Is this hard? I have an alinco DR 590 that is acting funny. Checked the battery and although it was keeping memory it showed less than a volt.

It is a BR 2032. Do these things come with the tabs already on the battery when you buy them?

778. Re: Radio battery installation

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-31 14:08:38 UTC
From: Lou <lf08357@Yahoo.Com>
Message-ID: <9ZqLd.40303$NC6.23459@newsread1.mlpsca01.us.to.verio.net>
Source record: 20611

<stryped@hotmail.com> wrote in message
news:1107177377.752452.219630@z14g2000cwz.googlegroups.com...
> Is this hard? I have an alinco DR 590 that is acting funny. Checked the
> battery and although it was keeping memory it showed less than a volt.
>
> It is a BR 2032. Do these things come with the tabs already on the
> battery when you buy them?
>

Is this a "REPEAT" post? You've been asking the same questions for over 2 weeks now. As one other poster suggested, DO SOMETHING. For Christ's sakes, you keep asking the same questions in like 5 different news groups, and you've STILL not managed to get it in your head what they're trying to tell you.

Getting help on line is good. I and I'm sure tons of others don't mind helping, but for Christ's sakes - PUT IT TO ACTION.
If you can't figure it out by now, then get an ELMER near you to help out. Otherwise, you're going to be a hell of a lot worse off than you are now, and from the looks of things, that is pretty bad. In case you are clueless as to an Elmer, it is a person with experience who can show you up close. From the sounds of things, you SURE could use one.

Otherwise, I'm beginning to wonder if you're not either slightly mentally deficient or a troll. NO ONE asks the same questions over a couple weeks and gets answers and has to still ask the same questions.......

L.

779. Re: Any difference in durability of two models of Fluke multimeters?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-31 15:13:50 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <OWrLd.87$Jq6.56@newsfe5-win.ntli.net>
Source record: 20612

> Hi, I'm looking for a multimeter that will be
> used 24/7 on DC and mA readings. Are there,
> in your opinion/experience, any difference in
> long-term durability between the Fluke 87
> (series 80) and the Fluke 81438 multimeters?
==========
Depending on the number of digits your readout needs to have , DVMs are nowadays very cheap .
Here in the UK a well known electronic components/gadgets chain store sells 3 digits multi-function DVMs (LCD display) for GBP 5.00 or US$ 7.00. Some time ago they sold these DVM as a promotion for GBP 3.00 or US$ 4.20 ,complete with 9V battery + leads and a soft plastic pouch. It is Mastech's model M-830B sold by Maplin
At that price 'long term durability' is no matter of concern.
BTW when comparing the reading of these low cost DVMs with a similar 'professional instrument ' the difference is at the most 2 of the least significant digit.
As a radioamateur (hobbyist) I feel these DVMs are fit for my purpose.

Frank GM0CSZ / KN6WH

780. Re: Radio battery installation

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-31 15:29:36 UTC
From: Galen Watts <gwatts@nrao.edu>
Message-ID: <41FE4EDF.6070909@nrao.edu>
Source record: 20613

stryped@hotmail.com wrote:
> Is this hard? I have an alinco DR 590 that is acting funny. Checked the
> battery and although it was keeping memory it showed less than a volt.

Yep, time to replace it.

> It is a BR 2032. Do these things come with the tabs already on the
> battery when you buy them?

I looked up the data sheet for a BR2032,
http://tinyurl.com/67puy

and it doesn't show tabs attached. If your battery has tabs attached you may want to contact Alinco and get a battery from them, soldering tabs on a battery can be difficult to battery destructive. Check carefully, it may be a simple battery holder and not attached clips. I have a DR570 that I haven't yet replaced the backup battery, I'll look if I have time tonight.

Note that you will lose all memory in the radio when you replace the battery and it's a good idea to do a full reset after replacing said battery, but from your posts it looks like the radio is not so great in the memory department anyway, an even better reason to do a full reset after a new battery.

Soldering the new battery in can be a challenge if you haven't done much soldering or component removal/replacement, you may want to either find a friend who solders well or take the radio to a repair shop and have them do it.

Good luck!
-Galen, W8LNA

781. Re: Radio battery installation

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-31 15:49:51 UTC
From: Larry Gagnon <lagagnon@fakeuniserve.com>
Message-ID: <pan.2005.01.31.15.49.49.676588@fakeuniserve.com>
Source record: 20614

On Mon, 31 Jan 2005 09:08:38 -0500, Lou wrote:

> <stryped@hotmail.com> wrote in message
> news:1107177377.752452.219630@z14g2000cwz.googlegroups.com...
>> Is this hard? I have an alinco DR 590 that is acting funny. Checked the
>> battery and although it was keeping memory it showed less than a volt.
>>
>> It is a BR 2032. Do these things come with the tabs already on the
>> battery when you buy them?
>>
>>
> Is this a "REPEAT" post? You've been asking the same questions for over 2
> weeks now. As one other poster suggested, DO SOMETHING. For Christ's
> sakes, you keep asking the same questions in like 5 different news groups,
> and you've STILL not managed to get it in your head what they're trying to
> tell you.
>
> Getting help on line is good. I and I'm sure tons of others don't mind
> helping, but for Christ's sakes - PUT IT TO ACTION. If you can't figure it
> out by now, then get an ELMER near you to help out. Otherwise, you're
> going to be a hell of a lot worse off than you are now, and from the looks
> of things, that is pretty bad. In case you are clueless as to an Elmer,
> it is a person with experience who can show you up close. From the sounds
> of things, you SURE could use one.
>
> Otherwise, I'm beginning to wonder if you're not either slightly mentally
> deficient or a troll. NO ONE asks the same questions over a couple weeks
> and gets answers and has to still ask the same questions.......
>
> L.

Well said. This guy has been "plonked" by me for weeks now. It is a
pleasure to see intelligent questions once again.

Larry
--
****
to reply via email remove "fake"
Microsoft will soon release their newest product: a vacuum cleaner.
It will be their only product which doesn't suck.

782. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-31 16:44:44 UTC
From: Hans Summers <hans.summers@tudor.com>
Message-ID: <3675jsF29a0msU1@individual.net>
Source record: 20615

>
> I don't want to start any flame wars but I just have to ask if any one has
> any suggestions on building this rig. I don't have a ham license yet but
> thats not the point of building this thing. I just want to jump into the
> deep end a bit. I've done all kinds of kits both big and small and just
> want to do everything from scratch and learn something in the process.
>

Stephen

I have that book too. Great read, very inspiring! I'd love to build it, or something similar - but have insufficient time right now and too many other projects lined up. I can't offer any specific advice but I would say this would be quite an ambitious project and you'd need to be quite committed in order to complete it successfully.

Another great book is "Crystal Sets to Sideband - a Guide to Building an Amateur Radio Station" by Frank Harris K0IYE. This free eBook is available for download on my website at http://www.hanssummers.com/radio/k0iye/index.htm . Frank covers all the theory and simple circuits, building up to more complex rigs. A great resource for the homebrewer.

73 Hans G0UPL
http://www.HansSummers.com

783. Re: Any difference in durability of two models of Fluke multimeters?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-31 17:19:11 UTC
From: fmmck@aol.communicate
Message-ID: <20050131121911.11779.00000309@mb-m03.aol.com>
Source record: 20616

<< I'm looking for a multimeter that will be
used 24/7 on DC and mA readings. Are there,
in your opinion/experience, any difference in
long-term durability between the Fluke 87
(series 80) and the Fluke 81438 multimeters? >>

Tunes-

I'm not familiar with the 81438. The 87 may be similar to a 77 I used at work.

The 77 function switch has a vulnerability in that the knob and shaft that activate it are attached to the front, and the switch and PCB are attached to the back when opened to change the battery. The rotary part of the switch is floating and moved out of position when the battery was changed. Damage to contacts occurred when the meter was re-assembled.

You may prefer to call this "operator error", but I've never had any such problem with my 8020A which has a separate battery compartment and push-button switches. (Of course it is not auto-ranging!)

Given a choice, I prefer push buttons to a rotary switch, especially if settings are to be frequently changed.

73, Fred, K4DII

784. Re: Radio battery installation

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-31 17:28:17 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncvsqlh.2nlr.bit-bucket@shell.config.com>
Source record: 20617

On Mon, 31 Jan 2005 07:49:51 -0800, Larry Gagnon wrote:
> On Mon, 31 Jan 2005 09:08:38 -0500, Lou wrote:
>
>> <stryped@hotmail.com> wrote in message
>> news:1107177377.752452.219630@z14g2000cwz.googlegroups.com...
>>> Is this hard? I have an alinco DR 590 that is acting funny. Checked the
>>> battery and although it was keeping memory it showed less than a volt.
>>>
>>> It is a BR 2032. Do these things come with the tabs already on the
>>> battery when you buy them?
>>>
>>>
>> Is this a "REPEAT" post? You've been asking the same questions for over 2
>> weeks now. As one other poster suggested, DO SOMETHING. For Christ's
>> sakes, you keep asking the same questions in like 5 different news groups,
>> and you've STILL not managed to get it in your head what they're trying to
>> tell you.
>>
>> Getting help on line is good. I and I'm sure tons of others don't mind
>> helping, but for Christ's sakes - PUT IT TO ACTION. If you can't figure it
>> out by now, then get an ELMER near you to help out. Otherwise, you're
>> going to be a hell of a lot worse off than you are now, and from the looks
>> of things, that is pretty bad. In case you are clueless as to an Elmer,
>> it is a person with experience who can show you up close. From the sounds
>> of things, you SURE could use one.
>>
>> Otherwise, I'm beginning to wonder if you're not either slightly mentally
>> deficient or a troll. NO ONE asks the same questions over a couple weeks
>> and gets answers and has to still ask the same questions.......
>
> Well said. This guy has been "plonked" by me for weeks now. It is a
> pleasure to see intelligent questions once again.

PLONK'ed for weeks by me, as well. He's been asking the most basic,
lame electronic/radio/antenna questions in a variety of ng's.

Kinda reminds me of a clueless fella I once had the 'pleasure' of
working with at an old $DAYJOB. He would ask me the most basic
(computer/programming) questions - that his resume claimed he had
down pat - and I got tired of it.
I told'im: "I don't mind answering questions. But, you had better not
ask me the same damn question more than once." (And, he had been...)
That seemed to have mostly solved the problem.
Later I learned that he started using a list of the "experts" at the
$DAYJOB, and was methodically going round-robin to ask his questions.

He finally (re)embellished his resume and moved on down the road to
a new, unfortunate employer.

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

785. Is this voltage doubler different?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-31 20:53:51 UTC
From: Mike Silva <snarflemike@yahoo.com>
Message-ID: <1107204831.573023.87930@c13g2000cwb.googlegroups.com>
Source record: 20618

Regarding the circuit here:
http://www.kwarc.org/bulletin/99-04/tech_corner.htm

Does this voltage doubler work any "better" (better regulation, better transformer utilization, etc) than the classic 2-diode, 2-capacitor doubler (as seen in e.g. the HP-23 supplies)? I know it uses more parts; what I'm wondering is whether the extra parts actually provide any benefits, and if so, under what circumstances.

Does anybody have any actual experience with this circuit?
73,
Mike, KK6GM

786. Re: 60Khz transmitter/repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-31 21:49:21 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <BJxLd.155$Xh1.6@newsfe1-gui.ntli.net>
Source record: 20619

> > I gather I can build a loop of wire that resonates at 60KHz, put it in
> > my attic, and it will reradiate the signal. Does that sound right?
> > Won't it have to be big - the wavelength at 60KHz is 5000 meters!
>
> It will create a resonant field and concentrate the 60KHz energy in your
> house.
>
> You can use a multi-turn loop. Square, 4-turns, maybe 2M per side and an
> AM tuning capacitor.
==========
Just a construction hint. For a neat multi-turn rx loop you could consider ribbon cable as used in computing gear .
Some time ago ,at a fleamarket I bought a roll of 100 ft (30.5 metres) of 15 leads wide ribbon cable.

Example : To make a 4 turns loop as above you would need 2*4 equals 8 metres of 8 lead ribbon cable using end of lead 1 and 8 as ends of the loop , join ends of lead 2 and 3 , 4 and 5 , 6 and 7.
Although the ribbon leads multi-strand overall diameter is only 0.2 - 0.3 mm ,it should be OK for rx purposes.

Frank GM0CSZ / KN6WH

787. Re: Is this voltage doubler different?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-31 23:06:56 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <1_yLd.1819$3W3.1208@bignews4.bellsouth.net>
Source record: 20620

Mike Silva wrote:
> Regarding the circuit here:
> http://www.kwarc.org/bulletin/99-04/tech_corner.htm
>
> Does this voltage doubler work any "better" (better regulation, better
> transformer utilization, etc) than the classic 2-diode, 2-capacitor
> doubler (as seen in e.g. the HP-23 supplies)? I know it uses more
> parts; what I'm wondering is whether the extra parts actually provide
> any benefits, and if so, under what circumstances.
>
> Does anybody have any actual experience with this circuit?
> 73,
> Mike, KK6GM
>
If, as the author claims, it yeilds 120hz ripple, it will need
smaller filter caps than a regular doubler and provide less ripple
(lower hum). Diodes are cheap, caps are not (at least not HV high
capacitance ones!) though.

788. Re: Is this voltage doubler different?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-31 23:18:07 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <P0zLd.191317$KO5.19413@clgrps13>
Source record: 20621

Hmmm, never seen that configuration before. I'll have to try it.

--
Gregg "t3h g33k"
http://geek.scorpiorising.ca
Ratings are for transistors, tubes have guidelines

789. Re: Any difference in durability of two models of Fluke multimeters?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-01-31 23:37:27 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <XizLd.4426$S3.3324@newsread2.news.atl.earthlink.net>
Source record: 20622

"Highland Ham" <abcgm0csz.kn6whxyz@abcntlworldxyz.com> wrote in message
news:OWrLd.87$Jq6.56@newsfe5-win.ntli.net...
> > Hi, I'm looking for a multimeter that will be
> > used 24/7 on DC and mA readings. Are there,
> > in your opinion/experience, any difference in
> > long-term durability between the Fluke 87
> > (series 80) and the Fluke 81438 multimeters?
> ====================
> Depending on the number of digits your readout needs to have , DVMs are
> nowadays very cheap .
> Here in the UK a well known electronic components/gadgets chain store
sells
> 3 digits multi-function DVMs (LCD display) for GBP 5.00 or US$ 7.00.
Some
> time ago they sold these DVM as a promotion for GBP 3.00 or US$ 4.20
> ,complete with 9V battery + leads and a soft plastic pouch. It is
> Mastech's model M-830B sold by Maplin
> At that price 'long term durability' is no matter of concern.
> BTW when comparing the reading of these low cost DVMs with a similar
> 'professional instrument ' the difference is at the most 2 of the least
> significant digit.
> As a radioamateur (hobbyist) I feel these DVMs are fit for my purpose.
>
> Frank GM0CSZ / KN6WH
>

It will greatly depend on what your purpose it. I use the Fluke meters at
work. I may measuer a 20 milliamp circuit and afew minuits later measuer a
480 volt circuit that is fused for about 600 amps. The Fluke people came in
and did a demonstration on their meters. One thing that impressed me was
some films they showed. Just by subituting the wrong fuse in their meter
and haveing it set for ohms or amps instead of voltage and hooking it to the
3 phase circuit created one big arc and flash. The cheeper meters did the
same thing. Just imagin an arc welder running 480 volts and number 20 wire
shorting the thing out. Then you are holding a lead in each hand. The
insylation melts off the leads and you become part of the circuit.

The cheep meters are ok for some home usage but if going to higher voltage
and current you want to use a meter that will stand up to some abuse without
making you a part of the circuit.
You can buy 50 meters for what a good one costs but if using it on high
voltage/current you do not want to put your life on the $ 4.00 meter. The $
4 meters are fine for low voltage stuff and you can buy a few if they crap
out on you.

790. Re: Is this voltage doubler different?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 04:03:59 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <vsvtv05bfqfp3ollc7ic4ag7819m8bm50o@4ax.com>
Source record: 20623

I don't see any difference from a regular voltage doubler with an
added filter cap at the output. C1 and C2 are still charged with 1/2
wave power.

73
Gary K4FMX

On 31 Jan 2005 12:53:51 -0800, "Mike Silva" <snarflemike@yahoo.com>
wrote:

>Regarding the circuit here:
>http://www.kwarc.org/bulletin/99-04/tech_corner.htm
>
>Does this voltage doubler work any "better" (better regulation, better
>transformer utilization, etc) than the classic 2-diode, 2-capacitor
>doubler (as seen in e.g. the HP-23 supplies)? I know it uses more
>parts; what I'm wondering is whether the extra parts actually provide
>any benefits, and if so, under what circumstances.
>
>Does anybody have any actual experience with this circuit?
>73,
>Mike, KK6GM

791. Re: Is this voltage doubler different?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 04:29:40 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <41FF05B4.8A65409F@rica.net>
Source record: 20624

Mike Silva wrote:
>
> Regarding the circuit here:
> http://www.kwarc.org/bulletin/99-04/tech_corner.htm
>
> Does this voltage doubler work any "better" (better regulation, better
> transformer utilization, etc) than the classic 2-diode, 2-capacitor
> doubler (as seen in e.g. the HP-23 supplies)? I know it uses more
> parts; what I'm wondering is whether the extra parts actually provide
> any benefits, and if so, under what circumstances.
>
> Does anybody have any actual experience with this circuit?
> 73,
> Mike, KK6GM

It is more complicated than the normal full wave doubler,
http://hyperphysics.phy-astr.gsu.edu/hbase/electronic/voldoub.html#c1
but I can't see that it has any advantages.

--
John Popelish

792. Re: 60Khz transmitter/repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 08:17:48 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <ccduv0985o8l1a4l9k9agfk4dshcntdfr5@4ax.com>
Source record: 20625

On Mon, 31 Jan 2005 21:49:21 GMT, "Highland Ham"
<abcgm0csz.kn6whxyz@abcntlworldxyz.com> wrote:

>Example : To make a 4 turns loop as above you would need 2*4 equals 8 metres
>of 8 lead ribbon cable using end of lead 1 and 8 as ends of the loop , join
>ends of lead 2 and 3 , 4 and 5 , 6 and 7.

Loops made of multi conductor cables in this way tend to have a very
large capacitance between turns and in the worst case the loop will
have a self resonance frequency below the desired frequency band. Even
if the self resonance is above the desired band, the amount of
external tuning capacitance is greatly reduced.

When a wide ribbon cable is available, it can be a good idea to use
only every other lead and let the intermediate leads floating to
reduce the capacitance between turns.

Paul OH3LWR

793. Re: Is this voltage doubler different? OT: Ckt sims?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 10:45:10 UTC
From: David J Windisch <davidjw@cinci.rr.com>
Message-ID: <W4JLd.79747$re1.78520@fe2.columbus.rr.com>
Source record: 20626

Build s test ckt with a filament xfmr and *small* caps and a "heavy" load,
and look at the oupt ripple with a scope. Or build it virtually.

OT: Which are the other good, (affordable!?) ckt sims?
Anyone have a transferable version of Electronics Workbench he'd like to
sell?

73, Dave, N3HE
Cincinnati OH

"Mike Silva" <snarflemike@yahoo.com> wrote in message
news:1107204831.573023.87930@c13g2000cwb.googlegroups.com...
> Regarding the circuit here:
> http://www.kwarc.org/bulletin/99-04/tech_corner.htm
>
> Does this voltage doubler work any "better" (better regulation, better
> transformer utilization, etc) than the classic 2-diode, 2-capacitor
> doubler (as seen in e.g. the HP-23 supplies)? I know it uses more
> parts; what I'm wondering is whether the extra parts actually provide
> any benefits, and if so, under what circumstances.
>
> Does anybody have any actual experience with this circuit?
> 73,
> Mike, KK6GM
>

794. Re: 60Khz transmitter/repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 13:58:31 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <bWLLd.273$XH5.235@newsfe5-win.ntli.net>
Source record: 20627

> >Example : To make a 4 turns loop as above you would need 2*4 equals 8
metres
> >of 8 lead ribbon cable using end of lead 1 and 8 as ends of the loop ,
join
> >ends of lead 2 and 3 , 4 and 5 , 6 and 7.
>
> Loops made of multi conductor cables in this way tend to have a very
> large capacitance between turns and in the worst case the loop will
> have a self resonance frequency below the desired frequency band. Even
> if the self resonance is above the desired band, the amount of
> external tuning capacitance is greatly reduced.
>
> When a wide ribbon cable is available, it can be a good idea to use
> only every other lead and let the intermediate leads floating to
> reduce the capacitance between turns.
>
> Paul OH3LWR
==========
Paul , Tnx for the above advice ,although for a loop made with flat multi
ribbon to be tuned to 60 kHz , the self-resonance freq will highly likely be
higher than 60 kHz . The ribbon I have is 15 leads wide ,hence for higher
freqs I could leave out every other lead .
Tnx again , this is good education .

Frank GM0CSZ / KN6WH

795. Re: Is this voltage doubler different?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 16:06:26 UTC
From: Mike Silva <snarflemike@yahoo.com>
Message-ID: <1107273986.546936.245770@c13g2000cwb.googlegroups.com>
Source record: 20628

Yes, both C1 and C2 are charged with 1/2 wave power (one pulse every full cycle). However, it appears to me that the difference is that they only discharge during one half-cycle of every full cycle. On the charging half-cycle they are not also discharging, but they only discharge on the opposite half-cycle. This is different from the 2x2 doubler, where both caps are charged on alternate half-cycles, but both caps discharge during the entire full cycle. If I've analysed this correctly, it seems that there should be some improvement in voltage regulation over the 2x2. But I wanted others to look at the circuit and offer their ideas on it as well.

73,
Mike, KK6GM

796. Re: EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 16:52:11 UTC
From: Andrew Tweddle <sarason_not_me@alphalink.com.au>
Message-ID: <41ffb341$1@news.alphalink.com.au>
Source record: 20629

Paul Burridge wrote:

> On 24 Jan 2005 19:38:20 -0800, radio913@aol.com wrote:
>
>
>>Ok, but let's say i wanna design a linear, class A PA, and
>>i need to know Zin and Zout, so i know what to
>>conjugately match too. I should be able to do this
>>with ADS using a *.s2p file, but i haven't figured
>>out how to do this yet! There should be a freeware
>>program out there...
>
>
> Checkout RFSim99. That should do what you want. Type it into Google to
> find it.
You can try Puff

http://www.its.caltech.edu/%7Emmic/puffindex/puffE/puffE.htm

Its a brilliant DOS based S-parameter analysis program

How ever if you are Windows savvy perhaps Serenade v8.5 from Ansoft

Regards Andrew

797. Re: Is this voltage doubler different? OT: Ckt sims?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 18:43:26 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1107283406.707672.300360@c13g2000cwb.googlegroups.com>
Source record: 20630

With regard to circuit simulation: have a look for LTSpice on the Linear Technology website. Or if you don't mind text-based netlists and classical Spice, see http://www.rfglobalnet.com/IndustrySearch/SearchResults.aspx?keyword=Spice&TabIndex=4&image1.x=0&image1.y=0 for some other sources.

With regards the circuit, it's fairly easy to do some mental arithmetic to see if there is an advantage or not over the two-diode, two-caps, floating-transformer "full wave voltage doubler" circuit.

In the old circuit, there are, if you will, four distinct time periods in each cycle (though two of them are electrically equivalent, and the other two are symmetrical). One is where the upper cap is charging, and the load current may be considered to be through the two caps in series -- or may be considered to be through the lower cap and the transformer and upper diode. Following that is a period where the transformer voltage is too low to charge the upper cap and too high (not negative enough) to charge the lower cap. Then the load current flows through the two caps in series. Following that, the transformer charges the lower cap, and after that the transformer voltage is again too low to forward bias either diode. So the net voltage across the two caps increases twice each cycle, once when the upper cap is charging and once when the lower cap is charging. The output (load) ripple fundamental frequency is twice the line frequency. You can get a reasonable idea of the ripple voltage if you assume the charging takes place in a tiny fraction of the total cycle time; in fact, that will be an upper bound on the ripple voltage. For simple analysis, assume a 1Hz input so there are two charging pulses per second (one per cap), and assume two 1-farad caps and a 1-amp load. Then the voltage across each cap between the charging pulses sags at 1 volt per second, and the output sags at 2 volts per second, but resets twice per second, so the ripple is 1 volt peak to peak.

In the new circuit, you need to say something about the capacitor values. Presumably the two "input" caps are the same value, but may differ from the output cap. But what happens if you say that you are going to use the same total energy-storage ability as you had in the simpler circuit? Then the output cap might be, say, 0.25 farads, and the two input caps might be 0.5 farads each, since the output cap must be rated at twice the voltage of the caps in the original circuit. Now...can you figure out an allocation of the caps that gives you even the same performance as the original circuit, let alone a better one? And is it worth using more caps and more diodes? Especially for low voltage use, the original circuit has a distinct advantage of having only one diode drop during charging.

You can also analyze transformer utilization and I think you'll find
that the "improved" circuit doesn't really offer any advantage, if you
set it up to give the same output ripple.

Any other viewpoints, backed by some analysis or simulation?

Cheers,
Tom

David J Windisch wrote:
> Build s test ckt with a filament xfmr and *small* caps and a "heavy"
load,
> and look at the oupt ripple with a scope. Or build it virtually.
>
> OT: Which are the other good, (affordable!?) ckt sims?
> Anyone have a transferable version of Electronics Workbench he'd like
to
> sell?
>
> 73, Dave, N3HE
> Cincinnati OH
>
> "Mike Silva" <snarflemike@yahoo.com> wrote in message
> news:1107204831.573023.87930@c13g2000cwb.googlegroups.com...
> > Regarding the circuit here:
> > http://www.kwarc.org/bulletin/99-04/tech_corner.htm
> >
> > Does this voltage doubler work any "better" (better regulation,
better
> > transformer utilization, etc) than the classic 2-diode, 2-capacitor
> > doubler (as seen in e.g. the HP-23 supplies)? I know it uses more
> > parts; what I'm wondering is whether the extra parts actually
provide
> > any benefits, and if so, under what circumstances.
> >
> > Does anybody have any actual experience with this circuit?
> > 73,
> > Mike, KK6GM
> >

798. Has anyone actuially received the latest QRZ Callsign CD

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 19:33:31 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <10vvmcinb0n0403@news.supernews.com>
Source record: 20631
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

I ordered mine over 8 days ago and so far not a word from qrz.com except an "order confirmation" on Dec 25 and a charge to our CC of course. The "new CD" was advertised as "available now" on the web site.
--

CJ

799. Re: A proposal for the body of Hams that make up this NG.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 19:42:32 UTC
From: TW <kilocycles**@**yahoo.com>
Message-ID: <7rmvv05v477mkkmr9rni9vp80niq3m7d71@4ax.com>
Source record: 20632
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

On Sun, 9 Jan 2005 15:04:59 -0000, "Airy R. Bean" <me@privacy.net>
wrote:

>.....is that we club together and conceive of a design
>for an HF transceiver that could form the basis of the
>station of any budding Radio Ham.
>
>We wouldn't need any facilities other than were present in,
>say, the KW2000 of 35 years ago (apart from greater than
>200 kHz coverage on each band!)
>
>None of the CBer's facilities such as scanners, memories,
>CAT interfaces, CTCSS and the like are necessary.
>
>I suggest that we consider a DSP approach for all the
>baseband mod and demod, and then phasing techniques
>for translating into the various bands.
>
>A power output of 5W will be more than sufficient for
>any self-respecting _REAL_ Radio Hams - it is only
>CBers and CBers-Masquerading-As-Radio-Hams who
>need to work with BBC levels of signal strength.
>
>Such a project could be what we need to capture the
>interest of newcomers who would not then be sidetracked
>into the CB-like purchasing of brand-new rigs from the
>shelves of emporia, and, having, constructed their own
>rigs, would feel competent to maintain those rigs, unlike
>those who send them back to the emporia and thus show
>themselves as closet CBers.
>
>We _COULD_ take a lead in this NG!
>
For starters, you might check out Mike's work at <www.qsl.net/g3tso>.
He's already done it.

800. Re: American QRP

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 19:46:36 UTC
From: TW <kilocycles**@**yahoo.com>
Message-ID: <82nvv0t32fcivsmq414bhth1iv54b5e9cs@4ax.com>
Source record: 20633

On Tue, 18 Jan 2005 21:07:36 -0500, beerbarrel <beerbarrel@cox.net>
wrote:

>Anyone subscribe to American homebrewer magazine? If so, what do you
>think of the new CDROM format? I'm going to take a few days to look it
>over good and see what I think. I was curious as to what everyone else
>thinks. I would really prefer printed matter but I'll see.

It makes bathroom reading very difficult. That's where I keep my
stash of QRPARCI and AMQRP issues.

801. Re: EZ WAY 2 CONVERT S-PARAMETERS TO SERIES EQUIVALENT????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 19:48:14 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ctomdu$6rn$1@hercules.btinternet.com>
Source record: 20634

Who's interested in academic S-parameters at HF and with G5RV's ?

802. Re: Has anyone actuially received the latest QRZ Callsign CD

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 20:02:58 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <10vvo3uacau9544@news.supernews.com>
Source record: 20635
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

s/b Jan 25 NOT Dec 25 - mea culpa...

--

"Charlie" <charlie@earthlink.com> wrote in message
news:10vvmcinb0n0403@news.supernews.com...
>
> I ordered mine over 8 days ago and so far not a word from qrz.com except
> an "order confirmation" on Dec 25 and a charge to our CC of course. The
> "new CD" was advertised as "available now" on the web site.
> --
>
> CJ
>
>
>
>
>
>

803. Re: Has anyone actuially received the latest QRZ Callsign CD

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 20:28:54 UTC
From: K4YZ <k4yz@aol.com>
Message-ID: <1107289734.582408.126450@c13g2000cwb.googlegroups.com>
Source record: 20636
Cross-posted to:
rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Charlie wrote:
> I ordered mine over 8 days ago and so far not a word from qrz.com
except an
> "order confirmation" on Dec 25 and a charge to our CC of course. The
"new
> CD" was advertised as "available now" on the web site.

Why not address this to "QRZ.com", rather than spamming several
Internet Newsgroups that can't help you one bit?

Steve, K4YZ

804. Re: 60Khz transmitter/repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 20:31:15 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ctooujbti1@titan.btinternet.com>
Source record: 20637

Beyond 3 or 4 turns on a single-layer coil, the coil's resonant
self-capacitance is not very much related to capacitance between adjacent
turns.

This is because the individual between-turn capacitances are all in series
with each other and the resultant rapidly decreaes.

For a 10 turn coil the end-to-end capacitance due to adjacent turns is only
1/10th of the individual turn-to-turn capacitance.

Coil self-capacitance soon becomes a linear function only of coil diameter
and length of the coil former.

It's rather complicated but the resulting self capacitance is much smaller
and the resonant frequency is higher than what you think it might be just by
considering the individual turn-to-turn capacitances.

Reg, G4FGQ

805. Re: Is this voltage doubler different? OT: Ckt sims?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 20:45:27 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <41FFEA67.5410F5D3@rica.net>
Source record: 20638

K7ITM wrote:
> With regard to circuit simulation: have a look for LTSpice on the
> Linear Technology website. Or if you don't mind text-based netlists
> and classical Spice, see
> http://www.rfglobalnet.com/IndustrySearch/SearchResults.aspx?
> keyword=Spice&TabIndex=4&image1.x=0&image1.y=0 for some other sources.
>
> With regards the circuit, it's fairly easy to do some mental arithmetic
> to see if there is an advantage or not over the two-diode, two-caps,
> floating-transformer "full wave voltage doubler" circuit.
>
> In the old circuit, there are, if you will, four distinct time periods
> in each cycle (though two of them are electrically equivalent, and the
> other two are symmetrical). One is where the upper cap is charging,
> and the load current may be considered to be through the two caps in
> series -- or may be considered to be through the lower cap and the
> transformer and upper diode. Following that is a period where the
> transformer voltage is too low to charge the upper cap and too high
> (not negative enough) to charge the lower cap. Then the load current
> flows through the two caps in series. Following that, the transformer
> charges the lower cap, and after that the transformer voltage is again
> too low to forward bias either diode. So the net voltage across the
> two caps increases twice each cycle, once when the upper cap is
> charging and once when the lower cap is charging. The output (load)
> ripple fundamental frequency is twice the line frequency. You can get
> a reasonable idea of the ripple voltage if you assume the charging
> takes place in a tiny fraction of the total cycle time; in fact, that
> will be an upper bound on the ripple voltage. For simple analysis,
> assume a 1Hz input so there are two charging pulses per second (one per
> cap), and assume two 1-farad caps and a 1-amp load. Then the voltage
> across each cap between the charging pulses sags at 1 volt per second,
> and the output sags at 2 volts per second, but resets twice per second,
> so the ripple is 1 volt peak to peak.
>
> In the new circuit, you need to say something about the capacitor
> values. Presumably the two "input" caps are the same value, but may
> differ from the output cap. But what happens if you say that you are
> going to use the same total energy-storage ability as you had in the
> simpler circuit? Then the output cap might be, say, 0.25 farads, and
> the two input caps might be 0.5 farads each, since the output cap must
> be rated at twice the voltage of the caps in the original circuit.
> Now...can you figure out an allocation of the caps that gives you even
> the same performance as the original circuit, let alone a better one?

> And is it worth using more caps and more diodes? Especially for low
> voltage use, the original circuit has a distinct advantage of having
> only one diode drop during charging.
>
> You can also analyze transformer utilization and I think you'll find
> that the "improved" circuit doesn't really offer any advantage, if you
> set it up to give the same output ripple.
>
> Any other viewpoints, backed by some analysis or simulation?

Be sure to load each side of the AC source that represents the
transformer winding with a small capacitor to ground (something like
.01 uF) or the simulation will run slow. The source is constrained
only by the diode reverse bias capacitance during most of the swing,
so it takes a while for the simulation to scale up and down between
what is happening when the diodes are on and when they are off.

--
John Popelish

806. Re: Has anyone actuially received the latest QRZ Callsign CD

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 21:26:26 UTC
From: Lloyd <lloyd@hojerkyoulloyd.com>
Message-ID: <ctos4s$eq3$0@pita.alt.net>
Source record: 20639
Cross-posted to:
rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Oh my Oh my, look everyone, one of the malcontent regulars
from r.r.a.p. has arrived on the scene to play NetKKKop.
errrrrrrr, shove your "suggestion" up your ass sideways fruit boy.

"K4YZ" <k4yz@aol.com> wrote in message:
>
> Why not address this to "QRZ.com", rather than spamming several
> Internet Newsgroups that can't help you one bit?
>
> Steve, K4YZ
>

807. Re: Has anyone actuially received the latest QRZ Callsign CD

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 21:46:15 UTC
From: K4YZ <k4yz@aol.com>
Message-ID: <1107294375.222858.264780@o13g2000cwo.googlegroups.com>
Source record: 20640
Cross-posted to:
rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Lloyd wrote:
> Oh my Oh my, look everyone, one of the malcontent regulars
> from r.r.a.p. has arrived on the scene to play NetKKKop.
> errrrrrrr, shove your "suggestion" up your ass sideways fruit boy.
>
>
>
> "K4YZ" <k4yz@aol.com> wrote in message:
> >
> > Why not address this to "QRZ.com", rather than spamming several
> > Internet Newsgroups that can't help you one bit?

Hey Lloydie...! ! ! Your Mommie says Daddy will be away ALLLLL
night! She put clean sheets on her bed JUST FOR YOU!
Have fun, you silly boy!

Steve, K4YZ

808. Re: Has anyone actuially received the latest QRZ Callsign CD

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 22:08:47 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <10vvvfpf3cipg92@news.supernews.com>
Source record: 20641
Cross-posted to:
rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

I'm taking a survey - OK pal????

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

"K4YZ" <k4yz@aol.com> wrote in message
news:1107289734.582408.126450@c13g2000cwb.googlegroups.com...
> Charlie wrote:
>> I ordered mine over 8 days ago and so far not a word from qrz.com
> except an
>> "order confirmation" on Dec 25 and a charge to our CC of course. The
> "new
>> CD" was advertised as "available now" on the web site.
>
> Why not address this to "QRZ.com", rather than spamming several
> Internet Newsgroups that can't help you one bit?
>
> Steve, K4YZ
>

809. Re: Is this voltage doubler different? OT: Ckt sims?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 22:29:45 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <tpTLd.91705$Ob.76903@edtnps84>
Source record: 20642

Behold, David J Windisch scribed on tube chassis:

> OT: Which are the other good, (affordable!?) ckt sims? Anyone have a
> transferable version of Electronics Workbench he'd like to sell?
>
> 73, Dave, N3HE
> Cincinnati OH

Look for Circuit Maker Student - it's freeware and uses the Berkeley 3f4
spice models.

If you use tubes, Robert Casey, WA2ISE has made a bunch of 3f4 tube models
:-)

--
Gregg "t3h g33k"
http://geek.scorpiorising.ca
Ratings are for transistors, tubes have guidelines

810. 75 to 50 ohm minimum loss pad

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 23:23:28 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <mn3001tfuc6k7kfnu9ncf9mqh6flv0ovqt@4ax.com>
Source record: 20643

Hi

can't find the notes for a minimum loss pad, anybody who remember the values? It should be easy to calculate, but I am not in the mood for doing so at the moment

73
Jan-Martin, LA8AK

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

811. Re: Racal RA17 SSB modifications

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 23:28:34 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <s14001d70avpj4mh2n0l5vk0pir3ls1jdd@4ax.com>
Source record: 20644

put some notes on the newsgroup, no comments, and one of the pages was
visited by 96 curious persons and the other by 56 during the last week

---
J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

812. Re: 75 to 50 ohm minimum loss pad

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 23:44:24 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <110052djctig391@corp.supernews.com>
Source record: 20645

J M Noeding wrote:

> Hi
>
> can't find the notes for a minimum loss pad, anybody who remember the
> values? It should be easy to calculate, but I am not in the mood for
> doing so at the moment
>

Here. Hot out of the math package. Assuming I know what I'm talking about it's an L with series 43.3 & shunt 86.6 (theoretical). Should be 6dB of attenuation.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

813. Re: 75 to 50 ohm minimum loss pad

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-01 23:56:08 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <42001718.E6E844EC@rica.net>
Source record: 20646

J M Noeding wrote:
>
> Hi
>
> can't find the notes for a minimum loss pad, anybody who remember the
> values? It should be easy to calculate, but I am not in the mood for
> doing so at the moment
>
> 73
> Jan-Martin, LA8AK
> ---
> J. M. Noeding, LA8AK, N-4623 Kristiansand
> http://home.online.no/~la8ak/c.htm

Series resistor on 75 ohm side is 43.3 ohms. Parallel resistor on 50
ohm side is 86.6 ohms.

--
John Popelish

814. I need to get some 1N34A diodes. Can you recommend a good supplier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 00:18:55 UTC
From: Rick Gray <rgray@atlanticbb.net>
Message-ID: <110073imdb9vi77@corp.supernews.com>
Source record: 20647
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I plan on building a crystal radio and need to get some 1N34A diodes. (I figure about 50 would last me a lifetime). Can anyone recommend a good supplier who has reasonable shipping charges? I see a bunch of people selling them but I don't want to spend more on shipping then I do on parts.

Also does anyone know where to get the old Quaker Oats containers? The ones I see in the stores have plastic tops.

Thank you for any help you can give me.

815. Re: 75 to 50 ohm minimum loss pad

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 00:19:28 UTC
From: dplatt@radagast.org
Message-ID: <110074gahv7m29a@corp.supernews.com>
Source record: 20548

>can't find the notes for a minimum loss pad, anybody who remember the
>values? It should be easy to calculate, but I am not in the mood for
>doing so at the moment

http://www.maxim-ic.com/appnotes.cfm/appnote_number/972

Their calcs yield a design with R1 (in series with the 75-ohm source)
being 43.3 ohms, and R2 (in shunt with the 50-ohm load) being 86.6
ohms.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

816. Re: I need to get some 1N34A diodes. Can you recommend a good supplier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 00:28:26 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <K8VLd.6792$lx.5286@newsread3.news.atl.earthlink.net>
Source record: 20549
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Rick Gray" <rgray@atlanticbb.net> wrote in message
news:110073imdb9vi77@corp.supernews.com...
> I plan on building a crystal radio and need to get some 1N34A diodes. (I
> figure about 50 would last me a lifetime). Can anyone recommend a good
> supplier who has reasonable shipping charges? I see a bunch of people
> selling them but I don't want to spend more on shipping then I do on
parts.
>
> Also does anyone know where to get the old Quaker Oats containers? The
ones
> I see in the stores have plastic tops.
>
> Thank you for any help you can give me.
>
That is the problem with buying small parts. The parts are about 10 for a
dollar and you pay for the small ammount shipping an handling. Try e-bay.

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=7287&item=3870460646&rd=1&ssPageNam
e=WDVW

Maybe you already have.

817. Re: Has anyone actuially received the latest QRZ Callsign CD

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 00:32:58 UTC
From: K4YZ <k4yz@aol.com>
Message-ID: <1107304378.675674.236080@o13g2000cwo.googlegroups.com>
Source record: 20550
Cross-posted to:
rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Charlie wrote:
> I'm taking a survey - OK pal????

My "pals" are generally more "with it" than to put such a
rhetorical question in a forum where it will only bring humiliation on
the author.

Kinda like you were.

Steve

818. Re: I need to get some 1N34A diodes. Can you recommend a good supplier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 00:42:08 UTC
From: Bill M <dontspamoleexray@coqui.net>
Message-ID: <11008f110b3ljdc@corp.supernews.com>
Source record: 20551
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Ralph Mowery wrote:

>>Also does anyone know where to get the old Quaker Oats containers? The
>
> ones
>
>>I see in the stores have plastic tops.

Here's some scans of old oatmeal boxes if you're interested. You can
wrap one a round salt box if you really want a cardboard form.
http://www.crystalradio.net/oatbox/index.shtml

-Bill

819. Re: American QRP

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 00:51:21 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <RCVLd.1439$0o1.85@fe03.lga>
Source record: 20554

"TW" <kilocycles**@**yahoo.com> wrote in message
news:82nvv0t32fcivsmq414bhth1iv54b5e9cs@4ax.com...
> On Tue, 18 Jan 2005 21:07:36 -0500, beerbarrel <beerbarrel@cox.net>
> wrote:
>
> It makes bathroom reading very difficult. That's where I keep my
> stash of QRPARCI and AMQRP issues.

Somebody posted this link on another ng

http://www.is-sixsigma.com/Elmer/HB4Palm/HB4.html

..

820. Re: I need to get some 1N34A diodes. Can you recommend a good supplier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 00:52:03 UTC
From: Rick Gray <rgray@atlanticbb.net>
Message-ID: <110091te94ftc3a@corp.supernews.com>
Source record: 20553
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Thank's for the link to the Quaker Box labels. That would work perfectly.

821. Re: Has anyone actuially received the latest QRZ Callsign CD

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 00:53:05 UTC
From: Buck <iam@this.site>
Message-ID: <v09001thefpboh7o51e44luqhc5aoog2oq@4ax.com>
Source record: 20552
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Tue, 1 Feb 2005 13:33:31 -0600, "Charlie" <charlie@earthlink.com>
wrote:

>
>I ordered mine over 8 days ago and so far not a word from qrz.com except an
>"order confirmation" on Dec 25 and a charge to our CC of course. The "new
>CD" was advertised as "available now" on the web site.

'

Has anyone ever cross-posted to too many groups before?

Buck
--
For what it's worth.

822. Re: 75 to 50 ohm minimum loss pad

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 01:06:40 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <jr90019euq7me2ohrjtr3mt96c3bimnp67@4ax.com>
Source record: 20555

On Wed, 02 Feb 2005 00:19:28 -0000, dplatt@radagast.org (Dave Platt)
wrote:

>>can't find the notes for a minimum loss pad, anybody who remember the
>>values? It should be easy to calculate, but I am not in the mood for
>>doing so at the moment
>
>http://www.maxim-ic.com/appnotes.cfm/appnote_number/972
>
>Their calcs yield a design with R1 (in series with the 75-ohm source)
>being 43.3 ohms, and R2 (in shunt with the 50-ohm load) being 86.6
>ohms.

thanks to all, I almost remembered it an hour after asking

73,
Jan-Martin

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

823. UTC CG-301W Transformer, N.O.S. $75 an split ship

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 01:09:57 UTC
From: DOUGLAS SNOWDEN <SNOWDEN@peoplepc.com>
Message-ID: <FLVLd.5373$S3.3896@newsread2.news.atl.earthlink.net>
Source record: 20556
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

Never had a wire soldered to it. If you don't know about this xfmr I can send full specs. This is a large sealed can type xfmr with 6 terminals for primary and 7 terminals for secondary. Greycolor. I have had this on the shelf for a few years and as soon as I let it go I will wish I had not:

primary: 105, 115, 210, 220, 230 vac
secondary: 580 - 530 - 300 - 0 300 530 -580
secondary current 470 ma.
Guess the weight to be about 20 pounds,

Doug, N4IJ
Carson, VA

824. LOOK AT MY WEBSITE.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 01:51:46 UTC
From: dialcover@webtv.net
Message-ID: <16517-42003232-472@storefull-3256.bay.webtv.net>
Source record: 20557

CHECK MY WEBSITE: www.dialcover.com
Bill Turner, excuse caps, short answers, stroke.
Business SASE, each order a copy of The Pocket Resource Guide.

825. Re: Is this voltage doubler different? OT: Ckt sims?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 02:23:37 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <JQWLd.3772$Nn1.630@newsread1.news.pas.earthlink.net>
Source record: 20558

K7ITM wrote:
> With regard to circuit simulation: have a look for LTSpice on the
> Linear Technology website. Or if you don't mind text-based netlists
> and classical Spice, see
> http://www.rfglobalnet.com/IndustrySearch/SearchResults.aspx?
> keyword=Spice&TabIndex=4&image1.x=0&image1.y=0 for some other sources.
>
> With regards the circuit, it's fairly easy to do some mental arithmetic
> to see if there is an advantage or not over the two-diode, two-caps,
> floating-transformer "full wave voltage doubler" circuit.
>
> In the old circuit, there are, if you will, four distinct time periods
> in each cycle (though two of them are electrically equivalent, and the
> other two are symmetrical). One is where the upper cap is charging,
> and the load current may be considered to be through the two caps in
> series -- or may be considered to be through the lower cap and the
> transformer and upper diode. Following that is a period where the
> transformer voltage is too low to charge the upper cap and too high
> (not negative enough) to charge the lower cap. Then the load current
> flows through the two caps in series. Following that, the transformer
> charges the lower cap, and after that the transformer voltage is again
> too low to forward bias either diode. So the net voltage across the
> two caps increases twice each cycle, once when the upper cap is
> charging and once when the lower cap is charging. The output (load)
> ripple fundamental frequency is twice the line frequency. You can get
> a reasonable idea of the ripple voltage if you assume the charging
> takes place in a tiny fraction of the total cycle time; in fact, that
> will be an upper bound on the ripple voltage. For simple analysis,
> assume a 1Hz input so there are two charging pulses per second (one per
> cap), and assume two 1-farad caps and a 1-amp load. Then the voltage
> across each cap between the charging pulses sags at 1 volt per second,
> and the output sags at 2 volts per second, but resets twice per second,
> so the ripple is 1 volt peak to peak.
>
> In the new circuit, you need to say something about the capacitor
> values. Presumably the two "input" caps are the same value, but may
> differ from the output cap. But what happens if you say that you are
> going to use the same total energy-storage ability as you had in the
> simpler circuit? Then the output cap might be, say, 0.25 farads, and
> the two input caps might be 0.5 farads each, since the output cap must
> be rated at twice the voltage of the caps in the original circuit.
> Now...can you figure out an allocation of the caps that gives you even
> the same performance as the original circuit, let alone a better one?
> And is it worth using more caps and more diodes? Especially for low

> voltage use, the original circuit has a distinct advantage of having
> only one diode drop during charging.
>
> You can also analyze transformer utilization and I think you'll find
> that the "improved" circuit doesn't really offer any advantage, if you
> set it up to give the same output ripple.
>
> Any other viewpoints, backed by some analysis or simulation?
>
> Cheers,
> Tom
>
> David J Windisch wrote:
>
>>Build s test ckt with a filament xfmr and *small* caps and a "heavy"
>
> load,
>
>>and look at the oupt ripple with a scope. Or build it virtually.
>>
>>OT: Which are the other good, (affordable!?) ckt sims?
>>Anyone have a transferable version of Electronics Workbench he'd like
>
> to
>
>>sell?
>>
>>73, Dave, N3HE
>>Cincinnati OH

Looks like about 100V ripple. Here it is for LTSpice...

```
Version 4
SHEET 1 880 680
WIRE -16 64 -96 64
WIRE -96 64 -96 208
WIRE -96 352 -16 352
WIRE -128 224 -128 208
WIRE -128 208 -96 208
WIRE -96 208 -96 352
WIRE 48 64 112 64
WIRE 176 64 208 64
WIRE 320 64 416 64
WIRE 416 64 416 352
WIRE 416 352 320 352
WIRE 256 352 240 352
WIRE 112 352 48 352
WIRE 112 160 48 160
WIRE 48 160 48 64
WIRE 112 256 48 256
WIRE 48 256 48 352
```

```
WIRE 176 256 208 256
WIRE 208 256 208 64
WIRE 208 64 256 64
WIRE 176 160 240 160
WIRE 240 160 240 352
WIRE 240 352 176 352
WIRE 416 400 416 352
WIRE 416 496 416 464
WIRE 416 352 528 352
WIRE 528 352 528 384
WIRE 528 464 528 496
WIRE -272 160 -272 0
WIRE 48 64 48 0
WIRE 48 0 -272 0
WIRE 48 352 48 416
WIRE 48 416 -272 416
WIRE -272 240 -272 288
WIRE -272 368 -272 416
FLAG -128 224 0
FLAG 416 496 0
FLAG 528 496 0
SYMBOL diode -16 80 R270
WINDOW 0 32 32 VTop 0
WINDOW 3 0 32 VBottom 0
SYMATTR InstName D1
SYMATTR Value MUR460
SYMBOL diode -16 368 R270
WINDOW 0 32 32 VTop 0
WINDOW 3 0 32 VBottom 0
SYMATTR InstName D2
SYMATTR Value MUR460
SYMBOL diode 256 80 R270
WINDOW 0 32 32 VTop 0
WINDOW 3 0 32 VBottom 0
SYMATTR InstName D3
SYMATTR Value MUR460
SYMBOL diode 256 368 R270
WINDOW 0 32 32 VTop 0
WINDOW 3 0 32 VBottom 0
SYMATTR InstName D4
SYMATTR Value MUR460
SYMBOL cap 176 48 R90
WINDOW 0 0 32 VBottom 0
WINDOW 3 32 32 VTop 0
SYMATTR InstName C1
SYMATTR Value 200ï¿½
SYMBOL cap 176 336 R90
WINDOW 0 0 32 VBottom 0
WINDOW 3 32 32 VTop 0
SYMATTR InstName C2
```

```
SYMATTR Value 200ï¿½
SYMBOL diode 112 176 R270
WINDOW 0 32 32 VTop 0
WINDOW 3 0 32 VBottom 0
SYMATTR InstName D5
SYMATTR Value MUR460
SYMBOL diode 112 272 R270
WINDOW 0 32 32 VTop 0
WINDOW 3 0 32 VBottom 0
SYMATTR InstName D6
SYMATTR Value MUR460
SYMBOL cap 400 400 R0
SYMATTR InstName C3
SYMATTR Value 100ï¿½
SYMBOL res 512 368 R0
SYMATTR InstName R1
SYMATTR Value 175
SYMBOL voltage -272 144 R0
WINDOW 3 -81 305 Left 0
WINDOW 123 0 0 Left 0
WINDOW 39 0 0 Left 0
SYMATTR InstName V1
SYMATTR Value SINE(0 250 60)
SYMBOL res -288 272 R0
SYMATTR InstName R2
SYMATTR Value .5
TEXT -366 520 Left 0 !.tran 0 1 0 .1m
```

John
KD5YI

826. Re: Is this voltage doubler different?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 02:37:09 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <qcXLd.16085$gS5.3726@bignews3.bellsouth.net>
Source record: 20560

Mike Silva wrote:
> Yes, both C1 and C2 are charged with 1/2 wave power (one pulse every
> full cycle). However, it appears to me that the difference is that
> they only discharge during one half-cycle of every full cycle. On the
> charging half-cycle they are not also discharging, but they only
> discharge on the opposite half-cycle. This is different from the 2x2
> doubler, where both caps are charged on alternate half-cycles, but both
> caps discharge during the entire full cycle. If I've analysed this
> correctly, it seems that there should be some improvement in voltage
> regulation over the 2x2. But I wanted others to look at the circuit
> and offer their ideas on it as well.
>
> 73,
> Mike, KK6GM
>
looks like a cross between a full wave bridge and a pair
of voltage doublers in parallel.

827. Re: Has anyone actuially received the latest QRZ Callsign CD

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 02:39:10 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <1100fao1ciosp2c@news.supernews.com>
Source record: 20559
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

I wouldn't know...evidently the news server had no trouble handling it!!!

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

"Buck" <iam@this.site> wrote in message
news:v09001thefpboh7o51e44luqhc5aoog2oq@4ax.com...
> On Tue, 1 Feb 2005 13:33:31 -0600, "Charlie" <charlie@earthlink.com>
> wrote:
>
>>
>>I ordered mine over 8 days ago and so far not a word from qrz.com except
>>an
>>"order confirmation" on Dec 25 and a charge to our CC of course. The "new
>>CD" was advertised as "available now" on the web site.
>
> '
> Has anyone ever cross-posted to too many groups before?
>
>
> Buck
> --
> For what it's worth.
>

828. Re: Is this voltage doubler different?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 03:24:01 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <agh001h3qm89rbudkitpdtubcqbu8hodp6@4ax.com>
Source record: 20561

On 1 Feb 2005 08:06:26 -0800, "Mike Silva" <snarflemike@yahoo.com>
wrote:

>Yes, both C1 and C2 are charged with 1/2 wave power (one pulse every
>full cycle). However, it appears to me that the difference is that
>they only discharge during one half-cycle of every full cycle. On the
>charging half-cycle they are not also discharging, but they only
>discharge on the opposite half-cycle. This is different from the 2x2
>doubler, where both caps are charged on alternate half-cycles, but both
>caps discharge during the entire full cycle. If I've analysed this
>correctly, it seems that there should be some improvement in voltage
>regulation over the 2x2. But I wanted others to look at the circuit
>and offer their ideas on it as well.
>
>73,
>Mike, KK6GM

It is true C1 and C2 are not discharging while charging. But when they
do discharge on the other half cycle they are being discharged more
than they would be in a regular doubler circuit.
They still each have to supply 1/2 of the output load at that time to
recharge the output capacitor. The output capacitor is getting
recharged through C1 and C2 only and not directly from the diodes and
transformer. So in effect you have 3 capacitors in series for the load
rather than 2 in a regular doubler.

Although at first glance it would seem that the output capacitor is
getting part of its charge through some of the diodes, it only does so
on the first cycle at startup . After that the output capacitor is
charged to a higher voltage than the transformer supplies directly.
That keeps the diodes directly from the transformer to the output
capacitor reverse biased so no current flows directly from the
transformer to the output capacitor.

So the output capacitor ends up only being charged by C1 and C2 on
alternate cycles. So it would seem that performance would be worse
than a standard doubler circuit. Unless much larger capacitors were
used.

73
Gary K4FMX

829. Re: 75 to 50 ohm minimum loss pad

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 04:15:44 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ctpk5g$f54$1@titan.btinternet.com>
Source record: 20562

Use program PADMATCH for T, Pi, L and minimum loss pads between any pair of terminating resistances.

.....

Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp

.....

830. Re: detector diode conduction question - zero-bias schotky diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 07:05:28 UTC
From: J <jmort@despammed.com>
Message-ID: <ctq564$hj1$1@newsg2.svr.pol.co.uk>
Source record: 20564

"Old Macdonald" <oeieio@hotmail.com> wrote in message
news:ct4uvimba1@newstree.wise.edt.ericsson.se...
> > I want to try to detect signal levels of 50mv to 200mv peak to peak.
> > I need a passive circuit with no amplifiers, and I will be feeding a
> > DVM with .01v resolution. The problem I am having is that a 1N34 will
> > not conduct very well at these low levels. Is there a more suitable
> > diode? Can you give me a part number, or a simple way to get just one
> > or two of these diodes? What the diode is looking at is a 50 ohm port
> > on a 30 to 60 mhz I.F. chassis.
>
> You can use "Zero-bias schotky diodes" for detecting small signals, but
you
> can also pass a small bias current through an ordinary diode to overcome
the
> forward conduction voltage.

Zero Bias Shottky Detector Diodes (by Agilent)

HSMS-2850
HSMS-2852
HSMS-2862

831. Re: 75 to 50 ohm minimum loss pad

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 08:16:32 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <p4TEXlEgxIACFAk+@ifwtech.co.uk>
Source record: 20563

Tim Wescott wrote:
>J M Noeding wrote:
>
>> Hi
>> can't find the notes for a minimum loss pad, anybody who remember
>>the
>> values? It should be easy to calculate, but I am not in the mood for
>> doing so at the moment
>>
>Here. Hot out of the math package. Assuming I know what I'm talking
>about it's an L with series 43.3 & shunt 86.6 (theoretical). Should be
>6dB of attenuation.
>
Faint bells ring... 43 ohms is a standard value, and 86.6 is pretty
close to 100 paralleled by 680.

For testing 75-ohm TVI filters in a 50-ohm system, it's very handy to
make up a pair of those pads as inter-series adaptors.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

832. Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 13:07:50 UTC
From: "johna@m" <mhdbd75@yahoo.fr>
Message-ID: <1107349670.876306.202210@c13g2000cwb.googlegroups.com>
Source record: 20565
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Hello All,

I am trying to simulate a simpe AM receiver circuit with diode detector. I am assuming that the signal received from the antenna (simulated with a voltage source) has a weak amplitude (around 100 uV) and a high frequency (around 600 Khz). The issue is that the current after the diode does not get rectified. The output current is very weak (less than 250pA) and still contains the full sin signal (both halves of signals).

When I try the simulation with smaller frequencies (around 5kHz) and higher amplitude (around 0.2 v), the signal gets correctly half-rectified, but not anymore when I work with higher frequencies and smaller signals.

In real shematic for AM simple receiver, there is no ampification bewteen the antenna (and the tuning LC circuit) and the diode. So how the diode manage to half-rectifies correctly in real operating mode when the signal is weak and high frequencies, which is the case of real radio signals.

I use Ansoft Simplorer mainly. Any other simulators recommended ?
Thanks in advance and best regards,

John.

833. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 13:36:52 UTC
From: Bill Sloman <bill.sloman@ieee.org>
Message-ID: <ctqlfc$js5$1@reader11.wxs.nl>
Source record: 20566
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"johna@m" <mhdbd75@yahoo.fr> schreef in bericht
news:1107349670.876306.202210@c13g2000cwb.googlegroups.com...
> Hello All,
>
> I am trying to simulate a simple AM receiver circuit with diode
> detector. I am assuming that the signal received from the antenna
> (simulated with a voltage source) has a weak amplitude (around 100 uV)
> and a high frequency (around 600 Khz). The issue is that the current
> after the diode does not get rectified. The output current is very weak
> (less than 250pA) and still contains the full sine signal (both halves
> of signals).
>
> When I try the simulation with smaller frequencies (around 5kHz) and
> higher amplitude (around 0.2 v), the signal gets correctly
> half-rectified, but not anymore when I work with higher frequencies and
> smaller signals.
>
> In real schematic for AM simple receiver, there is no amplification
> bewteen the antenna (and the tuning LC circuit) and the diode. So how
> the diode manage to half-rectifies correctly in real operating mode
> when the signal is weak and high frequencies, which is the case of real
> radio signals.
>
> I use Ansoft Simplorer mainly. Any other simulators recommended ?
> Thanks in advance and best regards,

The answer to your question is that real, simple AM receivers - crystal sets - only work where the received signal is quite high. They tend to use fast, low capacitance diodes. The term "rectifier" tends to be used for bigger, slower diodes basically intended to handle around an ampere of current from a 50/60Hz source, that look like capacitors in RF circuits.

Practical AM receivers always amplify the signal before they detect it, and usually "mix" the amplified signal from the antenna with the output from a local oscillator at different, if similar, frequency chosen to be 455kHz away for the transmitted signal. The nominally 455kHz component coming out of the mixer is then filtered by an elaborate bandpass filter to reject all the other components, further amplified, and only then detected.

Search on "superheterodyne".

Bill Sloman, Nijmegen

834. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 13:38:51 UTC
From: Rene Tschaggelar <none@none.net>
Message-ID: <4200d7e8$1@news1.ethz.ch>
Source record: 20567
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

johna@m wrote:
> Hello All,
>
> I am trying to simulate a simpe AM receiver circuit with diode
> detector. I am assuming that the signal received from the antenna
> (simulated with a voltage source) has a weak amplitude (around 100 uV)
> and a high frequency (around 600 Khz). The issue is that the current
> after the diode does not get rectified. The output current is very weak
> (less than 250pA) and still contains the full sin signal (both halves
> of signals).
>
> When I try the simulation with smaller frequencies (around 5kHz) and
> higher amplitude (around 0.2 v), the signal gets correctly
> half-rectified, but not anymore when I work with higher frequencies and
> smaller signals.
>
> In real shematic for AM simple receiver, there is no ampification
> bewteen the antenna (and the tuning LC circuit) and the diode. So how
> the diode manage to half-rectifies correctly in real operating mode
> when the signal is weak and high frequencies, which is the case of real
> radio signals.
>
> I use Ansoft Simplorer mainly. Any other simulators recommended ?
> Thanks in advance and best regards,

What makes you sure the simulation and the reality agree ?
There is capacive coupling over the PN structure of the
diode to start with. And then at one point a diode has
an exponential characterization instead of binary on/off.

Rene
--
Ing.Buero R.Tschaggelar - http://www.ibrtses.com
& commercial newsgroups - http://www.talkto.net

835. Re: I need to get some 1N34A diodes. Can you recommend a good supplier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 15:31:04 UTC
From: gus <gus@nospam.com>
Message-ID: <4200F236.C53344CC@nospam.com>
Source record: 20568
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew,rec.radio.amateur.misc

hi,
I search for the part number in google like this and then I get the mouser page
fast,

google search for : in34a mouser.com

http://www.mouser.com/?No=90&handler=data.listcategory&N=500

http://www.mouser.com (Germanium 34 cents each in 100 or 41 cents by 10's)

no minimum order, great online website, fast searching.
select us mail for lowest ship cost.

73 gus

Rick Gray wrote:

> I plan on building a crystal radio and need to get some 1N34A diodes. (I
> figure about 50 would last me a lifetime). Can anyone recommend a good
> supplier who has reasonable shipping charges? I see a bunch of people
> selling them but I don't want to spend more on shipping then I do on parts.
>

836. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 15:37:08 UTC
From: default <none@defaulter.net>
Message-ID: <tss1015uek136qivktua14jihp0bkjn9g5@4ax.com>
Source record: 20569
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On 2 Feb 2005 05:07:50 -0800, "johna@m" <mhdbd75@yahoo.fr> wrote:

>Hello All,
>
>I am trying to simulate a simpe AM receiver circuit with diode
>detector. I am assuming that the signal received from the antenna
>(simulated with a voltage source) has a weak amplitude (around 100 uV)
>and a high frequency (around 600 Khz). The issue is that the current
>after the diode does not get rectified. The output current is very weak
>(less than 250pA) and still contains the full sin signal (both halves
>of signals).
>
>When I try the simulation with smaller frequencies (around 5kHz) and
>higher amplitude (around 0.2 v), the signal gets correctly
>half-rectified, but not anymore when I work with higher frequencies and
>smaller signals.
>
>In real shematic for AM simple receiver, there is no ampification
>bewteen the antenna (and the tuning LC circuit) and the diode. So how
>the diode manage to half-rectifies correctly in real operating mode
>when the signal is weak and high frequencies, which is the case of real
>radio signals.
>
>I use Ansoft Simplorer mainly. Any other simulators recommended ?
>Thanks in advance and best regards,
>
>John.
http://uweb.superlink.net/~bhtongue/10npddec/10npddec.html
http://uweb.superlink.net/~bhtongue/16MeaDio/16MeaDio.html

Information on diodes for small signal detector use

Many crystal set devotees prefer iron pyrite with a cats whisker over
today's diodes for sensitivity to small signals.

837. Re: Has anyone actuially received the latest QRZ Callsign CD

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 15:40:10 UTC
From: King Zulu <KingZulu123@msn.com>
Message-ID: <uv6Md.44505$eT5.43100@attbi_s51>
Source record: 20570
Cross-posted to:
rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"K4YZ" <k4yz@aol.com> wrote in message
news:1107289734.582408.126450@c13g2000cwb.googlegroups.com...
> Charlie wrote:
> > I ordered mine over 8 days ago and so far not a word from qrz.com
> except an
> > "order confirmation" on Dec 25 and a charge to our CC of course. The
> "new
> > CD" was advertised as "available now" on the web site.
>
> Why not address this to "QRZ.com", rather than spamming several
> Internet Newsgroups that can't help you one bit?
>
> Steve, K4YZ

Received my copy of "Volume 24, Winter 2004-2005 QRZ Callsign Databae" last
year sometime. I remember it came in the mail the day after they said it
would be available. The charge showed up later.

ak

838. The Boatanchor Classifieds

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 16:15:49 UTC
From: Jeff James <cbstv@optonline.net>
Message-ID: <127Md.7541$yK7.3557@fe12.lga>
Source record: 20571

You never know what you'll find!
http://www.dealamerica.com/deal/cgi-bin/ads/bcads.cgi
Dedicated to Vintage Amateur Radio..

839. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 16:41:22 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <11020l5hr6rtq4d@corp.supernews.com>
Source record: 20572
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Bill Sloman wrote:

> "johna@m" <mhdbd75@yahoo.fr> schreef in bericht
> news:1107349670.876306.202210@c13g2000cwb.googlegroups.com...
>
>>Hello All,
>>
>>I am trying to simulate a simple AM receiver circuit with diode
>>detector. I am assuming that the signal received from the antenna
>>(simulated with a voltage source) has a weak amplitude (around 100 uV)
>>and a high frequency (around 600 Khz). The issue is that the current
>>after the diode does not get rectified. The output current is very weak
>>(less than 250pA) and still contains the full sine signal (both halves
>>of signals).
>>
>>When I try the simulation with smaller frequencies (around 5kHz) and
>>higher amplitude (around 0.2 v), the signal gets correctly
>>half-rectified, but not anymore when I work with higher frequencies and
>>smaller signals.
>>
>>In real schematic for AM simple receiver, there is no amplification
>>bewteen the antenna (and the tuning LC circuit) and the diode. So how
>>the diode manage to half-rectifies correctly in real operating mode
>>when the signal is weak and high frequencies, which is the case of real
>>radio signals.
>>
>>I use Ansoft Simplorer mainly. Any other simulators recommended ?
>>Thanks in advance and best regards,
>
>
> The answer to your question is that real, simple AM receivers - crystal
> sets - only work where the received signal is quite high. They tend to use
> fast, low capacitance diodes. The term "rectifier" tends to be used for
> bigger, slower diodes basically intended to handle around an ampere of
> current from a 50/60Hz source, that look like capacitors in RF circuits.
>
> Practical AM receivers always amplify the signal before they detect it,

You're going to get some flak from the crystal radio crowd on that one.

> and
> usually "mix" the amplified signal from the antenna with the output from a
> local oscillator at different, if similar, frequency chosen to be 455kHz
> away for the transmitted signal. The nominally 455kHz component coming out

> of the mixer is then filtered by an elaborate bandpass filter to reject all
> the other components, further amplified, and only then detected.
>

Crystal radios generally step up the voltage from the antenna, and use a
sensitive, high-impedance earphone -- and still require relatively
strong signals to receive well. For packaged diodes consider a
point-contact germanium or a zero-bias schottkey (although the real
crystal fans will want you to stick with germanium or other material,
per the other poster). Clever tricks to play include audio
amplification after the diode and a very slight forward bias applied to
the diode.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

840. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 16:50:55 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <VA.000000a3.01dc79f7@btinternet.com>
Source record: 20573
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Hi,

In days of yore a crystal set would have had a longish wire aerial (several millivolts output), a high-Q tuned circuit (further magnification) and a high-Z load on the detector all, of which lessened the need for a perfect characteristic.

And that's before you placed the headphones in a pudding bowl.

Cheers - Joe

841. Re: Is this voltage doubler different?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 17:11:43 UTC
From: eickrman@aztec.asu.edu
Message-ID: <1107364303.387774.262220@z14g2000cwz.googlegroups.com>
Source record: 20574

Gary Schafer wrote:
> On 1 Feb 2005 08:06:26 -0800, "Mike Silva" <snarflemike@yahoo.com>
> wrote:
>
> >Yes, both C1 and C2 are charged with 1/2 wave power (one pulse every
> >full cycle). However, it appears to me that the difference is that
> >they only discharge during one half-cycle of every full cycle. On
the
> >charging half-cycle they are not also discharging, but they only
> >discharge on the opposite half-cycle. This is different from the
2x2
> >doubler, where both caps are charged on alternate half-cycles, but
both
> >caps discharge during the entire full cycle. If I've analysed this
> >correctly, it seems that there should be some improvement in voltage
> >regulation over the 2x2. But I wanted others to look at the circuit
> >and offer their ideas on it as well.
> >
> >73,
> >Mike, KK6GM
>
>
> It is true C1 and C2 are not discharging while charging. But when
they
> do discharge on the other half cycle they are being discharged more
> than they would be in a regular doubler circuit.
> They still each have to supply 1/2 of the output load at that time to
> recharge the output capacitor. The output capacitor is getting
> recharged through C1 and C2 only and not directly from the diodes and
> transformer. So in effect you have 3 capacitors in series for the
load
> rather than 2 in a regular doubler.
>
> Although at first glance it would seem that the output capacitor is
> getting part of its charge through some of the diodes, it only does
so
> on the first cycle at startup . After that the output capacitor is
> charged to a higher voltage than the transformer supplies directly.
> That keeps the diodes directly from the transformer to the output
> capacitor reverse biased so no current flows directly from the
> transformer to the output capacitor.
>
> So the output capacitor ends up only being charged by C1 and C2 on
> alternate cycles. So it would seem that performance would be worse

> than a standard doubler circuit. Unless much larger capacitors were
> used.
>
> 73
> Gary K4FMX

I ran simulations for both circuits. With the basic assumption that the output voltage being developed is large compared to the diode drops, I can't find any advantage to the more complex circuit.

In both circuits the transformer supplies energy on each half cycle. The ripple at the top of the single capacitor in the complex circuit is the same as the ripple at the top of the 2 capacitor string in the simple circuit. The ripple at the output in both cases is 120 Hz for a 60 Hz supply with identical magnitude. The ripple at the junction of the two capacitors in the simple circuit happens to be 60 Hz. I varied the load and the regulation appears identical for both circuits and is mostly a function of the source resistance of the transformer (not terribly surprising). The series resistance added by the diodes would generally be an order of magnitude smaller for high voltage supplies and not a big factor in either case assuming these are high current diodes.

The simple circuit has the advantage of being able to easily supply both a double voltage 120 Hz ripple output and a standard voltage 60 Hz ripple output.

In a power supply I built for a Heathkit SB-101 a long time ago I took advantage of the two outputs from a simple doubler. The 850 V output went to the finals. Then from the 425 V output I added a divider and additional filter capacitor to provide the 300 V supply. By providing a load resistance across the upper cap similar to the load resistance of the divider on the lower cap the equally shared voltge was maintained at the two filter capacitors. The divider on the lower cap allowed me to tap off at a 300 V point to which I added a little additional filtering (remember that point has 60 Hz ripple). By doing this I didn't need a separate winding or transformer for the 300 V supply. I used an old 300 VRMS TV transformer for both my 850 V and 300 V supplies. That supply is still in use with original components 35 years later.

For the simulation of the complex circuit I used a 50 uF output filter and for the simple circuit I used two series 100 uF capacitors to provide the equivalent filtering (i.e., 50 uF).

So, all I can tell is that the complex circuit takes one extra 50 uF capacitor, and 4 extra diodes to do the same job as the simple circuit with no difference in efficiency that I can find.

Curtis Eickerman

842. Re: Is this voltage doubler different?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 17:46:19 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ctr3lb$dc9$1@titan.btinternet.com>
Source record: 20575

> So, all I can tell is that the complex circuit takes one extra 50 uF
> capacitor, and 4 extra diodes to do the same job as the simple circuit
> with no difference in efficiency that I can find.
>
> Curtis Eickerman
>
==========

A simpler logical analysis -

The more complex circuit will have lower efficiency because it does exactly
the same job with 5 additional components to lose power in.

Back to the drawing board !

843. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 17:54:13 UTC
From: "johna@m" <mhdbd75@yahoo.fr>
Message-ID: <1107366853.802291.149610@l41g2000cwc.googlegroups.com>
Source record: 20576
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Should not we expect that the current, even at very small level, to be
half rectified by a diode, since the reverse resistance of the diode is
supposed te be far greater than the forward resistance?

Why can't we found this result in smulation. Is it a flaw in the
simulator (Simplorer) or is the theoric behavior of a diode that
changes in case of very small input ?

Regards,

John.

844. Re: Is this voltage doubler different?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 17:57:51 UTC
From: Mike Silva <snarflemike@yahoo.com>
Message-ID: <1107367071.557234.296700@c13g2000cwb.googlegroups.com>
Source record: 20577

Many thanks for running that simulation. Sometimes more is better, and
other times more is just more!

73,
Mike, KK6GM

845. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 18:03:19 UTC
From: Keith Williams <krw@att.bizzzz>
Message-ID: <MPG.1c6adfef80f88c479898da@news.individual.net>
Source record: 20578
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

In article <11020l5hr6rtq4d@corp.supernews.com>,
tim@wescottnospamdesign.com says...
> Bill Sloman wrote:
>
> > "johna@m" <mhdbd75@yahoo.fr> schreef in bericht
> > news:1107349670.876306.202210@c13g2000cwb.googlegroups.com...
> >
> >>Hello All,
> >>
> >>I am trying to simulate a simple AM receiver circuit with diode
> >>detector. I am assuming that the signal received from the antenna
> >>(simulated with a voltage source) has a weak amplitude (around 100 uV)
> >>and a high frequency (around 600 Khz). The issue is that the current
> >>after the diode does not get rectified. The output current is very weak
> >>(less than 250pA) and still contains the full sine signal (both halves
> >>of signals).
> >>
> >>When I try the simulation with smaller frequencies (around 5kHz) and
> >>higher amplitude (around 0.2 v), the signal gets correctly
> >>half-rectified, but not anymore when I work with higher frequencies and
> >>smaller signals.
> >>
> >>In real schematic for AM simple receiver, there is no amplification
> >>bewteen the antenna (and the tuning LC circuit) and the diode. So how
> >>the diode manage to half-rectifies correctly in real operating mode
> >>when the signal is weak and high frequencies, which is the case of real
> >>radio signals.
> >>
> >>I use Ansoft Simplorer mainly. Any other simulators recommended ?
> >>Thanks in advance and best regards,
> >
> >
> > The answer to your question is that real, simple AM receivers - crystal
> > sets - only work where the received signal is quite high. They tend to use
> > fast, low capacitance diodes. The term "rectifier" tends to be used for
> > bigger, slower diodes basically intended to handle around an ampere of
> > current from a 50/60Hz source, that look like capacitors in RF circuits.
> >
> > Practical AM receivers always amplify the signal before they detect it,
>
> You're going to get some flak from the crystal radio crowd on that one.
>
> > and

> > usually "mix" the amplified signal from the antenna with the output from a
> > local oscillator at different, if similar, frequency chosen to be 455kHz
> > away for the transmitted signal. The nominally 455kHz component coming out
> > of the mixer is then filtered by an elaborate bandpass filter to reject all
> > the other components, further amplified, and only then detected.
> >
>
> Crystal radios generally step up the voltage from the antenna, and use a
> sensitive, high-impedance earphone -- and still require relatively
> strong signals to receive well. For packaged diodes consider a
> point-contact germanium or a zero-bias schottkey (although the real
> crystal fans will want you to stick with germanium or other material,
> per the other poster). Clever tricks to play include audio
> amplification after the diode and a very slight forward bias applied to
> the diode.

One of the Profs in college built a "crystal" radio that was powerful
enough to drive a loudspeaker. It played day and night in the lab.
He had it set up so he could change the detector, but left the LED in
there because it worked as an "on" indicator too. ;-)

--
Keith

846. Re: Is this voltage doubler different?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 18:14:55 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <4201189F.862066F2@rica.net>
Source record: 20579

Mike Silva wrote:
>
> Many thanks for running that simulation. Sometimes more is better, and
> other times more is just more!
>
> 73,
> Mike, KK6GM

I think a way of looking at the difference is that one is two half
wave doublers in series and one is two half wave doublers in
parallel. You would have a hard time using the parallel version if
you wanted an 800 volt output and intended to use electrolytic
capacitors, because each of the 3 would have 800 volts across them but
it may have some utility for low voltage outputs. There may be a
better way to connect the diodes, but I haven't got that far, yet.
--
John Popelish

847. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 18:38:14 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <11027g95c2bao6e@corp.supernews.com>
Source record: 20580
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

johna@m wrote:
> Should not we expect that the current, even at very small level, to be
> half rectified by a diode, since the reverse resistance of the diode is
> supposed te be far greater than the forward resistance?
>
> Why can't we found this result in smulation. Is it a flaw in the
> simulator (Simplorer) or is the theoric behavior of a diode that
> changes in case of very small input ?
>
> Regards,
>
> John.
>
The diode behavior is a continuous curve, so for a small AC voltage you
won't see much change in the diode's resistance even at zero bias.
Unless you're modeling a really leaky diode, however, you are probably
seeing a situation where the diode's resistance is effectively shunted
by it's capacitance and you are seeing capacitive coupling rather than
conduction.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

848. Re: American QRP

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 21:44:39 UTC
From: Brian Short <bshort4@cox.net>
Message-ID: <bshort4-1463DA.14443902022005@news.central.cox.net>
Source record: 20581

In article <82nvv0t32fcivsmq414bhth1iv54b5e9cs@4ax.com>,
TW <kilocycles**@**yahoo.com> wrote:

> On Tue, 18 Jan 2005 21:07:36 -0500, beerbarrel <beerbarrel@cox.net>
> wrote:
>
> >Anyone subscribe to American homebrewer magazine? If so, what do you
> >think of the new CDROM format? I'm going to take a few days to look it
> >over good and see what I think. I was curious as to what everyone else
> >thinks. I would really prefer printed matter but I'll see.
>
> It makes bathroom reading very difficult. That's where I keep my
> stash of QRPARCI and AMQRP issues.
>

Yes, I am like that with books. I will probably
never be able to switch to eBooks or whatever.

I know it is an emotional issue with some, but
you can print them, right? I should be getting
HB #4 any time now and look forward to it.

It really does seem like a bargain to me at $15/yr.

849. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-02 23:08:20 UTC
From: Roger Lascelles <invalidl@invalid.invalid>
Message-ID: <36d4r3F51m495U1@individual.net>
Source record: 20582
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"Tim Wescott" <tim@wescottnospamdesign.com> wrote in message
news:11027g95c2bao6e@corp.supernews.com...
> johna@m wrote:
> > Should not we expect that the current, even at very small level, to be
> > half rectified by a diode, since the reverse resistance of the diode is
> > supposed te be far greater than the forward resistance?
> >
> > Why can't we found this result in smulation. Is it a flaw in the
> > simulator (Simplorer) or is the theoric behavior of a diode that
> > changes in case of very small input ?
> >
> > Regards,
> >
> > John.
> >
> The diode behavior is a continuous curve, so for a small AC voltage you
> won't see much change in the diode's resistance even at zero bias.
> Unless you're modeling a really leaky diode, however, you are probably
> seeing a situation where the diode's resistance is effectively shunted
> by it's capacitance and you are seeing capacitive coupling rather than
> conduction.

The point about continuous curve is well made.

The diode doesn't have to hard rectify. As long as it has a non-linear V-I
graph it will produce some audio. The more sharply curved the
characteristic, the more audio is produced.

In the valve days, the anode bend detector worked that way, using a valve
biased to operate on the curved part of the characteristic.

Roger

850. Re: Has anyone actuially received the latest QRZ Callsign CD

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-03 00:43:17 UTC
From: Bob Reed W2CE <w2ce@comcast.net>
Message-ID: <FvudneJ1ffyx6ZzfRVn-iw@comcast.com>
Source record: 20583
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Charlie" <charlie@earthlink.com> wrote in message
news:10vvmcinb0n0403@news.supernews.com...
>
> I ordered mine over 8 days ago and so far not a word from qrz.com except
an
> "order confirmation" on Dec 25 and a charge to our CC of course. The "new
> CD" was advertised as "available now" on the web site.
> --
>
> CJ

I am very sure that QRZ.com is very much aware that they must not charge
your credit card until shipment has taken place. The fact that they did
tells me that you need to report to them that nothing has been received and
ask them to trace the shipment. They are just too reputable, a break down
in the shipping path has occured.

851. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-03 01:02:07 UTC
From: Gert Baars <g.baars13@chello.nl>
Message-ID: <420177FA.3080802@chello.nl>
Source record: 20584
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Diodes have a tresholdvoltage of 0.3-0.7 V.
The amplitude must be greater. That is why this
type of receiver requires a large antenna or a
transmitter nearby.

Regards,

Website: http://members.chello.nl/g.baars13

johna@m wrote:
> Hello All,
>
> I am trying to simulate a simpe AM receiver circuit with diode
> detector. I am assuming that the signal received from the antenna
> (simulated with a voltage source) has a weak amplitude (around 100 uV)
> and a high frequency (around 600 Khz). The issue is that the current
> after the diode does not get rectified. The output current is very weak
> (less than 250pA) and still contains the full sin signal (both halves
> of signals).
>
> When I try the simulation with smaller frequencies (around 5kHz) and
> higher amplitude (around 0.2 v), the signal gets correctly
> half-rectified, but not anymore when I work with higher frequencies and
> smaller signals.
>
> In real shematic for AM simple receiver, there is no ampification
> bewteen the antenna (and the tuning LC circuit) and the diode. So how
> the diode manage to half-rectifies correctly in real operating mode
> when the signal is weak and high frequencies, which is the case of real
> radio signals.
>
> I use Ansoft Simplorer mainly. Any other simulators recommended ?
> Thanks in advance and best regards,
>
> John.
>

852. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-03 02:20:26 UTC
From: DaveM <masondg4499@comcast99.net>
Message-ID: <kv-dnbj0Iqf2F5zfRVn-iQ@comcast.com>
Source record: 20585
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"johna@m" <mhdbd75@yahoo.fr> wrote in message
news:1107366853.802291.149610@l41g2000cwc.googlegroups.com...
> Should not we expect that the current, even at very small level, to be
> half rectified by a diode, since the reverse resistance of the diode is
> supposed te be far greater than the forward resistance?
>
> Why can't we found this result in smulation. Is it a flaw in the
> simulator (Simplorer) or is the theoric behavior of a diode that
> changes in case of very small input ?
>
> Regards,
>
> John.
>

There is nothing wrong with the simulator... the problem is with your idea of a diode. The general definition of a diode is a component that conducts normally in one direction, but does not conduct in the other. That definition only applies to a "perfect" diode. The reality of semiconductor diodes is that a 'barrier potential" exists across the junction. In germanium diodes, this is around 0.3 volts; in silicon diodes, it's around 0.6 volts.
In order for the diode to conduct, this barrier potential must be exceeded by an externally applied voltage. Until that potential is reached, the diode is said to be reverse biased, and only a very small leakage current flows. When the barrier potential is reached, the junction becomes forward biased and conducts heavily.

The small signal voltage that you are trying to simulate may not be enough to reach the barrier potential of the diode junction, thus, no conduction (rectification) in either direction. The simulator is aware of the barrier potential of the diode. If the peak value of your signal voltage is less than the barrier potential, no rectification occurs. If you increase the amplitude of the signal applied to the defined barrier potential of the particular diode in your model, you will see rectification begin. The higher the signal amplitude, the more rectified signal appears on the output.

You can make a diode rectify a signal amplitude lower than the barrier potential by applying a forward voltage that is just under the barrier potential, so that the signal doesn't have to overcome the full barrier potential. Fer instance, if you apply a 0.5 volt DC voltage to a silicon diode, it will start to rectify signal levels as low as 0.1 volts.

--
Dave M
MasonDG44 at comcast dot net (Just subsitute the appropriate characters in
the address)

Never take a laxative and a sleeping pill at the same time!!

853. Need Motorola Alert Monitor info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-03 06:09:46 UTC
From: "R. Belcher" <randy.belcher@verizon.net>
Message-ID: <KejMd.2014$uc.513@trnddc04>
Source record: 20586
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Hey, have a '78 model Alert Monitor, M03CNB1102B
VHF unit, silver front with black case, reset/alert/mon functions.

Questions:
Original battery type, location, voltage?
Frequency range? Will it do 146.000MHz?
Is it possible to turn down the volume on the alert tone?

Need schematic, tuning and recrystal instruction.

Any help appreciated,
thanks,
rb

854. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-03 09:59:00 UTC
From: Winfield Hill <hill_a@t_rowland-dotties-harvard-dot.s-edu>
Message-ID: <ctssl40f6m@drn.newsguy.com>
Source record: 20587
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

DaveM wrote...
>
> "johna@m" wrote ...
>> Should not we expect that the current, even at very small level, to
>> be half rectified by a diode, since the reverse resistance of the
>> diode is supposed te be far greater than the forward resistance?
>>
>> Why can't we found this result in smulation. Is it a flaw in the
>> simulator (Simplorer) or is the theoric behavior of a diode that
>> changes in case of very small input ?
>
> There is nothing wrong with the simulator... the problem is with your
> idea of a diode. The general definition of a diode is a component that
> conducts normally in one direction, but does not conduct in the other.
> That definition only applies to a "perfect" diode. The reality of
> semiconductor diodes is that a 'barrier potential" exists across the
> junction. In germanium diodes, this is around 0.3 volts; in silicon
> diodes, it's around 0.6 volts. In order for the diode to conduct, this
> barrier potential must be exceeded by an externally applied voltage.
> Until that potential is reached, the diode is said to be reverse biased,
> and only a very small leakage current flows. When the barrier potential
> is reached, the junction becomes forward biased and conducts heavily.
>
> The small signal voltage that you are trying to simulate may not be enough
> to reach the barrier potential of the diode junction, thus, no conduction
> (rectification) in either direction. The simulator is aware of the barrier
> potential of the diode. If the peak value of your signal voltage is less
> than the barrier potential, no rectification occurs. If you increase the
> amplitude of the signal applied to the defined barrier potential of the
> particular diode in your model, you will see rectification begin. The
> higher the signal amplitude, the more rectified signal appears on the
> output.
>
> You can make a diode rectify a signal amplitude lower than the barrier
> potential by applying a forward voltage that is just under the barrier
> potential, so that the signal doesn't have to overcome the full barrier
> potential. Fer instance, if you apply a 0.5 volt DC voltage to a silicon
> diode, it will start to rectify signal levels as low as 0.1 volts.

Dave, your considerable effort to explain the nuances of diodes to John
is commendable, but your explanation is rather misleading. It's not true
that for a diode to conduct, the "barrier potential must be exceeded,"
and "the junction becomes forward biased and conducts heavily." Instead

the diode current has an exponential relationship to the voltage across it, and gradually turns on over many hundreds of millivolts, not abruptly at say 600mV. Here, examine some diode measurements I made a long time ago, http://www.picovolt.com/win/elec/comp/diode/diode-curves.html

For example, these plots show that an ordinary 1n4148 class of silicon signal diode, which conducts about 0.5mA at 600mV, is still working at 250mV, conducting 1uA in my measurements. In fact, this diode was still conducted at 100mV. See http://www.fairchildsemi.com/ds/1N/1N4148.pdf where Fairchild's datasheet also shows this exponential relationship, albeit drawn with a draftsman's straight line.

So, as others have pointed out, diodes can rectify very small signals. They may not be very efficient, but they will work. These plots also show how Schottky diodes (e.g., 1n6263 and 1n5819) are better than ordinary silicon diodes at low voltages, even below 100mV. The 1n6263 may be hard to get, but other parts, like the sd101 or bat17 may not. http://www.vishay.com/docs/85629/85629.pdf

There are other diodes that work well at very low voltages, notably some made by Agilent (see an1090), but we won't go into them here.

--
Thanks,
- Win

855. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-03 12:59:44 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <4fpMd.47336$eT5.4323@attbi_s51>
Source record: 20588
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

The difficulty is "what to do with that 1uA current". To put it to practical use, a signal processor is needed that has a useful output. For example, a MOSFET amplifier with a 10 megohm input resistance and negligible input capacitance (for low frequency sigs) could be used.

In this case it would be better to rethink the project.
In addition to the diode, some system design is indicated.

Bill W0IYH

"Winfield Hill" <hill_a@t_rowland-dotties-harvard-dot.s-edu> wrote in message news:ctssl40f6m@drn.newsguy.com...
> DaveM wrote...
>>
>> "johna@m" wrote ...
>>> Should not we expect that the current, even at very small level, to
>>> be half rectified by a diode, since the reverse resistance of the
>>> diode is supposed te be far greater than the forward resistance?
>>>
>>> Why can't we found this result in smulation. Is it a flaw in the
>>> simulator (Simplorer) or is the theoric behavior of a diode that
>>> changes in case of very small input ?
>>
>> There is nothing wrong with the simulator... the problem is with your
>> idea of a diode. The general definition of a diode is a component that
>> conducts normally in one direction, but does not conduct in the other.
>> That definition only applies to a "perfect" diode. The reality of
>> semiconductor diodes is that a 'barrier potential" exists across the
>> junction. In germanium diodes, this is around 0.3 volts; in silicon
>> diodes, it's around 0.6 volts. In order for the diode to conduct, this
>> barrier potential must be exceeded by an externally applied voltage.
>> Until that potential is reached, the diode is said to be reverse biased,
>> and only a very small leakage current flows. When the barrier potential
>> is reached, the junction becomes forward biased and conducts heavily.
>>
>> The small signal voltage that you are trying to simulate may not be
>> enough
>> to reach the barrier potential of the diode junction, thus, no conduction
>> (rectification) in either direction. The simulator is aware of the
>> barrier
>> potential of the diode. If the peak value of your signal voltage is less
>> than the barrier potential, no rectification occurs. If you increase the
>> amplitude of the signal applied to the defined barrier potential of the
>> particular diode in your model, you will see rectification begin. The

>> higher the signal amplitude, the more rectified signal appears on the
>> output.
>>
>> You can make a diode rectify a signal amplitude lower than the barrier
>> potential by applying a forward voltage that is just under the barrier
>> potential, so that the signal doesn't have to overcome the full barrier
>> potential. Fer instance, if you apply a 0.5 volt DC voltage to a silicon
>> diode, it will start to rectify signal levels as low as 0.1 volts.
>
> Dave, your considerable effort to explain the nuances of diodes to John
> is commendable, but your explanation is rather misleading. It's not true
> that for a diode to conduct, the "barrier potential must be exceeded,"
> and "the junction becomes forward biased and conducts heavily." Instead
> the diode current has an exponential relationship to the voltage across
> it, and gradually turns on over many hundreds of millivolts, not abruptly
> at say 600mV. Here, examine some diode measurements I made a long time
> ago, http://www.picovolt.com/win/elec/comp/diode/diode-curves.html
>
> For example, these plots show that an ordinary 1n4148 class of silicon
> signal diode, which conducts about 0.5mA at 600mV, is still working at
> 250mV, conducting 1uA in my measurements. In fact, this diode was still
> conducted at 100mV. See http://www.fairchildsemi.com/ds/1N/1N4148.pdf
> where Fairchild's datasheet also shows this exponential relationship,
> albeit drawn with a draftsman's straight line.
>
> So, as others have pointed out, diodes can rectify very small signals.
> They may not be very efficient, but they will work. These plots also
> show how Schottky diodes (e.g., 1n6263 and 1n5819) are better than
> ordinary silicon diodes at low voltages, even below 100mV. The 1n6263
> may be hard to get, but other parts, like the sd101 or bat17 may not.
> http://www.vishay.com/docs/85629/85629.pdf
>
> There are other diodes that work well at very low voltages, notably
> some made by Agilent (see an1090), but we won't go into them here.
>
>
> --
> Thanks,
> - Win

856. Re: I need to get some 1N34A diodes. Can you recommend a good supplier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-03 13:09:44 UTC
From: Mark Robinson <mark.rob@verizon.net>
Message-ID: <sopMd.12008$QS5.5120@trndny06>
Source record: 20589
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi Rick,

Mouser has them as NTE replacements at .41 ea. The shipping should not be too bad on these. Would be worth it if you could add some other parts to your order.

http://www.mouser.com/index.cfm?handler=displayproduct&lstdisppproductid=411183&e_categoryid=131&e_pcodeid=52602

Also, look for 1N270. These are also GE devices and I think they are more available.

Mark
"Rick Gray" <rgray@atlanticbb.net> wrote in message
news:110073imdb9vi77@corp.supernews.com...
> I plan on building a crystal radio and need to get some 1N34A diodes. (I
> figure about 50 would last me a lifetime). Can anyone recommend a good
> supplier who has reasonable shipping charges? I see a bunch of people
> selling them but I don't want to spend more on shipping then I do on
parts.
>
> Also does anyone know where to get the old Quaker Oats containers? The
ones
> I see in the stores have plastic tops.
>
> Thank you for any help you can give me.
>
>

857. Re: I need to get some 1N34A diodes. Can you recommend a good supplier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-03 14:46:10 UTC
From: "kb5whv@gmail.com" <kb5whv@gmail.com>
Message-ID: <1107441970.432863.52880@o13g2000cwo.googlegroups.com>
Source record: 20590
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew,rec.radio.amateur.misc

A little off topic, but have you checked out the Xtal Set Society? If you're going to get into crystal sets (a great idea!) then you'll probably want to check out they're newsletter and site. Their part's aren't the cheapest, and I would suggest the other suppliers mentioned in the thread, but the source of information is great.

As for the Quaker Oat containers, do you have to have Quaker? I've found many generic brands in my area (great for my use since they are cheaper, and I don't eat that much oatmeal, but do use them for xtal set ideas from time to time) that still use the older style container. Try your local "dollar" stores and such.

Good luck with the project!
Jeramy

858. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-03 15:49:33 UTC
From: lemonjuice <exskimos@anonymous.to>
Message-ID: <1107445773.256036.51390@f14g2000cwb.googlegroups.com>
Source record: 20591
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On 2 Feb 2005 05:07:50 -0800, "johna@m" <mhdbd75@yahoo.fr> wrote:

>Hello All,
>
>I am trying to simulate a simpe AM receiver circuit with diode
>detector. I am assuming that the signal received from the antenna
>(simulated with a voltage source) has a weak amplitude (around 100 uV)
>and a high frequency (around 600 Khz). The issue is that the current
>after the diode does not get rectified. The output current is very
weak
>(less than 250pA) and still contains the full sin signal (both halves
>of signals).
>
>When I try the simulation with smaller frequencies (around 5kHz) and
>higher amplitude (around 0.2 v), the signal gets correctly
>half-rectified, but not anymore when I work with higher frequencies
and
>smaller signals.
>

Yes its what you'd expect. As I explained on the thread "Junction
capacitance of diodes and zeners" the Capacitance of a forward biased
diode increases with the applied bias or if you do the math you'll
see it increases exponentially with it. They are actually 2
capacitances in consideration but thats another question. Its really
hard modelling a non linear component with linear components but the
following can be said to be true for small variations of voltage. You
get your desired precision by adding up together pieces of this model.
If you look at a piece wise linear approximation model of the diode
you'll see it has a conductance or a linear dependent current source in
parallel with 2 condensers and the current through the conductance is
Is*exp(Vapp/Vt). Vapp is the voltage across the condensers. At high
Vapp and low frequencies from above C is high and has a lower
impedance so Idiode is high. At higher frquencies Vapp on the
condensers is pretty low so Idiode is also low. If Vapp is lower you
get an even lower value.

>In real shematic for AM simple receiver, there is no ampification
>bewteen the antenna (and the tuning LC circuit) and the diode. So how
>the diode manage to half-rectifies correctly in real operating mode
>when the signal is weak and high frequencies, which is the case of
real
>radio signals.
>

Well if you want to cheat you can have more turns on the primary then the secondary of the input transformer and you get a higher voltage (grin). I'd have to see the exact circuit you are talking about to be of more help.
Good luck.

859. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-03 17:36:15 UTC
From: "johna@m" <mhdbd75@yahoo.fr>
Message-ID: <1107452174.992725.51490@o13g2000cwo.googlegroups.com>
Source record: 20592
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Hi,

I have re-done the simulation with the diode 1N41481, and it rectified.
Thanks.

For the 600mv, it did give indeed around 0.5mA. I even tried at 100mv
and at 100uv, and it still conducts (respectively 60uA and 25nA).

Regards,

John.

860. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-03 17:59:15 UTC
From: john jardine <john@jjdesigns.fsnet.co.uk>
Message-ID: <cttoa4$jj6$1@newsg4.svr.pol.co.uk>
Source record: 20593
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"Winfield Hill" <hill_a@t_rowland-dotties-harvard-dot.s-edu> wrote in
message news:ctssl40f6m@drn.newsguy.com...
> For example, these plots show that an ordinary 1n4148 class of silicon
> signal diode, which conducts about 0.5mA at 600mV, is still working at
> 250mV, conducting 1uA in my measurements. In fact, this diode was still
> conducted at 100mV. See http://www.fairchildsemi.com/ds/1N/1N4148.pdf
> where Fairchild's datasheet also shows this exponential relationship,
> albeit drawn with a draftsman's straight line.
>
> So, as others have pointed out, diodes can rectify very small signals.
> They may not be very efficient, but they will work. These plots also
> show how Schottky diodes (e.g., 1n6263 and 1n5819) are better than
> ordinary silicon diodes at low voltages, even below 100mV. The 1n6263
> may be hard to get, but other parts, like the sd101 or bat17 may not.
> http://www.vishay.com/docs/85629/85629.pdf
>
> There are other diodes that work well at very low voltages, notably
> some made by Agilent (see an1090), but we won't go into them here.
>
>
> --
> Thanks,
> - Win

Must be my lucky week!. I needed to make some similar readings. Thanks!.
I still puzzle over the oft quoted "up to about 30mVrms the output from the
diode offers a square law response and will approximate a true RMS
measurement.
As the OP found, there's very little happening down there. Who makes these
sweeping statements?.
regards
john

861. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-03 19:25:02 UTC
From: Mark <makolber@yahoo.com>
Message-ID: <1107458702.351830.206970@f14g2000cwb.googlegroups.com>
Source record: 20594
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

>
> Must be my lucky week!. I needed to make some similar readings.
Thanks!.
> I still puzzle over the oft quoted "up to about 30mVrms the output
from the
> diode offers a square law response and will approximate a true RMS
> measurement.
> As the OP found, there's very little happening down there. Who makes
these
> sweeping statements?.
> regards
> john

No it's true. Look at the curves and notice that the current scale on
the x axis is a log scale. When the RF input is very small, the DC out
is proportional to the log of the RF level i.e. the RF in dB. This is
how the normal power meter works. It also provides a true RMS value
for modulated RF signal. Once the signal gets too big and the diode
begins to work as a converntoin rectifier, this relationship no longer
holds true. Notice the curves break upeards. When the RF volatge to
log I curves are straight line, this is rhe square law region where the
diode current gives you true RMS readings of the RF voltage.
Think of it as a voltage in dB to current converter.

Mark

862. Nitpicking re. the glorious Desert Ratt 2 regen RX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-03 20:47:53 UTC
From: SpamHog <n1jpr@hotmail.com>
Message-ID: <1107463673.482317.84890@l41g2000cwc.googlegroups.com>
Source record: 20498

The Desrt Ratt HR regenerative receiver has a good reputation, and I'd
love to build one, but I am a quite mediocre homebrewer... If I can
get some potential problems out of the way I can better concentrate on
the many others that will surely crop up!

These are my doubts w.r.t. the DR2 as described in the .PDFs on Paul
Harden's page:
http://www.aoc.nrao.edu/~pharden/hobby/DR2.pdf
http://www.aoc.nrao.edu/~pharden/hobby/DR2descr.pdf .
Can anyone comment on any of these points?

1) Tuning Coil

The PDF mentions inductance, number of turns and wire gage,
but leave us in suspense apropos the coil former:
"T1 is wound directly on the PCB". Uh?
I guess anything 5-6uH will do, but I can't keep from wondering...

2) Tuning Varicap

"R5 sets the current across D2-D3" The reverse resistance on such
rectifiers is huge, much greater than R5 (10kohm). I noticed that Paul
Harden N5AN once offered V/C measurements on diodes for use as varicaps
(http://www.kkn.net/archives/html/QRP-L/1998-01/msg00360.html)
There, one sees a 1N4148, forward biased. From the specs one gleans
that this diode has a sizeable current when forward biased at voltages
within a reasonable tunng range - but we're talking about something
quite different here. What gives?

3) Q2 (oscillator) biasing

The resistor between C6 and C7 is not rated. A base bias on an regen's
oscillator can be rather, well, critical....

4) IC Amplifier

R12 is indicated as "10W".
What would a reasonable resistance rating be?

5) Voltage Regulator

The text says that the drop across the forward biased LED1
is 1.3-1.8V, while across the Si rectifier D1 is 0.7V.
In series they'd sum up to 2 - 2.5V, but on the circuit
one reads a total drop of 3.0V, i.e. up to 1 V higher.
Charles Kitchin's design fed the oscillator just 2.1V...

Would 2.5V be enough? Or, do LEDs come with a wide variety
of voltage drops?

TIA to everyone!

I hope this will encourage others to experiment with this circuit.

Filippo (SpamHog)
N1JPR/I2

863. Nitpicking re. the glorious Desert Ratt 2 regen RX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-03 20:48:31 UTC
From: SpamHog <n1jpr@hotmail.com>
Message-ID: <1107463711.917374.304080@c13g2000cwb.googlegroups.com>
Source record: 20595

The Desrt Ratt HR regenerative receiver has a good reputation, and I'd
love to build one, but I am a quite mediocre homebrewer... If I can
get some potential problems out of the way I can better concentrate on
the many others that will surely crop up!

These are my doubts w.r.t. the DR2 as described in the .PDFs on Paul
Harden's page:
http://www.aoc.nrao.edu/~pharden/hobby/DR2.pdf
http://www.aoc.nrao.edu/~pharden/hobby/DR2descr.pdf .
Can anyone comment on any of these points?

1) Tuning Coil

The PDF mentions inductance, number of turns and wire gage,
but leave us in suspense apropos the coil former:
"T1 is wound directly on the PCB". Uh?
I guess anything 5-6uH will do, but I can't keep from wondering...

2) Tuning Varicap

"R5 sets the current across D2-D3" The reverse resistance on such
rectifiers is huge, much greater than R5 (10kohm). I noticed that Paul
Harden N5AN once offered V/C measurements on diodes for use as varicaps
(http://www.kkn.net/archives/html/QRP-L/1998-01/msg00360.html)
There, one sees a 1N4148, forward biased. From the specs one gleans
that this diode has a sizeable current when forward biased at voltages
within a reasonable tunng range - but we're talking about something
quite different here. What gives?

3) Q2 (oscillator) biasing

The resistor between C6 and C7 is not rated. A base bias on an regen's
oscillator can be rather, well, critical....

4) IC Amplifier

R12 is indicated as "10W".
What would a reasonable resistance rating be?

5) Voltage Regulator

The text says that the drop across the forward biased LED1
is 1.3-1.8V, while across the Si rectifier D1 is 0.7V.
In series they'd sum up to 2 - 2.5V, but on the circuit
one reads a total drop of 3.0V, i.e. up to 1 V higher.
Charles Kitchin's design fed the oscillator just 2.1V...

Would 2.5V be enough? Or, do LEDs come with a wide variety
of voltage drops?

TIA to everyone!

I hope this will encourage others to experiment with this circuit.

Filippo (SpamHog)
N1JPR/I2

864. Nitpicking re. the glorious Desert Ratt 2 regen RX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-03 20:48:34 UTC
From: SpamHog <n1jpr@hotmail.com>
Message-ID: <1107463714.311774.35170@g14g2000cwa.googlegroups.com>
Source record: 20596

The Desrt Ratt HR regenerative receiver has a good reputation, and I'd
love to build one, but I am a quite mediocre homebrewer... If I can
get some potential problems out of the way I can better concentrate on
the many others that will surely crop up!

These are my doubts w.r.t. the DR2 as described in the .PDFs on Paul
Harden's page:
http://www.aoc.nrao.edu/~pharden/hobby/DR2.pdf
http://www.aoc.nrao.edu/~pharden/hobby/DR2descr.pdf .
Can anyone comment on any of these points?

1) Tuning Coil

The PDF mentions inductance, number of turns and wire gage,
but leave us in suspense apropos the coil former:
"T1 is wound directly on the PCB". Uh?
I guess anything 5-6uH will do, but I can't keep from wondering...

2) Tuning Varicap

"R5 sets the current across D2-D3" The reverse resistance on such
rectifiers is huge, much greater than R5 (10kohm). I noticed that Paul
Harden N5AN once offered V/C measurements on diodes for use as varicaps
(http://www.kkn.net/archives/html/QRP-L/1998-01/msg00360.html)
There, one sees a 1N4148, forward biased. From the specs one gleans
that this diode has a sizeable current when forward biased at voltages
within a reasonable tunng range - but we're talking about something
quite different here. What gives?

3) Q2 (oscillator) biasing

The resistor between C6 and C7 is not rated. A base bias on an regen's
oscillator can be rather, well, critical....

4) IC Amplifier

R12 is indicated as "10W".
What would a reasonable resistance rating be?

5) Voltage Regulator

The text says that the drop across the forward biased LED1
is 1.3-1.8V, while across the Si rectifier D1 is 0.7V.
In series they'd sum up to 2 - 2.5V, but on the circuit
one reads a total drop of 3.0V, i.e. up to 1 V higher.
Charles Kitchin's design fed the oscillator just 2.1V...

Would 2.5V be enough? Or, do LEDs come with a wide variety
of voltage drops?

TIA to everyone!

I hope this will encourage others to experiment with this circuit.

Filippo (SpamHog)
N1JPR/I2

865. Nitpicking re. the glorious Desert Ratt 2 regen RX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-03 20:48:35 UTC
From: SpamHog <n1jpr@hotmail.com>
Message-ID: <1107463715.662788.140310@o13g2000cwo.googlegroups.com>
Source record: 20597

The Desrt Ratt HR regenerative receiver has a good reputation, and I'd
love to build one, but I am a quite mediocre homebrewer... If I can
get some potential problems out of the way I can better concentrate on
the many others that will surely crop up!

These are my doubts w.r.t. the DR2 as described in the .PDFs on Paul
Harden's page:
http://www.aoc.nrao.edu/~pharden/hobby/DR2.pdf
http://www.aoc.nrao.edu/~pharden/hobby/DR2descr.pdf .
Can anyone comment on any of these points?

1) Tuning Coil

The PDF mentions inductance, number of turns and wire gage,
but leave us in suspense apropos the coil former:
"T1 is wound directly on the PCB". Uh?
I guess anything 5-6uH will do, but I can't keep from wondering...

2) Tuning Varicap

"R5 sets the current across D2-D3" The reverse resistance on such
rectifiers is huge, much greater than R5 (10kohm). I noticed that Paul
Harden N5AN once offered V/C measurements on diodes for use as varicaps
(http://www.kkn.net/archives/html/QRP-L/1998-01/msg00360.html)
There, one sees a 1N4148, forward biased. From the specs one gleans
that this diode has a sizeable current when forward biased at voltages
within a reasonable tunng range - but we're talking about something
quite different here. What gives?

3) Q2 (oscillator) biasing

The resistor between C6 and C7 is not rated. A base bias on an regen's
oscillator can be rather, well, critical....

4) IC Amplifier

R12 is indicated as "10W".
What would a reasonable resistance rating be?

5) Voltage Regulator

The text says that the drop across the forward biased LED1
is 1.3-1.8V, while across the Si rectifier D1 is 0.7V.
In series they'd sum up to 2 - 2.5V, but on the circuit
one reads a total drop of 3.0V, i.e. up to 1 V higher.
Charles Kitchin's design fed the oscillator just 2.1V...

Would 2.5V be enough? Or, do LEDs come with a wide variety
of voltage drops?

TIA to everyone!

I hope this will encourage others to experiment with this circuit.

Filippo (SpamHog)
N1JPR/I2

866. Nitpicking re. the glorious Desert Ratt 2 regen RX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-03 21:05:41 UTC
From: SpamHog <n1jpr@hotmail.com>
Message-ID: <1107463550.809507.25210@g14g2000cwa.googlegroups.com>
Source record: 20499

The Desrt Ratt HR regenerative receiver has a good reputation, and I'd
love to build one, but I am a quite mediocre homebrewer... If I can
get some potential problems out of the way I can better concentrate on
the many others that will surely crop up!

These are my doubts w.r.t. the DR2 as described in the .PDFs on Paul
Harden's page:
http://www.aoc.nrao.edu/~pharden/hobby/DR2.pdf
http://www.aoc.nrao.edu/~pharden/hobby/DR2descr.pdf .
Can anyone comment on any of these points?

1) Tuning Coil

The PDF mentions inductance, number of turns and wire gage,
but leave us in suspense apropos the coil former:
"T1 is wound directly on the PCB". Uh?
I guess anything 5-6uH will do, but I can't keep from wondering...

2) Tuning Varicap

"R5 sets the current across D2-D3" The reverse resistance on such
rectifiers is huge, much greater than R5 (10kohm). I noticed that Paul
Harden N5AN once offered V/C measurements on diodes for use as varicaps
(http://www.kkn.net/archives/html/QRP-L/1998-01/msg00360.html)
There, one sees a 1N4148, forward biased. From the specs one gleans
that this diode has a sizeable current when forward biased at voltages
within a reasonable tunng range - but we're talking about something
quite different here. What gives?

3) Q2 (oscillator) biasing

The resistor between C6 and C7 is not rated. A base bias on an regen's
oscillator can be rather, well, critical....

4) IC Amplifier

R12 is indicated as "10W".
What would a reasonable resistance rating be?

5) Voltage Regulator

The text says that the drop across the forward biased LED1
is 1.3-1.8V, while across the Si rectifier D1 is 0.7V.
In series they'd sum up to 2 - 2.5V, but on the circuit
one reads a total drop of 3.0V, i.e. up to 1 V higher.
Charles Kitchin's design fed the oscillator just 2.1V...

Would 2.5V be enough? Or, do LEDs come with a wide variety
of voltage drops?

TIA to everyone!

I hope this will encourage others to experiment with this circuit.

Filippo (SpamHog)
N1JPR/I2

867. Nitpicking re. the glorious Desert Ratt 2 regen RX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-03 21:07:15 UTC
From: SpamHog <n1jpr@hotmail.com>
Message-ID: <1107463607.676883.28470@g14g2000cwa.googlegroups.com>
Source record: 20500

The Desrt Ratt HR regenerative receiver has a good reputation, and I'd
love to build one, but I am a quite mediocre homebrewer... If I can
get some potential problems out of the way I can better concentrate on
the many others that will surely crop up!

These are my doubts w.r.t. the DR2 as described in the .PDFs on Paul
Harden's page:
http://www.aoc.nrao.edu/~pharden/hobby/DR2.pdf
http://www.aoc.nrao.edu/~pharden/hobby/DR2descr.pdf .
Can anyone comment on any of these points?

1) Tuning Coil

The PDF mentions inductance, number of turns and wire gage,
but leave us in suspense apropos the coil former:
"T1 is wound directly on the PCB". Uh?
I guess anything 5-6uH will do, but I can't keep from wondering...

2) Tuning Varicap

"R5 sets the current across D2-D3" The reverse resistance on such
rectifiers is huge, much greater than R5 (10kohm). I noticed that Paul
Harden N5AN once offered V/C measurements on diodes for use as varicaps
(http://www.kkn.net/archives/html/QRP-L/1998-01/msg00360.html)
There, one sees a 1N4148, forward biased. From the specs one gleans
that this diode has a sizeable current when forward biased at voltages
within a reasonable tunng range - but we're talking about something
quite different here. What gives?

3) Q2 (oscillator) biasing

The resistor between C6 and C7 is not rated. A base bias on an regen's
oscillator can be rather, well, critical....

4) IC Amplifier

R12 is indicated as "10W".
What would a reasonable resistance rating be?

5) Voltage Regulator

The text says that the drop across the forward biased LED1
is 1.3-1.8V, while across the Si rectifier D1 is 0.7V.
In series they'd sum up to 2 - 2.5V, but on the circuit
one reads a total drop of 3.0V, i.e. up to 1 V higher.
Charles Kitchin's design fed the oscillator just 2.1V...

Would 2.5V be enough? Or, do LEDs come with a wide variety
of voltage drops?

TIA to everyone!

I hope this will encourage others to experiment with this circuit.

Filippo (SpamHog)
N1JPR/I2

868. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-03 21:17:35 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1107465455.530569.269950@z14g2000cwz.googlegroups.com>
Source record: 20501
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Indeed, as Win says, you can get some signal out of a diode detector even for very low input levels. With fairly simple home-brew techniques but a lot of attention to the details of leakage currents and op amp offset voltages, I'm able to detect RF signals down to a very few tens of microvolts. That's using either a zero-bias Schottky detector diode such as the Agilent HSMS-2860, or an old germanium point contact diode. At very low signal levels, the optimum load resistance is quite high. (See Agilent detector diode ap notes for details.) Things are actually easier if you're only interested in the modulation component of an AM signal, and not in trying to detect the carrier level, since the offsets aren't particularly important for AC signals. A JFET audio amplifier, or even a carefully-designed bipolar amplifier, can give you a very low noise figure for the high source resistance that the diode detector running at low input levels gives you.

There are tricks you can play to make a receiver that works from the power received by the antenna. If you live near a transmitter that's putting out significant power in your direction, you may be able to set up a rectifier for that received power and use it to run a micro-power amplifier following the detector for the station you wish to receive. If you want to hunt for weak stations, you'll need a carefully designed and built RF input tank/filter circuit. At night, especially, it's possible to listen to stations quite a ways away using no active components in the RF path before the detector.

Cheers,
Tom

869. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-03 21:28:56 UTC
From: lemonjuice <exskimos@anonymous.to>
Message-ID: <1107466136.298066.132930@c13g2000cwb.googlegroups.com>
Source record: 20502
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

>
>In real shematic for AM simple receiver, there is no ampification
>bewteen the antenna (and the tuning LC circuit) and the diode. So how
>the diode manage to half-rectifies correctly in real operating mode
>when the signal is weak and high frequencies, which is the case of
real
>radio signals.
>
You'll find that in reality something your simulator won't take into
account that its preferable to transmit at higher frequencies because
reception is better as the 1/f flicker noise is reduced to lower
values. Thats just 1 of the several reasons why frequency multipliers
are used in transmitters and downconverters in receivers.
>I use Ansoft Simplorer mainly. Any other simulators recommended ?
>Thanks in advance and best regards,
>

870. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-03 21:45:35 UTC
From: lemonjuice <exskimos@anonymous.to>
Message-ID: <1107467135.170393.300770@l41g2000cwc.googlegroups.com>
Source record: 20503
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

>
> Dave, your considerable effort to explain the nuances of diodes to
John
> is commendable, but your explanation is rather misleading. It's not
true
> that for a diode to conduct, the "barrier potential must be
exceeded,"
> and "the junction becomes forward biased and conducts heavily."
Instead
> the diode current has an exponential relationship to the voltage
across
> it, and gradually turns on over many hundreds of millivolts, not
abruptly
> at say 600mV. Here, examine some diode measurements I made a long
time
> ago, http://www.picovolt.com/win/elec/comp/diode/diode-curves.html
>
The theory confirms your results.

I diode ~K*exp(Vsignal/Vt) =K+ a*Vsignal + b*Vsignal^2+ .... by the
binomial theorem

So at low signal amplitudes the diode current follows a linear
relationship as predicted by the diode equation and confirmed by the
graphs there. At higher values the higher terms start dominating and
the exponential term takes over.

871. Re: I need to get some 1N34A diodes. Can you recommend a good supplier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-03 22:09:24 UTC
From: lenover21@aol.com
Message-ID: <20050203170924.01270.00000089@mb-m23.aol.com>
Source record: 20504

In article <110073imdb9vi77@corp.supernews.com>, "Rick Gray"
<rgray@atlanticbb.net> writes:

>I plan on building a crystal radio and need to get some 1N34A diodes. (I
>figure about 50 would last me a lifetime). Can anyone recommend a good
>supplier who has reasonable shipping charges? I see a bunch of people
>selling them but I don't want to spend more on shipping then I do on parts.

An average shipping charge on a small quantity of parts such
as 100 or less small-signal diodes is roughly $9US.

At www.circuitspecialists.com you can get 1N34s for 14 cents
at 100+ or 16 cents at 10 to 99 or 17 cents at quantities 1 to 9.
If you purchased 100 diodes the total price would be equal to
23 cents per diode. Buying 10 would be equal to $1.06 per
diode. But that's if ALL you bought was the diodes. Circuit
Specialists (prompt good supplier) has lots of hobbyist electronics
and some nifty deals on instruments (check out the Protek 100
MHz dual-trace scope for $500...new, not "seconds"). For
orders over $50 you can get a nice promotional item (last
year's item was a nice 3 1/2 digit DVM. good all-around meter).

Going to www.oselectronics.com (Ocean State Electronics in
Rhode Island) you can find some nice prices there on many
things plus lots and lots of single and multi-gang variable
capacitors (expensive because those are rare items nowadays).

Digikey in Minnesota has all sorts of new components of a wide
variety and will waive shipping charges on orders over $25 (?).
www.digikey.com

Until chain drug stores carry germanium diodes on easy-to-grab
sales racks, expect to pay at least $9 to get any small, low-weight
mail order delivery via FedEx or UPS. Or go to a Radio Shack
store and pay much more (if they have it) and spend gas driving
to it.

>Also does anyone know where to get the old Quaker Oats containers? The ones
>I see in the stores have plastic tops.

"Plastic tops" won't hurt any hand-wound coil done in the old, old
traditional manner of crystal sets. If it has a metal band somewhere
in that circular container, you've got big trouble from the "coupled
shorted turn" effect lowering the inductance. [plastics used in most
packaging are non-conductive]

A better bet is to visit an office supply store chain such as Office Depot or Office Max and check out the cardboard mailing tubes both carry. All kinds of diameters and lengths to choose from. The cardboard is thicker and sturdier and will have some slight effect on copying a traditional oat-box coil former, but not over a few percent off.

For a VERY sturdy coil former, DIY stores usually carry ABS waste line pipe stock, diameters roughly to 4 inches with thick walls. ABS (acrylonitrile butadiene styrene) plastic is non-conductive, non-magnetic. Check out the plumbing section at those stores.

LenAnderson@ieee.org

retired (from regular hours) electronic engineer person
LenAnderson@ieee.org

872. Re: Need Motorola Alert Monitor info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-04 01:41:41 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1c6c72b0c8bb4f769896bd@localhost>
Source record: 20505
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

In article <KejMd.2014$uc.513@trnddc04>, randy.belcher@verizon.net
says...

> Hey, have a '78 model Alert Monitor, M03CNB1102B
> VHF unit, silver front with black case, reset/alert/mon functions.
>
> Questions:
> Original battery type, location, voltage?
> Frequency range? Will it do 146.000MHz?
> Is it possible to turn down the volume on the alert tone?

In sequence:

Unknown. Best to adapt it to an external 12VDC supply.

Possibly. The VHF alert monitors were spec'd to bottom out at
150MHz. It may be possible to take one lower by increasing the value of
the padding capacitors across the receiver's oscillator and multiplier
coils. It is possible that it may go lower on its own. Never know until
you try.

> Need schematic, tuning and recrystal instruction.

That could be difficult. The manual for this receiver was Motorola
part #68-81048A55. This P/N comes up as no longer in the database, which
means that it is no longer available from Motorola (considering the age
of the unit, and Motorola's feverish desire to gain profit at any cost,
I'm not surprised).

You should check in with the gang at Batlabs
(http://batboard.batlabs.com). They may be of further assistance.

Happy hunting.

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped
with surreal ports?"

873. need some 1N34A - Radio Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-04 03:16:45 UTC
From: Carl WA1KPD <nantucketbound@yahoo.com>
Message-ID: <YZqdncK1n7eCdJ_fRVn-gw@comcast.com>
Source record: 20506
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Coincidently I picked up a pack of them today at RS.
They still carry them

--
Carl
WA1KPD
Visit My Boatanchor Collection at
http://home.comcast.net/~chnord/wa1kpd.html

<kb5whv@gmail.com> wrote in message
news:1107441970.432863.52880@o13g2000cwo.googlegroups.com...
>A little off topic, but have you checked out the Xtal Set Society? If
> you're going to get into crystal sets (a great idea!) then you'll
> probably want to check out they're newsletter and site. Their part's
> aren't the cheapest, and I would suggest the other suppliers mentioned
> in the thread, but the source of information is great.
>
> As for the Quaker Oat containers, do you have to have Quaker? I've
> found many generic brands in my area (great for my use since they are
> cheaper, and I don't eat that much oatmeal, but do use them for xtal
> set ideas from time to time) that still use the older style container.
> Try your local "dollar" stores and such.
>
> Good luck with the project!
> Jeramy
>

874. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-04 04:48:39 UTC
From: john jardine <john@jjdesigns.fsnet.co.uk>
Message-ID: <ctuubm$p36$1@newsg3.svr.pol.co.uk>
Source record: 20507
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"Mark" <makolber@yahoo.com> wrote in message
news:1107458702.351830.206970@f14g2000cwb.googlegroups.com...
>
>
> >
> > Must be my lucky week!. I needed to make some similar readings.
> Thanks!.
> > I still puzzle over the oft quoted "up to about 30mVrms the output
> from the
> > diode offers a square law response and will approximate a true RMS
> > measurement.
> > As the OP found, there's very little happening down there. Who makes
> these
> > sweeping statements?.
> > regards
> > john
>
> No it's true. Look at the curves and notice that the current scale on
> the x axis is a log scale. When the RF input is very small, the DC out
> is proportional to the log of the RF level i.e. the RF in dB. This is
> how the normal power meter works. It also provides a true RMS value
> for modulated RF signal. Once the signal gets too big and the diode
> begins to work as a converntoin rectifier, this relationship no longer
> holds true. Notice the curves break upeards. When the RF volatge to
> log I curves are straight line, this is rhe square law region where the
> diode current gives you true RMS readings of the RF voltage.
> Think of it as a voltage in dB to current converter.
>
> Mark
>
I know where you're coming in from, but whichever way I look at Win's graphs
I'm seeing a straight line for that 1N4148 at 0-30mv levels. Yes, the scales
are log-log but the constant of proportionality is dead straight linear. I.e
1mv RF in gives 1e-10 amps and 10mV in gives 1e-9 amps and pro-rata for all
points in between (you did see the double decade increments?). This agrees
with the 10Mohm value that's marked on the graph.
It shouldn't matter if the RF signal is swept over a 1 to 30mV range or just
a 5 to 5.01mV range, the DC out will be directly proportional to the 'DC' in
and no distortion of the waveform can occur, hence no dc offsets or
harmonics.
The graph next door though , the 1n5819, looks like it could offer up a tad
of rf dB-I rectification. Though to my eyes it still looks way more like a
resistor than anything with a square or log law response.

There'll be better devices out there that offer (say) quadratic like classical responses at these low levels but it's moving out of the 'common or garden' playground.
regards
john

875. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-04 05:09:44 UTC
From: john jardine <john@jjdesigns.fsnet.co.uk>
Message-ID: <ctuvj7$35v$1@news8.svr.pol.co.uk>
Source record: 20508
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"K7ITM" <k7itm@aol.com> wrote in message
news:1107465455.530569.269950@z14g2000cwz.googlegroups.com...
> Indeed, as Win says, you can get some signal out of a diode detector
> even for very low input levels. With fairly simple home-brew
> techniques but a lot of attention to the details of leakage currents
> and op amp offset voltages, I'm able to detect RF signals down to a
> very few tens of microvolts. That's using either a zero-bias Schottky
> detector diode such as the Agilent HSMS-2860, or an old germanium point
> contact diode. At very low signal levels, the optimum load resistance
> is quite high. (See Agilent detector diode ap notes for details.)
> Things are actually easier if you're only interested in the modulation
> component of an AM signal, and not in trying to detect the carrier
> level, since the offsets aren't particularly important for AC signals.
> A JFET audio amplifier, or even a carefully-designed bipolar amplifier,
> can give you a very low noise figure for the high source resistance
> that the diode detector running at low input levels gives you.
>
> There are tricks you can play to make a receiver that works from the
> power received by the antenna. If you live near a transmitter that's
> putting out significant power in your direction, you may be able to set
> up a rectifier for that received power and use it to run a micro-power
> amplifier following the detector for the station you wish to receive.
> If you want to hunt for weak stations, you'll need a carefully designed
> and built RF input tank/filter circuit. At night, especially, it's
> possible to listen to stations quite a ways away using no active
> components in the RF path before the detector.
>
> Cheers,
> Tom
>
10's of uV. Egad!. Wish I had your patience!. Built a feedback linearised RF
probe head last year, using a couple of dual BAT85 SM packages in its tip.
They were used as voltage doublers working into 10Mohms. I tried really,
really hard, (well, about an hour) to see a mV of RF i/p but random DC
shifts, thermocouple effects and second order temperature drifting called a
halt to the project. Wish I'd thought about these things before starting :-(
regards
john

876. Re: American QRP

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-04 05:45:05 UTC
From: TW <kilocycles**@**yahoo.com>
Message-ID: <hs2601tj1ke05kfsbafsj4ke973r0mc4j2@4ax.com>
Source record: 20509

On Tue, 1 Feb 2005 19:51:21 -0500, "xpyttl"
<xpyttl_NOSPAM@earthling.net> wrote:

>"TW" <kilocycles**@**yahoo.com> wrote in message
>news:82nvv0t32fcivsmq414bhth1iv54b5e9cs@4ax.com...
>> On Tue, 18 Jan 2005 21:07:36 -0500, beerbarrel <beerbarrel@cox.net>
>> wrote:
>>
>> It makes bathroom reading very difficult. That's where I keep my
>> stash of QRPARCI and AMQRP issues.
>
>Somebody posted this link on another ng
>
>http://www.is-sixsigma.com/Elmer/HB4Palm/HB4.html
>
>..
>
Darned good idea! Finally, a use for my IIIXE. Hope I don't drop it,
though....

877. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-04 13:34:08 UTC
From: Winfield Hill <hill_a@t_rowland-dotties-harvard-dot.s-edu>
Message-ID: <ctvtkg0tk8@drn.newsguy.com>
Source record: 20510
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

john jardine wrote...
>
> I know where you're coming in from, but whichever way I look at Win's graphs
> I'm seeing a straight line for that 1N4148 at 0-30mv levels. Yes, the scales
> are log-log but the constant of proportionality is dead straight linear. I.e
> 1mv RF in gives 1e-10 amps and 10mV in gives 1e-9 amps and pro-rata for all
> points in between (you did see the double decade increments?). This agrees
> with the 10Mohm value that's marked on the graph.

Right, but that part of my measurements cries out for further bench
exploration. It represents only one part, and is unconfirmed. Also,
what happens if the voltage is reversed? Are we to believe the diode
is a 10M resistor, shunted by a diode? I'm not comfortable with that.

--
Thanks,
- Win

878. Re: Nitpicking re. the glorious Desert Ratt 2 regen RX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-04 14:38:13 UTC
From: K7MEM <k7mem@myrealbox.com>
Message-ID: <cu01cn$bfu2@cui1.lmms.lmco.com>
Source record: 20511

SpamHog wrote:

> The Desrt Ratt HR regenerative receiver has a good reputation, and I'd
> love to build one, but I am a quite mediocre homebrewer... If I can
> get some potential problems out of the way I can better concentrate on
> the many others that will surely crop up!
>
> These are my doubts w.r.t. the DR2 as described in the .PDFs on Paul
> Harden's page:
> http://www.aoc.nrao.edu/~pharden/hobby/DR2.pdf
> http://www.aoc.nrao.edu/~pharden/hobby/DR2descr.pdf .
> Can anyone comment on any of these points?
>
> 1) Tuning Coil
> --------------
> The PDF mentions inductance, number of turns and wire gage,
> but leave us in suspense apropos the coil former:
> "T1 is wound directly on the PCB". Uh?
> I guess anything 5-6uH will do, but I can't keep from wondering...

Here is a link to a few pictures of an older version of the Desert Ratt.

http://www.njqrp.org/qhbextra/2/2a.html

You have to scroll down a little bit, but this shows that the coil is wound on a toroid. As long as it has good characteristics in the 3-30 MHz range, any one can be used. The permeability may vary from one toroid to another but you should be able experiment a little to get things right. Maybe someone else could suggest a proper toroid number. The one there looks like a T50-?? or T38-??. It's hard to tell.

> 2) Tuning Varicap
> -----------------
> "R5 sets the current across D2-D3" The reverse resistance on such
> rectifiers is huge, much greater than R5 (10kohm). I noticed that Paul
> Harden N5AN once offered V/C measurements on diodes for use as varicaps
> (http://www.kkn.net/archives/html/QRP-L/1998-01/msg00360.html)
> There, one sees a 1N4148, forward biased. From the specs one gleans
> that this diode has a sizeable current when forward biased at voltages
> within a reasonable tunng range - but we're talking about something
> quite different here. What gives?

Yes, forward biased the 1N4148 will have a high current. If you read further through that thread, someone else described a problem with using it in that mode. The high current caused excessive heating and drift. Not really recommended for use.

> 3) Q2 (oscillator) biasing
> -------------------------
> The resistor between C6 and C7 is not rated. A base bias on an regen's
> oscillator can be rather, well, critical....

C6, C7, and R? are there to filter and stabilize the Base-Emitter voltage and bypass the Base-Emitter junction from RF. A value of 100K should be sufficient. The value isn't really that critical.

Here is a link to a really old version of the Desert Ratt.

http://duke.usask.ca/~buydens/ham/ratt/index.htm

The coil is different but the biasing structure of Q2 is pretty much the same. Also note the slightly different part arrangement on the lm386. Get a spec sheet on the lm386 to see what each part is suppose to do.

> 4) IC Amplifier
> ------------
> R12 is indicated as "10W".
> What would a reasonable resistance rating be?

This just looks like a misprint. I believe that should be 10 Ohms. Just go to google and type in lm386 for all the information you can stand on that chip. I didn't see any configuration that used it in quite that way, but that doesn't mean it can't be used that wy.

> 5) Voltage Regulator
> --------------------
> The text says that the drop across the forward biased LED1
> is 1.3-1.8V, while across the Si rectifier D1 is 0.7V.
> In series they'd sum up to 2 - 2.5V, but on the circuit
> one reads a total drop of 3.0V, i.e. up to 1 V higher.
> Charles Kitchin's design fed the oscillator just 2.1V...
> Would 2.5V be enough? Or, do LEDs come with a wide variety
> of voltage drops?

The voltage drop across the diode D1 will be as specified for just about any 1N914 you use, however, the voltage across a LED depends on exactly which one you choose. Here is another link to a page that describes the kind of voltage drops you can expect from LEDs.

http://www.theledlight.com/LED101.html

It seems that this value can be any where between 1.7 and 4.6 volts depending on the type you choose. I seem to recall that even when you get a LED from Radio Shack the specs are printed on the back. Personally, I would shoot for the 3.0 volts, listed in the schematic.

> TIA to everyone!
>
> I hope this will encourage others to experiment with this circuit.

>
> Filippo (SpamHog)
> N1JPR/I2

--
Martin E. Meserve - K7MEM
http://www.k7mem.150m.com

879. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-04 16:26:00 UTC
From: john jardine <john@jjdesigns.fsnet.co.uk>
Message-ID: <cu0777$48n$1@news6.svr.pol.co.uk>
Source record: 20512
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"Winfield Hill" <hill_a@t_rowland-dotties-harvard-dot.s-edu> wrote in
message news:ctvtkg0tk8@drn.newsguy.com...
> john jardine wrote...
> >
> > I know where you're coming in from, but whichever way I look at Win's
graphs
> > I'm seeing a straight line for that 1N4148 at 0-30mv levels. Yes, the
scales
> > are log-log but the constant of proportionality is dead straight linear.
I.e
> > 1mv RF in gives 1e-10 amps and 10mV in gives 1e-9 amps and pro-rata for
all
> > points in between (you did see the double decade increments?). This
agrees
> > with the 10Mohm value that's marked on the graph.
>
> Right, but that part of my measurements cries out for further bench
> exploration. It represents only one part, and is unconfirmed. Also,
> what happens if the voltage is reversed? Are we to believe the diode
> is a 10M resistor, shunted by a diode? I'm not comfortable with that.
>
>
> --
> Thanks,
> - Win

Yes. Ive been mulling that over. If there is no static bias current flowing
through the diode and it magically switches to 'open circuit' when the
incoming voltage reverses sign, then it would still make a perfect 'average
respsonding' rectifier even at these mV or even uV levels. Just how does the
reverse current start to act in the reverse direction?. On the face of it, a
IN4148 seems easy enough to check out.
regards
john

880. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-04 17:15:53 UTC
From: Paul Burridge <pb@notthisbit.osiris1.co.uk>
Message-ID: <f8b7011e8hdnet1bdsr7m1sva29dbc0qmq@4ax.com>
Source record: 20513
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On 3 Feb 2005 07:49:33 -0800, "lemonjuice" <exskimos@anonymous.to>
wrote:

>Well if you want to cheat you can have more turns on the primary then
>the secondary of the input transformer and you get a higher voltage
>(grin). I'd have to see the exact circuit you are talking about to be
>of more help.

Input transformers are all very well, but some good voltage step-up
can be obtained by carefully chosen values of hi-Q capacitor and
inductor in series between the aerial and the diode. Of course this
makes the impedance even higher, just as the transformer would, but
how strong's your signal? It might be the cheapest alternative.
--

"What is now proved was once only imagin'd." - William Blake, 1793.

881. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-04 20:01:15 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1c6d7462d44650bc9896a0@news-central.giganews.com>
Source record: 20514
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

In article <ctvtkg0tk8@drn.newsguy.com>, hill_a@t_rowland-dotties-harvard-dot.s-edu says...
of my measurements cries out for further bench
> exploration. It represents only one part, and is unconfirmed. Also,
> what happens if the voltage is reversed? Are we to believe the diode
> is a 10M resistor, shunted by a diode? I'm not comfortable with that.

I'm confused. Is there some reason to expect the semiconductor material to be a perfect insulator with no resistivity at all? Nothing's perfect, and those diodes probably aren't made in the most exacting processes.

I would be blown away if you *couldn't* measure some ohmic current flow in a diode at any particular voltage level.

-- jm

---

http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

---

882. Tuned circuit Q question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-04 22:48:56 UTC
From: hexter@blazenet.net
Message-ID: <1107uuo52qbdb91@corp.supernews.com>
Source record: 20515

The source is 50 ohms, I am feeding through a 1000 ohm resistor to
my tuned circuit at 30mhz, and the load is over 5000 ohms (FET input).

I want to use a parallel resonant circuit to ground to form a pass
filter. If I want a Q of around 5, would I need 5000 ohm XL/XC ??

This would seem nearly correct. Have I calculated correctly?

883. Battery problems on IC2-SRA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-04 22:48:58 UTC
From: Brian Oakley <brianoakley@ispwest.com>
Message-ID: <cu0tv10110g@enews3.newsguy.com>
Source record: 20516

Hi,
Not sure this is the right spot to post this so please forgive me if its not. I have an Icom IC2-SRA 2mtr/scanner. The batter pack died on it and before I could replace it, the memory battery also went south. I used to be able to power it up with the plug in PS and listen to it but now it doesn't power up at all. PS is ok. I tried the reset for the processor but still nothing. Short of sending it in to Icom for repair, I thought I would ask for any advice here as to how to bring this rig back to life. I know I need to change the batteries, but will that get the rig working again, since its not operating off the PS now? Does anyone have any experience with these handie talkies? TIA
73,
Brian

884. Re: Tuned circuit Q question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 02:12:43 UTC
From: lenover21@aol.com
Message-ID: <20050204211243.12656.00000039@mb-m07.aol.com>
Source record: 20517

In article <1107uuo52qbdb91@corp.supernews.com>, hexter@blazenet.net (gudmundur) writes:

> The source is 50 ohms, I am feeding through a 1000 ohm resistor to
>my tuned circuit at 30mhz, and the load is over 5000 ohms (FET input).
>
> I want to use a parallel resonant circuit to ground to form a pass
>filter. If I want a Q of around 5, would I need 5000 ohm XL/XC ??
>
> This would seem nearly correct. Have I calculated correctly?

Not quite. Loaded Q is dependent on ALL losses in parallel with a parallel-resonant circuit. If you want a Q of around 5 then the R:Xc or R:Xl ratio is 5.

A problem seems to be the loading of the 50 Ohm source plus a series (?) resistance of 1000 Ohms. That alone puts 1050 Ohms in parallel with the resonant circuit. If the total parallel R is 1050 Ohms, the total from FET input and coil's own Q is 5000 Ohms, then the total parallel R will be 868 Ohms. The inductive reactance would have to be 1/5th of that or equivalent to 0.921 uHy. The Xl of 0.921 uHy is 173.6 Ohms at 30 MHz.

The problem is compounded by using a series resistor to feed the parallel resistance. If the resonant circuit has a total parallel resistance of 5000 Ohms, the magnitude of the impedance is that value, 5000 Ohms. But, with a series resistance from the 50 Ohm source there's a power loss from the equivalent voltage divider action equal to 5:6 or about 1.6 db at 30 MHz resonance.

It would be better to use another way to couple the 50 Ohm source, such as a tapped inductor. Tapping down at 1/10th of the turns has an approximate 1:100 impedance change which would transform the source to be about 5000 Ohms across the parallel L-C. That would change the needed inductance to get the loaded Q but there would be no extra losses involved. The new inductance value at resonance would be about 2.65 uHy for an Xl of 500 Ohms (1/5th of 5000 in parallel with 5000 Ohms).

Note: At resonance (and only at that frequency), the impedance across the L-C is entirely resistive. At any other frequency it is a complex number (both R and jX).

LenAnderson@ieee.org

retired (from regular hours) electronic engineer person
LenAnderson@ieee.org

885. Re: Battery problems on IC2-SRA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 02:18:50 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <1308019cjcjj4j9giddeu4ok9ljl0cq3u7@4ax.com>
Source record: 20518

On Fri, 4 Feb 2005 16:48:58 -0600, "Brian Oakley"
<brianoakley@ispwest.com> wrote:

>Hi,
> Not sure this is the right spot to post this so please forgive me if its
>not. I have an Icom IC2-SRA 2mtr/scanner. The batter pack died on it and
>before I could replace it, the memory battery also went south. I used to be
>able to power it up with the plug in PS and listen to it but now it doesn't
>power up at all. PS is ok. I tried the reset for the processor but still
>nothing. Short of sending it in to Icom for repair, I thought I would ask
>for any advice here as to how to bring this rig back to life. I know I need
>to change the batteries, but will that get the rig working again, since its
>not operating off the PS now? Does anyone have any experience with these
>handie talkies? TIA
>73,
>Brian
>
The PS may be sufficient to trickle charge the batteries, not enough
to actually power the unit. This is very typical for HTs. The battery
may be a necessary part of the circuit, even when running from wall
power.

It may be less expensive to buy the AA battery pack and drop in
regular alkalines or rechargables.

A good dealer who does service on Icoms should be able to explain your
options. Replacing the internal memory battery is no biggie for a
service center. It may be preventing a proper reset.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

886. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 03:22:52 UTC
From: john jardine <john@jjdesigns.fsnet.co.uk>
Message-ID: <cu1dmo$mt9$1@newsg3.svr.pol.co.uk>
Source record: 20519
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"Winfield Hill" <hill_a@t_rowland-dotties-harvard-dot.s-edu> wrote in
message news:ctvtkg0tk8@drn.newsguy.com...
> john jardine wrote...
> >
> > I know where you're coming in from, but whichever way I look at Win's
graphs
> > I'm seeing a straight line for that 1N4148 at 0-30mv levels. Yes, the
scales
> > are log-log but the constant of proportionality is dead straight linear.
I.e
> > 1mv RF in gives 1e-10 amps and 10mV in gives 1e-9 amps and pro-rata for
all
> > points in between (you did see the double decade increments?). This
agrees
> > with the 10Mohm value that's marked on the graph.
>
> Right, but that part of my measurements cries out for further bench
> exploration. It represents only one part, and is unconfirmed. Also,
> what happens if the voltage is reversed? Are we to believe the diode
> is a 10M resistor, shunted by a diode? I'm not comfortable with that.
>
>
> --
> Thanks,
> - Win

Test on a 1N4148.
ForwardV DiodeR
+50mV 8megs.
+30mV 9megs.
+20mV 10megs.
+10mv 12megs.
+5mV 21megs.
ReverseV
-5mV 21megs.
-10mV 30megs.
-30mV 270megs.

All the figures are suspect as the noise filter had a long settling time
and I was too lazy to wait but they do show a very sharp reverse cutoff, at
about 10-15mV.

And a bonus, a rectification test feeding the diode from a 60Hz source and
10k series R ...

ACi/p DCo/p
430mV 59mV
300mV 12mV
200mV 2.4mV
100mV 140uV
60mV 66uV
30mV 18uV
20mV 9uV
10mV 1uV
regards
john

887. Radio Free Colorado - A Successful New Internet Radio Station

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 04:41:35 UTC
From: Gary Burke <nospam@noreply.net>
Message-ID: <BE299C8F.7AF6%nospam@noreply.net>
Source record: 20520

Radio Free Colorado - A Successful New Internet Radio Station

NOTE: NEW CONNECTION URL'S GIVEN AT BOTTOM OF MESSAGE!

Radio Free Colorado
What Radio Once Was

Radio Free Colorado, a non-commercial Internet Radio Station, plays a lot of music you probably haven't heard in such a long time and have since forgotten how much you love. It's such a thrill when a forgotten song comes on and you say "Hey, I love this song" and all your fond memories of it come rushing back to you.

Our "Genre" (what kind of music we play) is VERY diverse. We play Modern/Classic Rock, Progressive Rock, Alternative (Modern and Retro), Pop, Billboard Classics, and Top Radio Hits from the 60's, 70's, 80's and 90's. We also play some Ambient/Instrumentals. No Rap or Hip-Hop, Classical, Jazz or Swing.

Radio Free Colorado streams music LIVE over the Internet using a high-fidelity 128 kbps MP3 stream. We use professional sound processing equipment to achieve a sound quality which we believe is superior to virtually all other 128 kbps streams.

Any computer with a DSL, Cable Modem (or faster) Internet connection that has a download speed capacity of at least 128 kbps can tune in.

Virtually all MP3 music players are capable of receiving live MP3 music streams over the Internet. Any music player compatible with streaming MP3 audio can receive Radio Free Colorado's broadcast.

Our MP3 broadcast stream is compatible with virtually all music software programs and works with PC's running Windows, Apple computers running OS X and other machines running Linux or Unix.

Radio Free Colorado is NOT beholden to anyone. There is no pre-approved "playlist", no one tells us what we can't play. Listeners can, however make song requests and if we have it we will play it.

Radio Free Colorado - Sample of Songs We Play

Go-Go's - Head Over Heels
Dire Straits - Walk of Life
Aimee Mann - Save Me (Acoustic - Recorded Live) - KBCO Studio C - Volume 14
Nena Hagen (Gabriela "Nena" Kerner) - 99 Luftballons (German) - 99 Luftballons
4 Non Blondes - What's Up
Cake - Short Skirt/Long Jacket - Comfort Eagle

Cracker - Euro Trash Girl - Garage d'Or
The Carpenters - Live At The Palladium 1976
Heart - Barracuda - The Essential Heart
Tom Petty & The Heartbreakers - You Don't Know How It Feels - Wildflowers
A Flock Of Seagulls - I Ran (So Far Away) - The Best Of A Flock Of Seagulls
Alphaville - Forever Young (Live) - Forever Young
Heaven 17 - Let Me Go (Original Unedited Version) - CD Single
The Waitresses - Quit - Wasn't Tomorrow Wonderful?
The Jam - Going Underground - The Sound of the Jam
Yaz - Situation (US 12" Mix) - Upstairs At Eric's
Slow Children - Vanessa Vacillating - Best Of Slow Children
Tori Amos - Silent All These Years - Little Earthquakes
Pink Floyd - One Of My Turns - The Wall (Disc 2)
Haysi Fantayzee - Shiny Shiny - Battle Hymns For Children Singing
Aimee Mann - I've Had It (Acoustic - Recorded Live) - Rare On Air, Volume 2: "Morning Becomes Eclectic"
Depeche Mode - Everything Counts (Original Unedited Version) - Depeche Mode
The Police - Don't Stand So Close To Me - Zenyatta Mondatta
Killer Pussy - Teenage Enema Nurses In Bondage - Bikini Wax
The Dead Milkmen - Punk Rock Girl - Death Rides a Pale Cow: The Ultimate Collection
The Vapors - Turning Japanese - Vaporized
Romeo Void - Never Say Never - Warm, In Your Coat
Siouxsie & The Banshees - Christine - The Best of Siouxsie and The Banshees
Echo & The Bunnymen - The Killing Moon (12" Version) - Ballyhoo: The Best Of Echo & The Bunnymen
Gary Numan - Cars - The Pleasure Principle
Berlin - The Metro - Best Of Berlin 1978 to 1988
U2 - Vertigo - How to Dismantle an Atomic Bomb
Peter Gabriel - Don't Give Up (Live) - Secret World Live (Disc 2)
George Harrison - Give Me Love (Give Me Peace On Earth) - The Best Of George Harrison
Where Did You Sleep Last Night - Kurt Cobain w/Nirvana - MTV Unplugged in New York
The Final Cut: A Requiem for the Post War Dream by Roger Waters
Missing Persons - Words - Spring Session M
Martin L. Gore - Compulsion - Counterfeit e.p.
Haircut 100 - Love Plus One (12" Version) - Pelican West
Split Enz - Six Months In A Leaky Boat - History Never Repeats - The Best Of Split Enz
Green Day - American Idiot (Uncut) - American Idiot
Social Distortion - Ball And Chain - Social Distortion
Primal Scream - Movin' on Up - Screamadelica
The Jim Carroll Band - People Who Died - Just Can't Get Enough: New Wave Hits Of The '80's Volume 6
Scala - Creep (Radiohead) - Scala On The Rocks
Led Zeppelin - Living Loving Maid (She's Just A Woman) - Led Zeppelin II
Creedence Clearwater Revival - Down On The Corner - Chronicle, Vol. 1
The Beatles - The Fool On The Hill (Demo) - Anthology 2: Disc 2
Oasis - Don't Look Back In Anger (Live) - MTV Unplugged

The Who - Eminence Front (Live) - Join Together (Disc 2)
Crowded House - Something So Strong (Live) - Recurring Dream: The Very Best of Crowded House
New Radicals - You Get What You Give - Maybe You've Been Brainwashed Too
Billy Joel - She's Got A Way (Live) - Soundboard Recording
Altered Images - I Could Be Happy - (12" Import)
The Bangles - Walk Like An Egyptian - Different Light
B-Movie - Nowhere Girl (Original Unedited Version) - 12" LP
Suzanne Vega - If You Were In My Movie - 99.9 Fï¿½
Patti Smith - Dancing Barefoot - Land (1975-2002)
The Clash - Know Your Rights - Combat Rock
David Bowie - Space Oddity - Space Oddity
Primitive Radio Gods - Standing Outside A Broken Phone Booth With Money In My Hand - Rocket
The Pretenders - My City Was Gone - Learning To Crawl
Midnight Oil - Beds Are Burning (12" Version) - 20,000 Watt R.S.L.
Pete Yorn - Life On A Chain - Musicforthemorningafter
Public Image Limited - Rise - Compact Disc
Violent Femmes - Add It Up - Violent Femmes: Deluxe Edition
The Psychedelic Furs - Ghost In You - Mirror Moves
R.E.M. - Radio Free Europe - Murmur
XTC - Dear God - Skylarking
Big Country - In A Big Country - The Crossing
Peter Murphy - Cuts You Up - Deep

These songs are just a partial list of some of the "rarer" songs that not only don't get played on the radio anymore but are hard to find as well. Virtually all of the songs on this sample list have long since been sent to the record company boneyard, which is why we play them. We have over 1,400 songs of all varieties and the list grows every day.

Artist and Song suggestions and requests are gladly accepted! We would like to grow RFC enough to satisfy a variety of tastes yet remain completely non commercial.

iTunes, RealPlayer, Winamp or Audion 3 (Mac only) are recommended for best listening quality.

Here is a list of recommended MP3 software programs you can use to listen to RFC's broadcast. They are all available for free.

iTunes Version 4.7 for Windows or Mac:
http://www.apple.com/itunes/download/

RealPlayer Version 10 for Windows:
http://www.real.com/affiliates/superpass.html?pcode=cj&src=cj

RealPlayer Version 10 for Mac:
http://www.real.com/?src=blackjack

RealPlayer Version 10 for Linux:
http://www.real.com/linux/

Winamp 5.08 from Nullsoft for Windows:
http://www.winamp.com/player/

Note: If you are using an earier version of Winamp, Nullsoft urges you to update
your software due to several "security flaws" that are fixed in version 5.08.

Audion 3 for Mac:
http://www.panic.com/audion/
Audion is now free of charge. Use the following link to get a free serial number for registering Audion:
http://www.panic.com/audion/buy.html

XMMS, MPG123, etc. MP3 Players for Linux/Unix or X Windows users:
http://www.uk6x.com/applicationservices/mp3radio.html

The "URL" address (the location on the Internet of Radio Free Colorado's Broadcast) is:
http://kara.fast-serv.com:8630/

For iTunes use the URL address:
http://kara.fast-serv.com:8630/listen.pls

For RealPlayer use the URL address:
http://kara.fast-serv.com:8630/listen.pls

For Winamp use the URL address:
http://kara.fast-serv.com:8630

For the Audion 3 media player, use the URL address:
http://kara.fast-serv.com:8630

You can find where to type RFC's "URL" address into iTunes under the menu item "Advanced" - "Open Stream".
For RealPlayer, look under "File" - "Open Location".
For Winamp, look under "File" - "Play URL".

We genuinely welcome Artist and Song suggestions, listener comments, etc.
You may contact Radio Free Colorado by visiting our website at:

http://www.boomspeed.com/garyburke/radiofreecolorado/RadioFreeColorado.html

Radio Free Colorado is protected under Copyright Law.

It is legal for you to listen as long as you don't record. :-)

Best wishes,

Gary Burke
Owner/Operator

888. Re: Tuned circuit Q question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 05:34:43 UTC
From: hexter@blazenet.net
Message-ID: <1108mnjclf12iad@corp.supernews.com>
Source record: 20521

In article <20050204211243.12656.00000039@mb-m07.aol.com>, lenover21@aol.com says...
>
>In article <1107uuo52qbdb91@corp.supernews.com>, hexter@blazenet.net >(gudmundur) writes:
>
>> The source is 50 ohms, I am feeding through a 1000 ohm resistor to >>my tuned circuit at 30mhz, and the load is over 5000 ohms (FET input).
>>
>> I want to use a parallel resonant circuit to ground to form a pass >>filter. If I want a Q of around 5, would I need 5000 ohm XL/XC ??
>>
>> This would seem nearly correct. Have I calculated correctly?
>
> Not quite. Loaded Q is dependent on ALL losses in parallel
> with a parallel-resonant circuit. If you want a Q of around 5
> then the R:Xc or R:Xl ratio is 5.
>
> A problem seems to be the loading of the 50 Ohm source plus
> a series (?) resistance of 1000 Ohms. That alone puts 1050
> Ohms in parallel with the resonant circuit. If the total parallel
> R is 1050 Ohms, the total from FET input and coil's own Q is
> 5000 Ohms, then the total parallel R will be 868 Ohms. The
> inductive reactance would have to be 1/5th of that or equivalent
> to 0.921 uHy. The Xl of 0.921 uHy is 173.6 Ohms at 30 MHz.
>
> The problem is compounded by using a series resistor to feed
> the parallel resistance. If the resonant circuit has a total parallel
> resistance of 5000 Ohms, the magnitude of the impedance is
> that value, 5000 Ohms. But, with a series resistance from the
> 50 Ohm source there's a power loss from the equivalent voltage
> divider action equal to 5:6 or about 1.6 db at 30 MHz resonance.
>
> It would be better to use another way to couple the 50 Ohm
> source, such as a tapped inductor. Tapping down at 1/10th of
> the turns has an approximate 1:100 impedance change which
> would transform the source to be about 5000 Ohms across the
> parallel L-C. That would change the needed inductance to get
> the loaded Q but there would be no extra losses involved. The
> new inductance value at resonance would be about 2.65 uHy for
> an Xl of 500 Ohms (1/5th of 5000 in parallel with 5000 Ohms).
>
> Note: At resonance (and only at that frequency), the impedance
> across the L-C is entirely resistive. At any other frequency it is

> a complex number (both R and jX).
>
> LenAnderson@ieee.org
>
> retired (from regular hours) electronic engineer person
>LenAnderson@ieee.org

I see my error, the XL/XC is one fifth, not five times the R.
I see this now in tank circuits where Q=10 R=2000 XL/XC=200.

O.K., now I can calculate my parts. This is for a bandpass
preselector, and loss is no problem, there is plenty of drive
available. I just need some relative measure of if any power
in the total signal level happens to be at 30mhz plus or minus
about 250kc at perhaps a 3db slope.

TNX KD3SH (WN3SOH-WB3BIO)

889. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 12:48:26 UTC
From: Winfield Hill <hill_a@t_rowland-dotties-harvard-dot.s-edu>
Message-ID: <cu2faq02dun@drn.newsguy.com>
Source record: 20522
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

John Miles wrote...
>
> Winfield Hill wrote...
>> http://www.picovolt.com/win/elec/comp/diode/diode-curves.html ...
>> that part of my measurements cries out for further bench exploration.
>> It represents only one part, and is unconfirmed. Also, what happens
>> if the voltage is reversed? Are we to believe the diode is a 10M
>> resistor, shunted by a diode? I'm not comfortable with that.
>
> I'm confused. Is there some reason to expect the semiconductor material
> to be a perfect insulator with no resistivity at all? Nothing's
> perfect, and those diodes probably aren't made in the most exacting
> processes.
>
> I would be blown away if you *couldn't* measure some ohmic current flow
> in a diode at any particular voltage level.

Agreed. It's the rather low 10M value that raises my eyebrows.
Hence my suggestion that the measurements be revisited. Picked up
by John Jardine, who obtained similar values, copied below:

Test on a 1N4148.
ForwardV DiodeR
+50mV 8megs.
+30mV 9megs.
+20mV 10megs.
+10mv 12megs.
+5mV 21megs.
ReverseV
-5mV 21megs.
-10mV 30megs.
-30mV 270megs.

John also suggests the measurements may need further refinement.

Oops! I can think of several circuits I've designed over the years
using diodes for discharge protection that might not work exactly as
I intended, given this observation. And I recall several circuits
where I intentionally back biased the diode a few hundred millivolts
to insure an open circuit.

--
Thanks,
- Win

890. Desert Ratt 2 HF regen rx: questions, replies from NA5N

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 13:40:13 UTC
From: SpamHog <n1jpr@hotmail.com>
Message-ID: <1107610813.879539.50050@l41g2000cwc.googlegroups.com>
Source record: 20523

Thank you Martin! Great pointers! {grrr... I hate it when Google's interface gives u no feedback & u end up reposting n times.... apologies for not using a serious news client}

I also got very interesting replies directly from Paul Harden.

Paul ran into some personal matters that required much of his attention for a while, but he's well aware that the latest PDF on his site has a few issues.

On Wed, 2 Feb 2005, Filippo Cattaneo wrote:

> 1) Tuning Coil
> --------------
> You mention inductance, number of turns and wire gage,
> but leave us in tantalizing suspense w.r.t. the former:
> "T1 is wound directly on the PCB"

I did the webpage about a year ago when I began designing a kit version for the DR2. Since then, my xyl broke her foot, an extremely heavy work load, and recently, a QRP club trying to kit the DR2 without my permission. So I temporarily removed the coil winding info. I am hoping to fire things back up to get the DR2 kitted this summer.

The problem with a kit, to make things consistent, is winding the coil. For one-of-a-kind homebrew, you can use anything, such as the 35mm film can suggested, etc.

> - as if there was some secret advantage
> in winding "on the PCB".

Nothing secret. For the kit, the coil will be wound directly on the board, that is, there will be two "slots" tooled into the board for winding the coil. It works surprisingly well and a fairly decent Q. It is an approach much easier than other first-time kit methods of winding a coil.

> I guess anything 5-6uH will do,
> but I can't keep from wondering:

That is a good range if you are using an air variable in the 200-300pF range.

With using back-biased diodes as varicaps, such as the 1N4004, you only get about 60pF of tuning range, and the new prototype I'm working on about 80pF. For that reason, you want to have the coil inductance in the 2-3uH region for wider tuning.

> - p-Chloro-alpha,alpha,alpha-trifluorotoluene?
Yes, that's my secret, but keep it
under the rug for right now :-)

> 2) Tuning Varicap
> ----------------
> "R5 sets the current across D2-D3"
> The reverse resistance on such rectifiers is huge,
> much greater than R5.
> I noticed your V/C measurements on diodes,
> (http://www.kkn.net/archives/html/QRP-L/1998-01/msg00360.html)
> and also that a 1N4148 has a sizeable current when forward biased
> at voltages within a reasonable tunng range -
> but we're taling about something quite different here.
> What gives?

I've never found 1N914/1N4148 to be very consistent, and in fact, some batches I've tested have the maximum capacitance when forward biased. I prefer the 1N4004/4005 series, as the V/C response is very consistent. Much of the idea of the DR2 is to build it with very common components. Obviously, a 100-200pF range varicap would be ideal, but they are hard to find and expensive. R5 can always be tinkered with to get the maximum tuning range for the diode that is actually selected.

> 3) Amplifier
> ------------
> R12 is indicated as "10W"

R11 and R12 are 10 ohms. I never noticed that before on R12 -thanks. That happens when you convert to .pdf and the translater fails to convert the special symbol. The omega symbol in the symbol font is the capital letter W. It just didn't get converted. 1/4W is fine.

Both resistors are optional. R11 helps those LM386 that like to motor-boat when the capacitor (C19) is not enough. Just forms a low pass filter to keep audio off the Vcc line. R12 helps cross-over distortion, but frankly, the regen action alone adds far more -hi.

> 4) Voltage Regulator
> --------------------
> You say that the drop across the forward biased LED1 is 1.3-1.8V,
> while across the Si rectifier D1 it's 0.7V.
> In series they'd sum up to 2 - 2.5V, but you also say that
> the voltage in the circuit is 3.0V, up to 1 V higher.
> Charles Kitchin's design fed the oscillator just 2.1V...
> Anything more we need to know? Would 2V be enough?

I have built several of these circuits with Kitchin's 3-diodes-in-series scheme with good results. The LED was added several years ago when several asked how would they add an LED to indicate power on. So I added the LED, using it as a "poor mans regulator" and the power on indicator to kill 2 birds with one stone. D1 raises this

voltage a bit, providing the lower voltage as the bias to the emitter follower, and affording some isolation between that bias and the regen bias, which knocked down some objectionable oscillations.

I apologize for the confusion in voltages. The DR2 has been documented and written about several times over the years, so discrepencies appear to exist. The batch of LED's I purchased for the kit drops 2.2v, making the total voltage almost 3v. Your mileage will differ.

One of the secrets of this regen stage, however, is the relatively low operating voltage. This is what keeps it from going into a wild regen oscillation like other circuits. The smoother regen action makes it much easier to control, holding in there over a wider frequency range, and makes it much nicer for AM detection. For this reason, this detector is not well suited for CW reception, as you never really get that "howl" type of regen oscillation.

Let me know if there are any other details I can help you with, and of course, I'm always interested in how others have built theirs. Due to having to postpone my plans to kit the DR2, the documentation never got completed and there are a few "holes" in it. I am hoping to get the prototype for the kit built before long, and when finalized, I will update the schematic, exact parts list and circuit description, including some drawings on how to build it "Manhattan Style."

> I thank you for your attention
> and hope you'll share some wisdom with us...

Likewise, let me know how you build yours on your end.

> Best Regards,
>
> Filippo Cattaneo
> N1JPR/I2

72, Paul NA5N

891. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 14:49:02 UTC
From: Stephen <atkinss@shaw.ca>
Message-ID: <pan.2005.02.05.14.44.42.673434@shaw.ca>
Source record: 20524
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

On Sun, 30 Jan 2005 23:52:03 +0000, KW wrote:

>
> "G1LVN" <google@g1lvn.org.uk> wrote in message
> news:1107125695.735520.275940@c13g2000cwb.googlegroups.com...
>> intelligent amateur radeo? Is that like a rodeo?
>>
>
> You could get horse with talking too much!
>
> KW

Okay enough on my ability to type and spell. I'm only a programmer not an
English major.

Stephen

892. Re: Tuned circuit Q question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 15:42:57 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <5Q5Nd.49660$IV5.18534@attbi_s54>
Source record: 20525

The loading on the resonator is 1050 ohms in parallel with 5000 ohms, which is 868 ohms. A coil or capacitor reactance value that is 868 / 5 ohms (173.6 ohms) produces a Q of 5.

The initial value of L is

L = 173.6 / (2 * pi * 30MHz) = 0.92 uH

An additional loading is due to the resonator itself, which is the product of the coil Q times coil reactance.Let's assume a coil Q of 200. The resistance value of the coil itself is

Q * XL = 200*173.6 = 38720 ohms

The resistance loading by the capacitor can usually be neglected if it is very small.

The loading on the output side by the combination of the 5000 ohm load and the 38720 is 4428 ohms.

Go back to the beginning and get a slightly revised value of the resistive loading = 849 ohms that includes the loading by the coil itself. Recalculate L and C for this slightly different value of loading.

This iterative process can be stopped here.

Connecting the 50 ohm source directly to the coil through a 1000 ohm resistor produces an additional power loss which is equal to

20 * log[(1000+4428) / 4428)] = 1.8 dB.

This additional loss may not be acceptable in some applications. A low-loss coupling transformer (e.g. tapped coil) or low-loss tuned network is a better approach.

Bill W0IYH

"gudmundur" <hexter@blazenet.net> wrote in message
news:1107uuo52qbdb91@corp.supernews.com...
> The source is 50 ohms, I am feeding through a 1000 ohm resistor to
> my tuned circuit at 30mhz, and the load is over 5000 ohms (FET input).
>
> I want to use a parallel resonant circuit to ground to form a pass
> filter. If I want a Q of around 5, would I need 5000 ohm XL/XC ??
>
> This would seem nearly correct. Have I calculated correctly?
>

893. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 15:43:17 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <pMhflnAVmOBCFweh@jmwa.demon.co.uk>
Source record: 20527
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

I read in sci.electronics.design that john jardine
<john@jjdesigns.fsnet.co.uk> wrote (in <cu1dmo$mt9$1@newsg3.svr.pol.co.u
k>) about 'Diode and very small amplitude high frequencies signals', on
Sat, 5 Feb 2005:
>Test on a 1N4148.
>ForwardV DiodeR
>+50mV 8megs.
>+30mV 9megs.
>+20mV 10megs.
>+10mv 12megs.
>+5mV 21megs.
>ReverseV
>-5mV 21megs.
>-10mV 30megs.
>-30mV 270megs.

How did you measure the resistance? Is it an incremental resistance
(slope of the V/I curve at the data point) or the slope of a line
joining the origin to the data point on the curve.
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

894. Re: Tuned circuit Q question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 15:49:28 UTC
From: "Donald J. Miller" <donmillerNOSPAM@spamnotmindspring.com>
Message-ID: <4204e78f$0$11725$9a6e19ea@news.newshosting.com>
Source record: 20526

Well. the 1050 ohm source in parrallel with the 5000 ohm load puts the resistance seen by the tank at around 867 ohms.

The circuit reactances would need to be RL/Q = 174 ohms.

I think you multiplied instead of divided. The calculations above assume that the Q of the elements that you use is large enough not to impact the calculations. You can calculate the equivilent parrallel resistance of the inductor you select, and add it in parrallel with the 867 ohms to assess the impact of a finite-Q inductor.

Don

895. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 18:17:22 UTC
From: Dave Holford <MyLastname@DELETE_THISsympatico.ca>
Message-ID: <B48Nd.24320$Ck1.2037654@news20.bellglobal.com>
Source record: 20528
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Stephen wrote:
> On Sun, 30 Jan 2005 23:52:03 +0000, KW wrote:
>
>
>>"G1LVN" <google@g1lvn.org.uk> wrote in message
>>news:1107125695.735520.275940@c13g2000cwb.googlegroups.com...
>>
>>>intelligent amateur radeo? Is that like a rodeo?
>>>
>>
>>You could get horse with talking too much!
>>
>>KW
>
>
> Okay enough on my ability to type and spell. I'm only a programmer not an
> English major.
>
> Stephen

That must make for some interesting debugging exercises?

Dave

896. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 19:30:30 UTC
From: Winfield Hill <hill_a@t_rowland-dotties-harvard-dot.s-edu>
Message-ID: <cu36sm01nbj@drn.newsguy.com>
Source record: 20529
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

```
Winfield Hill wrote...
>
> John Miles wrote...
>>
>> Winfield Hill wrote...
>>> http://www.picovolt.com/win/elec/comp/diode/diode-curves.html ...
>>> that part of my measurements cries out for further bench exploration.
>>> It represents only one part, and is unconfirmed. Also, what happens
>>> if the voltage is reversed? Are we to believe the diode is a 10M
>>> resistor, shunted by a diode? I'm not comfortable with that.
>>
>> I'm confused. Is there some reason to expect the semiconductor material
>> to be a perfect insulator with no resistivity at all? Nothing's
>> perfect, and those diodes probably aren't made in the most exacting
>> processes.
>>
>> I would be blown away if you *couldn't* measure some ohmic current flow
>> in a diode at any particular voltage level.
>
> Agreed. It's the rather low 10M value that raises my eyebrows.
> Hence my suggestion that the measurements be revisited. Picked up
> by John Jardine, who obtained similar values, copied below:
>
> Test on a 1N4148.
> ForwardV DiodeR
> +50mV 8megs.
> +30mV 9megs.
> +20mV 10megs.
> +10mv 12megs.
> +5mV 21megs.
> ReverseV
> -5mV 21megs.
> -10mV 30megs.
> -30mV 270megs.
>
> John also suggests the measurements may need further refinement.
>
> Oops! I can think of several circuits I've designed over the years
> using diodes for discharge protection that might not work exactly as
> I intended, given this observation. And I recall several circuits
> where I intentionally back biased the diode a few hundred millivolts
> to insure an open circuit.
```

And others where I used a transistor collector or JFET gate instead.

Pease Porridge in the Feb 3rd issue of Electronic Design mentions this problem, and Bob suggests using a transistor. "Using 2n3904s as diodes is very important because most ordinary diodes are much too leaky around +/-60mV to work well. Ordinary gold-doped 1n914s and 1n4148s are quite unsuitable..."

--
Thanks,
- Win

897. Re: Diplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 20:20:31 UTC
From: CWB <cboone@nospam.earthlink.net>
Message-ID: <jU9Nd.15192$uL5.878@fe2.texas.rr.com>
Source record: 20530

A diplexer in your case is merely a high pass and low pass filter connected at the common point. NO the Sat diplexers will NOT work....the cut off freq is wrong and they dont handle power well...
You COULD build one easily if you know the component values needed for the filters....but Larsen, Comet, Diamond and MFJ (which is the cheapest and most cost effective) all make one....You can get a MFJ 916B for about $30 bucks...and it will do what you need.

Chris
WB5ITT
(Not employed or paid by MFJ whatsoever)

<stryped@hotmail.com> wrote in message
news:1106661933.547773.102670@z14g2000cwz.googlegroups.com...
> I have an older ALinco DR 590 radio with two antenna outputs, one for
> vhf and one for uhf.
>
> What is the cheapest way to be able to use on dual coverage antenna?
> Can I use a satellite diplexer, can I make one? ANy advice is
> appreciated!
>

898. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 20:42:35 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <42052fa6.566119@news.iol.ie>
Source record: 20531
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Stephen <atkinss@shaw.ca> wrote:

: Okay enough on my ability to type and spell. I'm only a programmer not an
: English major.
:
: Stephen

in Brians eyes .. a "LOWLY" programmer.

899. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 20:45:25 UTC
From: huLLy <g4sdw@aol.com>
Message-ID: <36kphcF53gjrqU1@individual.net>
Source record: 20532
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

ZZZPK wrote:
> Stephen <atkinss@shaw.ca> wrote:
>
>> Okay enough on my ability to type and spell. I'm only a programmer
>> not an English major.
>>
>> Stephen
>
>
> in Brians eyes .. a "LOWLY" programmer.

Even an English squaddie could spell 'radio' for goodness sake..

Yes, before anyone points out the obvious... I know!

--
huLLy
VOIP SIP Phone Number 4823176 on Global Village
Or +44 8703 408916 to my VOIP line
email g4sdw@aol.com (Loon reports welcome)
http://www.giganews.com/customer/gn119503

900. Re: Battery problems on IC2-SRA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 20:51:46 UTC
From: Brian Oakley <brianoakley@ispwest.com>
Message-ID: <cu3bec0f7s@enews2.newsguy.com>
Source record: 20534

Thanks for the help Gary. Can anyone here recommend a good Icom service
center? I live in the DFW area. Any help is appreciated. TIA.
Brian

"Gary S." <Idontwantspam@net> wrote in message
news:1308019cjcjj4j9giddeu4ok9ljl0cq3u7@4ax.com...
> On Fri, 4 Feb 2005 16:48:58 -0600, "Brian Oakley"
> <brianoakley@ispwest.com> wrote:
>
> >Hi,
> > Not sure this is the right spot to post this so please forgive me if
its
> >not. I have an Icom IC2-SRA 2mtr/scanner. The batter pack died on it
and
> >before I could replace it, the memory battery also went south. I used to
be
> >able to power it up with the plug in PS and listen to it but now it
doesn't
> >power up at all. PS is ok. I tried the reset for the processor but still
> >nothing. Short of sending it in to Icom for repair, I thought I would ask
> >for any advice here as to how to bring this rig back to life. I know I
need
> >to change the batteries, but will that get the rig working again, since
its
> >not operating off the PS now? Does anyone have any experience with these
> >handie talkies? TIA
> >73,
> >Brian
> >
> The PS may be sufficient to trickle charge the batteries, not enough
> to actually power the unit. This is very typical for HTs. The battery
> may be a necessary part of the circuit, even when running from wall
> power.
>
> It may be less expensive to buy the AA battery pack and drop in
> regular alkalines or rechargables.
>
> A good dealer who does service on Icoms should be able to explain your
> options. Replacing the internal memory battery is no biggie for a
> service center. It may be preventing a proper reset.
>
> Happy trails,
> Gary (net.yogi.bear)
> --

> at the 51st percentile of ursine intelligence
>
> Gary D. Schwartz, Needham, MA, USA
> Please reply to: garyDOTschwartzATpoboxDOTcom

901. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 20:53:20 UTC
From: lemonjuice <exskimos@anonymous.to>
Message-ID: <1107636800.949130.224320@c13g2000cwb.googlegroups.com>
Source record: 20533
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Fri, 04 Feb 2005 17:15:53 +0000, Paul Burridge
<pb@notthisbit.osiris1.co.uk> wrote:

>On 3 Feb 2005 07:49:33 -0800, "lemonjuice" <exskimos@anonymous.to>
>wrote:
>
>>Well if you want to cheat you can have more turns on the primary
then
>>the secondary of the input transformer and you get a higher voltage
>>(grin). I'd have to see the exact circuit you are talking about to
be
>>of more help.
>
>Input transformers are all very well, but some good voltage step-up
>can be obtained by carefully chosen values of hi-Q capacitor and
>inductor in series between the aerial and the diode. Of course this
>makes the impedance even higher, just as the transformer would, but
>how strong's your signal? It might be the cheapest alternative.

Yes if you use a serial resonant with a capacitor, inductor and a
resistor as you're suggesting you get voltage amplification factor
exactly equal to the Q of the circuit plus you get frequency and
bandwidth selectivity

With a transformer you get all 3 of the above without having to add an
inductor (as you use the inductors in the windings of the transformer)
plus you get impedance level shifting of the capacitance and
resistance in the secondary to the primary multiplied by the square of
the turns ratio multiplied by the capacitance and resistance in the
secondary of the transformer.
Is it worth it. I can't tell but I see more parallel resonant circuits
then serial ones .

I've actually seen implementations of the above using positive and
negative feedback circuits with an opamp to get some really interesting
results.

902. wire strippers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 21:03:08 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <OXaNd.37752$BQ2.34242@bignews6.bellsouth.net>
Source record: 20536
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

Anybody remember that cold head soldering iron advertised on tv
a while back? It was supposed to come with a pair of these
neat looking wire strippers. Well today at the Miami hamfest
someone was selling just the wire strippers. I got two of the
smaller ones good for .2-3mm wire (what's that in AWG?) and
one of the larger ones good for .2-6mm wire for $20.
These really are cool wire strippers, they quickly strip
any guage wire (in the supported range) without nicking the
wire. They even appear to work on some wire wrap wire that
is usually impossible to strip except with hard to find
'no-nick' brand cutters. (though you have to be carefull to
put the wire in the right hand side of the cutters where
the opening is a bit wider.

903. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 21:20:50 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <42053893.2851814@news.iol.ie>
Source record: 20535
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"huLLy" <g4sdw@aol.com> wrote:

: ZZZPK wrote:
: > Stephen <atkinss@shaw.ca> wrote:
: >
: >> Okay enough on my ability to type and spell. I'm only a programmer
: >> not an English major.
: >>
: >> Stephen
: >
: >
: > in Brians eyes .. a "LOWLY" programmer.
:
: Even an English squaddie could spell 'radio' for goodness sake..
:
: Yes, before anyone points out the obvious... I know!

yes..the hook was the size of LVN's sigma4 aerial.

904. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 21:48:26 UTC
From: huLLy <g4sdw@aol.com>
Message-ID: <36kt92F552spvU1@individual.net>
Source record: 20537
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

ZZZPK wrote:
>
> yes..the hook was the size of LVN's sigma4 aerial.

If they didn't bend in half with a whisp of wind, I would have put one up
here...
--
huLLy
VOIP SIP Phone Number 4823176 on Global Village
Or +44 8703 408916 to my VOIP line
email g4sdw@aol.com (Loon reports welcome)
http://www.giganews.com/customer/gn119503

905. Need TM 701 for parts VHF/UHF dual band oldie

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 22:36:28 UTC
From: Ron <ron@onwisconsin.com>
Message-ID: <eria01tt4a8bhab0jc73d7ov6dkrju81dp@4ax.com>
Source record: 20538

Sorry if off topic...thought that maybe one of you hardware hackers
might have a tm 701 skeleton around for parts use.

ron@onwisconsin.com

906. Re: Megger Bridge (Similar to Wheatstone) to a good home?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 23:12:09 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <cu3jlh$3lq$2@news.utelfla.com>
Source record: 20539
Cross-posted to: uk.radio.amateur,alt.engineering.electrical,rec.radio.amateur.homebrew

Again my offer stands assuming you still have it as "the bin man came
tuesday morning".

Airy R.Bean wrote:

>POSTING REPEATED DUE TO CHILDISH RESPONSE FROM
>A NUMBER OF PEOPLE WHO SHOWED THEMSELVES UP
>FOR WHAT THEY REALLY ARE.
>
>LAST DAY OF OFFER! MUST END TOMORROW!!!!
>
>(BIN MAN COMES TUESDAY MORNING)
>
>(The person who donated it to me was going to bin it anyway)
>
>"Airy R.Bean" <Me@privacy.net> wrote in message
>news:35v4t7F4n65euU1@individual.net...
>
>
>>I've been given a Megger (500V Hand Generator), it's not
>>actually a Wheatstone bridge, but it does do the Varley
>>Bridge measurement.
>>
>>Resistance measurement from MegOhms to MilliOhms!
>>
>>I've already got one, which I use for accurate resistance
>>measurement (Box is about 9" cube) and I don't
>>need another!
>>
>>Free to a good home!
>>
>>
>>
>>
>
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"

The Lost Deep Thoughts By: Jack Handey
Before a mad scientist goes mad, there's probably a time when he's only partially mad. And this is the time when he's going to throw his best parties.

907. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-05 23:34:20 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <0KcNd.4461$W93.3821@newsfe2-win.ntli.net>
Source record: 20540

> Thanks for the info. I expecting the project will take me a year to
> build. But thats okay. I still need to get my license.
> Stephen
==========
Getting a licence might take you just a weekend or 2 ;)

Frank GM0CSZ / KN6WH

908. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 00:24:46 UTC
From: john jardine <john@jjdesigns.fsnet.co.uk>
Message-ID: <cu3nkp$t6t$1@news6.svr.pol.co.uk>
Source record: 20541
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"John Woodgate" <jmw@jmwa.demon.contraspam.yuk> wrote in message
news:pMhflnAVmOBCFweh@jmwa.demon.co.uk...
> I read in sci.electronics.design that john jardine
> <john@jjdesigns.fsnet.co.uk> wrote (in <cu1dmo$mt9$1@newsg3.svr.pol.co.u
> k>) about 'Diode and very small amplitude high frequencies signals', on
> Sat, 5 Feb 2005:
> >Test on a 1N4148.
> >ForwardV DiodeR
> >+50mV 8megs.
> >+30mV 9megs.
> >+20mV 10megs.
> >+10mv 12megs.
> >+5mV 21megs.
> >ReverseV
> >-5mV 21megs.
> >-10mV 30megs.
> >-30mV 270megs.
>
> How did you measure the resistance? Is it an incremental resistance
> (slope of the V/I curve at the data point) or the slope of a line
> joining the origin to the data point on the curve.
> --
> Regards, John Woodgate, OOO - Own Opinions Only.
> The good news is that nothing is compulsory.
> The bad news is that everything is prohibited.
> http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

I didn't measure the resistance. The values just come from the static V and
I plot points on the graph.
Having had my remaining bench DVM, (good ol'e UK, Datron shite) pack in on
me and 2 battery DVMs keel over with flat batteries and the CMOS buffers
floating off to la la land and 2 crocodile clips secretly fail and finally
my electric pencil sharpener going tits up, I was not of a mind to press
on :-)
regards
john

909. Info Philips ON4800, ON4801 UHF devices?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 01:20:42 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <53sa01dpdckahghhtmrq695hlucsh9vpee@4ax.com>
Source record: 20542

Hi

tried to find pdf file for data for the devices, but google only found some japanese or unreadable sites, could somebody please guide me in a better direction?

73
Jan-Martin, LA8AK
http://home.online.no/~la8ak/d27.htm

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

910. Re: Tuned circuit Q question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 01:31:15 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <4ksa01tmgejqb5pcunb7417jgn4b289qs0@4ax.com>
Source record: 20543

On Sat, 05 Feb 2005 15:42:57 GMT, "William E. Sabin"
<w.sabin@mchsi.com> wrote:

>The loading on the resonator is 1050 ohms in parallel with 5000 ohms, which
>is 868 ohms. A coil or capacitor reactance value that is 868 / 5 ohms
>(173.6 ohms) produces a Q of 5.
>
>The initial value of L is
>
>L = 173.6 / (2 * pi * 30MHz) = 0.92 uH
>
>An additional loading is due to the resonator itself, which is the product
>of the coil Q times coil reactance.Let's assume a coil Q of 200. The
>resistance value of the coil itself is
>
>Q * XL = 200*173.6 = 38720 ohms
>
>The resistance loading by the capacitor can usually be neglected if it is
>very small.
>
>The loading on the output side by the combination of the 5000 ohm load and
>the 38720 is 4428 ohms.
>
>Go back to the beginning and get a slightly revised value of the resistive
>loading = 849 ohms that includes the loading by the coil itself.
>Recalculate L and C for this slightly different value of loading.
>
>This iterative process can be stopped here.
>
>Connecting the 50 ohm source directly to the coil through a 1000 ohm
>resistor produces an additional power loss which is equal to
>
>20 * log[(1000+4428) / 4428)] = 1.8 dB.
>
>This additional loss may not be acceptable in some applications. A low-loss
>coupling transformer (e.g. tapped coil) or low-loss tuned network is a
>better approach.
>
>Bill W0IYH
>

interesting to see that you came to the same conclusion alltogether,
but I believe it is another problem to make a coil with Q=200, usually
the Q will be lower for readily available components, so the better
way is to make the coil first, measure it and then start the

calculation, hi

73
Jan-Martin, LA8AK

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

911. Re: Battery problems on IC2-SRA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 01:35:16 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <75sa01prfvn3df7gkq76he8eqrp94b1flo@4ax.com>
Source record: 20544

On Sat, 5 Feb 2005 14:51:46 -0600, "Brian Oakley"
<brianoakley@ispwest.com> wrote:

>"Gary S." <Idontwantspam@net> wrote in message
>news:1308019cjcjj4j9giddeu4ok9ljl0cq3u7@4ax.com...

>> A good dealer who does service on Icoms should be able to explain your
>> options. Replacing the internal memory battery is no biggie for a
>> service center. It may be preventing a proper reset.
>>
>> Happy trails,
>> Gary (net.yogi.bear)
>> --
>Thanks for the help Gary. Can anyone here recommend a good Icom service
>center? I live in the DFW area. Any help is appreciated. TIA.
>Brian
>
The www.icomamerica.com site will help with dealers.

AES and HRO do not appear to have anything in TX.

There is Texas Towers (which sells a full range of ham radio gear)
somewhere down there in Plano, but my Texas geography is a bit
sketchy. Not sure they have retail or just the online.

There are also Icom amateur radio dealers in Austin, Houston/Spring,
and Lubbock. It is possible that some of the land mobile Icom dealers
could help as well. Time to work the phone.

Bearcom Dallas
4009 Distribution Drive, Suite 200
Dallas, TX 75041
Phone: (800) 252-1691
Fax: (972) 880-7428
E-mail: greg.donahe@bearcom.com
Products: Land Mobile

Breakthrough
3620 Byers Avenue
Fort Worth, TX 76107
Phone: (817) 732-7791
Fax: (817) 731-8335
Products: Land Mobile

This should get you started.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

912. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 02:35:30 UTC
From: Custos Custodum <me@privacy.net>
Message-ID: <tkva015pt5dv5bkeuu5g0l196j1pcst4vp@4ax.com>
Source record: 20545
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

On Sat, 05 Feb 2005 14:49:02 GMT, Stephen <atkinss@shaw.ca> wrote:

>On Sun, 30 Jan 2005 23:52:03 +0000, KW wrote:
>
>>
>> "G1LVN" <google@g1lvn.org.uk> wrote in message
>> news:1107125695.735520.275940@c13g2000cwb.googlegroups.com...
>>> intelligent amateur radeo? Is that like a rodeo?
>>>
>>
>> You could get horse with talking too much!
>>
>> KW
>
>Okay enough on my ability to type and spell. I'm only a programmer not an
>English major.
>

About the use of language: it is impossible to sharpen a pencil with a
blunt axe. It is equally vain to try to do it with ten blunt axes
instead.

Besides a mathematical inclination, an exceptionally good mastery of
one's native tongue is the most vital asset of a competent programmer.

Edsger W. Dijkstra, "How do we tell truths that might hurt?"
from: Selected Writings on Computing: A Personal Perspective
Springer-Verlag, 1982. ISBN 0ï¿½387ï¿½90652ï¿½5.

913. Re: wire strippers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 03:57:22 UTC
From: "t.hoehler" <t.hoehler@insightbb.com>
Message-ID: <CAgNd.50998$EG1.24499@attbi_s53>
Source record: 20546
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
news:OXaNd.37752$BQ2.34242@bignews6.bellsouth.net...

<snip>

They even appear to work on some wire wrap wire that
> is usually impossible to strip except with hard to find
> 'no-nick' brand cutters. (though you have to be carefull to
> put the wire in the right hand side of the cutters where
> the opening is a bit wider.

I picked up a small wire stripper for a few bucks at a flea market, it works absolutely great on romex, 12 ga, 14ga, 18 ga. but not so hot on 23 - 24 gage wire with the high temp poly insulation. Kinda flattens it and tries to pull it off, but no dice. If you do a lot of work with big wire, these things are super.
Regards,
Tom

914. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 04:41:11 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <110b7vbt5jui259@corp.supernews.com>
Source record: 20547
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

I haven't followed this thread very thoroughly, so this might not be directly relevant. But it should be of interest to anyone trying to detect small signals with a diode.

There are several reasons why diodes do poorly with small AC signals.

The first is, of course, the forward drop. However, this can in theory be reduced to an arbitrarily low value by reducing the current to a low enough value (by, for example, making the load impedance high enough).

The second is that the ratio of reverse to forward current increases as the signal gets smaller and smaller, reaching one at the limit. This can be observed by looking at the I-V curve of a diode. At the origin, the curve is a straight line -- the diode behaves just like a resistor.

The third reason is the diode capacitance. This shunts the diode, effectively lowering the reverse impedance. It also lowers the forward impedance, but when the forward Z is lower than the reverse Z, the net effect is to further degrade the forward/reverse impedance ratio.

You can make all the DC measurements you want, but they only tell half the story. When you apply AC, you charge the load capacitor during half the cycle according to the diode's forward impedance, and charge is removed from it during the other half according to the diode's reverse impedance. As the forward/reverse impedance ratio degrades due to the two effects mentioned above, the net charge you get in the load capacitance decreases, hence the voltage it's charged to decreases. This ends up looking like a larger diode forward drop.

I spent a lot of time thinking about this some years ago when designing a QRP wattmeter, and some of the conclusions I came to appear in the resulting article, "A Simple and Accurate QRP Directional Wattmeter", published in QST, February 1990. See the analysis on p. 20, "Ac v Dc: Why the Difference?"

Roy Lewallen, W7EL

915. Searching for components

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 04:52:45 UTC
From: Sledster <nobody@nowhere.com>
Message-ID: <tohNd.2643$Ps.2487@okepread06>
Source record: 20448

Hi,

I am trying to locate some obsolete components.
After the usual google searches and numerous emails to vendors, I am hoping someone here will have what I need.

I need 2 ea MPSH17's, 1 ea 2n4417, 1 ea MC145152 and 1 ea MC12017.

If anyone can help it would be greatly appreciated.

Ed

916. Re: wire strippers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 06:12:24 UTC
From: Phil B <pcb999@NOSPAMcomcast.net>
Message-ID: <1_mdnZg-K7o-KJjfRVn-tA@comcast.com>
Source record: 20449
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

This type of wire stripper is not new. What may be new is that it actually works. As I am sure all the old timers know, there was a wire stripper sold years ago that worked on the same principle: clamp and slide. Back in the late 60s when I started my first job, the lab had a number of them in the drawers. I tried them a few times. Sometimes they worked and sometimes they didn't. These were inflated-priced industrial quality. All the techs in the lab used the regular old Miller strippers. When adjusted properly, they were quick and reliable. We used No-Nicks for wire wrap wire. They were always reliable. I still have one. Not much call these days for wire wrapping!

Phil B

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message news:OXaNd.37752$BQ2.34242@bignews6.bellsouth.net...
> Anybody remember that cold head soldering iron advertised on tv
> a while back? It was supposed to come with a pair of these
> neat looking wire strippers. Well today at the Miami hamfest
> someone was selling just the wire strippers. I got two of the
> smaller ones good for .2-3mm wire (what's that in AWG?) and
> one of the larger ones good for .2-6mm wire for $20.
> These really are cool wire strippers, they quickly strip
> any guage wire (in the supported range) without nicking the
> wire. They even appear to work on some wire wrap wire that
> is usually impossible to strip except with hard to find
> 'no-nick' brand cutters. (though you have to be carefull to
> put the wire in the right hand side of the cutters where
> the opening is a bit wider.

917. Have you joined yet?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 08:22:53 UTC
From: Goetz <goetz@goetz-von.com>
Message-ID: <cu4k4t$5l4$1@titan.btinternet.com>
Source record: 20450

The PMR / Amateur Radio forum at ww.euronium.de now has just under 500 members.

Why not join? Its free and is funded entirely by Radio Amateurs for Radio Amateurs with no pop up ads or commercial backing.

Support your fellow Amateur. You may be able to help someone or someone help you. Go to euronium.de and have a look.

G�etz.

918. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 08:54:32 UTC
From: Matthew Haigh <$matthaigh{News07}$@haigh.org>
Message-ID: <Sn4DQQiltdBCFwLt@local.gcrsoft.com>
Source record: 20451
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <tkva015pt5dv5bkeuu5g0l196j1pcst4vp@4ax.com>, Custos Custodum
<me@privacy.net> writes
>Besides a mathematical inclination, an exceptionally good mastery of
>one's native tongue is the most vital asset of a competent programmer.

I'd disagree. I know many very good commercial programmers who can't
spell to save their lives. But what really matters is that they can't
spell _consistently_, so mis-spelled variables and function names are
mis-spelled the same way every time (or the compiler catches the error
and they correct it to be consistent with their other mis-spellings).

It can be interesting reading some of the comments in their code!

Matt
--
Matthew Haigh --$matthaigh{News07}$@haigh.org--
GCRSoft, providing SMS solutions since 1996...
http://www.gcrsoft.com http://www.moretext.com

919. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 09:35:22 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <36m6lvF53th4hU1@individual.net>
Source record: 20452
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"Matthew Haigh" <$matthaigh{News07}$@haigh.org> wrote in message
news:Sn4DQQiItdBCFwLt@local.gcrsoft.com...
> In article <tkva015pt5dv5bkeuu5g0l196j1pcst4vp@4ax.com>, Custos Custodum
> <me@privacy.net> writes
> >Besides a mathematical inclination, an exceptionally good mastery of
> >one's native tongue is the most vital asset of a competent programmer.
>
> I'd disagree. I know many very good commercial programmers who can't
> spell to save their lives. But what really matters is that they can't
> spell _consistently_, so mis-spelled variables and function names are
> mis-spelled the same way every time (or the compiler catches the error
> and they correct it to be consistent with their other mis-spellings).

Plus, of course, programming is not the hard bit- hasn't been for some time.
The skill lies in the system and software design. These days many packages
can autogenerate code and, with the high uP speeds and low memory costs,
that code is efficient enough to do the job- hand crafting to improve speed
etc often isn't required, even in real time apps. The move to the use of
real time operating systems has also reduced the demand for much of the core
software- one company can turn out versions (for example VxWorks, LynxOS)
that can serve many applications. The OEM manufacturer can focus just in his
particular needs, and pay a pitance of a fee to the RTOS supplier (sometimes
s few)

Tends to leave a lot of the old hacker types on the scrap heap- often as not
claiming everyone else is the hacker.

> It can be interesting reading some of the comments in their code!

True.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

920. Re: Info Philips ON4800, ON4801 UHF devices?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 11:31:37 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <tenNd.390$Er2.275@newsfe4-gui.ntli.net>
Source record: 20453

> tried to find pdf file for data for the devices, but google only found
> some japanese or unreadable sites, could somebody please guide me in a
> better direction?
==========
I do have a number of (likely) similar devices (Philips ,made in the Philippines) type ON4749 (green plastic enclosure with 7 gold plated pins/wires on a sturdy heatsink with 2 holes) ,which I have been unable to identify.
However they are physically identical to (also Philips) type BGY80 . This is a wideband module for Cable TV systems , 40 - 450 MHz, 12.5dB gain, max flatness +/- 0.2 dB ; output voltage 61.5 dBmV.

Frank GM0CSZ / KN6WH

921. NEED RECOMMENDATION (L.A. AREA) 4 MOTOROLA MX PROGRAMMING

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 11:57:33 UTC
From: Dave Hildebrand <dunkirk@ispwest.com>
Message-ID: <cu50nd01293@enews1.newsguy.com>
Source record: 20454
Cross-posted to:
alt.ham-radio.vhf-uhf,rec.radio.amateur.boatanchors,alt.ham-radio.marketplace,alt.ham-radio.mods,rec.radio.amateur.homebrew

I have a few old Motorola MX-series (VHF & UHF) radios I would like to have re-programmed by someone (in or near the Los Angeles area) with such capabilities (and who's also affordable to an amateur of modest means). Any help/referrals would be greatly appreciated. Thank you!

...Dave, N6BHU

922. Looking for Transmitter Circuts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 12:28:14 UTC
From: megabyte <megabyte@kingsleymail.co.za>
Message-ID: <1107692894.550070.207000@c13g2000cwb.googlegroups.com>
Source record: 20455

I'm looking for schematics for low power fm transmitters.
Power/stability is more important than range. I need a transmitter that
will transmit up to 50-100m (150-300 feet aprox.), but with a strong,
stable output in that range. I want to use it in conjunction with small
digital fm receivers. I regularly play paintball and a fm-com system
will give the team an edge :)
I would like it to be compatible with dinamic mics, because we want to
use throught mics (ala Tears of the Sun).

Any suggestions will be gratefully accepted.

<<<MegaByte>>>
(The New) South Africa

923. Re: 60Khz transmitter/repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 12:35:18 UTC
From: Victor Lick <aaa@bbb.com>
Message-ID: <DY6dnSJbaZ2akpvfRVn-tQ@comcast.com>
Source record: 20456

Well, Mr. Anderson, thank you very much for your detailed reply. This all sounds very interesting but I think it's going to have a low benefit-to-work ratio, especially with the long project list I already have. I was hoping I could down to the passive re-radiator store and pick up something that you would work. Oh well.

Thanks again,

Vic

924. Re: Tuned circuit Q question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 12:46:05 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <gkoNd.51533$EG1.49135@attbi_s53>
Source record: 20457

I have had no trouble with Q=200 coils. I have a Boonton Q meter that verifies this when the correct core material (especially in a toroid) is used. At 30 MHz we do have to be somewhat persistent, though.

Best regards,

Bill W0IYH

"J M Noeding" <la8ak@online.no> wrote in message news:4ksa01tmgejqb5pcunb7417jgn4b289qs0@4ax.com...
> On Sat, 05 Feb 2005 15:42:57 GMT, "William E. Sabin"
> <w.sabin@mchsi.com> wrote:
>
>>The loading on the resonator is 1050 ohms in parallel with 5000 ohms,
>>which
>>is 868 ohms. A coil or capacitor reactance value that is 868 / 5 ohms
>>(173.6 ohms) produces a Q of 5.
>>
>>The initial value of L is
>>
>>L = 173.6 / (2 * pi * 30MHz) = 0.92 uH
>>
>>An additional loading is due to the resonator itself, which is the product
>>of the coil Q times coil reactance.Let's assume a coil Q of 200. The
>>resistance value of the coil itself is
>>
>>Q * XL = 200*173.6 = 38720 ohms
>>
>>The resistance loading by the capacitor can usually be neglected if it is
>>very small.
>>
>>The loading on the output side by the combination of the 5000 ohm load and
>>the 38720 is 4428 ohms.
>>
>>Go back to the beginning and get a slightly revised value of the
>>resistive
>>loading = 849 ohms that includes the loading by the coil itself.
>>Recalculate L and C for this slightly different value of loading.
>>
>>This iterative process can be stopped here.
>>
>>Connecting the 50 ohm source directly to the coil through a 1000 ohm
>>resistor produces an additional power loss which is equal to
>>
>>20 * log[(1000+4428) / 4428)] = 1.8 dB.

>>
>>This additional loss may not be acceptable in some applications. A
>>low-loss
>>coupling transformer (e.g. tapped coil) or low-loss tuned network is a
>>better approach.
>>
>>Bill W0IYH
>>
>
> interesting to see that you came to the same conclusion alltogether,
> but I believe it is another problem to make a coil with Q=200, usually
> the Q will be lower for readily available components, so the better
> way is to make the coil first, measure it and then start the
> calculation, hi
>
> 73
> Jan-Martin, LA8AK
> ---
> J. M. Noeding, LA8AK, N-4623 Kristiansand
> http://home.online.no/~la8ak/c.htm

925. Re: Looking for Transmitter Circuts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 12:55:17 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <VsoNd.11005$L_3.2179@clgrps13>
Source record: 20458

I think you want FRS radios.

--
Gregg "t3h g33k"
http://geek.scorpiorising.ca
Ratings are for transistors, tubes have guidelines

926. Re: Searching for components

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 13:25:41 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <cu55so0174h@enews1.newsguy.com>
Source record: 20459

"Sledster" <nobody@nowhere.com> wrote in message
news:tohNd.2643$Ps.2487@okepread06...
> Hi,
>
> I am trying to locate some obsolete components.
> After the usual google searches and numerous emails to vendors, I am
> hoping
> someone here will have what I need.
>
> I need 2 ea MPSH17's, 1 ea 2n4417, 1 ea MC145152 and 1 ea MC12017.
>
> If anyone can help it would be greatly appreciated.
>
> Ed

http://www.doom.com/ has all of these.

Google is your friend.

John

927. ATU enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 14:09:01 UTC
From: sb <sb@nospam.com>
Message-ID: <cu58dsbqu1@sparta.btinternet.com>
Source record: 20460

What are the collectives thoughts on the type of material to use for a homebrew ATU enclosure, should it be aluminium to reduce unwanted RF radiation or plastic to reduce coupling effects possibly caused by an aluminium enclosure.

Regards Simon.

928. Re: wire strippers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 14:41:19 UTC
From: Aden <adentore@hotmail.com>
Message-ID: <42062c8f$1@x-privat.org>
Source record: 20461
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> a crit dans le message de
news:OXaNd.37752$BQ2.34242@bignews6.bellsouth.net...
> Anybody remember that cold head soldering iron advertised on tv
> a while back? It was supposed to come with a pair of these
> neat looking wire strippers. Well today at the Miami hamfest
> someone was selling just the wire strippers. I got two of the
> smaller ones good for .2-3mm wire (what's that in AWG?) and
> one of the larger ones good for .2-6mm wire for $20.

http://www.asseenontv.com/prod-pages/quickstrip_std.html?gid=

http://www.asseenontv.com/prod-pages/quickstrip_del.html?gid=

Where I live, they can be bought for about 3$ a piece...

929. Re: ATU enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 15:23:44 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cu5cq0cbm1@titan.btinternet.com>
Source record: 20462

Simon,
Why worry about the extremely minute amount of radiation from small tuner coils and components when this is hopelessly swamped by radiation from the nearby antenna, even from the back of a beam, and there's always some significant amount from the feedline.

Think in terms of relative magnitudes.

The amount of radiation depends only on one dimension, ie., the physical LENGTH of what may be imagined to be radiating. Imagination is the keyword.

There is hardly any significant difference in radiation from a tuner between a plastic box, a metal box, and no box at all.

I prefer no box. Stray capacitance is smaller. A metal box behaves as a shorted-turn around the coils and results in power loss. And it's nice to be able to see the position of the roller coaster and the tuning capacitors without the tedium of unscrewing all the screws in the cover.

There may, of course, be a slight advantage of a box, metal or plastic, in a dusty atmosphere or if you are, like me, a nicotine addict.

Alcohol addicts will automatically ignore this mild advice anyway.

Reg, G4FGQ

930. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 15:59:37 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <bO3DDjDp7jBCFwo+@g3ohx.demon.co.uk>
Source record: 20463
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In message <tkva015pt5dv5bkeuu5g0l196j1pcst4vp@4ax.com>, Custos Custodum
<me@privacy.net> writes
>On Sat, 05 Feb 2005 14:49:02 GMT, Stephen <atkinss@shaw.ca> wrote:
>
>>On Sun, 30 Jan 2005 23:52:03 +0000, KW wrote:
>>
>>
>>>Okay enough on my ability to type and spell. I'm only a programmer not an
>>>English major.
>>
>
>About the use of language: it is impossible to sharpen a pencil with a
>blunt axe. It is equally vain to try to do it with ten blunt axes
>instead.
>
>Besides a mathematical inclination, an exceptionally good mastery of
>one's native tongue is the most vital asset of a competent programmer.
>
This probably explains why instructions for installing and running
software are frequently inaccurate, misleading and leave out certain
vital steps. The criterion seems to be 'if it's close enough. it's good
enough'.
Ian.
--

931. Re: ATU enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 16:25:38 UTC
From: Larry Gagnon <lagagnon@fakeuniserve.com>
Message-ID: <pan.2005.02.06.16.25.38.192544@fakeuniserve.com>
Source record: 20464

On Sun, 06 Feb 2005 15:23:44 +0000, Reg Edwards wrote:

> Simon,
> Why worry about the extremely minute amount of radiation from small tuner
> coils and components when this is hopelessly swamped by radiation from the
> nearby antenna, even from the back of a beam, and there's always some
> significant amount from the feedline.

[snip]

Exactly. Well said Reg. I have seen a beautifully working 1KW antenna tuner constructed on a breadboard. Completely open and very nice to look at also. No TVI. No interference. Save yourself the hassle and expense and build it without an enclosure at all (as long as your pet cat doesn't like to wander around your shack while you operate!).

Larry VE7EA

932. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 16:30:04 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cu5gmc$k4o$1@titan.btinternet.com>
Source record: 20466
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Shortcomings of computer programmers -

Lazy layabouts.

Lacking in logical thought.

A distinct weakness in use of the English language.

However, they are very good at outwitting their employers, who are even worse, and obtaining money (wages, salaries, fees) under false pretences.

933. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 16:30:55 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <42064618.71859152@news.iol.ie>
Source record: 20465
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Custos Custodum <me@privacy.net> wrote:

: Besides a mathematical inclination, an exceptionally good mastery of
: one's native tongue is the most vital asset of a competent programmer.

nonsense.

i know of a number of people who have programming "degrees" who couldnt do
either.

934. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 16:32:25 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <4206465f.71929686@news.iol.ie>
Source record: 20467
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote:

: "Matthew Haigh" <$matthaigh{News07}$@haigh.org> wrote in message
: news:Sn4DQQiItdBCFwLt@local.gcrsoft.com...
: > In article <tkva015pt5dv5bkeuu5g0l196j1pcst4vp@4ax.com>, Custos Custodum
: > <me@privacy.net> writes
: > >Besides a mathematical inclination, an exceptionally good mastery of
: > >one's native tongue is the most vital asset of a competent programmer.
: >
: > I'd disagree. I know many very good commercial programmers who can't
: > spell to save their lives. But what really matters is that they can't
: > spell _consistently_, so mis-spelled variables and function names are
: > mis-spelled the same way every time (or the compiler catches the error
: > and they correct it to be consistent with their other mis-spellings).
:
: Plus, of course, programming is not the hard bit- hasn't been for some time.
: The skill lies in the system and software design. These days many packages
: can autogenerate code and, with the high uP speeds and low memory costs,
: that code is efficient enough to do the job- hand crafting to improve speed
: etc often isn't required, even in real time apps. The move to the use of
: real time operating systems has also reduced the demand for much of the core
: software- one company can turn out versions (for example VxWorks, LynxOS)
: that can serve many applications. The OEM manufacturer can focus just in his
: particular needs, and pay a pitance of a fee to the RTOS supplier (sometimes
: s few)

said m3osn who never was a "lowly programmer"

:
: Tends to leave a lot of the old hacker types on the scrap heap- often as not
: claiming everyone else is the hacker.
u mean the ones who actually know how to program properly ?

935. Re: ATU enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 16:34:15 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnd0cho7.hee.bit-bucket@shell.config.com>
Source record: 20468

On Sun, 06 Feb 2005 08:25:38 -0800, Larry Gagnon wrote:
> On Sun, 06 Feb 2005 15:23:44 +0000, Reg Edwards wrote:
>
>> Simon,
>> Why worry about the extremely minute amount of radiation from small tuner
>> coils and components when this is hopelessly swamped by radiation from the
>> nearby antenna, even from the back of a beam, and there's always some
>> significant amount from the feedline.
>
> [snip]
>
> Exactly. Well said Reg. I have seen a beautifully working 1KW antenna
> tuner constructed on a breadboard. Completely open and very nice to look
> at also. No TVI. No interference. Save yourself the hassle and expense and
> build it without an enclosure at all (as long as your pet cat doesn't like
> to wander around your shack while you operate!).

Well, the OP did not specify whether it'd be installed at the shack
or at the antenna.

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

936. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 17:19:38 UTC
From: Steve H <g0lmv@yahoo.co.uk>
Message-ID: <420651e4_2@mk-nntp-1.news.uk.worldonline.com>
Source record: 20469
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cu5gmc$k4o$1@titan.btinternet.com...
> Shortcomings of computer programmers -
>
> Lazy layabouts.
>
> Lacking in logical thought.
>
> A distinct weakness in use of the English language.
>
> However, they are very good at outwitting their employers, who are even
> worse, and obtaining money (wages, salaries, fees) under false pretences.
>
>
A taste for red wine?

Steve H

937. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 17:50:25 UTC
From: john jardine <john@jjdesigns.fsnet.co.uk>
Message-ID: <cu5ktaepl1@news6.svr.pol.co.uk>
Source record: 20470
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:110b7vbt5jui259@corp.supernews.com...
> I haven't followed this thread very thoroughly, so this might not be
> directly relevant. But it should be of interest to anyone trying to
> detect small signals with a diode.

> I spent a lot of time thinking about this some years ago when designing
> a QRP wattmeter, and some of the conclusions I came to appear in the
> resulting article, "A Simple and Accurate QRP Directional Wattmeter",
> published in QST, February 1990. See the analysis on p. 20, "Ac v Dc:
> Why the Difference?"
>
> Roy Lewallen, W7EL

Your article sounds interesting. Is there a link available to see it?.
The simplest approach I've seen, was is in the 'Levell TM6A broadband
voltmeter'(UK). Designer chopped the low level diode output at 20Hz,
allowing a 1mVac FSD.
regards
john

938. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 19:30:01 UTC
From: Mike Monett <no@spam.com>
Message-ID: <42067039.5F54@spam.com>
Source record: 20473
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Roy Lewallen wrote:

[...]

> The second is that the ratio of reverse to forward current increases as
> the signal gets smaller and smaller, reaching one at the limit. This can
> be observed by looking at the I-V curve of a diode. At the origin, the
> curve is a straight line - the diode behaves just like a resistor.

[...]

> Roy Lewallen, W7EL

Excellent description - thanks.

Only one small problem - as Win pointed out, Bob Pease feels a
diode-connected 2N3904 has lower leakage at low voltage than a 1N4148:

"What's All This Comparator Stuff, Anyhow?"

http://www.elecdesign.com/Articles/ArticleID/9517/9517.html

Does this mean a 2N3904 has a shallower slope than a 1N4148 through zero, or
perhaps one or the other has an offset, such as the Agilent Zero Bias
Schottky Detector Diodes shown in AN969?

http://www.spelektroniikka.fi/kuvat/schot8.pdf

Regards,

Mike Monett

939. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 20:05:34 UTC
From: "Paul Hovnanian P.E." <Paul@Hovnanian.com>
Message-ID: <4206788E.A80B1139@Hovnanian.com>
Source record: 20471
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Roger Lascelles wrote:
>
> "Tim Wescott" <tim@wescottnospamdesign.com> wrote in message
> news:11027g95c2bao6e@corp.supernews.com...
> > johna@m wrote:
> > > Should not we expect that the current, even at very small level, to be
> > > half rectified by a diode, since the reverse resistance of the diode is
> > > supposed te be far greater than the forward resistance?
> > >
> > > Why can't we found this result in smulation. Is it a flaw in the
> > > simulator (Simplorer) or is the theoric behavior of a diode that
> > > changes in case of very small input ?
> > >
> > > Regards,
> > >
> > > John.
> > >
> > The diode behavior is a continuous curve, so for a small AC voltage you
> > won't see much change in the diode's resistance even at zero bias.
> > Unless you're modeling a really leaky diode, however, you are probably
> > seeing a situation where the diode's resistance is effectively shunted
> > by it's capacitance and you are seeing capacitive coupling rather than
> > conduction.
>
> The point about continuous curve is well made.
>
> The diode doesn't have to hard rectify. As long as it has a non-linear V-I
> graph it will produce some audio. The more sharply curved the
> characteristic, the more audio is produced.
>
> In the valve days, the anode bend detector worked that way, using a valve
> biased to operate on the curved part of the characteristic.
>
> Roger

Right. Take a look at a diode curve across a 100 uV region. Most diodes
will look pretty flat, even without considering the effects of
capacitance and other parasitics.

--
Paul Hovnanian mailto:Paul@Hovnanian.com

My inner child can beat up your inner child.
-- Alex Greenbank

940. Re: wire strippers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 20:09:40 UTC
From: Terry <tsanford@nf.sympatico.ca>
Message-ID: <RPuNd.467$504.78018@news20.bellglobal.com>
Source record: 20474
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
news:OXaNd.37752$BQ2.34242@bignews6.bellsouth.net...
> ..... snip .....
> someone was selling just the wire strippers. I got two of the
> smaller ones good for .2-3mm wire (what's that in AWG?) and
> one of the larger ones good for .2-6mm wire for $20.
>
From page 61 of Northern Electric "Electrical conductors handbook".
"Standard copper wire AWG" "1968"
AWG Diam. Diam.
Inches Millimetres.

56 0.0005 0.012
54 0.0006 0.016
52 0.0008 0.020
50 0.0010 0.025

48 0.0013 0.032
46 0.0016 0.040
45 0.0019 0.047
44 0.0020 0.051

43 0.0022 0.056
42 0.0025 0.064
41 0.0028 0.071
40 0.0031 0.079

39 0.0035 0.089
38 0.0040 0.102
37 0.0045 0.114
36 0.0050 0.127

35 0.0056 0.142
34 0.0063 0.160
33 0.0071 0.180
32 0.0080 0.203

31 0.0089 0.226
30 0.0100 0.254
29 0.0113 0.287
28 0.0126 0.320

27 0.0142 0.361
26 0.0159 0.404
25 0.0179 0.455

```
24 0.0201 0.511

23 0.0226 0.574
22 0.0253 0.643
21 0.0285 0.724
20 0.0320 0.813

19 0.0359 0.912
18 0.0403 1.020
17 0.0453 1.150
16 0.0508 1.290

15 0.0571 1.45
14 0.0641 1.63
13 0.0720 1.83
12 0.0808 2.05

10 0.1019 2.588
8 0.1285 3.264
6 0.1620 4.115
4 0.2043 5.189

3 0.2294 5.877
2 0.2576 6.543
1 0.2893 7.348
1/0 0.3249 8.252
```

941. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 20:18:01 UTC
From: "Paul Hovnanian P.E." <Paul@Hovnanian.com>
Message-ID: <42067B79.55130EFA@Hovnanian.com>
Source record: 20472
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

john jardine wrote:
>
> "John Woodgate" <jmw@jmwa.demon.contraspam.yuk> wrote in message
> news:pMhflnAVmOBCFweh@jmwa.demon.co.uk...
> > I read in sci.electronics.design that john jardine
> > <john@jjdesigns.fsnet.co.uk> wrote (in <cu1dmo$mt9$1@newsg3.svr.pol.co.u
> > k>) about 'Diode and very small amplitude high frequencies signals', on
> > Sat, 5 Feb 2005:
> > >Test on a 1N4148.
> > >ForwardV DiodeR
> > >+50mV 8megs.
> > >+30mV 9megs.
> > >+20mV 10megs.
> > >+10mv 12megs.
> > >+5mV 21megs.
> > >ReverseV
> > >-5mV 21megs.
> > >-10mV 30megs.
> > >-30mV 270megs.
> >
> > How did you measure the resistance? Is it an incremental resistance
> > (slope of the V/I curve at the data point) or the slope of a line
> > joining the origin to the data point on the curve.
> > --
> > Regards, John Woodgate, OOO - Own Opinions Only.
> > The good news is that nothing is compulsory.
> > The bad news is that everything is prohibited.
> > http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk
>
> I didn't measure the resistance. The values just come from the static V and
> I plot points on the graph.
> Having had my remaining bench DVM, (good ol'e UK, Datron shite) pack in on
> me and 2 battery DVMs keel over with flat batteries and the CMOS buffers
> floating off to la la land and 2 crocodile clips secretly fail and finally
> my electric pencil sharpener going tits up, I was not of a mind to press
> on :-)
> regards
> john

In other words, this data is just a plot of a diode's DC I vs V
characteristic, right?

What is of more interest is the slope at a given DC operating point. If
we pick 0V, for example, the above data (within the limits of its

precision) gives a flat line around that point (+5mV 21 Mohms, -5mV 21 Mohms). With a 100 uV signal, you might as well throw a 21 M ohm resistor in there instead.

--
Paul Hovnanian mailto:Paul@Hovnanian.com

Think honk if you're a telepath.

942. Re: Searching for components

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 20:38:35 UTC
From: Roger and Ute Brown <rogerbrown@gci.net>
Message-ID: <110d02bs20isk27@corp.supernews.com>
Source record: 20475

Can't help with the MC's, however, the MPSH17's cross to NTE/ECG 229 and the
2N4417 is an NTE/ECG 452.
NTE and ECG replacement parts are very common just about anywhere. Your
local jobber will have them.
I have a hunch that the MC parts could be rounded up with a more exhausting
computer search.
Roger, KL7Q

Sledster <nobody@nowhere.com> wrote in message
news:tohNd.2643$Ps.2487@okepread06...
> Hi,
>
> I am trying to locate some obsolete components.
> After the usual google searches and numerous emails to vendors, I am
hoping
> someone here will have what I need.
>
> I need 2 ea MPSH17's, 1 ea 2n4417, 1 ea MC145152 and 1 ea MC12017.
>
> If anyone can help it would be greatly appreciated.
>
> Ed
>
>

943. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 21:12:58 UTC
From: Winfield Hill <hill_a@t_rowland-dotties-harvard-dot.s-edu>
Message-ID: <cu618q017d5@drn.newsguy.com>
Source record: 20477
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Mike Monett wrote...
>
> Roy Lewallen wrote:
>
>> The second is that the ratio of reverse to forward current increases as
>> the signal gets smaller and smaller, reaching one at the limit. This can
>> be observed by looking at the I-V curve of a diode. At the origin, the
>> curve is a straight line - the diode behaves just like a resistor. ...
>
> Excellent description - thanks.
>
> Only one small problem - as Win pointed out, Bob Pease feels a
> diode-connected 2N3904 has lower leakage at low voltage than a 1N4148:
> "What's All This Comparator Stuff, Anyhow?"
> http://www.elecdesign.com/Articles/ArticleID/9517/9517.html
>
> Does this mean a 2N3904 has a shallower slope than a 1N4148 through zero,
> or perhaps one or the other has an offset, such as the Agilent Zero Bias
> Schottky Detector Diodes shown in AN969?

No, it means its a better diode at low currents. See my curves again,
http://www.picovolt.com/win/elec/comp/diode/diode-curves.html Note the
1n458 and the JFET diodes, which follow the theoretical 60mV/decade rule
down to very low currents. As for Roy Lewallen's "ratio of reverse to
forward current" argument, there is no reverse current for these fine
fellows, at least for DC and reasonably low frequencies. It's the very
crummy gold-doped 1n4148 that falls over. Awwkk!

--
Thanks,
- Win

944. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 21:13:08 UTC
From: john jardine <john@jjdesigns.fsnet.co.uk>
Message-ID: <cu60pt$47p$1@newsg2.svr.pol.co.uk>
Source record: 20476
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"Paul Hovnanian P.E." <Paul@Hovnanian.com> wrote in message
news:42067B79.55130EFA@Hovnanian.com...
>
> In other words, this data is just a plot of a diode's DC I vs V
> characteristic, right?
>
> What is of more interest is the slope at a given DC operating point. If
> we pick 0V, for example, the above data (within the limits of its
> precision) gives a flat line around that point (+5mV 21 Mohms, -5mV 21
> Mohms). With a 100 uV signal, you might as well throw a 21 M ohm
> resistor in there instead.
>
> --
> Paul Hovnanian mailto:Paul@Hovnanian.com
> --
> Think honk if you're a telepath.

Yep. Straight as a die between +/- 4mV. Incremental resistance dV/di =10Mohm
regards
john

945. Re: Sirius radio FM out..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 21:21:38 UTC
From: JJ <jjesson@PLSDELETEvoyager.net>
Message-ID: <110d35fjcp536d0@corp.supernews.com>
Source record: 20478

I tried one of the cassette audio couplers and now it will not exit!
Looks like I will have to remove the Philips car radio and take it apart.
The head had a small head-only plastic cover and this may have had to be
removed :-(

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
news:jXsvd.640$Ap1.47@bignews6.bellsouth.net...
> R J Carpenter wrote:
> > "Highland Ham"
> > <abcgm0csz.kn6whxyz@abcntlworldxyz.com> wrote in
> > message
> > news:z8Mud.264$fQ.5@newsfe3-win.ntli.net...
> >
> >>>Can the Sirius radio be set to a different FM
> >
> > frequency?
> >
> >>===============
> >>If your Sirius Radio has an audio output and
> >
> > your car radio a cassette
> >
> >>player ; you will be able to either homebrew or
> >
> > purchase an audio cassette
> >
> >>shaped transducer with an audio input ,which
> >
> > you stick into the cassette
> >
> >>player , such that by "playing the transducer"
> >
> > you can listen to its audio
> >
> >>input being the audio output of the Sirius
> >
> > radio.
> >
> > Until recently, all of the sat radio boxes came
> > with a fake cassette of this type. Since cassette
> > players have vanished from new car radios, the FM
> > modulator is the answer these days.
> >
> > I too have the interference problems using the FM

> > output from my XM. Fortunately my car radio still
> > reads cassettes. We have strong FM stations every
> > 400 kHz around here, in some cases stations in the
> > Balto/DC area are just 200 kHz apart.
> >
> > One of the serious problems using the FM approach
> > is that one must set the audio level far below
> > what you get from over-the-air FM stations. FM
> > stations process their audio to be LOUD, yet do
> > things to negate the 75 us preemphasis curve.
> > Your XM/Sirius FM modulator doesn't have all that
> > fancy processing, so you may have to set it as
> > much as 10 or 15 dB lower in level to avoid
> > overdeviating.
> >
> > The only really good way for sat radio is a direct
> > audio connection of some type.
> >
> >
> >
> The 2005 Dodge Caravan we just ordered comes standard
> with an AM/FM CD Cassette radio. Yup, it has BOTH a
> cd player AND a cassette player!
>
> BTW those cassette adaptors use a tape head run in
> reverse for the coupling.

946. Re: wire strippers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 23:13:27 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <KqxNd.24784$3W3.13281@bignews4.bellsouth.net>
Source record: 20479
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

Aden wrote:
> "Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> a ï¿½crit dans le message de
> news:OXaNd.37752$BQ2.34242@bignews6.bellsouth.net...
>
>>Anybody remember that cold head soldering iron advertised on tv
>>a while back? It was supposed to come with a pair of these
>>neat looking wire strippers. Well today at the Miami hamfest
>>someone was selling just the wire strippers. I got two of the
>>smaller ones good for .2-3mm wire (what's that in AWG?) and
>>one of the larger ones good for .2-6mm wire for $20.
>
>
> http://www.asseenontv.com/prod-pages/quickstrip_std.html?gid=
>
> http://www.asseenontv.com/prod-pages/quickstrip_del.html?gid=
>
> Where I live, they can be bought for about 3$ a piece...
>
>
So it wasn't a super deal, I paid about what it would cost
on this web site. At least I didn't have to pay the shipping
cost.

947. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 23:37:49 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <110daihmr2edo50@corp.supernews.com>
Source record: 20480
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Paul Hovnanian P.E. wrote:
>
> In other words, this data is just a plot of a diode's DC I vs V
> characteristic, right?
>
> What is of more interest is the slope at a given DC operating point. If
> we pick 0V, for example, the above data (within the limits of its
> precision) gives a flat line around that point (+5mV 21 Mohms, -5mV 21
> Mohms). With a 100 uV signal, you might as well throw a 21 M ohm
> resistor in there instead.
>

Exactly. At very small currents, the diode is just a resistor (shunted by a capacitance). At slightly small currents, it's a very poor diode, with reverse current almost equal to the forward current, so on each negative half cycle you suck out nearly all the charge you delivered during the positive half cycle.

Roy Lewallen, W7EL

948. Re: Tuned circuit Q question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-06 23:40:59 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <rhad01lq7dbm5rsp5ev9qdkinj0piqpotg@4ax.com>
Source record: 20481

On Sun, 06 Feb 2005 12:46:05 GMT, "William E. Sabin"
<w.sabin@mchsi.com> wrote:

>I have had no trouble with Q=200 coils. I have a Boonton Q meter that
>verifies this when the correct core material (especially in a toroid) is
>used. At 30 MHz we do have to be somewhat persistent, though.
>
>Best regards,
>
>Bill W0IYH
>

Bill,
what I meant is that "when you want to make a coil with Q=200 - not
180 or 190" you may have to try some times if you haven't any
experience from which materials gives at least Q=200, a higher Q may
always be reduced to 200 with a resistor
Yes, I have a Radiometer Q-meter - quite old, almost as old as yours,
with thermionic tubes from the 30's and 50's, hi

73,
jan-martin
LA8AK

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

949. Re: Radio Free Colorado - A Successful New Internet Radio Station

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 02:25:53 UTC
From: Brian - KB9BVN <kb9bvn@arrl.net>
Message-ID: <RkANd.1991$UX3.614@newsread3.news.pas.earthlink.net>
Source record: 20482

Gary

Do you ever actually broadcast anything over the air??

73

"Gary Burke" <nospam@noreply.net> wrote in message
news:BE299C8F.7AF6%nospam@noreply.net...
> Radio Free Colorado - A Successful New Internet Radio Station
>
> NOTE: NEW CONNECTION URL'S GIVEN AT BOTTOM OF MESSAGE!
>
> Radio Free Colorado
> What Radio Once Was
>
>
> Radio Free Colorado, a non-commercial Internet Radio Station, plays a lot
of
> music you probably haven't heard in such a long time and have since
> forgotten how much you love. It's such a thrill when a forgotten song
comes
> on and you say "Hey, I love this song" and all your fond memories of it
come
> rushing back to you.
>
> Our "Genre" (what kind of music we play) is VERY diverse. We play
> Modern/Classic Rock, Progressive Rock, Alternative (Modern and Retro),
Pop,
> Billboard Classics, and Top Radio Hits from the 60's, 70's, 80's and 90's.
> We also play some Ambient/Instrumentals. No Rap or Hip-Hop, Classical,
Jazz
> or Swing.
>
> Radio Free Colorado streams music LIVE over the Internet using a
> high-fidelity 128 kbps MP3 stream. We use professional sound processing
> equipment to achieve a sound quality which we believe is superior to
> virtually all other 128 kbps streams.
>
> Any computer with a DSL, Cable Modem (or faster) Internet connection that
> has a download speed capacity of at least 128 kbps can tune in.
>
> Virtually all MP3 music players are capable of receiving live MP3 music
> streams over the Internet. Any music player compatible with streaming MP3
> audio can receive Radio Free Colorado's broadcast.

>
> Our MP3 broadcast stream is compatible with virtually all music software
> programs and works with PC's running Windows, Apple computers running OS X
> and other machines running Linux or Unix.
>
> Radio Free Colorado is NOT beholden to anyone. There is no pre-approved
> "playlist", no one tells us what we can't play. Listeners can, however
make
> song requests and if we have it we will play it.
>
>
> Radio Free Colorado - Sample of Songs We Play
>
> Go-Go's - Head Over Heels
> Dire Straits - Walk of Life
> Aimee Mann - Save Me (Acoustic - Recorded Live) - KBCO Studio C - Volume
14
> Nena Hagen (Gabriela "Nena" Kerner) - 99 Luftballons (German) - 99
> Luftballons
> 4 Non Blondes - What's Up
> Cake - Short Skirt/Long Jacket - Comfort Eagle
> Cracker - Euro Trash Girl - Garage d'Or
> The Carpenters - Live At The Palladium 1976
> Heart - Barracuda - The Essential Heart
> Tom Petty & The Heartbreakers - You Don't Know How It Feels - Wildflowers
> A Flock Of Seagulls - I Ran (So Far Away) - The Best Of A Flock Of
Seagulls
> Alphaville - Forever Young (Live) - Forever Young
> Heaven 17 - Let Me Go (Original Unedited Version) - CD Single
> The Waitresses - Quit - Wasn't Tomorrow Wonderful?
> The Jam - Going Underground - The Sound of the Jam
> Yaz - Situation (US 12" Mix) - Upstairs At Eric's
> Slow Children - Vanessa Vacillating - Best Of Slow Children
> Tori Amos - Silent All These Years - Little Earthquakes
> Pink Floyd - One Of My Turns - The Wall (Disc 2)
> Haysi Fantayzee - Shiny Shiny - Battle Hymns For Children Singing
> Aimee Mann - I've Had It (Acoustic - Recorded Live) - Rare On Air, Volume
2:
> "Morning Becomes Eclectic"
> Depeche Mode - Everything Counts (Original Unedited Version) - Depeche
Mode
> The Police - Don't Stand So Close To Me - Zenyatta Mondatta
> Killer Pussy - Teenage Enema Nurses In Bondage - Bikini Wax
> The Dead Milkmen - Punk Rock Girl - Death Rides a Pale Cow: The Ultimate
> Collection
> The Vapors - Turning Japanese - Vaporized
> Romeo Void - Never Say Never - Warm, In Your Coat
> Siouxsie & The Banshees - Christine - The Best of Siouxsie and The
Banshees

> Echo & The Bunnymen - The Killing Moon (12" Version) - Ballyhoo: The Best
Of
> Echo & The Bunnymen
> Gary Numan - Cars - The Pleasure Principle
> Berlin - The Metro - Best Of Berlin 1978 to 1988
> U2 - Vertigo - How to Dismantle an Atomic Bomb
> Peter Gabriel - Don't Give Up (Live) - Secret World Live (Disc 2)
> George Harrison - Give Me Love (Give Me Peace On Earth) - The Best Of
George
> Harrison
> Where Did You Sleep Last Night - Kurt Cobain w/Nirvana - MTV Unplugged in
> New York
> The Final Cut: A Requiem for the Post War Dream by Roger Waters
> Missing Persons - Words - Spring Session M
> Martin L. Gore - Compulsion - Counterfeit e.p.
> Haircut 100 - Love Plus One (12" Version) - Pelican West
> Split Enz - Six Months In A Leaky Boat - History Never Repeats - The Best
Of
> Split Enz
> Green Day - American Idiot (Uncut) - American Idiot
> Social Distortion - Ball And Chain - Social Distortion
> Primal Scream - Movin' on Up - Screamadelica
> The Jim Carroll Band - People Who Died - Just Can't Get Enough: New Wave
> Hits Of The '80's Volume 6
> Scala - Creep (Radiohead) - Scala On The Rocks
> Led Zeppelin - Living Loving Maid (She's Just A Woman) - Led Zeppelin II
> Creedence Clearwater Revival - Down On The Corner - Chronicle, Vol. 1
> The Beatles - The Fool On The Hill (Demo) - Anthology 2: Disc 2
> Oasis - Don't Look Back In Anger (Live) - MTV Unplugged
> The Who - Eminence Front (Live) - Join Together (Disc 2)
> Crowded House - Something So Strong (Live) - Recurring Dream: The Very
Best
> of Crowded House
> New Radicals - You Get What You Give - Maybe You've Been Brainwashed Too
> Billy Joel - She's Got A Way (Live) - Soundboard Recording
> Altered Images - I Could Be Happy - (12" Import)
> The Bangles - Walk Like An Egyptian - Different Light
> B-Movie - Nowhere Girl (Original Unedited Version) - 12" LP
> Suzanne Vega - If You Were In My Movie - 99.9 F
> Patti Smith - Dancing Barefoot - Land (1975-2002)
> The Clash - Know Your Rights - Combat Rock
> David Bowie - Space Oddity - Space Oddity
> Primitive Radio Gods - Standing Outside A Broken Phone Booth With Money In
> My Hand - Rocket
> The Pretenders - My City Was Gone - Learning To Crawl
> Midnight Oil - Beds Are Burning (12" Version) - 20,000 Watt R.S.L.
> Pete Yorn - Life On A Chain - Musicforthemorningafter
> Public Image Limited - Rise - Compact Disc
> Violent Femmes - Add It Up - Violent Femmes: Deluxe Edition

> The Psychedelic Furs - Ghost In You - Mirror Moves
> R.E.M. - Radio Free Europe - Murmur
> XTC - Dear God - Skylarking
> Big Country - In A Big Country - The Crossing
> Peter Murphy - Cuts You Up - Deep
>
> These songs are just a partial list of some of the "rarer" songs that not
> only don't get played on the radio anymore but are hard to find as well.
> Virtually all of the songs on this sample list have long since been sent
to
> the record company boneyard, which is why we play them. We have over 1,400
> songs of all varieties and the list grows every day.
>
> Artist and Song suggestions and requests are gladly accepted! We would
like
> to grow RFC enough to satisfy a variety of tastes yet remain completely
non
> commercial.
>
> iTunes, RealPlayer, Winamp or Audion 3 (Mac only) are recommended for best
> listening quality.
>
> Here is a list of recommended MP3 software programs you can use to listen
to
> RFC's broadcast. They are all available for free.
>
> iTunes Version 4.7 for Windows or Mac:
> http://www.apple.com/itunes/download/
>
> RealPlayer Version 10 for Windows:
> http://www.real.com/affiliates/superpass.html?pcode=cj&src=cj
>
> RealPlayer Version 10 for Mac:
> http://www.real.com/?src=blackjack
>
> RealPlayer Version 10 for Linux:
> http://www.real.com/linux/
>
> Winamp 5.08 from Nullsoft for Windows:
> http://www.winamp.com/player/
>
> Note: If you are using an earier version of Winamp, Nullsoft urges you to
> update
> your software due to several "security flaws" that are fixed in version
> 5.08.
>
> Audion 3 for Mac:
> http://www.panic.com/audion/
> Audion is now free of charge. Use the following link to get a free serial

> number for registering Audion:
> http://www.panic.com/audion/buy.html
>
> XMMS, MPG123, etc. MP3 Players for Linux/Unix or X Windows users:
> http://www.uk6x.com/applicationservices/mp3radio.html
>
>
> The "URL" address (the location on the Internet of Radio Free Colorado's
> Broadcast) is:
> http://kara.fast-serv.com:8630/
>
> For iTunes use the URL address:
> http://kara.fast-serv.com:8630/listen.pls
>
> For RealPlayer use the URL address:
> http://kara.fast-serv.com:8630/listen.pls
>
> For Winamp use the URL address:
> http://kara.fast-serv.com:8630
>
> For the Audion 3 media player, use the URL address:
> http://kara.fast-serv.com:8630
>
> You can find where to type RFC's "URL" address into iTunes under the menu
> item "Advanced" - "Open Stream".
> For RealPlayer, look under "File" - "Open Location".
> For Winamp, look under "File" - "Play URL".
>
> We genuinely welcome Artist and Song suggestions, listener comments, etc.
> You may contact Radio Free Colorado by visiting our website at:
>
>
http://www.boomspeed.com/garyburke/radiofreecolorado/RadioFreeColorado.html
>
> Radio Free Colorado is protected under Copyright Law.
>
> It is legal for you to listen as long as you don't record. :-)
>
> Best wishes,
>
> Gary Burke
> Owner/Operator
>

950. Re: wire strippers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 02:50:42 UTC
From: tschw10117@aol.com
Message-ID: <1107744642.400165.7670@l41g2000cwc.googlegroups.com>
Source record: 20483
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

Phil, not much call for wire-wrap? I still use it for all my
prototyping at work, my nixie tube clocks, all my home gadget
projects... I love the stuff. Of course it helps to have an electric
gun and a cut/strip/wrap bit!

I don't know what I'd do without wire wrap... anyone with wire-wrap
tools they don't want, I'll take 'em!

Terry.

951. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 02:58:22 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <110dmaj25v3kg00@corp.supernews.com>
Source record: 20484
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Winfield Hill wrote:
>
> No, it means its a better diode at low currents. See my curves again,
> http://www.picovolt.com/win/elec/comp/diode/diode-curves.html Note the
> 1n458 and the JFET diodes, which follow the theoretical 60mV/decade rule
> down to very low currents. As for Roy Lewallen's "ratio of reverse to
> forward current" argument, there is no reverse current for these fine
> fellows, at least for DC and reasonably low frequencies.

Sure there is. All diodes have reverse current.

It's the very
> crummy gold-doped 1n4148 that falls over. Awwkk!

The gold doping is done to dramatically reduce charge storage time.
Without it, the voltage across a diode continues to be in the forward
direction for some time after you reverse the current through it. While
a non-gold-doped diode might look good in DC tests, it makes a lousy
rectifier of RF. In the extreme case, it acts like a PIN diode (which is
simply a diode designed intentionally to have a long charge storage, or
reverse recovery, time).

Alas, life is full of tradeoffs.

Roy Lewallen, W7EL

952. Heathkit HW-202 restoration

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 03:01:12 UTC
From: Mike Burch <mburch46@mchsi.com>
Message-ID: <YRANd.51561$IV5.2170@attbi_s54>
Source record: 20485

Hi Fella's
I am in the process of restoring an HW-202 back to as mint a radio as I can. I was able to get quite a few of them in various states of condition for very little money, and the idea is salvage all the really nice parts and make a perfect (close to perfect) radio for keeps. Well, this radio uses small male and female pin/plug connectors for the connection between the wiring harness and circuit boards and I would like to replace them with new ones preferably gold plated. Do you know where I could get an item like this? The originals look like they are tin plated and might become problematic with vibration and corrosion Or should I just use some sort of gold plated post instead and skip a removable pin/plug of the original? Thank you in advance for looking this over for me.

Best wishes

Mike Burch K8MB
Apache Junction, AZ

953. Re: wire strippers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 03:24:52 UTC
From: Phil B <pcb999@NOSPAMcomcast.net>
Message-ID: <1ZKdnewhvYmNfZvfRVn-sw@comcast.com>
Source record: 20486
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

Terry, we use millions of dollars worth of design and simulation
software to do our prototyping at work. The only tools we handle are a
keyboard and a mouse. If we are REALLY lucky the $5 million dollar ASIC
works out of the shoot. More likely, we need to spend a couple more
million to re-spin the design to get rid of a few really obscure bugs.

Back in the good old days, we could easily add/remove wire wrap wires on
the prototype backplanes until the pesky obscure bugs were squashed. Ah,
for the simpler days!

Phil B

<tschw10117@aol.com> wrote in message
news:1107744642.400165.7670@l41g2000cwc.googlegroups.com...
> Phil, not much call for wire-wrap? I still use it for all my
> prototyping at work, my nixie tube clocks, all my home gadget
> projects... I love the stuff. Of course it helps to have an electric
> gun and a cut/strip/wrap bit!
>
> I don't know what I'd do without wire wrap... anyone with wire-wrap
> tools they don't want, I'll take 'em!
>
> Terry.
>

954. Where to buy capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 04:00:40 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <3upd01dvgt64luvj31h61k0hellur1sj4f@4ax.com>
Source record: 20487

I am looking for some .01 mfd and .02 mfd @ 2kv ceramic radial lead
capacitors.
Looked in digikey and mouser and didn't see them there.

Any suggestions on where to buy them?

Thanks
Gary K4FMX

955. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 05:18:10 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <110dugm3lhdgg64@corp.supernews.com>
Source record: 20488
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

I need to clarify this. My comments apply only to junction diodes, which virtually all silicon diodes are. Schottky diodes don't exhibit this charge storage effect. That's one reason they're often used in high frequency switching supplies. Their leakage current is, however, much greater than silicon diodes.

Roy Lewallen, W7EL

Roy Lewallen wrote:
>
> The gold doping is done to dramatically reduce charge storage time.
> Without it, the voltage across a diode continues to be in the forward
> direction for some time after you reverse the current through it. While
> a non-gold-doped diode might look good in DC tests, it makes a lousy
> rectifier of RF. In the extreme case, it acts like a PIN diode (which is
> simply a diode designed intentionally to have a long charge storage, or
> reverse recovery, time).
>
> Alas, life is full of tradeoffs.
>
> Roy Lewallen, W7EL

956. Re: wire strippers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 05:28:18 UTC
From: Jim Strickland <jim@DIESPAMMERSCUMcalico.litterbox.com>
Message-ID: <20050206222818168O7%jim@DIESPAMMERSCUMcalicolitterboxcom>
Source record: 20489
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

I bought my first set of these strippers at Home Depot.

For the record, I got a cold heat soldering iron (including a second
set of these strippers) for Christmas and y'know? It works pretty darn
well. I don't use it as my every day soldering iron, but you can bet
it will be in my tool box when, for example, I take my combat robots to
competition. The trick to them appears to be be *gentle* with the tips.

-Jim

On 2005-02-06 16:13:27 -0700, Ken Scharf <wa2mzeNOTTHIS@bellsouth.net> said:

> Aden wrote:
>> "Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> a ï¿½crit dans le message de
>> news:OXaNd.37752$BQ2.34242@bignews6.bellsouth.net...
>>
>>> Anybody remember that cold head soldering iron advertised on tv
>>> a while back? It was supposed to come with a pair of these
>>> neat looking wire strippers. Well today at the Miami hamfest
>>> someone was selling just the wire strippers. I got two of the
>>> smaller ones good for .2-3mm wire (what's that in AWG?) and
>>> one of the larger ones good for .2-6mm wire for $20.
>>
>>
>> http://www.asseenontv.com/prod-pages/quickstrip_std.html?gid=
>>
>> http://www.asseenontv.com/prod-pages/quickstrip_del.html?gid=
>>
>> Where I live, they can be bought for about 3$ a piece...
>>
>>
> So it wasn't a super deal, I paid about what it would cost
> on this web site. At least I didn't have to pay the shipping
> cost.

--
-Jim Strickland
jim@DIESPAMMERSCUMcalico.litterbox.com

957. Re: Tuned circuit Q question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 05:46:47 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <ahDNd.53769$eT5.15743@attbi_s51>
Source record: 20490

Yes, I agree. Thanks.

Bill W0IYH

"J M Noeding" <la8ak@online.no> wrote in message
news:rhad01lq7dbm5rsp5ev9qdkinj0piqpotg@4ax.com...
> On Sun, 06 Feb 2005 12:46:05 GMT, "William E. Sabin"
> <w.sabin@mchsi.com> wrote:
>
>>I have had no trouble with Q=200 coils. I have a Boonton Q meter that
>>verifies this when the correct core material (especially in a toroid) is
>>used. At 30 MHz we do have to be somewhat persistent, though.
>>
>>Best regards,
>>
>>Bill W0IYH
>>
>
> Bill,
> what I meant is that "when you want to make a coil with Q=200 - not
> 180 or 190" you may have to try some times if you haven't any
> experience from which materials gives at least Q=200, a higher Q may
> always be reduced to 200 with a resistor
> Yes, I have a Radiometer Q-meter - quite old, almost as old as yours,
> with thermionic tubes from the 30's and 50's, hi
>
> 73,
> jan-martin
> LA8AK
> ---
> J. M. Noeding, LA8AK, N-4623 Kristiansand
> http://home.online.no/~la8ak/c.htm

958. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 06:16:53 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cu714l$28n$2@hercules.btinternet.com>
Source record: 20491
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"Steve H" wrote -
> > Shortcomings of computer programmers -
> >
> > Lazy layabouts.
> >
> > Lacking in logical thought.
> >
> > A distinct weakness in use of the English language.
> >
> > However, they are very good at outwitting their employers, who are even
> > worse, and obtaining money (wages, salaries, fees) under false
pretences.
> >
> >
> A taste for red wine?
============================

Steve, just a minor correction. I have a taste for the white stuff too.
But I'm not a computer programmer. Never been one. Just a recent hobby.
It seems I'm a retired engineer. But I didn't fully realise what sort of
animal, what classification I might fall into, until after I volunteered to
be put on the shelf.

I couldn't stand Maggie wasting my time and interfering with my everyday
work.

Hic!

Radio Amateur Reg, G4FGQ

959. Re: Searching for components

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 06:57:53 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <RjENd.165192$w62.134252@bgtnsc05-news.ops.worldnet.att.net>
Source record: 20492

Hi Ed,
I went through the whole thing with Doom Electronics when I was
trying to buy some SL6440s. This company will only sell to other
dealers.....not to manufacturers or to private individuals. Doom did
hook me up with a jobber who would sell me a minimum quantity of 25.
Too bad Motorola discontinued these devices.....now you have all of
these entities selling for more than the devices originally sold for.
Fortunately, a friend of mine located one of the jobber's sources, and we
were able to buy them for 1/3 of the jobber's price.

Pete

"Roger and Ute Brown" <rogerbrown@gci.net> wrote in message
news:110d02bs20isk27@corp.supernews.com...
> Can't help with the MC's, however, the MPSH17's cross to NTE/ECG 229 and
> the
> 2N4417 is an NTE/ECG 452.
> NTE and ECG replacement parts are very common just about anywhere. Your
> local jobber will have them.
> I have a hunch that the MC parts could be rounded up with a more
> exhausting
> computer search.
> Roger, KL7Q
>
> Sledster <nobody@nowhere.com> wrote in message
> news:tohNd.2643$Ps.2487@okepread06...
>> Hi,
>>
>> I am trying to locate some obsolete components.
>> After the usual google searches and numerous emails to vendors, I am
> hoping
>> someone here will have what I need.
>>
>> I need 2 ea MPSH17's, 1 ea 2n4417, 1 ea MC145152 and 1 ea MC12017.
>>
>> If anyone can help it would be greatly appreciated.
>>
>> Ed
>>
>>
>
>

960. 10 Mtr Vetical For Handheld ???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 10:19:12 UTC
From: Radio Man <puns@verizon.net>
Message-ID: <AgHNd.12490$uc.7798@trnddc02>
Source record: 20493

I have an all mode 10 mtr handheld. Is there a site
that has information on how to construct a vertical
antenna with a bnc connector at the base?

961. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 10:26:35 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <36ou9lF54chs1U1@individual.net>
Source record: 20494
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

I know someone with a maths degree who claimed that
e^(-jwt) was a function that decreased with increasing t,
and cited the maths being taught to 13-year-olds as being
evidence!

(That he also has an electronics degree and failed to recognise
the significance of "j" in a discussion about complex cisoids is
priceless!

Cue....squirming, spin-doctoring, side-stepping, bullshitting
and downright lying.....)

"ZZZPK" <zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net> wrote
in message news:42064618.71859152@news.iol.ie...
> Custos Custodum <me@privacy.net> wrote:
> : Besides a mathematical inclination, an exceptionally good mastery of
> : one's native tongue is the most vital asset of a competent programmer.
> nonsense.
> i know of a number of people who have programming "degrees" who couldnt do
> either.

962. Re: ATU enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 11:00:46 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <yTHNd.98$Os3.87@newsfe1-gui.ntli.net>
Source record: 20495

> What are the collectives thoughts on the type of material to use for a
> homebrew ATU enclosure, should it be aluminium to reduce unwanted RF
> radiation or plastic to reduce coupling effects possibly caused by an
> aluminium enclosure.
==========
For QRP power levels it could be best fitted in a wooden box , simple and
easy .
For much higher power levels a metal enclosure will be better.
However ,in order not to influence inductances by the metal cabinet , a rule
of thumb says that (air) inductors should be free form any metal keeping a
distance of their diameter
Example : With a fixed air or roller inductor of say 100 mm (4 inches)
,you need an enclosure of at least 300 mm (12 inches) such that the inductor
is not less than 100mm from any metal surface.

For this reason many homebrew antenna matching units are fitted inside
non-metallic enclosures often made of perspex (plexy glass)

Frank GM0CSZ / KN6WH

963. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 11:10:58 UTC
From: Spike <Aero.Spike@Solutions.invalid>
Message-ID: <jcie011oiuo3389qi6kao6kjnli9sqqbd4@4ax.com>
Source record: 20496
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

On Mon, 7 Feb 2005 10:26:35 -0000, Airy R.Bean wrote:

>I know someone with a maths degree who claimed that
>e^(-jwt) was a function that decreased with increasing t,
>and cited the maths being taught to 13-year-olds as being
>evidence!

I know someone with a degree from an 'avant-garde' university that
said 'heat' is radiated in 'heat bands', and claimed as evidence that
this was cited in schoolbooks!

Don't I, Bean?
--
from
Aero Spike

964. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 13:09:13 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <110eq3thlnet817@corp.supernews.com>
Source record: 20497
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Mike Monett wrote:
>
> Excellent description - thanks.
>
> Only one small problem - as Win pointed out, Bob Pease feels a
> diode-connected 2N3904 has lower leakage at low voltage than a 1N4148:
>
> "What's All This Comparator Stuff, Anyhow?"
>
> http://www.elecdesign.com/Articles/ArticleID/9517/9517.html
>
> Does this mean a 2N3904 has a shallower slope than a 1N4148 through zero, or
> perhaps one or the other has an offset, such as the Agilent Zero Bias
> Schottky Detector Diodes shown in AN969?
>
> http://www.spelektroniikka.fi/kuvat/schot8.pdf
>
> Regards,
>
> Mike Monett

I'm not sure what you mean by an "offset" -- all diodes cross through the origin of the I-V curve, when excited by DC, anyway -- unless they contain a battery. In the reverse direction, the current pretty much levels off beyond a small reverse voltage. The current of this level part is the saturation current.

Again, don't think that good DC characteristics make for a good RF detector. A number of other factors, which have been discussed here, are very important. As I recall, only transistors designed as saturated switches (2N918 comes to mind, but it's been a long time, so don't quote me) are gold doped. Ones which aren't, and I'm quite sure the 2N3904 is in that category, will have long reverse recovery times so will make poor RF rectifiers. Circuits became too fast for saturated switches long, long ago, so I'd be surprised if gold doping is done any more except for replacement transistors in very old equipment.

You can learn a lot with a very simple setup consisting of nothing more than a variable amplitude signal generator, a diode, load resistor and capacitor, and a meter or scope. SPICE should also show these effects provided you use good models.

Roy Lewallen, W7EL

965. Re: wire strippers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 14:20:35 UTC
From: tschw10117@aol.com
Message-ID: <1107786035.633632.190890@z14g2000cwz.googlegroups.com>
Source record: 20398
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

Phil,

I guess I still live in the simpler days!

Truthfully, most of my work is designing control boards for sweepers and scrubbers.... DSP based designs with straightforward I/O and lots of power outputs, H-bridges and such... Not a lot of prototyping goes on anymore. I kind of miss it. That's why I still do it at home. Pure fun.

Terry.

966. Re: wire strippers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 15:25:59 UTC
From: Rick <notta@goodone.com>
Message-ID: <bMLNd.2325$UX3.1811@newsread3.news.pas.earthlink.net>
Source record: 20399
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

<tschw10117@aol.com> wrote in message
news:1107744642.400165.7670@l41g2000cwc.googlegroups.com...
> Phil, not much call for wire-wrap? I still use it for all my
> prototyping at work, my nixie tube clocks, all my home gadget
> projects... I love the stuff. Of course it helps to have an electric
> gun and a cut/strip/wrap bit!
>
> I don't know what I'd do without wire wrap... anyone with wire-wrap
> tools they don't want, I'll take 'em!
>
> Terry.

Same here!!!

967. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 15:48:39 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <36phbmF54uh61U1@individual.net>
Source record: 20400
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

No wonder that you reported difficulties in managing the
software engineers that worked for you, and that you subsequently
left (HAD to leave? The BRATS all over again?) private industry
to parasitise from the public purse as a teacher.

"Those that can, do.
Those that can't, teach.
Those that can't teach, teach PE.
Those that can't teach PE, join the plods.
Those that can't plod, join the traffic plods.
Those that can't traffic plod, are on sale on the vegetable
rack in Tesco's.".

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:36m6lvF53th4hU1@individual.net...
> Plus, of course, programming is not the hard bit- hasn't been for some
time.
> The skill lies in the system and software design. These days many packages
> can autogenerate code and, with the high uP speeds and low memory costs,
> that code is efficient enough to do the job- hand crafting to improve
speed
> etc often isn't required, even in real time apps.

968. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 15:52:13 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <36phbnF54uh61U2@individual.net>
Source record: 20401
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

You seem to be as ignorant about the practices of
software as you are about the practise of Morse Code
at 12WPM.

RTOS's have been in regular use in Britland industry
for well over 35 years.

If the "demand for much of the core software" was reduced in the
systems for which you were responsible, why did they go on for
so long, and why did you ultimately have to leave and get a job
as a teacher?

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:36m6lvF53th4hU1@individual.net...
> The move to the use of
> real time operating systems has also reduced the demand for much of the
core
> software.

969. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 16:11:03 UTC
From: Spike <Aero.Spike@Solutions.invalid>
Message-ID: <5m4f01tlfab81kb98buavcrl47mbdj8u14@4ax.com>
Source record: 20402
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

On Mon, 7 Feb 2005 15:48:39 -0000, Airy R.Bean wrote:

>No wonder that you reported difficulties in managing the
>software engineers that worked for you..

Your 'Be Nice to Brian Week' lasted just 42 minutes.....
--
from
Aero Spike

970. Motorola channel element question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 16:18:49 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <5249fb3f.0502070818.6d3dc825@posting.google.com>
Source record: 20403
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I am trying to use a local oscillator board from an old Motorola UHF FM radio as part of a microwave construction project. I need to know the input impedance of the multiplier chain so I can design a new crystal oscillator/buffer. The original crystal frequency is in the 18 MHz region but the input coils on the board tune at around 54 MHz so obviously there is a tripler inside the channel element.

Does anyone understand how Motorola did these things ? The original channel element is a TLN 8968A - anyone got a schematic ?

73,
Steve VE3SMA

971. Re: Where to buy capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 16:44:23 UTC
From: Larry Gagnon <lagagnon@fakeuniserve.com>
Message-ID: <pan.2005.02.07.16.44.23.461170@fakeuniserve.com>
Source record: 20404

On Sun, 06 Feb 2005 23:00:40 -0500, Gary Schafer wrote:

> I am looking for some .01 mfd and .02 mfd @ 2kv ceramic radial lead
> capacitors.
> Looked in digikey and mouser and didn't see them there.
>
> Any suggestions on where to buy them?
>
> Thanks
> Gary K4FMX

try http://www.rfparts.com

Larry VE7EA
--
****
to reply via email remove "fake"
Microsoft will soon release their newest product: a vacuum cleaner.
It will be their only product which doesn't suck.

972. gold doping (was Re: Diode and very small amplitude high frequencies signals)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 16:55:42 UTC
From: david@slack.com
Message-ID: <110f7cee3c73j33@corp.supernews.com>
Source record: 20405
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

In article <110eq3thlnet817@corp.supernews.com>,
Roy Lewallen <w7el@eznec.com> wrote:
>As I recall, only transistors designed as saturated
>switches (2N918 comes to mind, but it's been a long time, so don't quote
>me) are gold doped. Ones which aren't, and I'm quite sure the 2N3904 is
>in that category, will have long reverse recovery times so will make
>poor RF rectifiers. Circuits became too fast for saturated switches
>long, long ago, so I'd be surprised if gold doping is done any more
>except for replacement transistors in very old equipment.

Don't people still use 2N2369As, or at least the plastic version?
If not, what do they use instead?

(Does gold doping work for PNP transistors? I don't see why it wouldn't,
but I've never seen a specific reference to a gold-doped PNP.)

973. Re: gold doping (was Re: Diode and very small amplitude high frequencies signals)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 17:10:57 UTC
From: Jim Thompson <thegreatone@example.com>
Message-ID: <k58f015dte50otru2ams8qavq858c3sl8b@4ax.com>
Source record: 20406
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Mon, 07 Feb 2005 16:55:42 -0000, david@slack.com (David DiGiacomo)
wrote:

>In article <110eq3thlnet817@corp.supernews.com>,
>Roy Lewallen <w7el@eznec.com> wrote:
>>As I recall, only transistors designed as saturated
>>switches (2N918 comes to mind, but it's been a long time, so don't quote
>>me) are gold doped. Ones which aren't, and I'm quite sure the 2N3904 is
>>in that category, will have long reverse recovery times so will make
>>poor RF rectifiers. Circuits became too fast for saturated switches
>>long, long ago, so I'd be surprised if gold doping is done any more
>>except for replacement transistors in very old equipment.
>
>Don't people still use 2N2369As, or at least the plastic version?

Yes.

>If not, what do they use instead?

CMOS has no storage.

>
>(Does gold doping work for PNP transistors? I don't see why it wouldn't,
>but I've never seen a specific reference to a gold-doped PNP.)

No. Doping "sex" (of gold) is wrong for the N-type base, which is
where you're trying to induce recombination.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

974. Re: gold doping (was Re: Diode and very small amplitude high frequencies signals)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 17:26:30 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <lJ1Hk2FGT6BCFw6j@jmwa.demon.co.uk>
Source record: 20407
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

I read in sci.electronics.design that Jim Thompson
<thegreatone@example.com> wrote (in <k58f015dte50otru2ams8qavq858c3sl8b@
4ax.com>) about 'gold doping (was Re: Diode and very small amplitude
high frequencies signals)', on Mon, 7 Feb 2005:

>No. Doping "sex" (of gold) is wrong for the N-type base, which is where
>you're trying to induce recombination.

What to use, then? Ion-implanted krypton?
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

975. Re: gold doping (was Re: Diode and very small amplitude high frequencies signals)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 19:21:28 UTC
From: Jim Thompson <thegreatone@example.com>
Message-ID: <ksff01tc8mt4bhrncopcd8mcrfl7nc3jhv@4ax.com>
Source record: 20408
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Mon, 7 Feb 2005 17:26:30 +0000, John Woodgate
<jmw@jmwa.demon.contraspam.yuk> wrote:

>I read in sci.electronics.design that Jim Thompson
><thegreatone@example.com> wrote (in <k58f015dte50otru2ams8qavq858c3sl8b@
>4ax.com>) about 'gold doping (was Re: Diode and very small amplitude
>high frequencies signals)', on Mon, 7 Feb 2005:
>
>>No. Doping "sex" (of gold) is wrong for the N-type base, which is where
>>you're trying to induce recombination.
>
>What to use, then? Ion-implanted krypton?

Sounds good to me, and it'll glow in the dark ;-)

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

976. ALinco Dr 590 Question (Modifications)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-07 21:18:59 UTC
From: stryped@hotmail.com
Message-ID: <1107811139.835613.103800@l41g2000cwc.googlegroups.com>
Source record: 20409

My radio has the mods done on it. I can receive out of band according to the display. Does this really work? I have not been able to pick anything up but have not been trying for too long.

Also it will scan the aircraft bands and even says am on it. But I cant hear anything. Does this have an am board on it?

977. Re: Build your own intelligent amateur radeo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-08 02:38:52 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <36qn1sF515ec8U1@individual.net>
Source record: 20410
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"Airy R.Bean, village idiot" <Me@privacy.net> wrote in message
news:36phbnF54uh61U2@individual.net...
> You seem to be as ignorant about the practices of
> software as you are about the practise of Morse Code
> at 12WPM.
>
> RTOS's have been in regular use in Britland industry
> for well over 35 years.
>
> If the "demand for much of the core software" was reduced in the
> systems for which you were responsible, why did they go on for
> so long, and why did you ultimately have to leave and get a job
> as a teacher?
>
Refresh my memory please, why did you 'leave' Westinghouse?
...(_!_)...

978. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-08 03:25:21 UTC
From: novatech@eskimo.com
Message-ID: <cu9bf1$8se$1@eskinews.eskimo.com>
Source record: 20411
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

When I needed diode clamps that would work with +/-100mV with less than 10pA of leakage, I always used selected Jfets with some back bias. The DPAD10, etc. series of diodes that were designed for this were too expensive. But that was when I was at Fluke and I could specify exactly what I wanted and the vendors would come knocking. Most of the parts were specially selected from National process 50, which was used to make 2N4416 RF transistors.

The diode equation works over all ranges of the diode. We also used 2n2484 over 9 decades of current (pA to mA) of DC and tested them to be very log-linear. At AC, as already stated, you have to include the capacitance in the model. A finger print on the transistor body would ruin the response.

Steve.
--
Steven D. Swift, novatech@eskimo.com, http://www.novatech-instr.com
NOVATECH INSTRUMENTS, INC. P.O. Box 55997
206.301.8986, fax 206.363.4367 Seattle, Washington 98155 USA

979. Re: ATU enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-08 10:33:33 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <1A0Od.550$nX.245@newsfe2-win.ntli.net>
Source record: 20412

"Bill Turner" <noway@nohow.com> wrote in message
news:4k6f01tce9hdo9q201rijj0vo9okgap4ig@4ax.com...
> On Mon, 07 Feb 2005 11:00:46 GMT, "Highland Ham"
> <abcgm0csz.kn6whxyz@abcntlworldxyz.com> wrote:
>
> >For much higher power levels a metal enclosure will be better.
> --
>
> May I ask why would metal be better than wood?
==========
At 1000 -1500 Watts RF it is better to keep thing within metal walls.

As I understand it ,in the USA any amateur radio station operating at an RF power level in excess of 50 Watts needs to make a 'antenna radiation assessment'
Although an antenna matching unit is not an antenna , sitting close to a non-screened matching unit with air inductors operating at 1000 -1500 Watts RF output ,seems to me rather too close for comfort.
For the same reason RF power amplifiers (even when home brewed) are no doubt inside a metal enclosure.

Frank GM0CSZ / KN6WH

980. Wanted Icom ic-251a Service Manual

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-08 11:04:08 UTC
From: Greg <gkm@deakin.edu.au.removethisbit>
Message-ID: <42089cad$0$18880$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 20413

Hi, I'm looking for an icom ic-251a service manual
If you can help email me gkm@deakin.edu.au thanks in advance.
Greg VK3JIY

981. Re: ATU enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-08 14:03:20 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cuagr8$sd4$1@titan.btinternet.com>
Source record: 20414

> sitting close to a
> non-screened matching unit with air inductors operating at 1000 -1500
Watts
> RF output ,seems to me rather too close for comfort.
> Frank GM0CSZ / KN6WH

==========

The problem lies mainly in the imagination. What measurable harm can befall
you?

A coil of wire in a tuner radiates hardly more than a straight length of
wire of about the same length as the coil former.

Radiation is negligible in comparison with the field from the nearby
antenna, even from the back of a beam, which nobody worries about.

Reg.

982. Re: ATU enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-08 14:20:18 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <4208CAA1.8040801@invalid.invalid>
Source record: 20415

Reg Edwards wrote:
> The problem lies mainly in the imagination. What measurable harm can befall
> you?

Well, I can certainly imagine being zapped by high RF voltages!

Of course, that's not the real subject of this thread, but it's
certainly a reasonable practical consideration.

I wonder, if there's a solid material, suitable for construction of an
enclosure, whose electrical properties are more similar to that of air
than those of metal or wood?
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

983. Re: Diode and very small amplitude high frequencies signals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-08 14:25:09 UTC
From: Winfield Hill <hill_a@t_rowland-dotties-harvard-dot.s-edu>
Message-ID: <cuai450h49@drn.newsguy.com>
Source record: 20416
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Steven Swift wrote...
>
> When I needed diode clamps that would work with +/-100mV with less
> than 10pA of leakage, I always used selected Jfets with some back
> bias. The DPAD10, etc. series of diodes that were designed for this
> were too expensive. But that was when I was at Fluke and I could
> specify exactly what I wanted and the vendors would come knocking.
> Most of the parts were specially selected from National process 50,
> which was used to make 2N4416 RF transistors.

Yes, the PAD-1 and pn4117 JFET curves on my plot show your point,
http://www.picovolt.com/win/elec/comp/diode/diode-curves.html
with about 150 to 200mV forward voltage at 1pA. In that setup,
the current for under 100mV was well below what I could detect.

> The diode equation works over all ranges of the diode. We also used
> 2n2484 over 9 decades of current (pA to mA) of DC and tested them to
> be very log-linear. At AC, as already stated, you have to include the
> capacitance in the model. A finger print on the transistor body would
> ruin the response.

Not to mention the long reverse-recovery time of those parts. I put
up my graph to counter Dave's claim of a 600mV "barrier potential",
not to argue that these diodes make good low-level RF rectifiers. :>)

--
Thanks,
- Win

984. Re: Where to buy capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-08 15:59:46 UTC
From: shoppa@trailing-edge.com
Message-ID: <1107878386.261515.296190@c13g2000cwb.googlegroups.com>
Source record: 20417

> I am looking for some .01 mfd and .02 mfd @ 2kv ceramic
> radial lead capacitors.
> Looked in digikey and mouser
> and didn't see them there.

Digikey stocks Panasonic 2kV capacitors up to 5600 pF (= 0.0056 uF).
See, for example, part number P4495A. Two or four of these in parallel
and you're set.

Tim.

985. Re: Wanted Icom ic-251a Service Manual

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-08 16:31:11 UTC
From: Larry Gagnon <lagagnon@fakeuniserve.com>
Message-ID: <pan.2005.02.08.16.31.11.710105@fakeuniserve.com>
Source record: 20418

On Tue, 08 Feb 2005 22:04:08 +1100, Greg wrote:

> Hi, I'm looking for an icom ic-251a service manual If you can help email
> me gkm@deakin.edu.au thanks in advance. Greg VK3JIY

You might want to try this website:

http://www.cqham.ru/sch_eng.html

Larry VE7EA
--
****
to reply via email remove "fake"
Microsoft will soon release their newest product: a vacuum cleaner.
It will be their only product which doesn't suck.

986. The Definitive Chord & Scale Bible - Literally EVERY chord and scale!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-08 17:51:29 UTC
From: Kind of Blue28 <createbeforeyouhate@itsjustabook.com>
Message-ID: <2005020809512994992%createbeforeyouhate@itsjustabookcom>
Source record: 20419

Finally it exists!! IF YOU PLAY GUITAR, YOU NEED THIS BOOK!! Listen to my story:

In the process of teaching myself guitar, I went looking for a book that simply had the all the chords, scales and modes, and nothing else. I was totally surprised to find that such a book didn't exist. There are plenty of places to find this information, but it tends to be spread out over the coarse of a long book or in a poorly organized workbook. I found some of it on the web in the form of calculators and such, but that wasn't helpful since I wanted to practice away from my computer. That is why I created THE ULTIMATE GUITAR RESOURCE, which has LITERALLY EVERY CHORD, SCALE and MODE in an easy to download and print document. Its a full 37 pages for only $3.99! (hardcover is available)

What makes this guide even better is that you don't need to read music to use it, so it can help every player at any level. I guarantee you'll use this guide for years!

For way less than you spent on lunch, you'll learn:
-EVERY CHORD (in every position)
-EVERY SCALE, including the jazz and blues scales
-ALL THE MODES
-LITERALLY EVERYTHING YOU NEED TO KNOW - solo and play chords without reading music today.

A free sample is available at:

<http://keystone-music.com/>
<http://keystone-music.com/>
<http://keystone-music.com/>

Good luck and God Bless!

p.s. I apologize if this message annoys, aggravates, miffs, disturbs, bugs or angers you. I'm actually just a dude who wrote a book that hundreds of people are using and apparently liking very much. While this may fall into a spam-like category, (since I am selling something, and you didn't ask for this message), I think that its not totally over that line since I'm not pitching a porn site, a refinance loan or a cock enlargement.
Peace!

everychordandscale@yahoo.com

987. Re: ATU enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-08 17:53:38 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cuaub2$59l$1@hercules.btinternet.com>
Source record: 20420

> Reg Edwards wrote:
> > The problem lies mainly in the imagination. What measurable harm can
befall
> > you?
>
> Well, I can certainly imagine being zapped by high RF voltages!
>
> Of course, that's not the real subject of this thread, but it's
> certainly a reasonable practical consideration.
>
> I wonder, if there's a solid material, suitable for construction of an
> enclosure, whose electrical properties are more similar to that of air
> than those of metal or wood?
> --
> Doug Smith W9WI
========================

If you insist on an enclosure, next to wind, why not try glass?

Then you can view the roller and capacitor settings without the inconvenience of taking all the screws out of the cover. It's also easy to show a next door neighbour the works, calm him down, just after you've cleared his TVI.

There's only roughly 1000 volts, its RF not DC, around a 1 KW tuner. Fairly harmless stuff. You can't call yourself a real ham unless you've ever had to quickly remove the tip of your forefinger from a hot spot.

But don't make a habit of kissing capacitor vanes, attractive as they are, because they look beautiful in motion!

Reg, G4FGQ

988. Re: ATU enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-08 18:38:06 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <4209070F.7030803@invalid.invalid>
Source record: 20421

Reg Edwards wrote:
> There's only roughly 1000 volts, its RF not DC, around a 1 KW tuner. Fairly
> harmless stuff. You can't call yourself a real ham unless you've ever had to
> quickly remove the tip of your forefinger from a hot spot.

Having got a thumb on 400 volts RF... let me assure you, I'm prepared
to sacrifice some efficiency to prevent it from happening again!
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

989. Re: wire strippers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-08 18:52:34 UTC
From: john graesser <graesser@tca.net>
Message-ID: <110i2hsbn3lc09@corp.supernews.com>
Source record: 20422
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
news:OXaNd.37752$BQ2.34242@bignews6.bellsouth.net...
> Anybody remember that cold head soldering iron advertised on tv
> a while back? It was supposed to come with a pair of these
> neat looking wire strippers. Well today at the Miami hamfest
> someone was selling just the wire strippers. I got two of the
> smaller ones good for .2-3mm wire (what's that in AWG?) and
> one of the larger ones good for .2-6mm wire for $20.
> These really are cool wire strippers, they quickly strip
> any guage wire (in the supported range) without nicking the
> wire. They even appear to work on some wire wrap wire that
> is usually impossible to strip except with hard to find
> 'no-nick' brand cutters. (though you have to be carefull to
> put the wire in the right hand side of the cutters where
> the opening is a bit wider.

I don't know about the ww wire where you are, but the cheap manual wrapping tools that Radio Shack used to sell work fine for stripping here, they had that built in hole with a sheet metal plate with an angled slot that you just pulled the wire into then pulled the wire down. I wrapped many a board with just that tool, I never did like the power wrapping tools I bought. I also didn't like the manual tools that held the spools of wire that you didn't strip since they wrapped tight enough that the posts cut thru the insulation.

Of course this is a hobbyist view, if I had to wrap dozens of boards a day instead of one every couple of months I'm sure I would have a differenet opinion of wrappers.
thanks, John.
KC5DWD

990. Re: ATU enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-08 18:53:51 UTC
From: Bruce Gordon <bruceg@btpost.net>
Message-ID: <bruceg-2A8B0B.09543308022005@netnews.worldnet.att.net>
Source record: 20423

In article <4208CAA1.8040801@invalid.invalid>,
Doug Smith W9WI <w9wi@invalid.invalid> wrote:

> I wonder, if there's a solid material, suitable for construction of an
> enclosure, whose electrical properties are more similar to that of air
> than those of metal or wood?

If you guys would look at what the BIG Boys use to enclose the commercial
ATU's you would fnd that they are all in Hoffman Boxs, made out of
plastic, fiberglass, and epoxy. These work extremely well, for the
intended purpose.

Me

--
Bruce (semiretired powderman & exFCC Field Inspector for Southeastern Alaska)
add a <2> before @
Bruce Gordon * Debora Gordon R.N. Bruce's Trading Post
P.O. Box EXI Excursion Inlet South
Juneau, Alaska 99850 Excursion Inlet, Alaska 99850
www.btpost.net www.99850.net

991. Re: Looking for Transmitter Circuts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-08 19:17:03 UTC
From: john graesser <graesser@tca.net>
Message-ID: <110i3vpjr44qo78@corp.supernews.com>
Source record: 20424

"megabyte" <megabyte@kingsleymail.co.za> wrote in message
news:1107692894.550070.207000@c13g2000cwb.googlegroups.com...
> I'm looking for schematics for low power fm transmitters.
> Power/stability is more important than range. I need a transmitter that
> will transmit up to 50-100m (150-300 feet aprox.), but with a strong,
> stable output in that range. I want to use it in conjunction with small
> digital fm receivers. I regularly play paintball and a fm-com system
> will give the team an edge :)
> I would like it to be compatible with dinamic mics, because we want to
> use throught mics (ala Tears of the Sun).
>
> Any suggestions will be gratefully accepted.

I don't know about the availability of them in SA, but as someone else mentioned FRS radios are both cheap and small. I used them here, the vox headset would fit under a mask and you just had to clip the radio somewhere where you wouldn't smash it too much (those stubby antennas take a pretty good pounding before they break off). Range is up to around a kilometer in more open terrain, down around 100m used inside buildings. Be aware that a week after you start using them, your opponents will have at least one to listen in on your team comms.

The trick then is to have a code system that your players use to refer to objects and players.

It isn't enough to just wear them at the paintball field during games, you need to practice with them on, since some people have trouble following directions over the radio in the heat of combat, they just tune out the radio and concentrate on what they see in front of them.

Here in the US you can get FRS radios in the $10 range, cheap enough that even losing one (when someone hits the dirt and lands on it) is no problem. Vox mikes will be more than double that, and I haven't seen throat mikes, though I have seen earbud mikes like they sell for cell phones. If you really get into it, a mike and speaker could easily be built into the face mask for each player, and I am sure it would be cheaper than buying boom headsets like we used or throat mikes and earpieces like you are thinking of using.
thanks, John.
KC5DWD

992. Re: ATU enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-08 19:27:41 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <36sic5F5383nsU1@individual.net>
Source record: 20425

ISTR someone called, "R.F.Burns" advertising gear in Bad Con.

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cuaub2$59l$1@hercules.btinternet.com...
> There's only roughly 1000 volts, its RF not DC, around a 1 KW tuner.
Fairly
> harmless stuff. You can't call yourself a real ham unless you've ever had
to
> quickly remove the tip of your forefinger from a hot spot.

993. Re: gold doping (was Re: Diode and very small amplitude high frequencies signals)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-08 21:31:51 UTC
From: lemonjuice <exskimos@anonymous.to>
Message-ID: <1107898311.541941.236120@f14g2000cwb.googlegroups.com>
Source record: 20426
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Mon, 07 Feb 2005 16:55:42 -0000, david@slack.com (David DiGiacomo)
wrote:

>In article <110eq3thlnet817@corp.supernews.com>,
>Roy Lewallen <w7el@eznec.com> wrote:
>>As I recall, only transistors designed as saturated
>>switches (2N918 comes to mind, but it's been a long time, so don't
quote
>>me) are gold doped. Ones which aren't, and I'm quite sure the 2N3904
is
>>in that category, will have long reverse recovery times so will make
>>poor RF rectifiers. Circuits became too fast for saturated switches
>>long, long ago, so I'd be surprised if gold doping is done any more
>>except for replacement transistors in very old equipment.
>
>Don't people still use 2N2369As, or at least the plastic version?
>If not, what do they use instead?
>
>(Does gold doping work for PNP transistors? I don't see why it
wouldn't,
>but I've never seen a specific reference to a gold-doped PNP.)
Without going into the details of Quantum chemistry and electronic
configurations (which is certainly more challenging and exciting) you
can easily see it from a simplified perspective of the energy bond
model of semiconductors.
For a npn transistor doped with Gold the equilibrium density (ed) for
impurity electrons in Silicon doped with gold is given by the well
known Fermi-Dirac statistics equation.
ed = B*Nd*exp(-Edonors/kT) E donors is the energy required for Golds
electron to freely dwell in the Silicon lattice ... a value much
smaller then the E gap energy value for Si to create an electron hole
pair.
Smaller values of Edonor imply larger values free donor electrons.

If a pnp transistor was to be formed from Si doped with Gold the
equilibrium density (ph) for impurity holes in Silicon doped with gold
is
ph = A*Na*exp(-Eacceptor/kT) Eacceptor is the energy required for a
electron to be stripped from the Silicon atom by the Gold atom.

As Eacceptor is greater then Edonor only a npn transistor can be formed
from Si doped with Gold.

Its even more exciting to look at the Physics of Gold plated
transistors. Very intriguing .. just like the MOSFET transistor!

994. Re: wire strippers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-09 15:42:47 UTC
From: Bruce Mercer <maxbud12@sigecom.net>
Message-ID: <Hr-dnWRFzJ61spffRVn-tQ@sigecom.net>
Source record: 20427
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

> For the record, I got a cold heat soldering iron (including a second
> set of these strippers) for Christmas and y'know? It works pretty darn
> well. I don't use it as my every day soldering iron, but you can bet
> it will be in my tool box when, for example, I take my combat robots to
> competition. The trick to them appears to be be *gentle* with the tips.
>
> -Jim

You mean that thing actually works?! I'm amazed....I made fun of it
everytime I saw
the commercial.

Bruce

995. Service manual for Yaesu FT-290R

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-09 19:06:50 UTC
From: Rami Vainio <rami.vainio.maps@on.eunet.fi>
Message-ID: <hbtOd.534$P66.182@reader1.news.jippii.net>
Source record: 20428
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Hi, I'm looking for service manual to old Yaesu FT-290R 2m multimode radio. Especially I'm interested of tuning intructions (schematics and user manual can found easily, but nothing else).

Ramppa

PS. remove no spam from email address...

--
Rami Vainio OH2LIY
EMAIL : ramppa.maps@on.iki.fi
PHONE : +358 40 505 8085

996. Re: Service manual for Yaesu FT-290R

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-09 22:08:32 UTC
From: Larry Gagnon <lagagnon@fakeuniserve.com>
Message-ID: <pan.2005.02.09.22.08.32.462462@fakeuniserve.com>
Source record: 20429
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Wed, 09 Feb 2005 21:06:50 +0200, Rami Vainio wrote:

> Hi, I'm looking for service manual to old Yaesu FT-290R 2m multimode
> radio. Especially I'm interested of tuning intructions (schematics and
> user manual can found easily, but nothing else).

Try here:

http://www.cqham.ru/sch_eng.html

Larry VE7EA

997. Re: Service manual for Yaesu FT-290R

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-09 23:13:05 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <5OwOd.7008$Z%2.4675@newsfe3-gui.ntli.net>
Source record: 20430
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

> Try here:
>
> http://www.cqham.ru/sch_eng.html
==========
Tnx Larry , An excellent site with loads of useful info.

Frank GM0CSZ / KN6WH

998. Re: wire strippers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-10 02:52:30 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <G4AOd.728$d84.77@bignews3.bellsouth.net>
Source record: 20431
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

john graesser wrote:
> "Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
> news:OXaNd.37752$BQ2.34242@bignews6.bellsouth.net...
>
>>Anybody remember that cold head soldering iron advertised on tv
>>a while back? It was supposed to come with a pair of these
>>neat looking wire strippers. Well today at the Miami hamfest
>>someone was selling just the wire strippers. I got two of the
>>smaller ones good for .2-3mm wire (what's that in AWG?) and
>>one of the larger ones good for .2-6mm wire for $20.
>>These really are cool wire strippers, they quickly strip
>>any guage wire (in the supported range) without nicking the
>>wire. They even appear to work on some wire wrap wire that
>>is usually impossible to strip except with hard to find
>>'no-nick' brand cutters. (though you have to be carefull to
>>put the wire in the right hand side of the cutters where
>>the opening is a bit wider.
>
>
> I don't know about the ww wire where you are, but the cheap manual wrapping
> tools that Radio Shack used to sell work fine for stripping here, they had
> that built in hole with a sheet metal plate with an angled slot that you
> just pulled the wire into then pulled the wire down. I wrapped many a board
> with just that tool, I never did like the power wrapping tools I bought. I
> also didn't like the manual tools that held the spools of wire that you
> didn't strip since they wrapped tight enough that the posts cut thru the
> insulation.
>
> Of course this is a hobbyist view, if I had to wrap dozens of boards a day
> instead of one every couple of months I'm sure I would have a differenet
> opinion of wrappers.
> thanks, John.
> KC5DWD
>
>
The only good way to wire wrap is with the battery operated
tool with the bit inside the sleeve. (Gardner-Denver)
The self stripper tools
had to be used with special wire that stripped easily.
BTW I have this huge spool of teflon insulated ww wire (30g)
that is real tough to strip. Got it surplus.

999. FREE "CellularOne" 12 volt cig. lighter adapters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-10 03:07:01 UTC
From: ars_wa8mea@netzero.com
Message-ID: <1108001999.743907.26850@z14g2000cwz.googlegroups.com>
Source record: 20432

I have obtained a mass quantity of high quality "CellularOne" 12 volt cig. lighter adapters, unused. I have over two dozen, most in the original package. You can clip off the cell phone plug, and add your own. Rat Shack wants eight bucks for theirs. Mine are FREE. (Limit two, please. $4.95 shipping and handling for one. $6.95 S&H for two.) Email me via tinytenna@hotmail.com (Photo at QTH.com. Just put my call in the search engine.)

73, Bill -WA8MEA
REALLY NEAT STUFF!! Visit - http://qth.com/dwm

1000. Re: wire strippers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-10 05:27:05 UTC
From: Jim Strickland <jim@DIESPAMMERSCUMcalico.litterbox.com>
Message-ID: <20050209222705168 07%jim@DIESPAMMERSCUMcalicolitterboxcom>
Source record: 20433
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

On 2005-02-09 08:42:47 -0700, "Bruce Mercer" <maxbud12@sigecom.net> said:

>> For the record, I got a cold heat soldering iron (including a second
>> set of these strippers) for Christmas and y'know? It works pretty darn
>> well. I don't use it as my every day soldering iron, but you can bet
>> it will be in my tool box when, for example, I take my combat robots to
>> competition. The trick to them appears to be be *gentle* with the tips.
>>
>> -Jim
>
> You mean that thing actually works?! I'm amazed....I made fun of it
> everytime I saw
> the commercial.
>
> Bruce

Yeah, I tried it soldering a wire to a tube socket. Nothing major.
Worked as advertised. Obviously it *was* hot while melting the solder.

--
-Jim Strickland
jim@DIESPAMMERSCUMcalico.litterbox.com

1001. MW phase and amplitude trimmer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-10 12:09:39 UTC
From: Ron Hardin <rhhardin@mindspring.com>
Message-ID: <420B4F0F.20AE@mindspring.com>
Source record: 20434

I have an 8-element MW active array (DA100E's and ALA1530's) spread out
over the yard and combined in 7 ANC-4's

I need a way to put a slight phase shift and amplitude shift on
one (or more) of the inputs, because when you're down in a 60dB
null, fraction-of-hair turns of the ANC-4 pots become necessary.

At the moment, I add another ANC-4 to another element at very very low
gain and use it as the final trim, but that produces a 3dB loss in
signal too.

So I want a passive box on one of the inputs instead, where turning
a couple of knobs will produce a _slight_ shift in phase and in
amplitude (they can couple but have to have two degrees of freedom).

I was thinking of a capacitor in series, and a pot voltage divider
selecting the main output and a tiny bit of the capacitor output,
for one; a straight voltage divider pot for the other. Pots in
parallel with small resistors to make them have very little effect.

Then, I was thinking, I could get close to a null with the ANC-4's,
and then finalize it with the trimmers.

Any suggestions? Better ideas?
--
Ron Hardin
rhhardin@mindspring.com

On the internet, nobody knows you're a jerk.

1002. Re: Where to buy capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-10 14:09:48 UTC
From: John Walton <jdwalton@comcast.net>
Message-ID: <s7udnck1-dlV9JbfRVn-2w@comcast.com>
Source record: 20435

Try Electronic Surplus in Cleveland -- they have a lot of high voltage caps.
http://www.electronicsurplus.com/

"Gary Schafer" <gaschafer@comcast.net> wrote in message
news:3upd01dvgt64luvj31h61k0hellur1sj4f@4ax.com...
> I am looking for some .01 mfd and .02 mfd @ 2kv ceramic radial lead
> capacitors.
> Looked in digikey and mouser and didn't see them there.
>
> Any suggestions on where to buy them?
>
> Thanks
> Gary K4FMX

1003. Henry Amps RIP

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-10 17:46:33 UTC
From: Chuck K8CPA <k8cpachuck@gmail.com>
Message-ID: <gf7n011igor7s7rtu3mivhqe0hui80fc0h@4ax.com>
Source record: 20436

Hi Guys,

I heard the news via the internet... and it's true. Henry amps are no more...:

Here's the e-mail from Mr. Henry Himself:

From: "Ted Henry" <henryradio@earthlink.net>
To: "Chuck Adkins (K8CPA)" <**********@comcast.net>
Subject: Re: Lost your Lease?
Date: Thursday, February 10, 2005 12:23 PM

There were about 15 reasons why we stopped - the primary reason was that the business has lost money for a number of years. The loss of the lease was about 5th down on the many reasons it made no sense to continue the business.

Thanks for your interest.

Ted Shannon Henry

Ted Shannon
HENRY RADIO, INC.
2050 South Bundy Drive Suite 285
Los Angeles, CA 90025

henryradio@earthlink.net
www.henryradio.com
eBay Store: http://stores.ebay.com/Henry-Radio

310-820-1234 ext 310
310-826-7790 FAX

----- Original Message -----
From: Chuck Adkins (K8CPA)
To: henryradio@earthlink.net
Sent: Thursday, February 10, 2005 8:52 AM
Subject: Lost your Lease?

Hi Guys,

why not just find another building? and Continue on?

Makes no sense to stop.

-Chuck K8CPA

1004. scales or pointers for 1/4" shafts ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-11 09:13:44 UTC
From: SpamHog <n1jpr@hotmail.com>
Message-ID: <1108113224.315405.277920@f14g2000cwb.googlegroups.com>
Source record: 20437

I know where to find good reduction drives
and calibrated SMD knobs
for 1/4' shaft variables and pots...

BUT

...I have never found any ready to buy
scale disk or pointer to mount on a 1/4" shaft
of e.g. caps with built in reduction drives.

These must allow the shaft all the way through
so a knob can be mounted on the tip of the shaft.

When I needed one, I drull (*) through a regular knob and superglued a
disk or aluminum hand to the bottom of it, and quite disliked it.

I saw this kind of pointers on several kits etc.
and if reduction caps exist,
pointers or scaledisks must exist too,
but where can I buy some?

TIA

Filippo / SpamHog
http://filippo.ru.ru

(*) I like to hack up radios, but I also like to mod my verbs. "to
drill" sounds so much better in the irregular "to drill, drull, drult"

1005. Re: Henry Amps RIP

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-11 13:10:21 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <192Pd.42721$L_3.37498@clgrps13>
Source record: 20438

Oh man :-(

An end to a glorious era.

--
Gregg "t3h g33k"
http://geek.scorpiorising.ca
Ratings are for transistors, tubes have guidelines

1006. HW-100 - 12 volt filament mod for 6883 finals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-11 18:12:11 UTC
From: "gpatterson53@hotmail.com" <gpatterson53@hotmail.com>
Message-ID: <1108145531.192587.224070@f14g2000cwb.googlegroups.com>
Source record: 20439
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Will putting the filaments in parallel to run 6883 finals screw up the filament string balance and effect the other tubes in the rig?

tnx 73 gary W4AF

1007. Re: wire strippers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-11 18:52:02 UTC
From: clvrmnky <clvrmnky-uunet@coldmail.com.invalid>
Message-ID: <m97Pd.90916$vO1.568748@nnrp1.uunet.ca>
Source record: 20440

On 08/02/2005 1:52 PM, john graesser wrote:
> "Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
> news:OXaNd.37752$BQ2.34242@bignews6.bellsouth.net...
>
>>Anybody remember that cold head soldering iron advertised on tv
>>a while back? It was supposed to come with a pair of these
>>neat looking wire strippers. Well today at the Miami hamfest
>>someone was selling just the wire strippers. I got two of the
>>smaller ones good for .2-3mm wire (what's that in AWG?) and
>>one of the larger ones good for .2-6mm wire for $20.
>>These really are cool wire strippers, they quickly strip
>>any guage wire (in the supported range) without nicking the
>>wire. They even appear to work on some wire wrap wire that
>>is usually impossible to strip except with hard to find
>>'no-nick' brand cutters. (though you have to be carefull to
>>put the wire in the right hand side of the cutters where
>>the opening is a bit wider.
>
>
> I don't know about the ww wire where you are, but the cheap manual wrapping
> tools that Radio Shack used to sell work fine for stripping here, they had
> that built in hole with a sheet metal plate with an angled slot that you
> just pulled the wire into then pulled the wire down. I wrapped many a board
> with just that tool, I never did like the power wrapping tools I bought. I
> also didn't like the manual tools that held the spools of wire that you
> didn't strip since they wrapped tight enough that the posts cut thru the
> insulation.
>
> Of course this is a hobbyist view, if I had to wrap dozens of boards a day
> instead of one every couple of months I'm sure I would have a differenet
> opinion of wrappers.
> thanks, John.
> KC5DWD
>
>
When I used to work for an engineering firm, we used to prototype in
wirewrap. Generally, we'd wrap up a handful of modules for testing.
Production would be properly soldered boards (I once assembled 200 of
'em myself when we were in a pinch.) This was almost all digital
electronics, but a fair amount of the control was discrete parts (we had
a lot of buffers and drivers, since this stuff talked to 500v grain
elevator hardware), with an EPROM running the show.

We found the only way to maintain a prototype over weeks was with tight, self-stripping connections. Mostly because we ended up unwrapping things a fair amount, and then re-wrapping with fresh connections. We tried the simpler tools that you strip by hand, but they kept losing the mechanical connection to the posts after a few weeks of digging around and re-wrapping, which caused spurious and hard to diagnose problems. Once we switched to the right post and wrap combo, things were much easier.

Obviously, this is about using the right tool for the application. I haven't wrapped wire in years, so at this point I'd be likely to stick it in my eye or something.

1008. Re: HW-100 - 12 volt filament mod for 6883 finals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-11 19:31:46 UTC
From: Antonio Vernucci <vernucci@tin.it>
Message-ID: <CK7Pd.876608$35.33251735@news4.tin.it>
Source record: 20441
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I do not know the HW100, but for the HW101 I have using 6883s should be no problem. If you put on paper the filament circuit you will easily realize that putting the final tubes in parallel instead than in series makes no change for the other tubes.

73

Tony, I0JX

<gpatterson53@hotmail.com> ha scritto nel messaggio
news:1108145531.192587.224070@f14g2000cwb.googlegroups.com...
> Will putting the filaments in parallel to run 6883 finals screw up the
> filament string balance and effect the other tubes in the rig?
>
> tnx 73 gary W4AF
>

1009. Re: HW-100 - 12 volt filament mod for 6883 finals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-12 01:03:04 UTC
From: N2EY@AOL.COM
Message-ID: <1108170184.792168.44820@c13g2000cwb.googlegroups.com>
Source record: 20442
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

gpatterson53@hotmail.com wrote:
> Will putting the filaments in parallel to run 6883 finals screw > up the filament string balance and effect the other tubes in
> the rig?

I have the schematic of the HW-101, which succeeded the HW-100 but is basically the same. The 6146 heaters are in series, so with a little rewiring, 6883s can be used.

But be sure to mark the rig to show that this mod has been done, because if at some future time someone puts 6146s in, they'll be toasted.

73 de Jim, N2EY

1010. Re: Heathkit HW-202 restoration

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-12 06:27:46 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <ClhPd.29806$Th1.22040@bgtnsc04-news.ops.worldnet.att.net>
Source record: 20443

Samtec should have what you need. I am not sure if these are the 0.150 inch pin field headers.

Pete

"Mike Burch" <mburch46@mchsi.com> wrote in message news:YRANd.51561$IV5.2170@attbi_s54...
> Hi Fella's
> I am in the process of restoring an HW-202 back to as mint a radio as I
> can. I was able to get quite a few of them in various states of condition
> for very little money, and the idea is salvage all the really nice parts
> and make a perfect (close to perfect) radio for keeps. Well, this radio
> uses small male and female pin/plug connectors for the connection between
> the wiring harness and circuit boards and I would like to replace them
> with new ones preferably gold plated. Do you know where I could get an
> item like this? The originals look like they are tin plated and might
> become problematic with vibration and corrosion Or should I just use some
> sort of gold plated post instead and skip a removable pin/plug of the
> original? Thank you in advance for looking this over for me.
>
> Best wishes
>
> Mike Burch K8MB
> Apache Junction, AZ

1011. Smooth tone clickless cw sidetone generator

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-12 08:53:16 UTC
From: Stephen <atkinss@shaw.ca>
Message-ID: <pan.2005.02.12.08.48.01.131359@shaw.ca>
Source record: 20444

Just wondering if anyone has built this
http://www.solorb.com/elect/sidetone/index.html. I'm looking for anyone
who has made a pcb out of it. Or if anyone would be willing to help me go
through the schematic a bit. I'm relatively new to reading schematics and
I'm sure this is not the one to start with but it looks like a good
project to help learn Morse code. If you are willing please contact me at
atkinss at shaw dot ca.

Stephen

1012. Re: Smooth tone clickless cw sidetone generator

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-12 11:32:22 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <aPlPd.44227$L_3.26165@clgrps13>
Source record: 20445

Good lord, what a Goldburg way of doing things.

Use one transistor in a phase-shift oscillator configuration and chose
your components for the same waveform ;-)

--
Gregg "t3h g33k"
http://geek.scorpiorising.ca
Ratings are for transistors, tubes have guidelines

1013. Re: Smooth tone clickless cw sidetone generator

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-12 12:51:20 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <420dfbc9$0$19154$cc9e4d1f@news-text.dial.pipex.com>
Source record: 20446

"Gregg" <nospam@unknown.org> wrote in message
news:aPlPd.44227$L_3.26165@clgrps13...
> Good lord, what a Goldburg way of doing things.
>
> Use one transistor in a phase-shift oscillator configuration and chose
> your components for the same waveform ;-)

Won't work. He has the amplitutude ramping up and down at the beginning and
end of the tone.

The same thing could be done digitally by a fast microcontroller. I think it
would be quite easy with a software DDS.

73, Leon

1014. Re: Smooth tone clickless cw sidetone generator

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-12 13:14:06 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <yinPd.19184$wK.2427@newsread3.news.atl.earthlink.net>
Source record: 20447

"Gregg" <nospam@unknown.org> wrote in message
news:aPlPd.44227$L_3.26165@clgrps13...
> Good lord, what a Goldburg way of doing things.
>
> Use one transistor in a phase-shift oscillator configuration and chose
> your components for the same waveform ;-)

While you may not get the same effect or knowledge of building the circuit
there are some ICs that will do that in one small package.
Even the one transisitor oscillators are good enough for learning the code.

1015. Re: Smooth tone clickless cw sidetone generator

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-12 13:32:43 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <%znPd.109$6L4.19@newsfe5-win.ntli.net>
Source record: 20348

> > Use one transistor in a phase-shift oscillator configuration and chose
> > your components for the same waveform ;-)
>
> While you may not get the same effect or knowledge of building the circuit
> there are some ICs that will do that in one small package.
> Even the one transisitor oscillators are good enough for learning the
code.
==========
Indeed a single transistor 'double Tee' phase shift oscillator with a single
chip audio amp ,if you wish to use a loudspeaker , + a key is all you need
to learn /practice morse code.
It is a popular 'very simple project' candidates for the UK Intermediate
Licence can choose to do .
At the moment candidates for this AR licence have to construct something
simple in order to be assessed for basic construction/soldering skills.

Frank GM0CSZ / KN6WH

1016. off topic

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-12 13:54:49 UTC
From: Stuart Kinnear <stuart@iol.ie>
Message-ID: <cul2mi$k1f$1@kermit.esat.net>
Source record: 20349

does anyone have a quick fix for a mitsubishi pajero radio from japonese to
european broadcast vhf bands
stuart
ei8en

1017. Re: Smooth tone clickless cw sidetone generator

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-12 14:11:00 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <U7oPd.44652$L_3.2742@clgrps13>
Source record: 20350

Behold, Leon Heller scribed on tube chassis:

> "Gregg" <nospam@unknown.org> wrote in message
> news:aPlPd.44227$L_3.26165@clgrps13...
>> Good lord, what a Goldburg way of doing things.
>>
>> Use one transistor in a phase-shift oscillator configuration and chose
>> your components for the same waveform ;-)
>
> Won't work. He has the amplitutude ramping up and down at the beginning
> and end of the tone.

Hi Leon!

Sure will, I've done it....by accident ;-)

Had a slow-starting conventional phase-shift oscillator once and decided
to "fix it".....ended up using the "flaw".

Changed the oscillator and adjusted the Re so you get a nice shaped rise
on the leading edge, cap from keyside to ground gives you the lead-out and
a little 1N4148 in the base-bias keeps her stable across room temprature
range from 15 to 25C.

IIRC, the xsistor I used was a 2N5088, replacing the existing 2N2222 for
more gain control.

--
Gregg "t3h g33k"
http://geek.scorpiorising.ca
Ratings are for transistors, tubes have guidelines

1018. Re: Smooth tone clickless cw sidetone generator

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-12 16:15:39 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <dq5s01hti5quar88ccibnig447uekofins@4ax.com>
Source record: 20351

On Sat, 12 Feb 2005 13:32:43 GMT, "Highland Ham"
<abcgm0csz.kn6whxyz@abcntlworldxyz.com> wrote:

>Indeed a single transistor 'double Tee' phase shift oscillator with a single
>chip audio amp ,if you wish to use a loudspeaker , + a key is all you need
>to learn /practice morse code.

Any method of locally generating the Morse characters are OK for
learning the Morse code.

>It is a popular 'very simple project' candidates for the UK Intermediate
>Licence can choose to do .
>At the moment candidates for this AR licence have to construct something
>simple in order to be assessed for basic construction/soldering skills.

According to the ITU-R recommendations, including the third harmonic
(for non-fading circuits) or even the 5th harmonic (for non-fading
circuits) is enough. For 12 WPM, this would translate to 30 or 50 Hz
bandwidth.

Why should any CW enthusiasts be encouraged to use any emissions
broader than this ?

Paul OH3LWR

1019. Re: HW-100 - 12 volt filament mod for 6883 finals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-12 17:54:20 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <TFrPd.956$u16.901@bignews6.bellsouth.net>
Source record: 20353
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

gpatterson53@hotmail.com wrote:
> Will putting the filaments in parallel to run 6883 finals screw up the
> filament string balance and effect the other tubes in the rig?
>
> tnx 73 gary W4AF
>
As 6146's became expensive hams started using 6883's which were cheaper
but now the 6883's cost as much as the 6146's. If you are not using
the rig mobile and can fit a 1:2 or 1:4 step up transformer under
the chassis you can also find 6159's a little cheaper. These are
the same as 6146's but with 25 volt heaters. The 6159 was mostly
used in aircraft radios and is available military surplus.

1020. JESUS CHRIST WENT TO THE CROSS SO YOU CAN GO TO HEAVEN - The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel supernaturally to a virgin Jewish woman named Mary. He lived a sinless life for thirty-three years and then sacrificed His sinless blood and died on a cross to pay the death penalty for our sins.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-12 18:12:28 UTC
From: Evangelist_2005@sbcglobal.net
Message-ID: <1108231948.355281.260150@z14g2000cwz.googlegroups.com>
Source record: 20352

Good News!

Do you know how simple it is to go to Heaven after this life has ended?

The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel supernaturally to a virgin Jewish woman named Mary. He lived a sinless life for thirty-three years and then sacrificed His sinless blood and died on a cross to pay the death penalty for our sins.

After Jesus died He rose from the dead three days later as He said He would. The Holy Bible also tells us that Jesus Christ ascended into Heaven and that all who accept Him as their Lord and Saviour will live forever with Him in Heaven where there is no more death, sorrow, sickness and pain.

The Holy Bible very clearly explains how simple it is to be saved and on your way to Heaven, "For if you confess with your mouth, "Jesus is Lord," and believe in your heart that God raised him from the dead, you WILL BE SAVED." (Romans 10:9)

You can be saved right now and on your way to Heaven if you will open your heart to Jesus and pray the following prayer:

Dear Jesus Christ, I want to be saved so that I can have a home in Heaven when I die. I agree with You that I am a sinner. I believe You love me and want to save me. I believe that You bled and died on the cross to pay the penalty for my sins. I believe that You rose from the dead. Please forgive my sins and come into my heart and be my Lord and Saviour. Thank You Lord Jesus Christ for forgiving me and saving me through Your merciful grace. Amen.

You are now a Christian if you said the prayer and allowed
God to save you. Welcome to the family of God.

If you decide to wait till later you may die before you get
another chance to be saved because none of us knows
exactly when we will die.

Have a great day!
Internet Evangelist R.L. Grossi

Free Online Bible
http://www.biblegateway.com

Free Online Movies
http://www.tbn.org/index.php/8/1.html

Animation
http://www.gieson.com/Library/projects/animations/walk/index.html

The Passion Of The Christ
http://www.worshipmusic.com/0310263670.html

Beware Of Cults
http://www.carm.org/cults/cultlist.htm

About Hell
http://www.equip.org/free/DH198.htm

Is Jesus God?
http://www.powertochange.com/questions/qna2.html

1021. Re: HW-100 - 12 volt filament mod for 6883 finals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-12 22:38:21 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <e11t011c5uel0557uct7b5fmqb6btqu9lb@4ax.com>
Source record: 20354
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Sat, 12 Feb 2005 12:54:20 -0500, Ken Scharf
<wa2mzeNOTTHIS@bellsouth.net> wrote:

>gpatterson53@hotmail.com wrote:
>> Will putting the filaments in parallel to run 6883 finals screw up the
>> filament string balance and effect the other tubes in the rig?
>>
>> tnx 73 gary W4AF
>>
>As 6146's became expensive hams started using 6883's which were cheaper
>but now the 6883's cost as much as the 6146's. If you are not using
>the rig mobile and can fit a 1:2 or 1:4 step up transformer under
>the chassis you can also find 6159's a little cheaper. These are
>the same as 6146's but with 25 volt heaters. The 6159 was mostly
>used in aircraft radios and is available military surplus.

G3TQD modified his HW100 so we could operate RSGB national field day
within the rules, and put a PL36 into the PA instead of 2x 6146B's.
Operated the whole contest with at least 120W input with no problems,
so I would believe it is many alternatives which are not exact
equivalents but will work fine

73 Jan-Martin, LA8AK (ex-G5BFV)

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

1022. Re: off topic

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-12 22:40:51 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <ce1t01tblq76ivbf96fijs5r7pm20csbjg@4ax.com>
Source record: 20355

On Sat, 12 Feb 2005 13:54:49 -0000, "Stuart Kinnear" <stuart@iol.ie>
wrote:

>does anyone have a quick fix for a mitsubishi pajero radio from japonese to
>european broadcast vhf bands
>stuart
>ei8en
>
didn't even know it was a difference, not for the Pajero I use at work

---
J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

1023. Re: JESUS CHRIST WENT TO THE CROSS SO YOU CAN GO TO HEAVEN - The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel s

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-13 05:00:27 UTC
From: "B.Viel" <sjouk@home.nl>
Message-ID: <cummt9$p0u$1@news5.zwoll1.ov.home.nl>
Source record: 20356

It would be better for the LORD if HE homebrewed HIS own radio.
We could talk !

<Evangelist_2005@sbcglobal.net> schreef in bericht
news:1108231948.355281.260150@z14g2000cwz.googlegroups.com...
> Good News!
>
>
> Do you know how simple it is to go to Heaven after this
> life has ended?
>
>
> The good news is that God came from Heaven to earth
> in the person of Jesus Christ over 2000 years ago and
> died for our past, present and future sins(misdeeds).
> He was born in the land of Israel supernaturally to a
> virgin Jewish woman named Mary. He lived a sinless life
> for thirty-three years and then sacrificed His sinless
> blood and died on a cross to pay the death penalty for
> our sins.
>
>
> After Jesus died He rose from the dead three days later
> as He said He would. The Holy Bible also tells us that
> Jesus Christ ascended into Heaven and that all who accept
> Him as their Lord and Saviour will live forever with Him
> in Heaven where there is no more death, sorrow, sickness
> and pain.
>
>
> The Holy Bible very clearly explains how simple it is
> to be saved and on your way to Heaven, "For if you
> confess with your mouth, "Jesus is Lord," and believe
> in your heart that God raised him from the dead, you
> WILL BE SAVED." (Romans 10:9)
>
>
> You can be saved right now and on your way to Heaven if
> you will open your heart to Jesus and pray the following
> prayer:
>

>
> Dear Jesus Christ, I want to be saved so that I can have
> a home in Heaven when I die. I agree with You that I am a
> sinner. I believe You love me and want to save me. I
> believe that You bled and died on the cross to pay the
> penalty for my sins. I believe that You rose from the dead.
> Please forgive my sins and come into my heart and be my
> Lord and Saviour. Thank You Lord Jesus Christ for
> forgiving me and saving me through Your merciful grace.
> Amen.
>
>
> You are now a Christian if you said the prayer and allowed
> God to save you. Welcome to the family of God.
>
>
> If you decide to wait till later you may die before you get
> another chance to be saved because none of us knows
> exactly when we will die.
>
>
> Have a great day!
> Internet Evangelist R.L. Grossi
>
>
>
> Free Online Bible
> http://www.biblegateway.com
>
>
> Free Online Movies
> http://www.tbn.org/index.php/8/1.html
>
>
> Animation
> http://www.gieson.com/Library/projects/animations/walk/index.html
>
>
> The Passion Of The Christ
> http://www.worshipmusic.com/0310263670.html
>
>
> Beware Of Cults
> http://www.carm.org/cults/cultlist.htm
>
>
> About Hell
> http://www.equip.org/free/DH198.htm
>
>

> Is Jesus God?
> http://www.powertochange.com/questions/qna2.html
>

1024. 4-400 HF Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-13 13:31:47 UTC
From: Rob <robnang34@woh.rr.com>
Message-ID: <7FIPd.38280$i42.5362@fe1.columbus.rr.com>
Source record: 20357

I was just wondering if anyone out there might have a schematic of an amplifier using a single 4-400 tube in grounded grid configuration that they might have constructed or even a website with one? It doesn`t have to have tuned input or power supply with it. I can do the math and figure out values for it, but thought I might check and save myself some time. Thanks for any info, Rob WB8VWI

1025. Re: JESUS CHRIST WENT TO THE CROSS SO YOU CAN GO TO HEAVEN - The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel s

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-13 16:58:22 UTC
From: drwxr-xr-x <bit-bucket@config.com>
Message-ID: <slrnd0v1pe.24qt.bit-bucket@shell.config.com>
Source record: 20358

```
On Sun, 13 Feb 2005 06:00:27 +0100, B.Viel wrote:
> It would be better for the LORD if HE homebrewed HIS own radio.
> We could talk !

It would be WAY BETTER if idiots would not reply to Write-Only
spammer posts. Furthermore, it only helps promote the spam
to INCLUDE THE FULL BODY OF THE ORIGINAL PAYLOAD.

<big snip>
```

1026. Re: Heathkit HW-202 restoration

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-13 23:23:14 UTC
From: Mike Burch <mburch46@mchsi.com>
Message-ID: <CjRPd.67758$eT5.20827@attbi_s51>
Source record: 20359

Thanks for the reply Pete, I will look into that.

Mike K8MB
>
>
>

1027. Re: 4-400 HF Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-13 23:48:23 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <bHRPd.2812$vx4.649@newsfe4-gui.ntli.net>
Source record: 20360

> I was just wondering if anyone out there might have a schematic of an
> amplifier using a single 4-400 tube in grounded grid configuration that
> they might have constructed or even a website with one? It doesn`t have
> to have tuned input or power supply with it. I can do the math and
> figure out values for it, but thought I might check and save myself some
> time. Thanks for any info, Rob WB8VWI
==========
An RF Power amp. for the HF bands with 2 4-400's in grounded grid
configuration can be found in ARRL Handbook 1986 , pages 30-40 and 30-41.
Input circuit is very simple ,perhaps too simple for a solid state front end
transceiver.
In the old days with valve transceivers having their own PI tank tuning
,this was acceptable.
Suggest you also have a look at AG6K's web site which has a lot of info re
RF power amplifiers with valves.

Frank GM0CSZ / KN6WH

1028. Re: JESUS CHRIST WENT TO THE CROSS SO YOU CAN GO TO HEAVEN - The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel s

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-14 00:12:27 UTC
From: "B.Viel" <sjouk@home.nl>
Message-ID: <cuoqda$jc1$1@news6.zwoll1.ov.home.nl>
Source record: 20361

```
There is nothing wrong with the original payload, thats why I did not
delete it.
It's only off topic.
I don't believe in not reply would stop the spam.
Seen to many newsgroups over years spoiled with spam that did
not get reply's.
If my reply is not your kind of joke, I am sorry for that.
At least I posted it under my real name, and not some
idiot drwxr-xr-x ......

"drwxr-xr-x" <bit-bucket@config.com> schreef in bericht
news:slrnd0v1pe.24qt.bit-bucket@shell.config.com...
> On Sun, 13 Feb 2005 06:00:27 +0100, B.Viel wrote:
> > It would be better for the LORD if HE homebrewed HIS own radio.
> > We could talk !
>
> It would be WAY BETTER if idiots would not reply to Write-Only
> spammer posts. Furthermore, it only helps promote the spam
> to INCLUDE THE FULL BODY OF THE ORIGINAL PAYLOAD.
>
> <big snip>
```

1029. Wanted To Buy: DSSS Spread Spectrum Radio Modem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-14 11:28:12 UTC
From: "S. Clark" <s_clark@nospam.com>
Message-ID: <hp2111da6ac4rtmgs6htfgia2ccb187p6m@4ax.com>
Source record: 20363

Hello,

Looking to buy a DSSS spread spectrum radio modem.

click link for example:

http://www.imagi-vision.com/GinaDSSS.jpg

Please E-Mail:

stephanclark001@yahoo.com

Thank you.

1030. WTB: New or Used - DSSS Spread Spectrum Radio Modem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-14 12:14:59 UTC
From: "S. Clark" <s_clark@nospam.com>
Message-ID: <bg5111tbp41ct40uo545t60blfcrcq7hla@4ax.com>
Source record: 20364

Hello,

Looking to buy a DSSS spread spectrum radio modem.

NEW or USED

900MHz or 2.4GHz

click link for example:

http://www.imagi-vision.com/GinaDSSS.jpg

Please E-Mail:

stephanclark001@yahoo.com

Thank you.

1031. Re: WTB: New or Used - DSSS Spread Spectrum Radio Modem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-14 12:55:03 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <Hc1Qd.46805$gA4.27681@edtnps89>
Source record: 20362

There's been a guy on ebay.ca trying to get rid of a pair for months.

--
Gregg "t3h g33k"
http://geek.scorpiorising.ca
Ratings are for transistors, tubes have guidelines

1032. free money

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-14 18:40:33 UTC
From: Brian king <brianking123@hotmail.com>
Message-ID: <Bg6Qd.2103$oh4.78918@ursa-nb00s0.nbnet.nb.ca>
Source record: 20365

Greetings,

A while back, I was browsing the newsgroups, just like you are now, and came across an article similar to this that said you could make thousands in CASH within weeks with only an initial investment of $6.00 (American) plus International stamps due to users that may be outside the United States! So I thought, "Yeah, right, this must be a scam!" But like most of us I was curious and kept reading. It said that if you send $1.00 to each of the 6 names and addresses listed in the article, you could make thousands in a very short period of time. You then place your own name and address at the bottom of the list at #6, and post the article to at least 300 newsgroups. (There are about 32,000 of them out there and that's quite a large market pool). No catch, that was it. Even though the investment was a measly $6, I had three questions that needed to be answered before I could get involved in this sort of thing.

1. IS THIS REALLY LEGAL? I called a lawyer first. The lawyer was a little skeptical that I would actually make any CASH but he said it WAS LEGAL if I wanted to try it. I told him it sounded a lot like a chain letter but the details of the system (SEE BELOW) actually made it a legitimate legal business.

2. IS IT OK WITH THE POST OFFICE OR IS IT MAIL FRAUD? I called them: 1-800-725-2161 and they confirmed THIS IS ABSOLUTELY LEGAL! (See 18, sections 1302 NS 1341 of Postal Lottery Laws). This clarifies the program of collecting names and addresses for a mailing list.

3. IS IT RIGHT? Well, everyone who sends me a buck has a good chance of getting A LOT of CASH ... a much better chance than buying a lottery ticket!!! So, having these questions answered, I invested EXACTLY $8.22 ...

six $1.00 bills and six 37-cent postage stamps ... and boy am I glad I did!!! Within 7 days, I started getting CASH in the mail! I was shocked! I figured it would end soon and didn't give it another thought. But the CASH continued coming in. In my first week I made between $20 to $30. By the end of the second week I had made a total of $1,000.00. In the third week I had over $10,000.00 and it was still growing. This is now my fourth week and I have made a total of just over $42,000 and it's still coming in..... It's certainly worth $6.00 and 6 stamps!!!

Also, make sure you print a copy of this article NOW, so you can get the information off of it, as you need it. I promise you that if you follow the directions exactly, that you will start making more CASH than you thought possible by doing something so easy!

Suggestion: Read this entire message carefully! (Print it out or download it.) Follow the simple directions and watch the CASH come in! It's easy. It's legal. And, your investment is only $6.00 (Plus postage), IMPORTANT: This is not a rip-off; it is not indecent; it is not illegal; and there is virtually no risk - it really works!!!! If all of the following instructions are adhered to, you will receive extraordinary dividends. PLEASE NOTE: Please follow these directions EXACTLY, and $50,000 or more can be yours in 20 to 60 days. This program remains successful because of the honesty and integrity of the participants. Please continue its success by carefully adhering to the instructions. You will now become part of the Mail Order business. In this business your product is not solid and tangible, it's a service. You are in the business of developing Mailing Lists. Many large corporations are happy to pay big bucks for quality lists. However, the CASH made from the mailing lists is secondary to the income that is made from people like you and me asking to be included in that list. Here are the 4 easy steps to success:

STEP 1: Get 6 separate pieces of paper and write the following on each piece of paper "PLEASE PUT ME ON YOUR MAILING LIST." Now get 6 US $1.00 bills and place ONE inside EACH of the 6 pieces of paper so the bill will not be seen

through the envelope (to prevent thievery). Place one paper in each of the 6 envelops and seal them. You should now have 6 sealed envelopes, each with a piece of paper stating the above phrase, your name and address, and a $1.00 bill. What you are doing is creating a service. THIS IS ABSOLUTELY LEGAL! You are requesting a legitimate service and you are paying for it! Like most of us I was a little skeptical and a little worried about the legal aspects of it all. So I checked it out with the U.S. Post Office (1-800-725-2161) and they confirmed that it is indeed legal! Mail the 6 envelopes to the following

addresses:

#1) Brian King 15O'Dea Pl St.Johns NL canada A1c 3c6

#2) D. Ben Istomin, 2530 Betsy Way, Rancho Cordova, CA 95670

#3) D. Gardner, 5808 San Pierre Ct., Bakersfield, CA 93308

#4) Eduardo Rodrigues, 404 N. Montello St. #3, Brockton, MA 02301

#5) Darlene Rodrigues, 1 Madrid Square #4, Brockton, MA 02301

#6) Jay Conway, PO BOX 1116 Lake Sherwood, MO 63357-1116

STEP 2: Now take the #1 name off the list that you see above, move the other names up (6 becomes 5, 5 becomes 4, etc...) and add YOUR Name as number 6 on the list.

STEP 3: Change anything you need to, but try to keep this article as close to the original as possible. Now, post your amended article to at least 300 newsgroups. (I think there are close to 32,000 groups) All you need is 300, but remember, the more you post, the more CASH you make! This is perfectly legal! If you have any doubts, refer to Sec. 18 1302 NS & 1341 of the Postal lottery laws. Keep a copy of these steps for yourself and, whenever you need CASH, you can use it again, and again.

PLEASE REMEMBER that this program remains successful because of the honesty and integrity of the participants and by them carefully adhering to the directions. Look at it this way. If you are a person of integrity, the program will continue and the CASH that so many others have received will come your way. NOTE: You may want to retain every name and addresses sent to

you, either on a computer or hard copy and keep the notes people send you. This VERIFIES that you are truly providing a service. (Also, it might be a good idea to wrap the $1 bill in dark paper to reduce the risk of mail theft.) So, as each post is downloaded and the directions carefully followed, six members will be reimbursed for their participation as a List Developer with one dollar each. Your name will move up the list geometrically so that when your name reaches the #1 position you will be receiving thousands of CASH in CASH!!! What an opportunity for only $6.00 ($1.00 for each of the first six people listed above) Send it now, add your own name to the list and you're in business!

---DIRECTIONS ----- FOR HOW TO POST TO NEWSGROUPS----------

Step 1) You do not need to re-type this entire letter to do your own posting. Simply put your cursor at the beginning of this letter and drag your cursor to the bottom of this letter, and select 'copy' from the edit menu. This will copy the entire letter into the computer's memory.

Step 2) Open a blank 'notepad' file and place your cursor at the top of the blank page. From the 'edit' menu select 'paste'. This will paste a copy of the letter into the notepad so that you can add your name to the list.

Step 3) Save your new notepad file as a .txt file. If you want to do your postings in different settings, you'll always have this file to go back to.

Step 4) Use Netscape or Internet explorer and try searching for various newsgroups (on-line forums, message boards, chat sites, discussions.)

Step 5) Visit these message boards (Best way to find them is use a search engine, type in " news groups + free message posting") and post this article as a new message by highlighting the text of this letter and selecting paste from the edit menu. Fill in the Subject, this will be the header that everyone sees as they scroll through the list of postings in a particular group, click the post message button. You're done with your first one!

Congratulations...THAT'S IT! All you have to do is jump to different newsgroups and post away, after you get the hang of it, it will take about 30 seconds for each newsgroup!

REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE CASH YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 300

That's it! You will begin receiving CASH from around the world within days! You may eventually want to rent a P.O. Box due to the large amount of mail you will receive. If you wish to stay anonymous, you can invent a name to use, as long as the postman will deliver it. **JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT.**

Now the WHY part: Out of 300 postings, say I receive only 7 replies (a very low example). So then I made $7.00 with my name at #6 on the letter. Now, each of the 7 persons who just sent me $1.00 make the MINIMUM 300 postings, each with my name at #5 and only 7 persons respond to each of the 7 original 7, that is another $49.00 for me, now those 49 each make 300 MINIMUM posts with my name at #4 and I get 7 replies each, I will bring in an additional $343.00! Now, those 343 persons turn around and post the MINIMUM 300 with my name at #3 and only receive 7 replies each, I will make an additional $2401.00! OK, now here is the fun part, each of those 2401 persons post a MINIMUM 300 letters with my name at #2 and they each only receive 7 replies, that just made me $16,807.00!!! Those 16807 persons will all deliver this message to 300 newsgroups with my name at #1 and if 7 persons per 300 Newsgroups react I will receive

$117,649.00! With an original investment of only $6.00! And some stamps. AMAZING! When your name is no longer on the list, you just take the latest posting in the newsgroups, and send out another $6.00 to names on the list, putting your name at number 6 again. And start posting again. The thing to remember is: do you realize that thousands of people all over the world are joining the internet and reading these articles everyday? JUST LIKE YOU are now!! So, can you afford $6.00 and see if it really works?? I think so... People have said, "what if the plan is played out and no one sends you the CASH? So what! What are the chances of that happening when there are tons of new honest users and new honest people who are joining the internet and newsgroups everyday and are willing to give it a try? Estimates are at

20,000 to 50,000 new users, every day, with thousands of those joining the actual internet. Remember, play FAIRLY and HONESTLY and this will really work. By the way, if you try to deceive people by posting the messages with your name in the list and not sending the CASH to the rest of the people already on the list, you will NOT get as much. Someone I talked to knew someone who did that and he only made about $150.00, and that's after seven or eight weeks! Then he sent the 6 $1.00 bills, people added him to their lists, and in 4-5 weeks he had over $10k. This is the fairest and most honest way I have ever seen to share the wealth of the world without costing anything but our time!!! You also may want to buy mailing and e-mail lists for future CASH. Make sure you print this article out RIGHT NOW! Also, try to keep a list of everyone that sends you CASH and always keep an eye on the newsgroups to make sure everyone is playing fairly. Remember, HONESTY IS THE BEST POLICY. You don't need to cheat the basic idea to make CASH!! GOOD LUCK to all and please play fairly and reap the huge rewards from this, which is tons of extra CASH. Please remember to declare your extra income. Thanks once again...

"People have asked me if this is really legal. Well, it is! You are using the Internet to advertise your business. What is that business? You are creating a mailing list of people who are interested in home-based computer and online business and methods of generating income at home. Remember, people send you a small fee to be added to your mailing list. It is legal. What will you do with your list of thousands of names? That's up to you."

So, build your mailing list, keep good accounts, declare the income and pay your taxes. By doing this you prove your business intentions. Keep an eye on the newsgroups and when the cash has stopped coming (that means your name is no longer on the list), you just take the latest posting at the newsgroups, send another $6.00 to the names stated on the list, make your corrections (put your name at #6) and start posting again.

NOTES: *1. In some countries, the export of the country's exchange is illegal. But you can get the license to do this from the post office,

explaining the above statements (that you have an online business, etc. You may have to pay an extra tax, but that's OK, the amount of the incoming CASH is HUGE! And as I said, a few countries have that restriction. *2. You may want to buy mailing and e-mail lists for future CASH. (Or Database or Spreadsheet software.) *3. If you're really not sure or still think this can't be for real, please print a copy of this article and give it to someone who really needs the CASH, and see what happens. *4. You will start getting responses within 1-2 weeks.

ALSO REMEMBER SEND YOUR $1 OUT TO EVERYONE ON THE LIST, EVEN IF THEY ARE NOT FROM THE U.S. BY DOING SO, YOU'RE EXPANDING YOUR BUSINESS TO THE ENTIRE WORLD AND SECURING YOURSELF AN EVEN LARGER INCOME. WHAT ARE YOU WAITING FOR??? $$$!!! $$$!!! $$$!!! $$$!!! $$$!!! $$$!!! $$$!!! $$$!!! $$$!!!

GOOD LUCK!!!

1033. Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-14 19:15:32 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <37cbsuF56al3iU1@individual.net>
Source record: 20366
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Much of the negativity that the CBer-Masquerading-As-A-Radio-Ham emits when it is suggested to him that he should build his own rig comes from a complaint that it is not possible to miniaturise a rig to the sizes that are available from the Nipland CB suppliers, mainly Yaesu and Kenwood.

But, surely, the size of a rig is irrelevant to anyone interested in technical
performance?

I wonder what size of rig is really acceptable to the _REAL_ Radio Ham when you consider that the RACAL RA17 was a large 19" rack model, and
when you take into consideration the footprint of desktop PC's that have been welcomed so recently into a number of shacks?

How about a foot print of between 12" and 18" square, with a height of about 3"?

That would make a rig about the same size as a DVD player, again, an item of consumerist products that until recently was unknown but now is de rigeur - again
pointing out the spurious argument put up against HB.

In a box 18" square by 3" tall, we'd have enough room to manoeuvre and to experiment with circuit changes but without worrying that our Henley "Solon" soldering irons were going to melt a component other than the one we're currently dealing with.

1034. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-14 19:46:39 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnd1200v.ihr.bit-bucket@shell.config.com>
Source record: 20367
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

On Mon, 14 Feb 2005 19:15:32 -0000, Airy R.Bean wrote:

> But, surely, the size of a rig is irrelevant to anyone interested in
> technical performance?
>
> I wonder what size of rig is really acceptable to the _REAL_ Radio Ham when
> you consider that the RACAL RA17 was a large 19" rack model, and
> when you take into consideration the footprint of desktop PC's that have
> been welcomed so recently into a number of shacks?

Give me a steel chassis - 3' wide and 2' deep, with a 20 lb power
transformer, a 15 lb modulation transformer, a 5 lb audo output
transformer, and a dozen or so octal based tubes.

----- or, a BC-610 and an HRO-50.

HI!HI!
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

1035. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-14 20:02:56 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <t502119ms619gooin4ujva2rfb5h7qrtta@4ax.com>
Source record: 20368

On Mon, 14 Feb 2005 19:15:32 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>Much of the negativity that the CBer-Masquerading-As-A-Radio-Ham
>emits when it is suggested to him that he should build his own rig comes
>from a complaint that it is not possible to miniaturise a rig to the sizes
>that are available from the Nipland CB suppliers, mainly Yaesu and Kenwood.

Er why not. It's doable as a homebrewer. My favorite chassis is old
cb rigs. outercase subcase and front pannel are often useful. Even
put a 6m sideband rig in one.

>But, surely, the size of a rig is irrelevant to anyone interested in
>technical performance?

Most appliance ops dont understand perfomance.

>I wonder what size of rig is really acceptable to the _REAL_ Radio Ham when
>you consider that the RACAL RA17 was a large 19" rack model, and
>when you take into consideration the footprint of desktop PC's that have
>been welcomed so recently into a number of shacks?

Boat anchor. Good radio and small for that time. They still do not
go cheap.

>How about a foot print of between 12" and 18" square, with a height of about
>3"?

That is a bit big. The usual footprint I shoot for is 2" tall by 6"
wide and maybe 8"deep. That's 96 cubic inches, plenty of room.

Allison

1036. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-14 21:02:41 UTC
From: yammyr6 <dtb@KNICkERScwazy.co.uk>
Message-ID: <noudnbS6-fpvjIzfRVnyhQ@pipex.net>
Source record: 20369
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

and just where do you intend to buy all those components from
after youve searched and found that there are only a few places and the
all charge the earch for a resistor or a transistor the cost of building a
Tranciver is prohibitive
its far cheaper to modifie existing stuff to the bands you want to use ie
11mt to 10mt to 6 mt
just my opinion
but then again in true amateur status i never buy anything i just loan it
from work or rescue it carefully from the skip where it was carefully
placed ;)
sonow you know where all those LED's came from

1037. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-14 23:21:32 UTC
From: Gary Cavie <m0jjh@despammed.com>
Message-ID: <MPG.1c7b42ccd6adc7bc9896d3@news.individual.net>
Source record: 20370
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

In article <37cbsuF56al3iU1@individual.net>, Me@privacy.net says...
> Much of the negativity that the CBer-Masquerading-As-A-Radio-Ham
> emits when it is suggested to him that he should build his own rig comes
> from a complaint that it is not possible to miniaturise a rig to the sizes
> that are available from the Nipland CB suppliers, mainly Yaesu and Kenwood.
>
> But, surely, the size of a rig is irrelevant to anyone interested in
> technical
> performance?
>
> I wonder what size of rig is really acceptable to the _REAL_ Radio Ham when
> you consider that the RACAL RA17 was a large 19" rack model, and
> when you take into consideration the footprint of desktop PC's that have
> been welcomed so recently into a number of shacks?
>
> How about a foot print of between 12" and 18" square, with a height of about
> 3"?
>
> That would make a rig about the same size as a DVD player, again, an item
> of consumerist products that until recently was unknown but now is de
> rigeur - again
> pointing out the spurious argument put up against HB.
>
> In a box 18" square by 3" tall, we'd have enough room to manoeuvre and to
> experiment with circuit changes but without worrying that our Henley "Solon"
> soldering irons were going to melt a component other than the one we're
> currently dealing with.
>
>
>
>

I'm currently building Pic-a-star, and haven't given the final casing a thought yet. Rather than trying to build to a pre-determined size, I'll design the case around whatever size the radio ends up, allowing for 'poke-about-a-bility' when it's done.

I don't find the SMT devices a problem. G3XJP has come up with some excellent ideas for repeatable, reliable methods of using them. By making the code open-source, it is also encouraging to have a dabble, and see what changes when certain parts are altered. A true homebrewer's delight!

1038. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-14 23:31:22 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <37cql8F5br5tvU1@individual.net>
Source record: 20371
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Gary Cavie" <m0jjh@despammed.com> wrote in message
news:MPG.1c7b42ccd6adc7bc9896d3@news.individual.net...
>
> I'm currently building Pic-a-star, and haven't given the final casing a
> thought yet. Rather than trying to build to a pre-determined size, I'll
> design the case around whatever size the radio ends up, allowing for
> 'poke-about-a-bility' when it's done.

There is a chap locally (G8SUY I think) who has developed some ATV SMT
designs- they seem to work well and be popular. If you can hold the parts
while soldering then SMT isn't too bad- an illuminated bench magnifier
helps.

> I don't find the SMT devices a problem. G3XJP has come up with some
> excellent ideas for repeatable, reliable methods of using them. By making
> the code open-source, it is also encouraging to have a dabble, and see
> what changes when certain parts are altered. A true homebrewer's delight!

Sadly, I'm sure someone will come along and falsely claim G3XJP's code was
hacked and needs rewriting- totally ignoring his efforts to encourage
homebrew and failing to produce anything to replace it.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

1039. Something like a diplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 00:51:45 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <faudncsAR8Q32ozfRVn-3w@comcast.com>
Source record: 20372

I'm trying to build a circuit to split two signal paths apart, process them differently, and them put them back together. In particular, I have incoming RF signals from ~25MHz-3GHz (they're going to a wideband receiver) and I have some notch filters that I want to be able to selectively engage between 25-500MHz.Due to the topology and parasitics of the filters, they tend to roll off above 500MHz and have significant loss by the time you get to 3GHz.

Hence, I'd like to run 25-500MHz though one signal path and 500MHz-3GHz through another (I want to leave the 500MHz-3GHz part untouched). The 'cross over' region doesn't have to be particular 'clean' (i.e., it can vary +/-5dB easily).

I tried desgining a 5th order diplexer, and it cleanly splits the two frequency ranges into separate path going to their own terminators. However, if instead of terminating the low pass output and high pass outputs to their own loads I connect the two outputs together, I get something of a mess -- not at all a 'flat line' like I was hoping for.

I next tried hooking up two of these diplexers 'end to end,' and while the response is almost flat, it has a very sharp null right at the 500MHz corner frequency, and another very sharp set of nulls a couple hundred MHz above and below this (they're mirror images). Hmm...

So... any hints how to do this properly? I thought for certain the end to end diplexers would have done the trick.

Thanks,
---Joel Kolstad

1040. Re: Something like a diplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 02:47:53 UTC
From: "B.Viel" <sjouk@home.nl>
Message-ID: <curnsq$5o6$1@news5.zwoll1.ov.home.nl>
Source record: 20373

To split a signal you can use a direction coupler.
I have seen "hybrid" ring models made of transmission line with specific length in UKW-unterlage A4 typed edition 1980's.
To inject a signal you can use a direction coupler too....
>and them put them back together.
Maybe Google for Dubus artikels.
I'am just giving a hint.
A piece of thick coax, braid a wire for about 1/4 wavelength under the outer layer, remove plastic cover first.
Connect one end to a resistor 50 Ohm (same as the transmission line impedance) other end of the resistor to earth.
The other end of the wire to get signal from or put signal in.
Idea from the book antennenbibel Karl Rothammel.

"Joel Kolstad" <JKolstad71HatesSpam@Yahoo.Com> schreef in bericht news:faudncsAR8Q32ozfRVn-3w@comcast.com...
> I'm trying to build a circuit to split two signal paths apart, process them
> differently, and them put them back together. In particular, I have
> incoming RF signals from ~25MHz-3GHz (they're going to a wideband receiver)
> and I have some notch filters that I want to be able to selectively engage
> between 25-500MHz.Due to the topology and parasitics of the filters, they
> tend to roll off above 500MHz and have significant loss by the time you get
> to 3GHz.
>
> Hence, I'd like to run 25-500MHz though one signal path and 500MHz-3GHz
> through another (I want to leave the 500MHz-3GHz part untouched). The
> 'cross over' region doesn't have to be particular 'clean' (i.e., it can vary
> +/-5dB easily).
>
> I tried desgining a 5th order diplexer, and it cleanly splits the two
> frequency ranges into separate path going to their own terminators.
> However, if instead of terminating the low pass output and high pass outputs
> to their own loads I connect the two outputs together, I get something of a
> mess -- not at all a 'flat line' like I was hoping for.
>
> I next tried hooking up two of these diplexers 'end to end,' and while the
> response is almost flat, it has a very sharp null right at the 500MHz corner

> frequency, and another very sharp set of nulls a couple hundred MHz above
> and below this (they're mirror images). Hmm...
>
> So... any hints how to do this properly? I thought for certain the end to
> end diplexers would have done the trick.
>
> Thanks,
> ---Joel Kolstad
>
>

1041. Linux and X-Windows

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 03:09:07 UTC
From: "Leland C. Scott" <k.c.8.l.d.o.@arrl.net>
Message-ID: <_e2dnU1Uk8JJ-ozfRVn-og@comcast.com>
Source record: 20374

I received the following E-mail from Paul Swart (pauls@starnet.com) at Starnet Communications about a special license fee for their X-Win32 client software for running Linux X-Window desktop, and apps, remotely over the Internet or a LAN connection. I would think there would be some Hams who would be interested in contacting Paul about his proposal.

http://www.starnet.com/products/

I've tried the demo out using the Gnome desktop under Fedora Core 3 and it's a really slick bit of work.

-
"How many of these non-commercial Ham users would you say could use the X-Win32 X server?

I'm thinking about setting up some kind of special (low-cost) license program exclusively for this kind of use by Ham radio operators so cost would not be any barrier. Just like we're selling lots of classroom/lab licenses to schools at around $30. The revenue basically supports our cost of the program, including the engineering and tech support we provide to these users. I'm sure you have ways to make this known to others in your Ham community so that the volume would justify putting the program in place."

Let me now if I'm onto something or whether we're talking about a handful of people in the Ham radio community that could use our software.

--
Leland C. Scott
KC8LDO

Wireless Network
Mobile computing
on the go brought
to you by Micro$oft

1042. Something like a diplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 04:53:26 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_4211f863@fidonet.org>
Source record: 20306

"Joel Kolstad" bravely wrote to "All" (14 Feb 05 16:51:45)
--- on the heady topic of "Something like a diplexer"

JK> From: "Joel Kolstad" <JKolstad71HatesSpam@Yahoo.Com>
JK> Subject: Something like a diplexer
JK> Xref: aeinews rec.radio.amateur.homebrew:2136

JK> I'm trying to build a circuit to split two signal paths apart, process
JK> them differently, and them put them back together. In particular, I
JK> have incoming RF signals from ~25MHz-3GHz (they're going to a wideband
JK> receiver) and I have some notch filters that I want to be able to
JK> selectively engage between 25-500MHz.Due to the topology and
JK> parasitics of the filters, they tend to roll off above 500MHz and have
JK> significant loss by the time you get to 3GHz.

JK> Hence, I'd like to run 25-500MHz though one signal path and
JK> 500MHz-3GHz through another (I want to leave the 500MHz-3GHz part
JK> untouched). The 'cross over' region doesn't have to be particular
JK> 'clean' (i.e., it can vary +/-5dB easily).

JK> I tried desgining a 5th order diplexer, and it cleanly splits the two
JK> frequency ranges into separate path going to their own terminators.
JK> However, if instead of terminating the low pass output and high pass
JK> outputs to their own loads I connect the two outputs together, I get
JK> something of a mess -- not at all a 'flat line' like I was hoping for.

JK> I next tried hooking up two of these diplexers 'end to end,' and while
JK> the response is almost flat, it has a very sharp null right at the
JK> 500MHz corner frequency, and another very sharp set of nulls a couple
JK> hundred MHz above and below this (they're mirror images). Hmm...

JK> So... any hints how to do this properly? I thought for certain the
JK> end to end diplexers would have done the trick.

JK> Thanks,
JK> ---Joel Kolstad

You missed a step called a directional coupler. It's a sort of
transformer with 2 input ports and 1 output port. The 2 inputs don't
see one another but their power is combined at the output.

A*s*i*m*o*v

... We're young, rich, and full of sugar, what do we do?

1043. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 06:23:08 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <gzgQd.58975$L_3.40931@clgrps13>
Source record: 20375

IMHO, it would be of benefit if the no-code class, rather than limit one to commercial based equipment, be forced to use homebrew TX or RX equipment.

The only requirement being a power limitation and it meets the spectral purity, etc. regs of the country of origin. Boatanchor or "radio-on-a-PIC", whatever construction.

But you know the government.....

--
Gregg "t3h g33k"
http://geek.scorpiorising.ca
Ratings are for transistors, tubes have guidelines

1044. Re: Linux and X-Windows

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 06:24:53 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <VAgQd.47616$gA4.8227@edtnps89>
Source record: 20376

With so much GPL-ware out there, why bother?

Let the proprietary people stick to writing Windows software and leave us
alone.

--
Gregg "t3h g33k"
http://geek.scorpiorising.ca
Ratings are for transistors, tubes have guidelines

1045. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 06:29:22 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1c7b369ebf199bf99896a3@news-central.giganews.com>
Source record: 20377

In article <gzgQd.58975$L_3.40931@clgrps13>, nospam@unknown.org says...
> IMHO, it would be of benefit if the no-code class, rather than limit one
> to commercial based equipment, be forced to use homebrew TX or RX
> equipment.
>
> The only requirement being a power limitation and it meets the spectral
> purity, etc. regs of the country of origin. Boatanchor or
> "radio-on-a-PIC", whatever construction.
>
> But you know the government.....
>

Somehow, I doubt many of those 20 WPM Extras making equine posteriors
out of themselves on 75 fone are doing so on homebrew rigs.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

1046. Re: New or Used - DSSS Spread Spectrum Radio Modem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 07:36:08 UTC
From: Andrey <a8421@intergate.bc.ca>
Message-ID: <11139gtf802l37a@corp.supernews.com>
Source record: 20378

Check products of Simbol technologies.

"S. Clark" <s_clark@nospam.com> wrote in message
news:bg5111tbp41ct40uo545t60blfcrcq7hla@4ax.com...
> Hello,
>
> Looking to buy a DSSS spread spectrum radio modem.
>
> NEW or USED
>
> 900MHz or 2.4GHz
>
> click link for example:
>
> http://www.imagi-vision.com/GinaDSSS.jpg
>
>
> Please E-Mail:
>
> stephanclark001@yahoo.com
>
> Thank you.

1047. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 08:18:47 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <37dq2eF5a2hq0U1@individual.net>
Source record: 20379
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

But what of the "liebebstraum" (sp?) for future experimentation
with the circuitry?

<nospam@nouce.bellatlantic.net> wrote in message
news:t502119ms619gooin4ujva2rfb5h7qrtta@4ax.com...
> On Mon, 14 Feb 2005 19:15:32 -0000, "Airy R.Bean" <Me@privacy.net>
> wrote:
> >How about a foot print of between 12" and 18" square, with a height of
about
> >3"?
> That is a bit big. The usual footprint I shoot for is 2" tall by 6"
> wide and maybe 8"deep. That's 96 cubic inches, plenty of room.

1048. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 08:20:46 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <37dq2fF5a2hq0U2@individual.net>
Source record: 20380
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Used to be the case here in Britland that the first year was
limited to CW with a max 10W output.

About time to re-introduce it, so that Ham experimenters are
thereby forced to gain an appreciation of elementary RF?

"Gregg" <nospam@unknown.org> wrote in message
news:gzgQd.58975$L_3.40931@clgrps13...
> IMHO, it would be of benefit if the no-code class, rather than limit one
> to commercial based equipment, be forced to use homebrew TX or RX
> equipment.

1049. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 09:30:54 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <ijjQd.42545$K54.37341@edtnps84>
Source record: 20381

Behold, John Miles scribed on tube chassis:

> In article <gzgQd.58975$L_3.40931@clgrps13>, nospam@unknown.org says...
>> IMHO, it would be of benefit if the no-code class, rather than limit
>> one to commercial based equipment, be forced to use homebrew TX or RX
>> equipment.
>>
>> The only requirement being a power limitation and it meets the spectral
>> purity, etc. regs of the country of origin. Boatanchor or
>> "radio-on-a-PIC", whatever construction.
>>
>> But you know the government.....
>>
>>
> Somehow, I doubt many of those 20 WPM Extras making equine posteriors
> out of themselves on 75 fone are doing so on homebrew rigs.

The idea is the advanced ticket people can buy commercial rigs.

I was reading some of the the history of Ham radio though and it seems
today's ham's rarely fit the bill :-(

What happened?

--
Gregg "t3h g33k"
http://geek.scorpiorising.ca
Ratings are for transistors, tubes have guidelines

1050. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 10:56:56 UTC
From: real-radio-ham <eric@yahoo.com>
Message-ID: <4211cff8$1_3@mk-nntp-1.news.uk.worldonline.com>
Source record: 20382
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Latest project here is a HF transmitter, 8" X 15" X 13", the same size as
the old Sony surround amp put up in the loft 7 years ago.

RRH.
"Airy R.Bean" <Me@privacy.net> wrote in message
news:37cbsuF56al3iU1@individual.net...
> Much of the negativity that the CBer-Masquerading-As-A-Radio-Ham
> emits when it is suggested to him that he should build his own rig comes
> from a complaint that it is not possible to miniaturise a rig to the sizes
> that are available from the Nipland CB suppliers, mainly Yaesu and
Kenwood.
>
> But, surely, the size of a rig is irrelevant to anyone interested in
> technical
> performance?
>
> I wonder what size of rig is really acceptable to the _REAL_ Radio Ham
when
> you consider that the RACAL RA17 was a large 19" rack model, and
> when you take into consideration the footprint of desktop PC's that have
> been welcomed so recently into a number of shacks?
>
> How about a foot print of between 12" and 18" square, with a height of
about
> 3"?
>
> That would make a rig about the same size as a DVD player, again, an item
> of consumerist products that until recently was unknown but now is de
> rigeur - again
> pointing out the spurious argument put up against HB.
>
> In a box 18" square by 3" tall, we'd have enough room to manoeuvre and to
> experiment with circuit changes but without worrying that our Henley
"Solon"
> soldering irons were going to melt a component other than the one we're
> currently dealing with.
>
>
>

1051. sync detector

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 11:29:21 UTC
From: Nicolas Boretos <nospam_nicolas@maich.gr>
Message-ID: <1108466961.687179@athnrd02>
Source record: 20383

Hi,

New poster here. May be this has been beaten to death in the past,
but is there freebie schems for an outboard sync detector
using modern chips? Most of the stuff I've run accross use really old
chips that I cannot get locally. I am also sure things must have gotten
better since sony 2010 days...

Yes, I am aware of sherwood eng..

regards
nikos

1052. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 11:36:54 UTC
From: David Honey <david@nospam.thanks.com>
Message-ID: <4211DED6.9050203@nospam.thanks.com>
Source record: 20384
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Airy R.Bean wrote:

> But, surely, the size of a rig is irrelevant to anyone interested in
> technical
> performance?
>
> I wonder what size of rig is really acceptable to the _REAL_ Radio Ham when
> you consider that the RACAL RA17 was a large 19" rack model, and
> when you take into consideration the footprint of desktop PC's that have
> been welcomed so recently into a number of shacks?
>
> How about a foot print of between 12" and 18" square, with a height of about
> 3"?

I understand your sentiments. The trend of making rigs very small can also make them more difficult to use. As an example of a rig that is more compact than most commercial off-the-shelf ones, look at the Elecraft range. I love the performance of my K2. However, the front panel size means that each key is often performing at least 2 different functions, sometimes 3. Many on the Elecraft reflector have expressed a desire for a larger FP when more functions could be available by dedicated buttons. So I think that ergonomics comes into play. For even higher component density, again mostly with discrete components, look at the KX1. A fun cw qrp tcvr to build. So it's not always the case that HB rigs have to be very much larger than commercial rigs.

I think much depends on your intended usage. For a base station, as you point out, size doesn't matter that much. I don't think anyone would claim that the IC7800 or FT1000MP was a small rig.
Your suggested size would be fine with me for a base station. For portable, field-day or for mobile or even pedestrian mobile operation, size and current consumption are important attributes, and often some performance and ergonomics are sacrificed in the trade-off for smaller size. Your proposed size would probably be too large for such usage - perhaps, something in the region of a quarter of that volume would be more appropriate.

Another factor is the extent to which you want to remodel the rig after experimentation. I think a

lot of HB tends to end up larger because it was prototyped using construction techniques (such as
ugly bug) that are good for prototyping and changes, but then when the design has iterated to
something near optimal, it is never rebuilt using denser construction such as double-sided PCB.
Perhaps it's a case that the constructor has got their satisfaction with design and are less
motivated by better engineering its construction. I know that some are and like to aim for more
production quality, often taking as much time in that area than the original design and
prototyping. However, I suspect that they are in the minority.

73, David M0DHO

1053. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 12:20:24 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <cOlQd.498$g44.22@attbi_s54>
Source record: 20385
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

The correct size for homebrew equipment is the following:

1) The size that you feel most comfortable with. Many individuals do not want to duplicate the ultra compact construction methods that electronics corporations use. That is hard and tedious work, for sure, done by people who are experts in that area. Those nifty little boxes that we buy began life spread out and haywired together over a large table top. I have been through that many times.

2) The goal that you have in building your own equipment. Many folks consider their homebrew equipment as "test beds" for future experimentation, refinement and possible redesign. I am one of those, and an example is on QRZ.COM (W0IYH). If you build this gear as a very compact "ship in a bottle" project you are pretty much "locked in" to whatever you come up with. Major modifications become doubly major projects.

3) The average amateur, working in his basement (that's me) has a very lengthy and arduous task to duplicate what a room full of engineers do for a living. Not only that, those folks very often don't redesign everything from scratch, they improve and redesign iteratively over several years, building on what they have done on previous models.

4) Finally, there is a big difference between a) duplicating a published design and b) struggling with your own (and possibly unique) design. In the latter case we need hardware and software that are easily accessible.

The experimenter's code is "Nothing is permanent".

Bill W0IYH

"Airy R.Bean" <Me@privacy.net> wrote in message
news:37cbsuF56al3iU1@individual.net...
> Much of the negativity that the CBer-Masquerading-As-A-Radio-Ham
> emits when it is suggested to him that he should build his own rig comes
> from a complaint that it is not possible to miniaturise a rig to the sizes
> that are available from the Nipland CB suppliers, mainly Yaesu and
> Kenwood.
>
> But, surely, the size of a rig is irrelevant to anyone interested in
> technical
> performance?
>
> I wonder what size of rig is really acceptable to the _REAL_ Radio Ham
> when
> you consider that the RACAL RA17 was a large 19" rack model, and

> when you take into consideration the footprint of desktop PC's that have
> been welcomed so recently into a number of shacks?
>
> How about a foot print of between 12" and 18" square, with a height of
> about
> 3"?
>
> That would make a rig about the same size as a DVD player, again, an item
> of consumerist products that until recently was unknown but now is de
> rigeur - again
> pointing out the spurious argument put up against HB.
>
> In a box 18" square by 3" tall, we'd have enough room to manoeuvre and to
> experiment with circuit changes but without worrying that our Henley
> "Solon"
> soldering irons were going to melt a component other than the one we're
> currently dealing with.
>
>
>

1054. Re: Linux and X-Windows

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 12:57:36 UTC
From: AB2RC <AB2RC@localhost.localdomain>
Message-ID: <slrnd13sgd.und.AB2RC@localhost.localdomain>
Source record: 20386

On 2005-02-15, Leland C. Scott <k.c.8.l.d.o@arrl.net> wrote:
> I received the following E-mail from Paul Swart (pauls@starnet.com) at
> Starnet Communications about a special license fee for their X-Win32 client
> software for running Linux X-Window desktop, and apps, remotely over the
> Internet or a LAN connection. I would think there would be some Hams who
> would be interested in contacting Paul about his proposal.
>
> http://www.starnet.com/products/
>
> I've tried the demo out using the Gnome desktop under Fedora Core 3 and it's
> a really slick bit of work.

I can doo this all for free.. I just export my xsession from one linux
machine to another linux machine.

I can see no advantage to running an exported xsession from a *nix machine
to a windows desktop.

--
Alex / AB2RC
Linux is user friendly, however it is not idiot friendly

1055. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 13:09:37 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <lwmQd.498$zH6.17@attbi_s53>
Source record: 20387
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

> The correct size for homebrew equipment is the following:
>
> 1) The size that you feel most comfortable with.
> The experimenter's code is "Nothing is permanent".
>
> Bill W0IYH

GM Bill, good to hear you up and about. The curmudgeon (Sorry all you curmudgeons for the insult) that started this thread hasn't the common sense or native intelligence to pose the question. He's just there to troll and present his agenda that he is better than others. Obviously the answer is "as big as it needs to be to house the intended materials" and not the other way around. I put the poor soul in my plonk box some time ago and hadn't seen hide nor hair of him in some time until your byline showed up.

I still haven't found my stray resonance in my MRF-150's that causes the gain dip at 32 MHz. Haven't looked real hard for it since it's so eminently flat from 2-30, it's just that it's also useable on 50 MHz and there's just a little 4 dB droop that comes right back up above 35-36 MHz. What with the state of the solar cycle, and with what my age for the next one will be, I suspect I shouldn't be so concerned about it.

I know that with your design philosophy, your 150's are going to last forever, but just in case you ever get a thunderstorm in CR that does you dirt, there's an awfully good buy running around on E-Bay at the moment. ERB Engineering built the solid drivers for the tube amps for MRI machines and a large number of them have turned up on the surplus market. They include a pair of MRF 150's as well as a LOAD of other goodies and usually go for less that the price of a singleton. They don't have the matched pair codes, and with the computer controlled bias the way they set them up they can get away without them, but they DO have the same batch codes on both the ones I bought. Search on MRF-150 amplifier.

Regards

W4ZCB

1056. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 13:29:41 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <ics311lkgqpu8tvkbjn2c93loq7abdhsta@4ax.com>
Source record: 20388

On Tue, 15 Feb 2005 08:18:47 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>But what of the "liebebstraum" (sp?) for future experimentation
>with the circuitry?
>

Hate top posting, you always loose the question.

Since I do experiment and modify I allow for it. I enjoy building
small. Since many of my designs are elaborate I've gotten used to
working in small spaces and laying out circuits for accessability and
considerations for possible future changes.

Sometimes I will work around an existing package. I have a number of
of old computer serial A/B switches. They are aluminum with a rounded
side top and bottom shell. The front and rear plate form a simple
frame to screw the case into one unit. It's a trivial task to make
replacement front and rear as the original have too many holes. I got
these for free when a local merchant decided they were of
insufficient value to store for sale.

My latest project is a 5Wpep SSB tranceiver for 6M band in a package
thats only 2x5x7 inches with PLL tuning and digital display. The pll
module is only 1.5"x1.5"x1" constructed dead bug on pcb material
which also forms the case/shield. It could be made smaller but,
that was adaquately small for this project. The power amp is three
transistors of VHF types and fits in a strip of 1.25"Wx 2.5"L x1.5H
excluding heatsink(case is aluminum). For 10mW in I get 5W pep
with good IMD. The front end (rf amp, mixer and mixer amp) is
complete [1x1x1..25"] and is both compact and very low noise.
The bandpass filter assembly and the crystal filter IF amp sections
are done too. The rest will easily fit in that box obviously.

When doing this I have to consider mechanical things like connectors,
controls and other parts that may be physically large compared to the
circuits they control. For example the froont pannel has to to have
a volume control, RF gain, tuning , microphone jack, headphone jack,
frequency display and meter for RX signal and tx power all in 2x5
inches. The RF gain and volume will have to be a dual (coaxial)
control to fit it all. As you can see getting all the knobs in place
can be more difficult than the electronics behind it.

The only components that will not be in the box will be microphone
dattery and antenna. I exclude the antenna (portable 3 element beam)
and battery power as this is an excusion radio. A 10AH battery of the

gell electrolyte type will be adaquate for a 24 hour field use.

Small is not hard and doesn't contradict high perfomance.

Allison
KB1GMX

1057. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 13:35:55 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <%UmQd.93$e03.41@newsfe2-win.ntli.net>
Source record: 20389
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

> I understand your sentiments. The trend of making rigs very small can also
make them more
> difficult to use. As an example of a rig that is more compact than most
commercial off-the-shelf
> ones, look at the Elecraft range. I love the performance of my K2.
However, the front panel size
> means that each key is often performing at least 2 different functions,
sometimes 3. Many on the
> Elecraft reflector have expressed a desire for a larger FP when more
functions could be available
> by dedicated buttons. So I think that ergonomics comes into play. For even
higher component
> density, again mostly with discrete components, look at the KX1. A fun cw
qrp tcvr to build. So
> it's not always the case that HB rigs have to be very much larger than
commercial rigs.
==========

A example of good ergonomics are the Watkins & Johnson commercial receivers , in a 19 inch enclosure with a large functional front panel. Inside a tiny switch mode power supply and a few small PCB modules ; the box being about half empty .

Same with my old TenTec Paragon transceiver ,a large enclosure with ergonomical FP and separate cable linked modules inside.
Also for homebrew equipment using a relatively large enclosure ,you have a large FP and oodles of space to fit separate screened modules which can be individually tested (building block method). The RF modules based on 50Ohms IN and 50Ohms OUT can be readily interconnected with ready made short coax leads with SMA or similar connectors . These links can be found at flea markets , probably surplus leftovers from the mobile phone industry.

Frank GM0CSZ / KN6WH

1058. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 13:41:56 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <efu311h4kcrgj65mhsh1eq6k5jg8rjjo8q@4ax.com>
Source record: 20390

On Tue, 15 Feb 2005 06:23:08 GMT, Gregg <nospam@unknown.org> wrote:

>IMHO, it would be of benefit if the no-code class, rather than limit one
>to commercial based equipment, be forced to use homebrew TX or RX
>equipment.

We have far to many appliance ops.

>The only requirement being a power limitation and it meets the spectral
>purity, etc. regs of the country of origin. Boatanchor or
>"radio-on-a-PIC", whatever construction.

That exists already/

Here in the USA:

Tech limited to bands starting at 6M (50mhz) and up to whatever.
Power is 1500 max, any mode, build, modify or buy. No CW required.
All modes permitted unless restricted by band use, SSB, FM, Fastscan
TV, Data/digital, and even CW. Even if you have not taken the CW test
and you think you can do it you can use it.

Tech+ same as above with code, limited access to some of the HF
bands.

General same as Tech(all permitted modes per band), required 5wpm
code and grants access to the MW and HF bands (160 thru 10).

Extra all of general privledges plus acces to some of the subbands.

Allison
Kb1GMX

1059. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 13:55:16 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <38v311h5116gcvh2ie8rl4a0sl5s18n0ra@4ax.com>
Source record: 20391

On Tue, 15 Feb 2005 13:35:55 GMT, "Highland Ham"
<abcgm0csz.kn6whxyz@abcntlworldxyz.com> wrote:

RE: modern tranceivers.
Yes most of the current generation radios (FT817, IC706MIIG, and
friends) with their menus and all are quite annoying to me. I only
have a few commercial radios other than HTs. My favorite is a
25 year old IC245 (2m FM/SSB/CW) and the other a Tentec 526(6n2 meter
SSB/SM/CW radio) as both don't have menues.

>>>>>>>>>>>>Much snippage-----
>large FP and oodles of space to fit separate screened modules which can be
>individually tested (building block method). The RF modules based on 50Ohms
>IN and 50Ohms OUT can be readily interconnected with ready made short coax
>leads with SMA or similar connectors . These links can be found at flea
>markets , probably surplus leftovers from the mobile phone industry.

I happen to like that mode. Also testing with a 50ohm path is easier
and can make it possible to build simple test fixtures on the bench.
I build modues usually using PCB material soldered up and test each
stand alone. The beauty is you can optimize that function and if at a
later date you wich to try different it can easily be remove and a new
design substituted. Also shielding is inherent, that alone in many
cases is a performance improver. Testing is easy on the bench
as nothing has to be mounted to work and once satisfied you transfer
the modules to a practical package. Repair show somethign fail is
simplified as you can remove the offending module and fix or outright
replace it by building another, and maybe improving it.

Allison
KB1GMX

1060. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 14:04:28 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <mtv3119cs1fka7t8tq5afignecdiejqff2@4ax.com>
Source record: 20392

On Tue, 15 Feb 2005 13:09:37 GMT, "Harold E. Johnson"
<W4ZCB@mchsi.com> wrote:

>I still haven't found my stray resonance in my MRF-150's that causes the
>gain dip at 32 MHz. Haven't looked real hard for it since it's so eminently
>flat from 2-30, it's just that it's also useable on 50 MHz and there's just
>a little 4 dB droop that comes right back up above 35-36 MHz. What with the
>state of the solar cycle, and with what my age for the next one will be, I
>suspect I shouldn't be so concerned about it.

I'd take a look and a grounding issue. Last I played with MRF150s I
forgot to ground the top to the bottom side of the board right where
the leads intersect (the hole wher ethe MRFs meet the heat sink).
A peice of .003 copper shim stock from the top to bottom at the hole
fixed it along with a few places in the board (#18 wires from top
ground to bottom ground) seemed to clean it up. Then I first
encountered the problem I thought it to be a device lead length
problem on the input or output. HIgh RF current at low imedences
can really show things you'd never notice at lower power.

Allison
KB1GMX

1061. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 14:24:06 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <37ef7rF5bjnqsU1@individual.net>
Source record: 20393
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Your gratuitous use of Childish Broadcasting (CB) suggests
that "W4CZB" is some form of Yankland CBer's callsign.

Ham Radio has traditions of gentlemanliness which have been
completely lost on you. If there is any trolling going on, then
surely it has arisen through your infantile and
uncalled-for outburst below?

Grow up, Harold!

Stupid boy.

"Harold E. Johnson" <W4ZCB@mchsi.com> wrote in message
news:lwmQd.498$zH6.17@attbi_s53...
> The curmudgeon (Sorry all you
> curmudgeons for the insult) that started this thread hasn't the common
sense
> or native intelligence to pose the question. He's just there to troll and
> present his agenda that he is better than others.

1062. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 14:32:41 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <37eforF588mt7U1@individual.net>
Source record: 20394
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Top-posting is the preferred method because you get to see
new material without having to page down through oft-repeated
and over-familiar historical reprints.

<nospam@nouce.bellatlantic.net> wrote in message
news:ics311lkgqpu8tvkbjn2c93loq7abdhsta@4ax.com...
> On Tue, 15 Feb 2005 08:18:47 -0000, "Airy R.Bean" <Me@privacy.net>
> wrote:
> >But what of the "liebebstraum" (sp?) for future experimentation
> >with the circuitry?
> >
>
> Hate top posting, you always loose the question.

1063. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 15:07:44 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <4foQd.199$kS6.43@attbi_s52>
Source record: 20395
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Test

1064. Almost Free Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 15:13:30 UTC
From: Al <no.spam@wanted.com>
Message-ID: <no.spam-2CA381.10133415022005@news.verizon.net>
Source record: 20396

I have a Royal Canadian AF Xmitter, P/N BC-458-A, that I picked up in my town's recycling center. It has a sticker on it that says it was certified operational in 1953. The frequency range is 5.3 to 7 MHz. Missing are two VT136 tubes. Otherwise it appears to be as prestine as a greater than 50yr old elecyronics gadget can be. It contains two tubes, VT 137 and VT138, as well as a tube shaped 7000KC xtal.

If you want it, I will sent it to you for the price of the shipping and for whatever extra you think its worth to you. It hefts at about 5lbs. (?)

Reply to this newsgroup if interested.

Al

1065. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 15:14:08 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <4loQd.610$g44.389@attbi_s54>
Source record: 20397
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Hello Harold,

Thanks for the comments. My 100 W PA has worked quite well from 1.8 to 29.7 MHz, which was the requirement. Nice to hear from you.

Bill W0IYH

1066. Re:Top Posting

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 15:17:58 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <ZpoQd.31629$xt.29051@fed1read07>
Source record: 20298
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Karnac the Magnificent would be proud of you (and I)

--
Caveat Lector (Reader Beware)
Help The New Hams
Someone Helped You
Or did You Forget That ?

"Airy R.Bean" <Me@privacy.net> wrote in message
news:37eforF588mt7U1@individual.net...
> Top-posting is the preferred method because you get to see
> new material without having to page down through oft-repeated
> and over-familiar historical reprints.

> >> Hate top posting, you always loose the question.
>
>

1067. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 16:25:22 UTC
From: mikea@mikea.ath.cx
Message-ID: <cut7picsi1@puck.litech.org>
Source record: 20299

Gregg <nospam@unknown.org> wrote:
> Behold, John Miles scribed on tube chassis:

> > Somehow, I doubt many of those 20 WPM Extras making equine posteriors
> > out of themselves on 75 fone are doing so on homebrew rigs.

> The idea is the advanced ticket people can buy commercial rigs.

> I was reading some of the the history of Ham radio though and it seems
> today's ham's rarely fit the bill :-(

> What happened?

Way Back When I Got Started, in 1962, the difference between what I could build at home and what I could buy from a manufacturer wasn't all that great. The high-end stuff got fairly fancy, as indicated by the Collins A-line gear, but mostly it was fairly mundane.

But that was when commercial transistor gear was moderately new and much (or most) commercial stuff was tube-based. There were _no_ ICs, definitely no computer-controlled rigs, and Life Was Much Simpler. The overall performance level of rigs was lower, as a result.

Nowadays the commercial gear is *SO* much more advanced than anything the average ham can design and build[1], or even build from a design someone else worked out, that it's just easier to buy an appliance to get the performance one wants. Construction is hard, it requires time and expensive materials, and the overall bill for the appliance most of the time is less than it would cost (including time) to build a comparable device.

[1] There are exceptions, and they appear as showcase examples in the ARRL Handbook and other places.

--
Mike Andrews, W5EGO/AE, 5 WPM Extra (But working on getting faster!)
mikea@mikea.ath.cx
Tired old sysadmin

1068. Re: Linux and X-Windows

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 16:29:10 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <uO2dndWNeczsvo_fRVn-iQ@comcast.com>
Source record: 20300

"Gregg" <nospam@unknown.org> wrote in message
news:VAgQd.47616$gA4.8227@edtnps89...
> With so much GPL-ware out there, why bother?

Just because plenty of people are willing to give away software for free (which is great and should certainly be encouraged) doesn't imply that 'pay' software can't be useful and well worth the money. There are many examples of software out there where the free stuff still doesn't come close to containing the functionality of the pay versions... although of course there are also plenty of examples where the free stuff is as good or better than the pay stuff!

1069. Re: Linux and X-Windows

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 16:52:42 UTC
From: clvrmnky <clvrmnky-uunet@coldmail.com.invalid>
Message-ID: <uNpQd.91301$vO1.570891@nnrp1.uunet.ca>
Source record: 20301

On 15/02/2005 7:57 AM, AB2RC wrote:
> On 2005-02-15, Leland C. Scott <k.c.8.l.d.o@arrl.net> wrote:
>
>>I received the following E-mail from Paul Swart (pauls@starnet.com) at
>>Starnet Communications about a special license fee for their X-Win32 client
>>software for running Linux X-Window desktop, and apps, remotely over the
>>Internet or a LAN connection. I would think there would be some Hams who
>>would be interested in contacting Paul about his proposal.
>>
>>http://www.starnet.com/products/
>>
>>I've tried the demo out using the Gnome desktop under Fedora Core 3 and it's
>>a really slick bit of work.
>
> I can doo this all for free.. I just export my xsession from one linux
> machine to another linux machine.
>
> I can see no advantage to running an exported xsession from a *nix machine
> to a windows desktop.
>
shrug It is certainly a handy thing to be able to do. With all the
amateur radio software available to Win32 users, it makes sense for many
to run Windows. Having the option of running X apps from a headless
server just adds more value to both systems, and is a great way to
extend the usefulness of your network.

The only problem I've run into is that these are X emulators. This
means some apps will behave strangely, or not work at all, when run in
this environment. Java Swing/AWT apps are notorious for this
(InstallAnywhere, I'm looking in your direction.)

*nix-based operating systems like Linux, *BSD and Mac OS X can benefit
from running a local X server, with the added benefit that these are
"real" X servers, allowing problematic Java apps to run.

--
clvrmnky <mailto:clvrmnky@COLDmail.com.INVALID>

Heat up and unmunge email to reply.

1070. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 19:36:20 UTC
From: Gary Cavie <m0jjh@despammed.com>
Message-ID: <MPG.1c7c5f90f2c7895d9896d5@news.individual.net>
Source record: 20302
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

In article <37ef7rF5bjnqsU1@individual.net>, Me@privacy.net says...
> Your gratuitous use of Childish Broadcasting (CB) suggests
> that "W4CZB" is some form of Yankland CBer's callsign.
>
> Ham Radio has traditions of gentlemanliness which have been
> completely lost on you. If there is any trolling going on, then
> surely it has arisen through your infantile and
> uncalled-for outburst below?
>

Actually Gareth, Harold W4CZB is everything that you claim to aspire to.

1071. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 20:15:16 UTC
From: huLLy <g4sdw@aol.com>
Message-ID: <37f3h5F5dpsgtU1@individual.net>
Source record: 20303
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Gary Cavie wrote:
>
> Actually Gareth, Harold W4CZB is everything that you claim to aspire
> to.

Funny how Gareth only posts during library opening hours...
--
huLLy
VOIP SIP Phone Number 4823176 on Global Village
Or +44 8703 408916 to my VOIP line
email g4sdw@aol.com (Loon reports welcome)
http://www.giganews.com/customer/gn119503

1072. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 20:48:35 UTC
From: Howard Long <howard@howardlongxxx.com>
Message-ID: <cutn73$p75$1@titan.btinternet.com>
Source record: 20304
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Hi Airy

> Your gratuitous use of Childish Broadcasting (CB) suggests
> that "W4CZB" is some form of Yankland CBer's callsign.
>
> Ham Radio has traditions of gentlemanliness which have been
> completely lost on you. If there is any trolling going on, then
> surely it has arisen through your infantile and
> uncalled-for outburst below?
>
> Grow up, Harold!
>
> Stupid boy.

Long time no speak! Sorry I didn't make it to the rally last week, I would have liked to meet you.

You know, if we got to see some of the interesting homebrew kit and modifications that you frequently talk about, I am sure that it would stall many of the "outbursts" that you attract and refer to. If you don't have access to a camera or scanner, written desciptions would be fine. I am sure that that your designs would be both an inspiration and a help to many of us who would like to have the benefit of your knowledge and experience.

If you don't have a website, you can either email or post me your designs and I'll be glad to publish them for you, of course giving you full credit, as I have done for a few others' designs that I've published on the authors' behalf.

My email address is on my website and my address is in qrz.com and the Yearbook back to 2001.

Thanks & 73, Howard G6LVB
http://www.g6lvb.com

1073. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-15 20:52:52 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <421260c5.2806358@news.iol.ie>
Source record: 20305
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote:

: an illuminated bench magnifier
<plain english> a magnifying glass on a stand with a light on it </plain english>

1074. Audio Freq Generator software for alignging rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-16 00:33:24 UTC
From: AB7RU <spamcatcher1@mparkes.com>
Message-ID: <vt45115ruppe12849n01hl4n7848if6tdv@4ax.com>
Source record: 20307

As part of the transmitter alignment on my Icom751a, I need an Audio frequency generator supplying tones at 1.3, 1.9 khz at 3mV - is there software out there that will do this? I have found some audio generator software but haven't seen where you can set the mV level any help is appreciated! thanks, Mike AB7RU

1075. Re: Audio Freq Generator software for alignging rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-16 00:59:13 UTC
From: dplatt@radagast.org
Message-ID: <11156n1jrubb4cf@corp.supernews.com>
Source record: 20308

In article <vt45115ruppe12849n01hl4n7848if6tdv@4ax.com>,
AB7RU <spamcatcher1@mparkes.com> wrote:

>As part of the transmitter alignment on my Icom751a, I need an Audio
>frequency generator supplying tones at 1.3, 1.9 khz at 3mV - is there
>software out there that will do this? I have found some audio
>generator software but haven't seen where you can set the mV level
>any help is appreciated! thanks, Mike AB7RU

There's no universal way to do this, since PC sound cards don't have consistent output levels. Full-scale-digital output signals are often at 1- or 2-volts peak-to-peak on the line-level output jacks, but they're often at different levels depending on the PC's sound chip, amplifiers, whether there's a headphone amp involved, etc.

In one case I encountered (my Dell Latitude CPxj) turning the PCM-out control all the way up to full scale resulted in horrible digital clipping of the signal, *before* the sound interface's master volume control. I had to turn the PCM output level down to about 30% to get a clean sinewave output.

The best I can suggest is that you generate the tone that you need using the PC software you have, feed the line- or headphone-level output from the PC sound card to an analog volume control (a 1k or 10k audio-taper pot is probably a good choice), and use a reasonably well calibrated oscilloscope or DVM to measure the resulting voltage and trim it to 3 millivolts (P-P or RMS, depending on what the calibration procedure asks for).

I'd recommend using a 'scope, to confirm that you're actually getting a clean signal.

It's best to measure the actual signal level "in circuit", with the PC/generator and the attenuator driving the rig's transmitter. If you measure first and then attach to the rig, the rig's input impedance may shift the level enough to perturb your calibration procedure.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1076. Re: Audio Freq Generator software for alignging rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-16 01:21:49 UTC
From: AB7RU <spamcatcher1@mparkes.com>
Message-ID: <iv75119ta9mnk5q4jl7ib1552dob2r7lsd@4ax.com>
Source record: 20309

Thanks Dave, good advice!
73

On Wed, 16 Feb 2005 00:59:13 -0000, dplatt@radagast.org (Dave Platt)
wrote:

>In article <vt45115ruppe12849n01hl4n7848if6tdv@4ax.com>,
>AB7RU <spamcatcher1@mparkes.com> wrote:
>
>The best I can suggest is that you generate the tone that you need
>using the PC software you have, feed the line- or headphone-level
>output from the PC sound card to an analog volume control (a 1k or 10k
>audio-taper pot is probably a good choice), and use a reasonably well
>calibrated oscilloscope or DVM to measure the resulting voltage and
>trim it to 3 millivolts (P-P or RMS, depending on what the calibration
>procedure asks for).
>
>I'd recommend using a 'scope, to confirm that you're actually getting
>a clean signal.
>
>It's best to measure the actual signal level "in circuit", with the
>PC/generator and the attenuator driving the rig's transmitter. If you
>measure first and then attach to the rig, the rig's input impedance
>may shift the level enough to perturb your calibration procedure.

1077. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-16 01:41:34 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <ixxQd.52631$gA4.1726@edtnps89>
Source record: 20310

Behold, nospam scribed on tube chassis:

> On Tue, 15 Feb 2005 06:23:08 GMT, Gregg <nospam@unknown.org> wrote:
>
>>IMHO, it would be of benefit if the no-code class, rather than limit one
>>to commercial based equipment, be forced to use homebrew TX or RX
>>equipment.
>
> We have far to many appliance ops.
>
>>The only requirement being a power limitation and it meets the spectral
>>purity, etc. regs of the country of origin. Boatanchor or
>>"radio-on-a-PIC", whatever construction.
>
> That exists already/
>
> Here in the USA:
>
> Tech limited to bands starting at 6M (50mhz) and up to whatever. Power
> is 1500 max, any mode, build, modify or buy. No CW required. All modes
> permitted unless restricted by band use, SSB, FM, Fastscan TV,
> Data/digital, and even CW. Even if you have not taken the CW test and
> you think you can do it you can use it.
>
> Tech+ same as above with code, limited access to some of the HF bands.
>
> General same as Tech(all permitted modes per band), required 5wpm code
> and grants access to the MW and HF bands (160 thru 10).
>
> Extra all of general privledges plus acces to some of the subbands.
>
> Allison
> Kb1GMX

There you have an advantage on us. Unless the regs changed recently, the
VE/VO no-coder allows only "CB" style Ham ops :-(

--
Gregg "t3h g33k"
http://geek.scorpiorising.ca
Ratings are for transistors, tubes have guidelines

1078. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-16 01:44:12 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <MzxQd.52634$gA4.49388@edtnps89>
Source record: 20311

Behold, Mike Andrews scribed on tube chassis:

> Gregg <nospam@unknown.org> wrote:
>> Behold, John Miles scribed on tube chassis:
>
>> > Somehow, I doubt many of those 20 WPM Extras making equine posteriors
>> > out of themselves on 75 fone are doing so on homebrew rigs.
>
>> The idea is the advanced ticket people can buy commercial rigs.
>
>> I was reading some of the the history of Ham radio though and it seems
>> today's ham's rarely fit the bill :-(
>
>> What happened?

<snip>

> Nowadays the commercial gear is *SO* much more advanced than anything
> the average ham can design and build[1], or even build from a design
> someone else worked out, that it's just easier to buy an appliance to
> get the performance one wants. Construction is hard, it requires time
> and expensive materials, and the overall bill for the appliance most of
> the time is less than it would cost (including time) to build a
> comparable device.
>
> [1] There are exceptions, and they appear as showcase examples in
> the ARRL Handbook and other places.

Point taken. Myself, I am a tubehead, but I would love to design a
PLL-PIC based VFO for my tubes. After all the readin' and studyin' I did
on the subject, I have come to the conclusion to let a dedicated
solid-state-aholic mate design one and I just build it.

Are we just too old?

--
Gregg "t3h g33k"
http://geek.scorpiorising.ca
Ratings are for transistors, tubes have guidelines

1079. Re: Almost Free Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-16 01:47:03 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <rCxQd.66375$L_3.64334@clgrps13>
Source record: 20312

Hi Al,

I would love to preserve our Canadian heritage :-)

For shipping estimate, my postal is V0X 1X0, Rosedale, BC.

I'll see if what you come back with is within the budget ;-)

--
Gregg "t3h g33k"
http://geek.scorpiorising.ca
Ratings are for transistors, tubes have guidelines

1080. Re: Linux and X-Windows

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-16 03:37:29 UTC
From: "Leland C. Scott" <k.c.8.l.d.o.@arrl.net>
Message-ID: <YvydnRKFme5nIo_fRVn-gA@comcast.com>
Source record: 20313

"AB2RC" <AB2RC@localhost.localdomain> wrote in message
news:slrnd13sgd.und.AB2RC@localhost.localdomain...
> On 2005-02-15, Leland C. Scott <k.c.8.l.d.o@arrl.net> wrote:
> > I received the following E-mail from Paul Swart (pauls@starnet.com) at
> > Starnet Communications about a special license fee for their X-Win32
client
> > software for running Linux X-Window desktop, and apps, remotely over the
> > Internet or a LAN connection. I would think there would be some Hams who
> > would be interested in contacting Paul about his proposal.
> >
> > http://www.starnet.com/products/
> >
> > I've tried the demo out using the Gnome desktop under Fedora Core 3 and
it's
> > a really slick bit of work.
>
>
> I can doo this all for free.. I just export my xsession from one linux
> machine to another linux machine.

Yeah, I know about that except I don't have another Linux box to use.

>
> I can see no advantage to running an exported xsession from a *nix machine
> to a windows desktop.

Except when that is all you have access to use. I have a company laptop,
which I can't install Linux on, and is setup for Win 2K so I don't have much
choice. I'm limited in what I can carry out in the field so I don't have the
option to get another laptop, which the company won't install their software
on for me to use. And I'm not lugging around two laptops. Same goes for my
office desktop computer too, only company approved major software apps,
small utilities they don't mind so much.

--
Leland C. Scott
KC8LDO

Wireless Network
Mobile computing
on the go brought
to you by Micro$oft

1081. Re: Linux and X-Windows

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-16 03:54:40 UTC
From: "Leland C. Scott" <k.c.8.l.d.o.@arrl.net>
Message-ID: <Es2dncNi_Y2cWY_fRVn-1Q@comcast.com>
Source record: 20314

"clvrmnky" <clvrmnky-uunet@coldmail.com.invalid> wrote in message
news:uNpQd.91301$vO1.570891@nnrp1.uunet.ca...
>users, it makes sense for many
> to run Windows.

In general that is what Micro$oft is hoping to have happen, if not already.
Then Micro$oft will begin moving to a "subscription" based licensing model.
They will have to do this when the market reaches saturation and new
software sales begin dropping. They will then use the new subscription based
licensing model to keep their revenue stream going if not increase it. At
that time GPL based software will be much more appealing.
--
Leland C. Scott
KC8LDO

Wireless Network
Mobile computing
on the go brought
to you by Micro$oft

1082. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-16 04:07:30 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <cuugu2pfh1@theodyn.ncf.ca>
Source record: 20315

Gregg (nospam@unknown.org) writes:
> Behold, nospam scribed on tube chassis:
>
>> On Tue, 15 Feb 2005 06:23:08 GMT, Gregg <nospam@unknown.org> wrote:
>>
>>>IMHO, it would be of benefit if the no-code class, rather than limit one
>>>to commercial based equipment, be forced to use homebrew TX or RX
>>>equipment.
>>
>> We have far to many appliance ops.
>>
>>>The only requirement being a power limitation and it meets the spectral
>>>purity, etc. regs of the country of origin. Boatanchor or
>>>"radio-on-a-PIC", whatever construction.
>>
>> That exists already/
>>
>> Here in the USA:
>>
>> Tech limited to bands starting at 6M (50mhz) and up to whatever. Power
>> is 1500 max, any mode, build, modify or buy. No CW required. All modes
>> permitted unless restricted by band use, SSB, FM, Fastscan TV,
>> Data/digital, and even CW. Even if you have not taken the CW test and
>> you think you can do it you can use it.
>>
>> Tech+ same as above with code, limited access to some of the HF bands.
>>
>> General same as Tech(all permitted modes per band), required 5wpm code
>> and grants access to the MW and HF bands (160 thru 10).
>>
>> Extra all of general privledges plus acces to some of the subbands.
>>
>> Allison
>> Kb1GMX
>
> There you have an advantage on us. Unless the regs changed recently, the
> VE/VO no-coder allows only "CB" style Ham ops :-(
>
Once again, you're misreading the rules.

As I told you last summer, whether someone has passed the code test
or not has no relevance. It's whether someone has passed the advanced test.
Since it's a mix and match system, people can pass the advanced test
without taking a code test. They can build all the transmitters all

they want at that point, but since they haven't passed the code test
they have no HF privileges.

There is no "no code license" in Canada. There are two levels of license,
and either one can be no-code.

Michael VE2BVW

1083. Re: Something like a diplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-16 04:52:14 UTC
From: budgie <me@privacy.net>
Message-ID: <l5k511da0ngvrbqp420kdfu3uv4tmi27j5@4ax.com>
Source record: 20316

On Monday, 14 Feb 2005 23:53:26 -500, "Asimov"
<Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote:

>"Joel Kolstad" bravely wrote to "All" (14 Feb 05 16:51:45)
> --- on the heady topic of "Something like a diplexer"
>
> JK> From: "Joel Kolstad" <JKolstad71HatesSpam@Yahoo.Com>
> JK> Subject: Something like a diplexer
> JK> Xref: aeinews rec.radio.amateur.homebrew:2136
>
> JK> I'm trying to build a circuit to split two signal paths apart, process
> JK> them differently, and them put them back together. In particular, I
> JK> have incoming RF signals from ~25MHz-3GHz (they're going to a wideband
> JK> receiver) and I have some notch filters that I want to be able to
> JK> selectively engage between 25-500MHz.Due to the topology and
> JK> parasitics of the filters, they tend to roll off above 500MHz and have
> JK> significant loss by the time you get to 3GHz.
>
> JK> Hence, I'd like to run 25-500MHz though one signal path and
> JK> 500MHz-3GHz through another (I want to leave the 500MHz-3GHz part
> JK> untouched). The 'cross over' region doesn't have to be particular
> JK> 'clean' (i.e., it can vary +/-5dB easily).
>
> JK> I tried desgining a 5th order diplexer, and it cleanly splits the two
> JK> frequency ranges into separate path going to their own terminators.
> JK> However, if instead of terminating the low pass output and high pass
> JK> outputs to their own loads I connect the two outputs together, I get
> JK> something of a mess -- not at all a 'flat line' like I was hoping for.
>
> JK> I next tried hooking up two of these diplexers 'end to end,' and while
> JK> the response is almost flat, it has a very sharp null right at the
> JK> 500MHz corner frequency, and another very sharp set of nulls a couple
> JK> hundred MHz above and below this (they're mirror images). Hmm...
>
> JK> So... any hints how to do this properly? I thought for certain the
> JK> end to end diplexers would have done the trick.
>
> JK> Thanks,
> JK> ---Joel Kolstad
>
>You missed a step called a directional coupler. It's a sort of
>transformer with 2 input ports and 1 output port. The 2 inputs don't
>see one another but their power is combined at the output.

You don't actually *need* a directional coupler. I have seen window preselectors with five separate sections for sub-bands between 403 and 520 MHz. The configuration is symmetrical (in/out) with simple bandpass filter segments and coaxial split/combine harnesses. Not a DC or hybrid in sight. I am presuming - not having swept one - that at "off" frequencies each parallelled leg presents a high enough impedance to the split junction that the effect is negligible.

1084. L-C phase-shift networks

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-16 10:31:37 UTC
From: David J Windisch <davidjw@cinci.rr.com>
Message-ID: <diFQd.2150$LD5.1667@fe2.columbus.rr.com>
Source record: 20317

Hi, all concerned:

In Ham Radio mag, Jan, 1978, there are some 90-deg phase-shift networks covering 1-30 MHz.

Could an Elmer help me out with a lead to schematics, pls?

73, Dave, N3HE

1085. Re: Linux and X-Windows

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-16 12:40:09 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <cgHQd.9202$vD6.4210@fe03.lga>
Source record: 20318

"Leland C. Scott" <k.c.8.l.d.o.@arrl.net> wrote in message
news:YvydnRKFme5nIo_fRVn-gA@comcast.com...

> > I can see no advantage to running an exported xsession from a *nix
machine
> > to a windows desktop.
>
> Except when that is all you have access to use. I have a company laptop,

Well, there is a lot more than that. Most of us interact from time to time
with other people, and it's a Windoze/Office world out there. Sorry, that's
the way it is. You can wish all you want, and you can prattle on about how
much better open source stuff is, but the real world is Windoze/Office.
Most of us don't have the luxury of hiding in our hole and pretending that
the outside world doesn't exist.

Even if we can afford/control another box, most of us also have physical
space limitations. I only have room for just so many keyboards on my desk,
and it is a major pain in the butt to have to walk around to another desk to
get to the Linux console. (Yeah, I probably have more space than most).

I run X sessions from Cygwin on a couple of Windoze machines, and it works
quite well. Earlier in the thread there was a mention about windows
behaving weird under Windows, but I haven't seen that. Indeed, if the X
implementation is anywhere close to correct, you shouldn't see that.

But it is a huge convenience to have both the Linux *and* Windoze tools at
my fingertips.

..

1086. Re: Something like a diplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-16 14:42:58 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_42135d1b@fidonet.org>
Source record: 20323

"budgie" bravely wrote to "All" (16 Feb 05 12:52:14)
--- on the heady topic of "Re: Something like a diplexer"

bu> From: budgie <me@privacy.net>
bu> Xref: aeinews rec.radio.amateur.homebrew:2181

>You missed a step called a directional coupler. It's a sort of
>transformer with 2 input ports and 1 output port. The 2 inputs don't
>see one another but their power is combined at the output.

bu> You don't actually *need* a directional coupler. I have seen window
bu> preselectors with five separate sections for sub-bands between 403 and
bu> 520 MHz. The configuration is symmetrical (in/out) with simple bandpass
bu> filter segments and coaxial split/combine harnesses. Not a DC or
bu> hybrid in sight. I am presuming - not having swept one - that at "off"
bu> frequencies each parallelled leg presents a high enough impedance to
bu> the split junction that the effect is negligible.

Yes but it requires some effort and cost to build the 2nd BP filters so
I wonder if it's any more difficult to do either? What do you figure?

A*s*i*m*o*v

... Always look on the bright side of life...[Monty Python]

1087. Re: Linux and X-Windows

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-16 15:05:10 UTC
From: Joe User <nobody@nowhere.com>
Message-ID: <cuvnht$a2g$1@info2.uah.edu>
Source record: 20319

If cygwin doesn't cut it, there is an application called vmware that lets you create virtual machines on a single box.

I've seen one instance where an application running on a virtual machine with win2k installed (physical machine was linux) actually ran faster on the virtual machine than it did with win2k installed on the physical machine. Doesn't make much sense, but there ya go.

virtual machines let you experiment with all kinds of OS stuff without trashing a "production" machine. I've had virtual machines with win2k, redhat 7.3, redhat 9, solaris x86 all on one box without shutting down the native OS (which happened to be mac OS).

The biggest difference between virtual machines and dual boot is that you can have 'em both running at the same time.

-j

1088. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-16 15:32:36 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <2ep611lg3tnsvhet79lqnl6922belaehlk@4ax.com>
Source record: 20320

On Wed, 16 Feb 2005 01:44:12 GMT, Gregg <nospam@unknown.org> wrote:

>> Nowadays the commercial gear is *SO* much more advanced than anything
>> the average ham can design and build[1], or even build from a design
>> someone else worked out, that it's just easier to buy an appliance to
>> get the performance one wants. Construction is hard, it requires time
>> and expensive materials, and the overall bill for the appliance most of
>> the time is less than it would cost (including time) to build a
>> comparable device.

Elecraft has several kits that build an advaned transceivers with
microprocessors and digial pannels. The average hams do build them
and when done can even fix them.

>Point taken. Myself, I am a tubehead, but I would love to design a
>PLL-PIC based VFO for my tubes. After all the readin' and studyin' I did
>on the subject, I have come to the conclusion to let a dedicated
>solid-state-aholic mate design one and I just build it.

There is an outfit that has kits to do exactly that. Also there
was/is the Amqrp [http://www.amqrp.org/] DDS VFO daughter board.
That with the PIC-el kit was a quick means for me to bootstrap into
using PICs and DDS for my Rf perojects. In the past I've used micros
but ahving the tools and a a really nice course on a specific one was
a useful assist.

>Are we just too old?

Never!

Allison

1089. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-16 15:38:01 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <qup611pr4kpg5khsoq8ulg4j0a9ei2ak1i@4ax.com>
Source record: 20321

On 16 Feb 2005 04:07:30 GMT, et472@FreeNet.Carleton.CA (Michael Black)
wrote:

>As I told you last summer, whether someone has passed the code test
>or not has no relevance. It's whether someone has passed the advanced test.
>Since it's a mix and match system, people can pass the advanced test
>without taking a code test. They can build all the transmitters all
>they want at that point, but since they haven't passed the code test
>they have no HF privileges.
>
>There is no "no code license" in Canada. There are two levels of license,
>and either one can be no-code.

I wasn't sure if the countries involved but my understanding was
Canadian rules are similar to US in style and form. Other countries
are beyond my knowledge. I'd expect from articles I've read
and the calibar of those authors there are many that allow home built
equipment and may even encourage it.

Allison
Kb1GMX

1090. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-16 16:05:45 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <VoOdnb4bjInt8o7fRVn-hA@comcast.com>
Source record: 20322

<nospam@nouce.bellatlantic.net> wrote in message
news:2ep611lg3tnsvhet79lqnl6922belaehlk@4ax.com...
> Elecraft has several kits that build an advaned transceivers with
> microprocessors and digial pannels. The average hams do build them
> and when done can even fix them.

I'm not so sure I'd call someone building an Elecraft an 'average ham.'
Especially with the K2, there are enough parts in there that most people who
build it are probably already seasoned kit builders. Indeed, there are even
lists of hams out there who will assemble Elecrafts for other hams who
don't have the skills or desire to put the things together!

Still, I think there are plenty of homebrewing opportunities available to
hams (the ARRL's publication of "Experimental Methods in RF Design" last
year bolsters this argument), just that a smaller percentage of hams than in
prior years chose to avail themselves of the option.

There will always be folks out there experimenting with radio -- look at how
popular WiFi 'hacking' is and even low power FM!

----Joel Kolstad

1091. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-16 18:21:59 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <cv0307$215$1@theodyn.ncf.ca>
Source record: 20324

(nospam@nouce.bellatlantic.net) writes:
> On 16 Feb 2005 04:07:30 GMT, et472@FreeNet.Carleton.CA (Michael Black)
> wrote:
>
>>As I told you last summer, whether someone has passed the code test
>>or not has no relevance. It's whether someone has passed the advanced test.
>>Since it's a mix and match system, people can pass the advanced test
>>without taking a code test. They can build all the transmitters all
>>they want at that point, but since they haven't passed the code test
>>they have no HF privileges.
>>
>>There is no "no code license" in Canada. There are two levels of license,
>>and either one can be no-code.
>
> I wasn't sure if the countries involved but my understanding was
> Canadian rules are similar to US in style and form. Other countries
> are beyond my knowledge. I'd expect from articles I've read
> and the calibar of those authors there are many that allow home built
> equipment and may even encourage it.
>
> Allison
> Kb1GMX
>
When things were restructured here back in 1990, the basic test/license
specifically forbade the use of homebuilt transmitters. It's only
after one passes the advanced test that one can use homebuilt transmitters
(and it allows for 1000watts input versus 250W for the basic license,
and the control of repeaters).

But his error is in reading the rules to mean that you have to have code
to pass the advanced test, and thus to build transmitters. The code tests
(back then there were both a 5 and 12wpm tests, now it's only 5wpm) were
independent of the written tests. With no code test, but the advanced
license, one has full privileges, though it all has to be above 30MHz.
The code test(s) only add HF capability, whether you have the basic
or advanced license.

This is in contrast to the US model, where advancing did require a code
test at some point.

Up till 1990, of course anyone with a ham license here could build their
own transmitter (and the only thing the advanced license gave was
voice on HF). When I was licensed back in 1972, it was still called
the Amateur Experimental Service, though that full name was dropped
at some point without comment.

The impression people had was that since few were building things,
then this wouldn't affect many. But by making the written test
simpler, it would "make it easier" for people to enter the hobby.
I've not realy looked over what the test is like, but I sure had no
problem passing the test back in 1972, when I was twelve. But ironically,
if few are building things, those few won't be doing much damage even
if they don't know what they are doing. Indeed, it's likely that only
people who know what they are doing would be building, hence the state
of the test shouldn't matter.

I don't like the rule, since it does change the hobby, and institutionalizes
a perception of the hobby.

But like I said, code has nothing to do with whether or not someone can
build their transmitter.

Michael VE2BVW

1092. Re: JESUS CHRIST WENT TO THE CROSS SO YOU CAN GO TO HEAVEN - The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel s

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-16 23:44:08 UTC
From: Brian Oakley <brianoakley@ispwest.com>
Message-ID: <cv0ll10a0@enews2.newsguy.com>
Source record: 20325

> "drwxr-xr-x" <bit-bucket@config.com> schreef in bericht
> news:slrnd0v1pe.24qt.bit-bucket@shell.config.com...
> > On Sun, 13 Feb 2005 06:00:27 +0100, B.Viel wrote:
> > > It would be better for the LORD if HE homebrewed HIS own radio.
> > > We could talk !
You can talk to God anytime. You don't even need a radio or a sked. He's
always there for you. Just call.
B

1093. Re: JESUS CHRIST WENT TO THE CROSS SO YOU CAN GO TO HEAVEN - The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel s

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-17 01:00:45 UTC
From: "B.Viel" <sjouk@home.nl>
Message-ID: <cv0qbs$66v$1@news2.zwoll1.ov.home.nl>
Source record: 20326

That's good news !

"Brian Oakley" <brianoakley@ispwest.com> schreef in bericht
news:cv0ll10a0@enews2.newsguy.com...
> > "drwxr-xr-x" <bit-bucket@config.com> schreef in bericht
> > news:slrnd0v1pe.24qt.bit-bucket@shell.config.com...
> > > On Sun, 13 Feb 2005 06:00:27 +0100, B.Viel wrote:
> > > > It would be better for the LORD if HE homebrewed HIS own radio.
> > > > We could talk !
> You can talk to God anytime. You don't even need a radio or a sked. He's
> always there for you. Just call.
> B
>
>

1094. December 1990 QST, QSK for SB220

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-17 04:15:38 UTC
From: Win <w0lz@winlyn.us>
Message-ID: <u56811dgjat05ejoictuoa9k79003cvius@4ax.com>
Source record: 20327

I am interested in installing a vaccum relay QSK circuit in a SB220.
If anyone could copy for me, the article, and provide me with it, in
the December 1990 QST, I would be forever gratefull, and would pay any
cost.

Either e-mail attachments or USPS would work for me.

Win, W0LZ

1095. Re: Linux and X-Windows

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-17 04:59:12 UTC
From: bart <not@here.ca>
Message-ID: <nv88119bcrp4pbipbv2qa1bblm5r2rt5h0@4ax.com>
Source record: 20328

Like Joe wrote, you CAN dual boot.
I run a quad boot: 98se, w2k, xp & rh9..for old ham apps, general
use, crashing, and complicating my life...all in that order! ;)

On Wed, 16 Feb 2005 07:40:09 -0500, "xpyttl"
<xpyttl_NOSPAM@earthling.net> wrote:

>"Leland C. Scott" <k.c.8.l.d.o.@arrl.net> wrote in message
>news:YvydnRKFme5nIo_fRVn-gA@comcast.com...
>
>> > I can see no advantage to running an exported xsession from a *nix
>machine
>> > to a windows desktop.
>>
>> Except when that is all you have access to use. I have a company laptop,
>
>Well, there is a lot more than that. Most of us interact from time to time
>with other people, and it's a Windoze/Office world out there. Sorry, that's
>the way it is. You can wish all you want, and you can prattle on about how
>much better open source stuff is, but the real world is Windoze/Office.
>Most of us don't have the luxury of hiding in our hole and pretending that
>the outside world doesn't exist.
>
>Even if we can afford/control another box, most of us also have physical
>space limitations. I only have room for just so many keyboards on my desk,
>and it is a major pain in the butt to have to walk around to another desk to
>get to the Linux console. (Yeah, I probably have more space than most).
>
>I run X sessions from Cygwin on a couple of Windoze machines, and it works
>quite well. Earlier in the thread there was a mention about windows
>behaving weird under Windows, but I haven't seen that. Indeed, if the X
>implementation is anywhere close to correct, you shouldn't see that.
>
>But it is a huge convenience to have both the Linux *and* Windoze tools at
>my fingertips.
>
>..
>

1096. Re: Something like a diplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-17 09:35:11 UTC
From: budgie <me@privacy.net>
Message-ID: <m2p811t39t8sc74hp9nt4asfpe1d12lj2c@4ax.com>
Source record: 20329

On Wednesday, 16 Feb 2005 09:42:58 -500, "Asimov"
<Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote:

>"budgie" bravely wrote to "All" (16 Feb 05 12:52:14)
> --- on the heady topic of "Re: Something like a diplexer"
>
> bu> From: budgie <me@privacy.net>
> bu> Xref: aeinews rec.radio.amateur.homebrew:2181
>
> >You missed a step called a directional coupler. It's a sort of
> >transformer with 2 input ports and 1 output port. The 2 inputs don't
> >see one another but their power is combined at the output.
>
> bu> You don't actually *need* a directional coupler. I have seen window
> bu> preselectors with five separate sections for sub-bands between 403 and
> bu> 520 MHz. The configuration is symmetrical (in/out) with simple bandpass
> bu> filter segments and coaxial split/combine harnesses. Not a DC or
> bu> hybrid in sight. I am presuming - not having swept one - that at "off"
> bu> frequencies each parallelled leg presents a high enough impedance to
> bu> the split junction that the effect is negligible.
>
>Yes but it requires some effort and cost to build the 2nd BP filters so
>I wonder if it's any more difficult to do either? What do you figure?

I'm not sure we are on the same wavelength here (no pun intended). For
non-overlapping filter sections, the bandsplit through two bandpass sections
25-500 and say 550-3000 should be able to be achieved with T-pieces at the input
and output ends (although it appears the O/P didn't achieve this).

1097. Re: JESUS CHRIST WENT TO THE CROSS SO YOU CAN GO TO HEAVEN - The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel s

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-17 10:35:37 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <37jaioF5d8oqnU1@individual.net>
Source record: 20330

When I was very young, I had a little make-believe friend that I could talk to all the time, who was with me all the time and who was always on my side. When I grew up, I stopped going to church.

"Brian Oakley" <brianoakley@ispwest.com> wrote in message news:cv0ll10a0@enews2.newsguy.com...
> > "drwxr-xr-x" <bit-bucket@config.com> schreef in bericht
> > news:slrnd0v1pe.24qt.bit-bucket@shell.config.com...
> > > On Sun, 13 Feb 2005 06:00:27 +0100, B.Viel wrote:
> > > > It would be better for the LORD if HE homebrewed HIS own radio.
> > > > We could talk !
> You can talk to God anytime. You don't even need a radio or a sked. He's
> always there for you. Just call.
> B
>
>

1098. The FAQ (Well, Question 1, at least)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-17 10:56:16 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <37jboqF5clhohU1@individual.net>
Source record: 20331
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----ooooo----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing

of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

1099. Re: The FAQ (Well, Question 1, at least)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-17 11:22:10 UTC
From: Spike <Aero.Spike@Solutions.invalid>
Message-ID: <u8v811d58s1hu11pmari3nvv13a9j436is@4ax.com>
Source record: 20332
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Thu, 17 Feb 2005 10:56:16 -0000, Airy R.Bean wrote:

>Radio Hams are qualified to design, build and then
>operate their own pieces of equipment.

Your troll bait is becoming boring. However, for the sake of any
newcomers who might be misled it, a slight amount of correction
needed.

Although it is unclear what a 'radio ham' is, it should be noted that
anyone canspecify, design, construct, align, test, modify, adjust,
and even own such radios without a licence.

The only licence needed is to cover 'installation' and 'operation'.

Amazing how that latter term, which you used to use as a term of
derision, has disappeared from your Gospel.
--
from
Aero Spike

1100. Re: L-C phase-shift networks

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-17 12:48:07 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <42149287$0$2081$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 20333

Try googling with "polyphase quadrature network"
I have used one of these as an RF network which worked acceptably well
to 30 MHz, though losses were significant.
I seem to recall the original article described one of these, though I
am not sure.

Richard

David J Windisch wrote:
> Hi, all concerned:
>
> In Ham Radio mag, Jan, 1978, there are some 90-deg phase-shift networks
> covering 1-30 MHz.
>
> Could an Elmer help me out with a lead to schematics, pls?
>
> 73, Dave, N3HE
>
>

1101. Re: L-C phase-shift networks

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-17 14:50:25 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <Ra2Rd.5915$zH6.295@attbi_s53>
Source record: 20334

>
> David J Windisch wrote:
> > Hi, all concerned:
> >
> > In Ham Radio mag, Jan, 1978, there are some 90-deg phase-shift networks
> > covering 1-30 MHz.
> >
> > Could an Elmer help me out with a lead to schematics, pls?

GM David

I sent this to your e-mail address, but not sure that it was received.

G.W. Horn, I4MK. QEX November 1982

"How to design wide-band RF quadrature Network".

Regards

W4ZCB

1102. Re: Linux and X-Windows

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-17 15:35:10 UTC
From: Here to there <here@mylittlewhitehouse.com>
Message-ID: <slrnd19ede.64i.here@shuttle.mulveyfamily.com>
Source record: 20335

On Wed, 16 Feb 2005 07:40:09 -0500, xpyttl <xpyttl_NOSPAM@earthling.net> wrote:
> "Leland C. Scott" <k.c.8.l.d.o.@arrl.net> wrote in message
> news:YvydnRKFme5nIo_fRVn-gA@comcast.com...
>
>> > I can see no advantage to running an exported xsession from a *nix
> machine
>> > to a windows desktop.
>>
>> Except when that is all you have access to use. I have a company laptop,
>
> Well, there is a lot more than that. Most of us interact from time to time
> with other people, and it's a Windoze/Office world out there. Sorry, that's
> the way it is. You can wish all you want, and you can prattle on about how
> much better open source stuff is, but the real world is Windoze/Office.
> Most of us don't have the luxury of hiding in our hole and pretending that
> the outside world doesn't exist.
>
> Even if we can afford/control another box, most of us also have physical
> space limitations. I only have room for just so many keyboards on my desk,
> and it is a major pain in the butt to have to walk around to another desk to
> get to the Linux console. (Yeah, I probably have more space than most).
>
> I run X sessions from Cygwin on a couple of Windoze machines, and it works
> quite well. Earlier in the thread there was a mention about windows
> behaving weird under Windows, but I haven't seen that. Indeed, if the X
> implementation is anywhere close to correct, you shouldn't see that.
>
> But it is a huge convenience to have both the Linux *and* Windoze tools at
> my fingertips.

We have a mix of Linux, Windows, Solaris, etc machines at my home
and office. When it comes to outstanding convenience and price (free!)
nothing beats VNC. Much, much faster than X, multi-platform, and you
can even issue a 3-finger-salute to a remote Windows box,
when necessary. Heck, I've controlled both Windows and Unix boxes
with it from my Palm, when I was too lazy to walk to over to my laptop. ;-)

Particularly when you run the Xvnc server on a Linux box, the
interface is all-but-indistinguishable from running X locally, no matter
what machine you're actually sitting at.

- Rich

1103. Re: The FAQ (Well, Question 1, at least)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-17 16:53:40 UTC
From: Leigh Preece <news@leighs.org>
Message-ID: <o_3Rd.284$0x1.249@newsfe2-win.ntli.net>
Source record: 20336
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Airy R Bean - may I offer the following text document as guidance prior to tackling writing a FAQ:

Archive-name: faqs/about-faqs
Posting-Frequency: monthly
Last-modified: Aug. 8, 1995

This article is a description and primer on Frequently Asked Questions (FAQs) articles and lists.

The following topics are addressed:

1) WHAT ARE FAQs?
1.1) What does FAQ stand for?
1.2) How is FAQ pronounced?
1.3) What do FAQs contain?
1.4) What are FAQs used for?
1.5) Where are FAQs found/kept/hidden?
1.6) What was the first FAQ?

2) WRITING A FAQ
2.1) Who may write/compile a FAQ?
2.2) Why write a FAQ?
2.3) What subjects are appropriate?
2.4) How important is accuracy?
2.5) What is the format for a FAQ?
2.6) What is the maximum size of a FAQ?
2.7) What is a header and do I need one?
2.8) Additional information

3) POSTING A FAQ
3.1) How do I post/distribute my FAQ?
3.2) Where do I post/distribute my FAQ?
3.3) How often should my FAQ be posted?

4) LEGAL STUFF
4.1) Do I need to copyright my FAQ?
4.2) Do I need a disclaimer?

5) APPROVAL FOR *.ANSWERS - THE BIG TIME
5.1) Why bother getting a FAQ approved for *.answers?
5.2) How do I get my FAQ approved?
5.3) FAQ maintainers
5.4) FAQ maintainers mailing list

6) ACKNOWLEDGMENTS

1) WHAT ARE FAQs?

1.1) What does FAQ stand for?

FAQ is an acronym for Frequently Asked Questions. It is also sometimes used as the singular Frequently Asked Question (Although when was the last time you heard only one question?).

Some have called it Frequently Answered Questions as well. This isn't necessarily correct, but it isn't necessarily wrong either. It effectively has the same meaning.

A compilation of Frequently Asked Questions (and their answers) is referred to as a FAQ list or FAQ article. Sometimes the term FAQ itself is used to refer to the article - as an example, I refer to this article as a FAQ about FAQs.

The term FAQ has a meaning of its own that could almost qualify it as a word of its own. Sometimes, FAQs are full of answers. Other times they are policy statements for USENET groups, without the Question and Answer format that is popular.

FAQs fall into the realm of articles called "Periodic Postings". In addition to FAQs, other articles or compilations of information are posted and/or archived.

1.2) How is FAQ pronounced?

FAQ is pronounced three ways:
1. By pronouncing the letters individually: F - A - Q
2. As a word: fack
3. Obscenely:

The first two pronunciations are the most common, and are used about equally. Some will say F - A - Q if they are speaking with someone that really doesn't know the Internet. Those who are lazy (me for example) will use "fack", since it is easier to say. Often when initiating a conversation it is useful to say F - A - Q, and then once the subject has been established, "fack" should be sufficient.

You will notice that in this document I use the phrase "a FAQ" rather than "an FAQ". This is because most of the time I say "a fack" instead of "an F-A-Q".

Feel free to use whichever pronunciation you prefer and don't let anyone bully you. Both ways are acceptable. If you use the third way... well, you're on your own.

1.3) What do FAQs contain?

FAQs are compilations of information which are [usually] the result of certain questions constantly being asked (posted) in a newsgroup - hence the name FAQ (Frequently Asked Questions).

It seems that those who frequent USENET are a polite bunch. In my house, the "frequently asked questions" that my three rug rats come

up with are usually referred to as stupid questions or pestering. There is a lesson to be learned from this... before asking a question in a newsgroup or mailing list, make sure that you've checked out the appropriate FAQs. A frequently asked question can be a stupid question if the answer is posted right in front of your face in one or more FAQs.

Sometimes a FAQ or periodic posting is compiled as a result of extensive research on a specific subject. A convenient way to share the information with others is by posting the article. In this case, the article might not really be a FAQ - that is, it isn't necessarily based on frequently asked questions. However, the term FAQ is sometimes used as a catch all term for articles, periodic postings, compilations, etc.

It is becoming common practice to refer to some "off-line documentation" as FAQs. Yes, it's true, off-line documentation still exists, I actually saw some a little while back ;-). All sorts of stuff now comes with support-staff-written FAQs, whereas they would have been called Q&A sections before.

Many of the FAQs found on USENET or the Internet today (including mine :-) could actually be considered NSFAQBTIWTS - Not So Frequently Asked Questions, But Things I Wanted To Share (thanks to Robin Getz for this gem). I've also seen them referred to as LFAQ (Less Frequently Asked Questions). Is there no end?! Where is Chicken Man, now that we need him?

1.4) What are FAQs used for?

Before asking a question in a USENET newsgroup, check out the appropriate FAQs. If you can't find the answer to your question there, then you can post your question to the newsgroup. Frequently asked questions in a newsgroup tend to make the news hard to read. With more news traffic, there is more to sift through. Do everyone a favor, first try to find the applicable FAQs. Then read them. If you can't find them, look for them. If you still can't find them, ask where they are. Then read them.

If after reading the appropriate FAQs, you still can't find the answer to your question, then you can post your question to the appropriate newsgroup. It is recommended that after you receive your answer(s), you post a summary to the newsgroup. It might also be nice to notify the maintainer of the appropriate FAQ(s) of the answers so that they can update their articles accordingly (keep in mind that they don't always have the time to scan the newsgroups for new information).

Don't assume that the FAQ maintainer is willing or able to answer every question he or she receives. Some make every attempt possible to answer as best as they can. Others either just get too many questions to deal with, or they're busy with other things. Please

keep this in mind - it might be better to ask your question in a newsgroup.

1.5) Where are FAQs found/kept/hidden?

Please do not ask the FAQ maintainer to mail you a copy of their FAQ. They just don't have the time - believe me, I know. Instead, make every possible effort to obtain the FAQ from the standard locations described in this section (USENET newsgroups, archives, etc).

1.5.1) USENET

FAQs can be found all over the Internet. The most common place to find FAQs are in USENET newsgroups. USENET is a distributed discussion system that exists on the Internet and some other networks. Many newsgroups have a FAQ specific to the subject of the newsgroup. It is also common, in some newsgroups (that by nature cover more ground), to have a number of FAQs on different, pertinent subjects. Some FAQs that have been approved by the *.answers moderators team (more on this in section 3) appear in the various *.answers newsgroups (news.answers, comp.answers, sci.answers, etc). A quick browse through these newsgroups will turn up many interesting articles - do yourself a favor and check from time to time.

1.5.2) Mailing lists

Many mailing lists also have their own FAQs. Some mailing lists automatically mail the FAQ to the list of subscribers. Other lists send a notice advising subscribers how to get a copy. The second option seems to be the most prevalent. An important reason for this is that most FAQs are fairly large (some are even multi-part), and it wouldn't make sense to periodically mail it out to an entire mailing list. Some mailing lists automatically mail the FAQ(s) out to new subscribers (probably with the hope that this will avoid stupid questions), and then letting the subscriber retrieve updated versions of the FAQ(s) by ftp.

1.5.3) Archives

Many FAQs are also archived. One important repository of FAQs and other articles is the news.answers archive maintained by the moderators of the news.answers newsgroup. All FAQs that have been approved for posting to the news.answers newsgroup are archived at the rtfm.mit.edu ftp site (and all of the mirror sites) in the following directories:

By subject line -
/pub/usenet/news.group.name
/pub/usenet-by-group/news.group.name

By subject category -
/pub/usenet/news.answers
/pub/usenet-by-group/news.answers

and for the other *.answers newsgroups
/pub/usenet/*.answers (eg. comp.answers, sci.answers, rec.answers)
/pub/usenet-by-group/*.answers

By newsgroup hierarchy -
/pub/usenet-by-hierarchy/news/group/name

To find a FAQ by the newsgroup it belongs to, look in the directory /pub/usenet (which is the same as /pub/usenet-by-group). There you will find that each newsgroup has its own subdirectory (if applicable). As an example, if you are looking for one of my FAQs on microcontrollers, look in /pub/usenet-by-group/comp.answers/microcontroller-faq. There you will find three entries: 8051, 68ch11, and primer.

You can also search for FAQs by working your way through the newsgroup hierarchy. Look in the directory /pub/usenet-by-hierarchy and you will find a subdirectory for each newsgroup category (news, comp, rec, alt, ...). Then just keep working your way down the hierarchy by entering the appropriate subdirectory to find the FAQs that you are looking for. For example, to find my FAQs on microcontrollers, look in /pub/usenet-by-hierarchy. Go into the comp subdirectory, and then go into the answers subdirectory. All of the FAQs posted to comp.answers will be listed under this directory.

Instead of searching through the archive, many of the periodical postings on USENET are listed in the news.lists newsgroup under the heading:
"List of Periodic Informational Postings, Part * *"
These lists are archived at /pub/usenet/news.lists with the archive names:
"List_of_Periodic_Informational_Postings,_Part_*_*"

If you do not have access to anonymous ftp, you can also send e-mail to mail-server@rtfm.mit.edu to get FAQs by e-mail.

Initially, try a message with no Subject: and just the following lines in the body:
help
end

One useful command is the index command. This returns a list of the contents of a particular directory. Some examples of how to use this command are:
index
index usenet-by-group
index usenet-by-group/news.announce.newusers
index usenet-by-group/news.answers
Be warned that news.answers has a LOT of information in it. The directory listing that will be sent to you by Email will be LARGE.

1.5.4) World Wide Web

If your system has a browser for the World Wide Web, then you can access all of the USENET FAQs found in news.answers (and lots of other good stuff!) at these addresses:
http://www.faqs.org/faqs/FAQ-List.html
http://www.cs.ruu.nl/cgi-bin/faqwais
http://www.lib.ox.ac.uk/internet/news/faq/by_group.index.html
[non-functional now]

The World Wide Web uses hypertext links, contained in HTML (HyperText Markup Language) documents, to join pieces of information located either at the same or different sites. The links are in the form of URLs (uniform resource locators), a standard way of coding the location of hypertext information.

Check with your system administrator or on-line service for more information on how to access the World Wide Web.

1.5.5) Collections and Compilations on CD-ROM

This is a controversial subject among FAQ maintainers. Even my mentioning this subject puts me in danger ;-). Many FAQ maintainers (such as myself) object to the practice of some firms grabbing everything available from the USENET archives (including many copyrighted FAQs), putting it on a CD-ROM, and then selling it.

In some ways, the idea of a FAQ being distributed in a CD-ROM collection isn't necessarily evil. After all, the main idea behind writing the FAQ in the first place is to share information with others. The CD-ROM is another way to share this information. It even gives access to those who don't have access to the Internet.

On the other side of the coin, you'll find many FAQ maintainers who think that the whole idea of restricting the distribution of FAQs (theirs in particular) is misguided. That's fine - the owner of a FAQ can set whatever conditions for distribution that they want.

The basic objection to the use of FAQs without the permission of the author, is one of control over copyrighted material. The FAQ maintainer works hard at compiling and maintaining the FAQ. The issue is not one of greed, since it is clear that the FAQ maintainer wants to share with others. It just isn't fair for someone else to make a buck at it.

Some FAQ maintainers are fussy about the most recent information being available. A FAQ on a CD-ROM is out of date - PERIOD. The only place to get a FAQ, and be sure that it is up-to-date, is from the appropriate USENET group (or archive). It should be the right of the FAQ maintainer to decide what to do with the FAQ.

Finally, the practice of using copyrighted works without permission is illegal. Most FAQ maintainers have a copyright statement, along with the phrase "all rights reserved", appended to their FAQ. Therefore, the FAQ maintainer, and no one else, has the right to do whatever (s)he wishes to do with the FAQ.

If you come across such a FAQ (with the appropriate copyright statements) in a commercial collection, please notify the company you purchased it from that what they are doing is illegal. It would also be appropriate and appreciated if you would notify the author of the FAQ that his/her FAQ is illegally being sold.

Many popular magazines have advertisements for collections on CD-ROM of Internet/USENET archives. I cannot verify whether they adhere to the proper legal practices in the compilation and distribution of the contents of their collections. I'm not even sure if I (personally) agree or disagree with the practice. Please keep the FAQ maintainers' interests (and feelings) in mind.

1.6) What was the first FAQ?

Eugene Miya is usually credited with being the author of the first FAQ. Although, in his words, "I didn't do the very first FAQ, but I probably did the first one of an informational nature." His article might possibly be the first one that was called a FAQ. Eugene points out that Mark Horton kept an "18 question" periodic post. This was posted to "general", which was later called news.announce.*. It had answers to questions such as "What does 'foobar' mean?" and "What does 'unix' stand for?"

In 1982, while acting as an official NASA presence on the gatewayed ARPAnet mailing list SPACE[-Digest]/net.space news groups, he tired of seeing "dumb answers" to recurring questions. The situation as Eugene saw it was that the answers to these questions were are often poorly thought out, inconsistent, and uninformed. Furthermore, the posters of the questions often weren't trying to find the answers from books, magazines, or other references. They also weren't paying attention to previous answers to these same questions. Rather, they were just taking the easy way out - email the question and wait for the answer.

Eugene therefore decided to start a series of monthly posts in 1983 to rectify this sorry state of affairs. The mechanism of periodic postings was also a way to provide information to those who didn't have access to the archives.

The first posts included the addresses of NASA Centers, some basic references, etc. He also had a yearly posting trying to attract summer hires for the various NASA centers. All of these are still being posted, albeit by someone else now.

2) WRITING A FAQ

2.1) Who may write/compile a FAQ?

Anyone - no rule exists about who may or may not compile/write a FAQ. If there is a need for the information contained, your FAQ will be appreciated.

2.2) Why write a FAQ?

The Internet (and USENET) is frequently referred to as the Information SuperHighway. You can argue the merits of this analogy, but you can't deny that there's lots of stuff out there. The big problem is finding it - and I mean BIG PROBLEM. It might be more accurate to refer to the Internet as "the large, multi-storied, over-crowded, Information Parking Lot." And the attendant is away!

One thing that I've discovered in the short time that I've been on the Internet, is the willingness of those who frequent USENET to help others find their way around this great big wonderful mess. A FAQ is a good way to help lots of good folks at the same time. The first FAQ that I wrote was as a result of my search for information on Intel 8051 microcontrollers. I couldn't find anything for a long time. I used Archie, Gopher, and lots of other methods that I either read about or that friends recommended. In addition, I scanned the appropriate newsgroups. However, all that I could find were the same questions that I was asking. I nearly came to the conclusion that the Internet was a waste of time.

After compiling a few facts, I put them together in a small article (under 5K) and posted it to a few USENET newsgroups that seemed to have a reasonable connection to the subject matter. In a short time I was inundated with Email. Readers of my FAQ from all over the world sent additions and corrections for the FAQ, requests to post to other newsgroups, kind words of appreciation, offers of free software and literature, and even a job offer. Today the FAQ is over 100K in size and two other FAQs were born from the leftovers from this first FAQ.

As a result of this modest effort, I have learned a lot. I have more than enough information about the 8051 microcontroller, I learned my way around the Internet, and I have made connections with a number of really nice people. Even more, my FAQ had a snowballing affect. Several other people are now either maintaining or starting FAQs on other microcontrollers. In a short time, if a newcomer to the Internet is looking for information on microcontrollers, a pile of information will be immediately available, without the need for months of searching. Hopefully, the same will be true about the subject(s) that you are interested in.

2.3) What subjects are appropriate?

Just about anything. If you see the same questions always popping up in your favorite newsgroups, a FAQ might be needed. Check first if a FAQ exists, by looking in the USENET archives and by asking in the newsgroup is such a FAQ exists. If there is no FAQ, and you know the answers (or at least a good number of them), do yourself and everyone else a favor. Compile the questions and answers together in an article, and post it regularly to the newsgroup.

Just as important, make sure that your FAQ is made available to the right audience. This means carefully choosing which newsgroups to post it to. Often, requests from other newsgroups will inform you

that others are also interested in your FAQ.

2.4) How important is accuracy?

If you are maintaining a listing of all of the Gilligan's Island episodes (yeah, there is such a FAQ, and it's great!), the chances of causing serious damage to someone are pretty slim.

However, as a purely hypothetical example:
- if you are maintaining a FAQ on the Pentium processor
- you claim that the Pentium is 100% accurate and bug-free
- someone reads your FAQ, bases a project on this information, and encounters a bug that has terrible consequences
- at the least, you will be considered vermin by your dear reader
- at the worst, you might find yourself being sued by same

Some FAQs are in the business of sharing information about different products. This can be a bit touchy when trying to convey quality or usability. Care should be taken when relying on opinions (even, or especially, your own) or hearsay. Try to check out the details the best that you can. You might consider stating if an item is opinion or fact (whatever that is). Be open for suggestions. The inclusion of a disclaimer might be called for, although it really shouldn't be necessary (see section 4.2).

2.5) What is the required format and style for a FAQ?

No format is required. You are free to be as creative as you wish. Keep in mind however, that the FAQ should be readable. Don't just cobble together a document that has no organization or flow.

One common practice is to organize the FAQ as questions and answers, much like this article itself. This fits in well with the name Frequently Asked/Answered Questions. In other cases, it may make more sense to organize your FAQ as a reference. That is, lots of answers without the questions being stated (asked) specifically. Some FAQs can use both of these techniques in the same document. One part of the article can be in question/answer format, while the rest can be a reference.

It is highly recommended that you establish a consistent and easy to read format. For this document I chose to use a hierarchical numbering system, but you may prefer another method (e.g. Roman numeral, Capital letter, number, small letter). Indenting the text also makes it easier to read the document (Ask just about any graphics artist, and they will tell you that white space is important). If you prefer a particular formatting technique, by all means use it. Just please keep in mind that everyone will get more out of your efforts if the result can be easily read.

In addition, a FAQ can be in straight ASCII, or in several other special formats. I prefer using straight ASCII since it is more easily accessible to a larger number of users.

One proposed format is "FAQs: A Suggested Minimal Digest Format".
This article is posted periodically to:
news.admin.misc, news.software.readers, news.answers
The author is:
clewis@ferret.ocunix.on.ca (Chris Lewis)
This article is also archived as:
faqs/minimal-digest-format

Another format is the html document standard for use on the World Wide Web (WWW). This is becoming a popular way to "publish" information, however there are some disadvantages:
- HTML is NOT an easy-to-understand language
- not everyone has access to the Web

It is becoming common practice to maintain two versions of a FAQ. One is in straight ASCII and is posted to the appropriate USENET newsgroups. The other version is in html and is made available on a web site, giving the reader easy and instant access to the various site links contained in the FAQ.

Grammar and spelling are also important. Poor grammar can cause ambiguities and make it difficult for the reader to understand what you're trying to say. Spelling mistakes are distracting, and can also create confusion. Although it isn't necessary to work towards a doctorate in English literature, take a few moments to review your work and clean it up.

2.6) What is the maximum size of a FAQ?

FAQs have no size limit, although sometimes a system may impose certain restrictions - 64K is always a magic number. I've also seen 100K used as a limit. In addition to system limits, FAQs that are very large (over 64K) might be difficult to handle. You might consider splitting your FAQ up into pieces, with each piece having its own theme.

Many old USENET sites will not accept articles over 64k. Some on-line services have smaller limits (32k for America Online). FAQ maintainers have to make a trade-off between the universality that they wish their FAQ to achieve, and the convenience of one large article as opposed to several smaller articles.

The trend seems to be towards keeping FAQs in one piece, no matter how large they get. I recently asked the readers of my microcontroller FAQs if they wanted the FAQs split into multiple parts or kept in one piece. Even though two of the FAQs are over 100K, and the third is approaching 100K, the results were unanimously for keeping each of the FAQs intact and in one piece. The convenience of not having to juggle different pieces of the document (both for the author/maintainer and for the reader) outweighs the inconvenience of an occasional newsreader program that can't handle large articles. Also, most on-line services are in the process of removing size restrictions, making the size of the FAQ more dependent

on personal taste, and less on "technology" (or the lack thereof).

2.7) What is a header and do I need one?

A header contains descriptive information about your posting. If you post your FAQ by means of a newsreader, a [minimal] header will be supplied automatically. This header is required by the posting mechanism.

Providing additional header information isn't really crucial unless there is a specific need (such as providing a version number). If you are considering submitting your FAQ for *.answers approval, certain header information is required. See section 5 for more details about this. If you aren't worried about approval for now, then you don't need to worry about the header either.

2.8) Additional information

There are several additional sources of information on FAQs and FAQ writing.

David Alex Lamb's "FAQ maintenance aids":
http://www.qucis.queensu.ca/FAQs/FAQaid/

Infinite Ink's (Nancy McGough) "Finding and Writing FAQs and Periodic Postings":
Finding FAQs:
primary - www.ii.com/internet/faqs/
mirror - http://ii.best.vwh.net/internet/faqs.html

Writing FAQs:
primary - www.ii.com/internet/faqs/writing/
mirror - www.best.com/~ii/internet/faqs/writing/

The bible for getting your FAQ approved by the news.answers team is the *.answers guideline. This document has been recently revised by Pamela Greene (one of the news.answers moderators) and is posted monthly to news.answers. See section 5.2 for more information on getting this document and having your FAQ approved.

Eugene Miya has an article "FAQ on FAQs n.g.FAQ" posted to:
news.groups (hint: the n.g. is short for news.groups).

3) POSTING/DISTRIBUTING A FAQ

3) POSTING A FAQ
3.1) How do I post/distribute my FAQ?
3.2) Where do I post/distribute my FAQ?
3.3) How often should my FAQ be posted?

4) LEGAL STUFF
4.1) Do I need to copyright my FAQ?
4.2) Do I need a disclaimer?

5) APPROVAL FOR *.ANSWERS - THE BIG TIME
5.1) Why bother getting a FAQ approved for *.answers?
5.2) How do I get my FAQ approved?
5.3) FAQ maintainers
5.4) FAQ maintainers mailing list

6) ACKNOWLEDGMENTS

3) POSTING/DISTRIBUTING A FAQ

3.1) How do I post/distribute my FAQ?

If you only need to post your FAQ to one or two USENET newsgroups (or mailing lists), then you can just manually post it whenever the posting date rolls around. It is also possible to cross post it to several groups at once. Check with your system administrator for more details on how to do this.

Some sites don't keep their news around for a long time, so your posting might disappear from those location sooner than you planned. For this reason, and to allow general access to your FAQ, it is a good idea to archive it somewhere if possible. This might be on a friendly ftp site that agrees to keep the current copy available for ftp'ing, on a mail server, or on your own system (as long as others have some sort of access).

If your FAQ is to be posted to a large number of newsgroups, then it might be a good idea to take advantage of the faq-server set up by the *.answers team. The faq-server can be used to automatically post any periodic posting that is first approved by the *.answers team. It allows automatic posting at set intervals to as many newsgroups as required. A big advantage of using the faq-server is that it is quick, easy, and automatic. Check with the *.answers team for more details on this.

3.2) Where do I post/distribute my FAQ?

Among the many places that you might choose to post or distribute your FAQ:
- USENET newsgroups
- Commercial on-line services (Compuserve, America On Line, BIX, Prodigy, etc)
- Bulletin Board Systems (BBS)
- manufacturers' literature (I have given my permission to several major corporations to include portions of my microcontroller FAQs in various product/technical documents.)
- published works (many authors or publishers like to include portions of the appropriate FAQs in their works, this gives the reader an easy way to find more information on the subject)
- a number of FAQs (as well as other articles that started out as information guides on USENET) are now being made available in print (these range from full-blown works issued by major publishers, to simple pamphlets printed privately)

3.3) How often do I post/distribute my FAQ?

Posting your FAQ once a month should be sufficient. In some special circumstances, you might need to post your FAQ twice a month to keep it available in the newsgroup. Adding an expiration date in the header also helps keep it from being purged too soon. This doesn't always work, since your local system determines when the articles will be purged, and this doesn't always coincide with the expiration date.

4) LEGAL STUFF

4.1) Do I need to copyright my FAQ?

If you invest a lot of time on your FAQ, and most FAQ maintainers do, you might be concerned about protecting your work. Under the Berne Convention (to which the vast majority of "Western" nations are signatories), as soon as something is published, then the writer/producer of the item is held to own the copyright. You can add (C) copyright 1995 if you want, but it is no longer necessary (sort of like chicken soup, doesn't necessarily help, but it couldn't hurt).

Protecting your work with a copyright protects your rights if someone else decides to steal your work and make a buck from it. As mentioned above in section 1.5.5, it is very common for companies to compile information from the Internet, put it on a CD-ROM, and sell it. While copyright protection won't prevent this from happening, it at least makes it illegal and gives you legal recourse if you need.

Check the copyright FAQ for further details. If it is important enough, you should consult with a lawyer experienced in copyright law.

4.2) Do I need a disclaimer?

In this "sue the pants off of anyone that looks at me cross-eyed" world that we live in today, many FAQ maintainers are using disclaimers to protect against possible law suits. If your FAQ contains information that might be used in sensitive applications, and if something were to go terribly (and tragically) wrong, do you think that you would be sued? Does a bear defecate in the woods? See section 2.4 (How important is accuracy?) for more information on this subject.

I'm not a lawyer, so I won't attempt to give definitive advice here (yes, this is a disclaimer), but something such as the following might help cover your tush. Whether it in fact really helps or not, I don't know.

This article is provided as is without any express or implied warranties. While every effort has been taken to ensure the accuracy of the information contained in this article, the author/maintainer/contributors assume(s) no

responsibility for errors or omissions, or for damages resulting from the use of the information contained herein.

Another common disclaimer (that you have more than likely already encountered), is that used to disclaim any connection between the author's opinions and those of their employer. If your article is in anyway related to what you do for a living, and if there might be a conflict of interest, it might be worthwhile to include something like this:

The contents of this article reflect my opinions only and not necessarily those of my employer.

5) APPROVAL FOR *.ANSWERS - THE BIG TIME

5.1) Why bother getting a FAQ approved for news.answers?

When your FAQ is approved for posting to one or more of the *.answers newsgroups (news.answers, comp.answers, sci.answers, etc), it is brought to the attention of those who might not be regular readers of the newsgroup(s) that you usually post your FAQ to. This means that a larger potential audience gets a chance to know about your hard work.

One of the major reasons for getting your FAQ approved by the news.answers team, is that a FAQ that is posted to one of the *.answers newsgroups is automatically archived. This is important since some sites purge old postings more frequently due to lack of space. The archive makes your FAQ available anytime someone wishes to ftp it from rtfm.mit.edu (the archive site) or any of its mirrors.

Another important reason to get your FAQ approved, is that you can then use the faq-server to automatically post to whichever newsgroups you want.

Last, and least or most (depending on your personality), there is always the fame and glory associated with being a FAQ maintainer. Once your FAQ becomes widely read and distributed, you will be amazed at how many times your name will be mentioned in postings or other articles.

5.2) How do I get my FAQ approved?

In order to get a FAQ approved for posting to news.answers, you need to submit your FAQ to the *.answers team. For a detailed explanation of what you need to do to make your FAQ *.answers compliant, read the *.answers guideline. Check in news.answers to see if it is posted there under the heading "news.answers submission guidelines". If the document isn't currently available at your site, send a mail message to mail-server@rtfm.mit.edu with the command "send usenet/news.answers/news-answers/guidelines" (without the quotes) in its body. You can of course ftp the document from the same place.

Getting a FAQ approved is easy and doesn't require much on your part.
The most important consideration for approval is a proper header. A
minimal example follows:

```
From: russ@silicom.co.il (Russ Hersch)
Newsgroups:
comp.robotics,comp.realtime,sci.electronics,comp.answers,sci.answers,news.answers
Subject: 68hc11 microcontroller FAQ
Followup-To: poster
Approved: news-answers-request@MIT.EDU
Summary: This article is a collection of information sources on
the Motorola 68hc11 line of microcontrollers.

Archive-name: microcontroller-faq/68hc11
Posting-Frequency: monthly
```

This is a real live header taken from one of my FAQs. Another
example would be the header to the FAQ you are currently reading.
The news.answers guideline document clearly explains the purpose of
each line of the header. To make things simple, you can just take
the above example and adapt it for your FAQ. Just a few cautions:
- All of the fields in the above header are required and all must
be included. There are additional, optional fields which may be
included if you want to take the time to figure out what they're
used for. Personally, I'm too lazy.
- The Newsgroups line must have one space after the colon. All of
the newsgroups must be listed on one line with no spaces or
extraneous characters (which is why the Newsgroups line seems to
fall off the edge of this document - it is not a mistake).
- Followup-To must specify either "poster" (which directs followups
back to the author of the FAQ) as done above or the home
newsgroup of the FAQ (which directs followups to the newsgroup).
Do not forget this field since responses then might be directed
to the news.answers team, and they will not be very happy about
that. Do NOT put an E-mail address in the "Followup-To:" field.
- *** IMPORTANT *** The Approved heading is ONLY used when your
FAQ is actually approved. When you are notified by the
news.answers team that your FAQ has been accepted, then you may
add this line to your header. DO NOT include this field until
your FAQ is approved, or you will find yourself in deep doo-doo.
- For a multi-line summary, the second line of the Summary field
should start with at least one space.
- One blank line should appear before the Archive-name line.
- Archive-name should be fairly descriptive but short. If you
aren't sure about this, take your best shot at it and the
*.answers team will adjust it if necessary.

Once you've added the appropriate header to your FAQ, you can submit
it to the news.answers moderators for approval. Send it to the
following address: news-answers@mit.edu. Don't expect an immediate
answer as these guys are REALLY busy. They will send you back a
letter indicating if your FAQ has been approved, and if not, what

needs to be done to get it in order.

If you have any questions, don't be embarrassed to ask the news.answers moderators, that's what they're there for. Most of the time the problem is simpler than you think. As you gain more experience, things will become clearer. Send your questions to: news-answers-request@mit.edu.

To get your FAQ approved for posting to *.answers, you need to do the following:
1. Get (as described above) the "news.answers submission guidelines" article before you do anything. This is a good reference document which discusses many details that I chose not to delve into.
2. Make sure your FAQ is accurate. If you've already been posting it, then your readers have probably already helped you out on this. If you prefer, you can begin by posting the article marked as "DRAFT" a couple of times, to get feedback - then submit it for approval.
3. Make sure that your FAQ is organized so that the material is easily accessible to the reader.
4. Similarly, make sure your FAQ is formatted nicely (proper margins and indentation). This really helps when trying to read it.
5. Prepare a header (as described above) to add to the beginning of your FAQ.
6. Submit your FAQ for approval.
The address for submitting your article:
news-answers@mit.edu - ONLY for submissions (no questions!)
The address for requesting information and for asking questions about the process:
news-answers-request@mit.edu (questions and requests for help)
7. Please be patient and don't ask the moderators about the status of your submission. They are very busy and are not able to deal with "nuisance" mail. Use your judgement - if your teenage daughter was in Kindergarten when you submitted the article, then you might be justified in sending them a note. If she was only in fourth grade, think twice.

5.3) FAQ maintainers

Once your FAQ is approved, you are now included in the fraternity of elite individuals known as FAQ maintainers (FAQers might not be the best term for obvious reasons). Pass out cigars, throw a party, have a beer, and write and tell Mom about it.

So what now? Well, you should prepare yourself for Email. Possibly lots of it. You've now become a "personality" on the Internet (as Jonathan Horen, a good friend of mine put it), and an "authority" on the subject that your FAQ covers (whether you really are or not). You will more than likely become a central address for those who have questions about the topic that you've addressed in your FAQ. Enjoy

yourself - you will end up "meeting" a lot of very nice people from all over the world. These new friends of yours will help you keep your FAQ up-to-date. Everyone will benefit.

It is very likely that you will find yourself very busy maintaining your FAQ. Some FAQs require a lot of attention. Others, once they hit their maturity, just sort of coast for a while. My microcontroller FAQs keep me pretty busy and often keep me from working with the very microcontrollers that I originally set out to do. Since I'm still learning a lot about the subject, I don't mind this too much. However, I would like to apply what I'm learning and actually accomplish something. I wouldn't want anyone to say (to paraphrase an old saying), "Those who can do, those who can't write the FAQ."

5.4) FAQ maintainers mailing list

As a FAQ maintainer, you might want to consider joining the faq-maintainers mailing list. This is used for discussing issues related to the *.answers newsgroups and the maintenance of FAQs. There is also a faq-maintainers-announce list, which is used only for announcements. Subscribers to the faq-maintainers list automatically receive messages sent to faq-maintainers-announce.

Traffic on the faq-maintainers list is sporadic and the topics eclectic. Sometimes I feel that this mailing list is really useful, other times I have no use for it whatsoever. Lately, the traffic has been heavy and the topics varied, some interesting and some not so interesting (in my opinion). Try it out for yourself and see if you get anything out of it. You can always terminate your subscription if you don't find it useful (don't try asking for your money back though :-).

You may send a subscription request for either one of these lists whenever you want. Please send an Email request to faq-maintainers-request@rtfm.mit.edu with a short message in the body specifying which list you would like to subscribe to.

The faq-maintainers list is not restricted to only those who have [approved] FAQs that are posted to news.answers. Anyone who is interested in the fine points of FAQ writing/maintaining is invited to participate in the discussions. If you are considering putting a FAQ together, even if you don't intend on getting it approved, the faq-maintainers list is a valuable source of information, and a good place to ask questions.

6) ACKNOWLEDGMENTS

I would like to thank the following individuals who have helped and contributed to this document:
Jonathan Horen (a real personality in his own right) for his brilliant technical support and who has finally stopped calling me a Techno-Wimp just because I don't know UNIX

Pamela Greene, Ping Huang (a true gentleman and a scholar), Thomas Koenig, Aliza Panitz, and the rest of the news.answers moderation team for their valuable help in getting my various FAQs approved for news.answers and for providing important suggestions to this document
Mark Moraes (the news.announce.newusers moderator) for his valuable contributions and continuing support
The subscribers to the FAQ Maintainers mailing list who from time to time provide valuable insight and who are always there when help is needed
Mark Israel (the maintainer of the alt.usage.english FAQ) who pointed out a lot of errors a long time ago that I finally got around to fixing a short time ago!
Carl Aude for his suggestions about copyrights.
You, my readers for your support and encouragement, I'm glad I was able to help
My three rug rats (son Menachem, and daughters Michal and Edya) for your "Frequently Asked (stupid?) Questions" :-)

Special thanks to my Mom and Dad (Gloria and Morton Hersch) who never hear from me because I'm always busy with my FAQs. I'm writing a FAQ about myself to send to them, so they'll know what I'm up to.

I disclaim everything. The contents of this article might be totally inaccurate, inappropriate, misguided, or otherwise perverse - except for my name (you can probably trust me on that).

Copyright (c) 1995 by Russell Hersch, all rights reserved.
This FAQ may be posted to any USENET newsgroup, on-line service, or BBS as long as it is posted in its entirety and includes this copyright statement.
This FAQ may not be distributed for financial gain.
This FAQ may not be included in commercial collections or compilations without express permission from the author.

Russ Hersch - russ@silicom.co.il or sibit@datasrv.co.il

1104. Re: Linux and X-Windows

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-17 17:38:09 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <0LednduvUs8fS4nfRVn-vg@comcast.com>
Source record: 20337

"Here to there" <here@mylittlewhitehouse.com> wrote in message
news:slrnd19ede.64i.here@shuttle.mulveyfamily.com...
> We have a mix of Linux, Windows, Solaris, etc machines at my home
> and office. When it comes to outstanding convenience and price (free!)
> nothing beats VNC.

Given your criteria, I'd have to agree with you. HOWEVER... I've used VNC plenty, and there are numerous minor 'quirks' where parts of the screen don't get updated correctly. For connecting Windows machines to other Windows machines, the Microsoft 'Remote Desktop' facility is, in my experience, more reliable and robust (it lets you control far more of what gets 'stripped away' from the controlled machine, besides just the desktop wallpaper that VNC will). (The server side is included with Windows XP for the price of the OS, and the client is free for all platforms, including UNIX machines.)

VNC does have some nice goodies that remote desktop doesn't -- the built-in 'web server' feature is really great. I've run some Windows machines with both VNC and remote desktop enabled.

---Joel Kolstad

1105. Re: Something like a diplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-17 22:42:43 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <7c7a11d247n4q2n6nj6p1b9g61oqlol7fr@4ax.com>
Source record: 20338

On Thu, 17 Feb 2005 17:35:11 +0800, budgie <me@privacy.net> wrote:

>On Wednesday, 16 Feb 2005 09:42:58 -500, "Asimov"
><Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote:
>
>>"budgie" bravely wrote to "All" (16 Feb 05 12:52:14)
>> --- on the heady topic of "Re: Something like a diplexer"
>>
>> bu> From: budgie <me@privacy.net>
>> bu> Xref: aeinews rec.radio.amateur.homebrew:2181
>>
>> >You missed a step called a directional coupler. It's a sort of
>> >transformer with 2 input ports and 1 output port. The 2 inputs don't
>> >see one another but their power is combined at the output.
>>
>> bu> You don't actually *need* a directional coupler. I have seen window
>> bu> preselectors with five separate sections for sub-bands between 403 and
>> bu> 520 MHz. The configuration is symmetrical (in/out) with simple bandpass
>> bu> filter segments and coaxial split/combine harnesses. Not a DC or
>> bu> hybrid in sight. I am presuming - not having swept one - that at "off"
>> bu> frequencies each parallelled leg presents a high enough impedance to
>> bu> the split junction that the effect is negligible.
>>
>>Yes but it requires some effort and cost to build the 2nd BP filters so
>>I wonder if it's any more difficult to do either? What do you figure?
>
>I'm not sure we are on the same wavelength here (no pun intended). For
>*non-overlapping* filter sections, the bandsplit through two bandpass sections
>25-500 and say 550-3000 should be able to be achieved with T-pieces at the input
>and output ends (although it appears the O/P didn't achieve this).

it looks like different wavelength to me, but I believe it is
described in ARRL handbook how to build such combiners

73, LA8AK

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

1106. Re: Something like a diplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-17 22:44:52 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <mh7a11dqj8rst5epfclvorlk0ji6odhvig@4ax.com>
Source record: 20339

If it was supposed to be for the same wavelength is another
interesting construction shown at
http://my.athenet.net/~multiplx/cgi-bin/wilk.main.cgi

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

1107. Re: The FAQ (Well, Question 1, at least)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-18 00:30:08 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <kGaRd.73764$L_3.17484@clgrps13>
Source record: 20340
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Behold, Spike scribed on tube chassis:

> On Thu, 17 Feb 2005 10:56:16 -0000, Airy R.Bean wrote:
>
>>Radio Hams are qualified to design, build and then operate their own
>>pieces of equipment.
>
> Your troll bait is becoming boring. However, for the sake of any
> newcomers who might be misled it, a slight amount of correction needed.

Thanks for proving my point, CB'er!

plonk

--
Gregg "t3h g33k"
http://geek.scorpiorising.ca
Ratings are for transistors, tubes have guidelines

1108. Re: The FAQ (Well, Question 1, at least)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-18 00:57:10 UTC
From: real-radio-ham <real_radio_ham@yahoo.co.uk>
Message-ID: <421537e1$1_1@mk-nntp-1.news.uk.worldonline.com>
Source record: 20341
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Don't you ever change the record, amateur radio is what you make it, it's only a hobby, if you spent less time moaning and more time in the shack working the bands and actually putting into practice some of your bullshit you may find out what this hobby is all about.

RRH

real_radio_ham@yahoo.co.uk

"Airy R.Bean" <Me@privacy.net> wrote in message news:37jboqF5clhohU1@individual.net...
> What is Ham Radio?
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.
>
> Ham Radio awakens in its aficionados a whole-life
> fascination with all things technical and gives
> an all-abiding curiosity to improve one's scientific
> knowledge. It's a great swimming pool, please dive in!
>
> This excitement causes a wish to share the experience
> with ones fellow man, and shows itself in the
> gentlemanly traditions of Ham Radio.
>
> Radio Hams are qualified to design, build and then
> operate their own pieces of equipment. They do this
> with gusto, and also repair and modify their own
> equipment.
>
> The excitement that drives a Radio Ham starts with
> relatively simple technologies at first, perhaps making
> his own Wimshurst machine and primary cells. Small pieces
> of test equipment follow, possibly multimeters and signal
> generators. Then comes receivers and transmitters. It is with
> the latter that communication with like-minded technically
> motivated people takes off. The scope for technical
> development grows with the years
> and now encompasses DSP and DDS. There is also a great deal
> of excitement in the areas of computer programming to

> be learnt and applied.
>
> The technical excitement motivates Radio Hams to compete
> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.
>
> -----ooooo----
>
> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large
> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
> repaired; they are not interested in technical discussion
> and sneer at those who are; they have no idea how
> their radios work inside and have no wish to find out;
> they are free with rather silly personal insults;
> they have not satisfied any technical qualification
> and their licences prevent the use of
> self-designed-and-built equipment.
>
> These CB types engage in the competitive activities
> with their Cheque-Book-purchased off-the-shelf radios
> in a forlorn effort to prove that they are Radio Hams.
>
> No _REAL_ Radio Hams are deceived by such people!
>
>
>
>

1109. Re: JESUS CHRIST WENT TO THE CROSS SO YOU CAN GO TO HEAVEN - The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel s

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-18 02:00:50 UTC
From: "B.Viel" <sjouk@home.nl>
Message-ID: <cv3i8hroh1@news6.zwoll1.ov.home.nl>
Source record: 20342

Do talk again, from when I was a child I talk to God.
Just forgot it for a decade when I was grown up.
That was the most misserable time in my live.
Talk positive, positive=live, negative=dead.
The power of words !
The good news is, you can program yourself.
There are too many negative "things" around here.
Any questions? think about TV advertisement.
If words of someone else can do let you buy, than the
same method can work for you !
All the negative things take something from us.
The live out of us, believe me.
You can't start your car battery for ever whitout
charge it.
If you talk positive you will receive positive things.
God made live=positive, believe in it and carry it with you.
Everyone on this earth likes friendly, love.
I make a stronger statement, no one can whitout love.
No money on this world can buy you that.
Samples enough!
Multiply the good things in you, that's the message of God.
And that are just the hard things!
It's much easy'er doing nothing getting old and going dead.
But what was the purpose of that?
Beeing here and leave the world whitout making it a little better?
Your be born for nothing? Would you?
My personal believing is, be here and make something out of it,
else jump off a high building.
Would get you only in more trouble.....

Why I would have a dialog with God so as I said, "We could talk".
That's just a wish, and personal.
Some day I will have my dialog, I am very sure about that.

I could not let ending this thread with, I stopped going to Church.
Whitout this notice.
Its your choice and I will respect that.

I not going to any Church too, but don't stop talking to God !
If this message does not make sense..... just skip it.

"Airy R.Bean" <Me@privacy.net> schreef in bericht
news:37jaioF5d8oqnU1@individual.net...
> When I was very young, I had a little make-believe friend that I could
> talk to all the time, who was with me all the time and who was
> always on my side. When I grew up, I stopped going to church.
>
> "Brian Oakley" <brianoakley@ispwest.com> wrote in message
> news:cv0ll10a0@enews2.newsguy.com...
> > > "drwxr-xr-x" <bit-bucket@config.com> schreef in bericht
> > > news:slrnd0v1pe.24qt.bit-bucket@shell.config.com...
> > > > On Sun, 13 Feb 2005 06:00:27 +0100, B.Viel wrote:
> > > > > It would be better for the LORD if HE homebrewed HIS own radio.
> > > > > We could talk !
> > You can talk to God anytime. You don't even need a radio or a sked. He's
> > always there for you. Just call.
> > B
> >
> >
>
>

1110. Re: Something like a diplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-18 02:36:05 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <54la11tcv7l05l64gmjhhnus7908k68oog@4ax.com>
Source record: 20343

On Thu, 17 Feb 2005 17:35:11 +0800, budgie <me@privacy.net> wrote:

>On Wednesday, 16 Feb 2005 09:42:58 -500, "Asimov"
><Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote:
>
>>"budgie" bravely wrote to "All" (16 Feb 05 12:52:14)
>> --- on the heady topic of "Re: Something like a diplexer"
>>
>> bu> From: budgie <me@privacy.net>
>> bu> Xref: aeinews rec.radio.amateur.homebrew:2181
>>
>> >You missed a step called a directional coupler. It's a sort of
>> >transformer with 2 input ports and 1 output port. The 2 inputs don't
>> >see one another but their power is combined at the output.
>>
>> bu> You don't actually *need* a directional coupler. I have seen window
>> bu> preselectors with five separate sections for sub-bands between 403 and
>> bu> 520 MHz. The configuration is symmetrical (in/out) with simple bandpass
>> bu> filter segments and coaxial split/combine harnesses. Not a DC or
>> bu> hybrid in sight. I am presuming - not having swept one - that at "off"
>> bu> frequencies each parallelled leg presents a high enough impedance to
>> bu> the split junction that the effect is negligible.
>>
>>Yes but it requires some effort and cost to build the 2nd BP filters so
>>I wonder if it's any more difficult to do either? What do you figure?
>
>I'm not sure we are on the same wavelength here (no pun intended). For
>*non-overlapping* filter sections, the bandsplit through two bandpass sections
>25-500 and say 550-3000 should be able to be achieved with T-pieces at the input
>and output ends (although it appears the O/P didn't achieve this).

I am not sure exactly what is trying to be accomplished here but if it
is to combine two different bandpass filters then yes a T. The cable
from the low pass filter to the T should be a quarter wave length at
the frequency of the high pass filter.

The cable from the high pass filter to the T should then be a quarter
wave length of the low pass filter.

The low pass filter will look like a short circuit at the high pass
frequency. With the quarter wave length cable that short circuit will
then be transformed to a very high impedance to the hi pass circuit.
That effectively isolates one from the other.

Do the another T and cable setup at the input and output.

73
Gary K4FMX

1111. Re: Something like a diplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-18 03:42:56 UTC
From: budgie <me@privacy.net>
Message-ID: <hpoa119i3nm6vustjpjarhcdjfbrra1bjk@4ax.com>
Source record: 20344

On Thu, 17 Feb 2005 21:36:05 -0500, Gary Schafer <gaschafer@comcast.net> wrote:

>On Thu, 17 Feb 2005 17:35:11 +0800, budgie <me@privacy.net> wrote:
>
>>On Wednesday, 16 Feb 2005 09:42:58 -500, "Asimov"
>><Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote:
>>
>>>"budgie" bravely wrote to "All" (16 Feb 05 12:52:14)
>>> --- on the heady topic of "Re: Something like a diplexer"
>>>
>>> bu> From: budgie <me@privacy.net>
>>> bu> Xref: aeinews rec.radio.amateur.homebrew:2181
>>>
>>> >You missed a step called a directional coupler. It's a sort of
>>> >transformer with 2 input ports and 1 output port. The 2 inputs don't
>>> >see one another but their power is combined at the output.
>>>
>>> bu> You don't actually *need* a directional coupler. I have seen window
>>> bu> preselectors with five separate sections for sub-bands between 403 and
>>> bu> 520 MHz. The configuration is symmetrical (in/out) with simple bandpass
>>> bu> filter segments and coaxial split/combine harnesses. Not a DC or
>>> bu> hybrid in sight. I am presuming - not having swept one - that at "off"
>>> bu> frequencies each parallelled leg presents a high enough impedance to
>>> bu> the split junction that the effect is negligible.
>>>
>>>Yes but it requires some effort and cost to build the 2nd BP filters so
>>>I wonder if it's any more difficult to do either? What do you figure?
>>
>>I'm not sure we are on the same wavelength here (no pun intended). For
>>*non-overlapping* filter sections, the bandsplit through two bandpass sections
>>25-500 and say 550-3000 should be able to be achieved with T-pieces at the input
>>and output ends (although it appears the O/P didn't achieve this).
>
>I am not sure exactly what is trying to be accomplished here but if it
>is to combine two different bandpass filters then yes a T. The cable
>from the low pass filter to the T should be a quarter wave length at
>the frequency of the high pass filter.
>
>The cable from the high pass filter to the T should then be a quarter
>wave length of the low pass filter.
>
>The low pass filter will look like a short circuit at the high pass
>frequency. With the quarter wave length cable that short circuit will
>then be transformed to a very high impedance to the hi pass circuit.

>That effectively isolates one from the other.
>
>Do the another T and cable setup at the input and output.

If I understood the O/P he was trying to split and then recombine the 25-3000 band with a split ("crossover") at 500 MHz. Assuming a 50R in/out impedance across the passband, the fiter sections presumably present a substantially different (usually much higher) port impedance out of band. A simple T combiner therefore presents a minimal impedance mismatch except near the split frequency.

Also I'm still thinking about how to make a quarter-wavelength line at 25-500 MHz or at 500-3000 MHz..

1112. Re: December 1990 QST, QSK for SB220

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-18 04:16:56 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <RoadneHgh5Wi8YjfRVn-gQ@comcast.com>
Source record: 20345

"Win" <w0lz@winlyn.us> wrote in message
news:u56811dgjat05ejoictuoa9k79003cvius@4ax.com...
>I am interested in installing a vaccum relay QSK circuit in a SB220.
> If anyone could copy for me, the article, and provide me with it, in
> the December 1990 QST, I would be forever gratefull, and would pay any
> cost.
>
> Either e-mail attachments or USPS would work for me.
>
> Win, W0LZ

Win,

What you are asking for are the QST articles authored by Rick Measures.
"Circuit Improvements for the Heath SB-220 Amplifier" (Rick's updated
manuscript (2001) for Nov.-Dec., 1990 QST article).
http://www.somis.org/SB220ci.html

Rick has these on his web site, here:
http://www.somis.org/

gb

1113. Re: The FAQ (Well, Question 1, at least)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-18 09:48:06 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <37lsr0F5e7068U1@individual.net>
Source record: 20346
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"A stroke" - would you be suggesting that the CBer, the CBer-Masquerading-As-A-Radio-Ham, the M3/CB Fools' Licensee, is some form of "Clot"?

"Walt Davidson" <g3nyy@despammed.com> wrote in message news:g5eb11p514t3ckc4n2vkskg7k881mi5hgd@4ax.com...
> On Fri, 18 Feb 2005 00:57:10 -0000, "real-radio-ham"
> <real_radio_ham@yahoo.co.uk> wrote:
> >Don't you ever change the record, amateur radio is what you make it, it's
> >only a hobby.
> CB is only a hobby.
> Amateur radio is much more than a hobby. It is a technical pursuit
> for people interested in and capable of lifelong learning and
> self-development. That excludes the vast majority of CBers, at a
> stroke.

1114. Re: The FAQ (Well, Question 1, at least)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-18 10:34:44 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <37lv8fF5ddqnnU1@individual.net>
Source record: 20347
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Something that deprives blood would be described correctly
as a "gangrenous degeneration", would it not?

"Walt Davidson" <g3nyy@despammed.com> wrote in message
news:28hb111td3j4pfgnvue79t131762mqvurf@4ax.com...
> On Fri, 18 Feb 2005 09:48:06 -0000, "Airy R.Bean" <Me@privacy.net>
> wrote:
> >"A stroke" - would you be suggesting that the CBer, the
CBer-Masquerading-
> >As-A-Radio-Ham, the M3/CB Fools' Licensee, is some form of "Clot"?
> Yes. A blood-clot'.

1115. Re: December 1990 QST, QSK for SB220

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-18 18:31:50 UTC
From: Win <w0lz@winlyn.us>
Message-ID: <r1cc111nqkqe2r4686ujjrs2l6vnecfvnu@4ax.com>
Source record: 20248

Thanks, gb. I found Rick's site last night and ordered the parts
direct from him for the mod.

Also, I thank Joe, G3LLE, and Danny, K6MHE, for providing me with
documentation via e-mail.

Win, W0LZ

1116. Re: JESUS CHRIST WENT TO THE CROSS SO YOU CAN GO TO HEAVEN - The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel s

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-18 18:44:56 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <42163777.161007015@News.Individual.NET>
Source record: 20249

On Wed, 16 Feb 2005 17:44:08 -0600, "Brian Oakley"
<brianoakley@ispwest.com> wrote:

>> "drwxr-xr-x" <bit-bucket@config.com> schreef in bericht
>
>You can talk to God anytime. You don't even need a radio or a sked. He's
>always there for you. Just call.
What frequency? Is he on ssb or cw?

1117. Re: The FAQ (Well, Question 1, at least)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-18 18:47:42 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <421737fb.161139296@News.Individual.NET>
Source record: 20250
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Fri, 18 Feb 2005 00:57:10 -0000, "real-radio-ham"
<real_radio_ham@yahoo.co.uk> wrote:

>Don't you ever change the record, amateur radio is what you make it, it's
>only a hobby, if you spent less time moaning and more time in the shack
>working the bands and actually putting into practice some of your bullshit
>you may find out what this hobby is all about.
>
>RRH
>
>real_radio_ham@yahoo.co.uk
>
>"Airy R.Bean" <Me@privacy.net> wrote in message
>news:37jboqF5clhohU1@individual.net...
>> What is Ham Radio?

The thing is to killfile Bean like I have. I only know he's around if
others quote him in their posts. Just ignore him!

... and please font quote him ... you're just falling into the trap!

1118. Re: The FAQ (Well, Question 1, at least)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-18 19:02:20 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <37msloF5gcgvqU1@individual.net>
Source record: 20251
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

You behave like a 5-year-old.

"Peter" <microwaves@blueyonder.co.uk> wrote in message
news:421737fb.161139296@News.Individual.NET...
> The thing is to killfile Bean like I have. I only know he's around if
> others quote him in their posts. Just ignore him!
> ... and please font quote him ... you're just falling into the trap!

1119. Re: The FAQ (Well, Question 1, at least)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-18 19:09:32 UTC
From: Enigms <invalid@invalid.invalid>
Message-ID: <42163d6c$1@x-privat.org>
Source record: 20252
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Airy R.Bean" <Me@privacy.net> wrote in message
news:37msloF5gcgvqU1@individual.net...
> You behave like a 5-year-old.
> "Peter" <microwaves@blueyonder.co.uk> wrote in message
> news:421737fb.161139296@News.Individual.NET...
> > The thing is to killfile Bean like I have. I only know he's around if
> > others quote him in their posts. Just ignore him!
> > ... and please font quote him ... you're just falling into the trap!

I wouldn't say that he was advanced as that.

1120. Re: The FAQ (Well, Question 1, at least)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-18 19:21:28 UTC
From: huLLy <g4sdw@aol.com>
Message-ID: <37mtffF5f3hksU1@individual.net>
Source record: 20253
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Airy R.Bean wrote:
> You behave like a 5-year-old.
>

Your postings on USENET were completely different from the drivel you post
now... what happened, Gareth? Tell Doctor Hully...
--
huLLy
VOIP SIP Phone Number 4823176 on Global Village
Or +44 8703 408916 to my VOIP line
email g4sdw@aol.com (Loon reports welcome)
http://www.giganews.com/customer/gn119503

1121. Re: JESUS CHRIST WENT TO THE CROSS SO YOU CAN GO TO HEAVEN - The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel s

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-18 19:55:49 UTC
From: drwxr-xr-x <bit-bucket@config.com>
Message-ID: <slrnd1ci25.jlg.bit-bucket@shell.config.com>
Source record: 20254

On Fri, 18 Feb 2005 18:44:56 GMT, Peter wrote:
> On Wed, 16 Feb 2005 17:44:08 -0600, "Brian Oakley" wrote:
>
>>> "drwxr-xr-x" <bit-bucket@config.com> schreef _NICHT_ in bericht
>>
>>You can talk to God anytime. You don't even need a radio or a sked. He's
>>always there for you. Just call.
>
> What frequency? Is he on ssb or cw?

The Phules posting followups in this banal thread have (as is typical
of Phules) screwed up the attributions. That is _not_ an earlier quote
of drwxr-xr-x.

1122. Re: The FAQ (Well, Question 1, at least)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-18 19:58:51 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <421648bd.658403@news.iol.ie>
Source record: 20255
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Airy R.Bean" <Me@privacy.net> wrote:

: What is Ham Radio?
:
: Ham Radio is a technical pursuit for those who
: are interested in the science of radio wave
: propagation and who are also interested in the
: way that their radios function. It has a long-standing
: tradition of providing a source of engineers who
: are born naturals.
:
: Ham Radio awakens in its aficionados a whole-life
: fascination with all things technical and gives
: an all-abiding curiosity to improve one's scientific
: knowledge. It's a great swimming pool, please dive in!
:

sort of correct.
but thanks the certain organisations..and a bunch of lazy people it
no longer exists.
it has however been replaced by multi-band cb radio

1123. Re: Something like a diplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-18 21:31:31 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <jhnc11h3q18lduq0preeqkpresjnt5cnmj@4ax.com>
Source record: 20257

On Fri, 18 Feb 2005 11:42:56 +0800, budgie <me@privacy.net> wrote:

>On Thu, 17 Feb 2005 21:36:05 -0500, Gary Schafer <gaschafer@comcast.net> wrote:
>
>>On Thu, 17 Feb 2005 17:35:11 +0800, budgie <me@privacy.net> wrote:
>>
>>>On Wednesday, 16 Feb 2005 09:42:58 -500, "Asimov"
>>><Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote:
>>>
>>>>"budgie" bravely wrote to "All" (16 Feb 05 12:52:14)
>>>> --- on the heady topic of "Re: Something like a diplexer"
>>>>
>>>> bu> From: budgie <me@privacy.net>
>>>> bu> Xref: aeinews rec.radio.amateur.homebrew:2181
>>>>
>>>> >You missed a step called a directional coupler. It's a sort of
>>>> >transformer with 2 input ports and 1 output port. The 2 inputs don't
>>>> >see one another but their power is combined at the output.
>>>>
>>>> bu> You don't actually *need* a directional coupler. I have seen window
>>>> bu> preselectors with five separate sections for sub-bands between 403 and
>>>> bu> 520 MHz. The configuration is symmetrical (in/out) with simple bandpass
>>>> bu> filter segments and coaxial split/combine harnesses. Not a DC or
>>>> bu> hybrid in sight. I am presuming - not having swept one - that at "off"
>>>> bu> frequencies each parallelled leg presents a high enough impedance to
>>>> bu> the split junction that the effect is negligible.
>>>>
>>>>Yes but it requires some effort and cost to build the 2nd BP filters so
>>>>I wonder if it's any more difficult to do either? What do you figure?
>>>
>>>I'm not sure we are on the same wavelength here (no pun intended). For
>>>*non-overlapping* filter sections, the bandsplit through two bandpass sections
>>>25-500 and say 550-3000 should be able to be achieved with T-pieces at the input
>>>and output ends (although it appears the O/P didn't achieve this).
>>
>>I am not sure exactly what is trying to be accomplished here but if it
>>is to combine two different bandpass filters then yes a T. The cable
>>from the low pass filter to the T should be a quarter wave length at
>>the frequency of the high pass filter.
>>
>>The cable from the high pass filter to the T should then be a quarter
>>wave length of the low pass filter.
>>
>>The low pass filter will look like a short circuit at the high pass

>>frequency. With the quarter wave length cable that short circuit will
>>then be transformed to a very high impedance to the hi pass circuit.
>>That effectively isolates one from the other.
>>
>>Do the another T and cable setup at the input and output.
>
>If I understood the O/P he was trying to split and then recombine the 25-3000
>band with a split ("crossover") at 500 MHz. Assuming a 50R in/out impedance
>across the passband, the fiter sections presumably present a substantially
>different (usually much higher) port impedance out of band. A simple T combiner
>therefore presents a minimal impedance mismatch except near the split frequency.
>
>Also I'm still thinking about how to make a quarter-wavelength line at 25-500
>MHz or at 500-3000 MHz..

Usually a bandpass filter will present a low impedance out of band.
That is where I was with the quarter wave cables. But you are right,
it may be somewhat of a problem with that wide of a span. Guess I
didn't read close enough.

I read the original post again and maybe understand better what is
trying to be accomplished.
With the back to back diplexers there may be a termination problem
with combining them. ?? Maybe try a load resistor at the junction
where they recombine.

The simplest solution seems to be two hybrid power splitters back to
back. No band pass filters needed. Like two tv cable splitters. Of
course that means 6 db of loss.

73
Gary K4FMX

1124. Re: The FAQ (Well, Question 1, at least)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-18 21:47:03 UTC
From: real-radio-ham <real_radio_ham@yahoo.co.uk>
Message-ID: <42165ccf_1@mk-nntp-1.news.uk.worldonline.com>
Source record: 20256
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Fine, so it's a technical hobby that requires some aptitude and an interest in one or more facets of the hobby/technical pursuit. I may be more towards to the technical side of the hobby and have an interest in restoration of old boatanchors but there are many other areas of interest. If a licensed amateur is interested in contesting/collecting squares, ragchewing, homebrewing raynet or even trying something new why not just let them get on with it. Garath has a bad attitude mainly directed at anyone without a Morse test, more a case of "I spent 10 long years learning the code, it was hard work so why should they get HF by just passing the RAE." Morse is a fantastic mode for DX and weak signal working breaking down the language barrier and allowing for very simple homebrew but is not a suitable or appropriate qualification for access to HF (the requirement for Morse was due to the shared bands to enable the primary user the facility to tell us to QSY, no longer necessary). We all have our personal views regarding the qualifications that should be required, usually the skill level of the individual expressing the view, in your case Walt probably 30 wpm+. My view is that a higher level of RAE pass mark should be required but that again is just a personal view. Don't deride the amateurs, deride the system if need be but blind insults towards a licence "CLASS" are out of order and to coin a phrase from Garth are not in keeping with the gentlemanly traditions of amateur radio.

RRH
real_radio_ham@yahoo.co.uk

"Walt Davidson" <g3nyy@despammed.com> wrote in message
news:g5eb11p514t3ckc4n2vkskg7k881mi5hgd@4ax.com...
> On Fri, 18 Feb 2005 00:57:10 -0000, "real-radio-ham"
> <real_radio_ham@yahoo.co.uk> wrote:
>
> >Don't you ever change the record, amateur radio is what you make it, it's
> >only a hobby.
>
> CB is only a hobby.
>
> Amateur radio is much more than a hobby. It is a technical pursuit
> for people interested in and capable of lifelong learning and
> self-development. That excludes the vast majority of CBers, at a
> stroke.
>
> 73 de G3NYY
>
> --
> Walt Davidson Email: g3nyy @despammed.com

1125. Re: The FAQ (Well, Question 1, at least)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-18 22:32:50 UTC
From: "Jock." <real_class_a@yahoo.co.uk>
Message-ID: <d3rc11tvclm3ba6bg6dlot7oi13i5q4573@4ax.com>
Source record: 20258
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Fri, 18 Feb 2005 21:47:03 -0000, "real-radio-ham" <real_radio_ham@yahoo.co.uk>
wrote:

>Morse is a fantastic mode for DX and weak signal working breaking down
>the language barrier and allowing for very simple homebrew but is not a
>suitable or appropriate qualification for access to HF ...

Perhaps not, but it was very effective in keeping CB-ers and other
feckless yobs off the HF bands.

18.25x4 de Jock.
--

XXX Olympiad, Paris, 2012.

1126. fast easy cash. very worth it

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-19 08:59:10 UTC
From: masatosan <neosilvia87@hotmail.com>
Message-ID: <1108803550.299545.258960@g14g2000cwa.googlegroups.com>
Source record: 20259
Cross-posted to: rec.music.marketplace.vinyl,rec.arts.startrek.tech,rec.radio.amateur.homebrew

Im tellin yah it workx and its so worth it

Turn $5.00 into $50,000...read this to find out how!!!
READING THIS COULD CHANGE YOUR LIFE!!!
I found this on a bulletin board like this one and decided to try it.
A little while back, I was browsing through a newsgroup, just like you are now, and came across an article similar to this that said you could make thousands of dollars within weeks with only an initial investment of $5.00! So I thought, "Yeah right, this must be a scam", but like most of us, I was curious, so I kept reading... I also did an internet search and found nothing but success stories.

Anyway, it said that you need to send $1.00 to each of the 5 names and address stated in the article. You then place your own name and address in the bottom of the list at ..5, and post the article in at least 200 newsgroups. (There are thousands) No catch, that was it. So after thinking it over, and talking to a few people first, I thought about trying it. I figured "what have I got to lose except 5 stamps and $5.00, right?"

Then I invested the measly $5.00 (I use the word "measly" because $5 really is measly compared to the money I have made through the initial investment). Well GUESS WHAT!!... within 7 days, I started getting money in the mail! I was shocked! I figured it would end soon, but the money just kept coming in.
In my first week, I made about $25.00. By the end of the second week I had made a total of over $1,000.00! In the third week I had over $10,000.00 and it's still growing.

This is now my fourth week and I have made just over $42,000.00 and it's still coming in rapidly. It's certainly worth $5.00, and 5 stamps, I have spent more than that on the lottery!!
Let me tell you how this works and most importantly, why it works....
Also, make sure you print a copy of this article NOW, so you can get the information off of it as you need it.
I promise you that if you follow the directions exactly, that you will start making more money than you thought possible by doing something so easy!

Suggestion:
Read this entire message carefully! (print it out or download it.)
Follow the simple directions and watch the money come in! It's easy.
It's legal. And, your investment is only $5.00 (Plus postage)

IMPORTANT:
This is not a rip-off; it is not indecent; it is not illegal; and it is virtually no risk - it really works!!!! If all of the following instructions are adhered to, you will receive extraordinary dividends.
PLEASE NOTE:
Please follow these directions EXACTLY, and $50,000 or more can be yours in 20 to 60 days.
This program remains successful because of the honesty and integrity of the participants. Please continue it's success by carefully adhering to the instructions.
You will now become part of the Mail Order business. In this business your product is not solid and tangible, it's a service. You are in the business of developing Mailing Lists.
Many large corporations are happy to pay big bucks for quality lists. However, the money made from the mailing lists is secondary to the income which is made from people like you and me asking to be included in that list.
Here are the 4 easy steps to success:

STEP 1:
Get 5 separate pieces of paper and write the following on each piece of paper "PLEASE PUT ME ON YOUR MAILING LIST."
Now get 5 US $1.00 bills and place ONE inside EACH of the 6 pieces of paper so the bill will not be seen through the envelope (to prevent thievery).
Next, place one paper in each of the 5 envelopes and seal them. You should now have 5 sealed envelopes, each with a piece of paper stating the phrase "PLEASE
PUT ME ON YOUR MAILING LIST.", your name and address, and a $1.00 bill.
What you are doing is creating a service. THIS IS ABSOLUTELY LEGAL!
You are requesting a legitimate service and you are paying for it!
Like most of us I was a little skeptical and a little worried about the legal aspects of it all. So I checked it out with the U.S. Post Office (1-800-725-2161) and they confirmed that it is indeed legal!
Mail the 5 envelopes to the following addresses:

..1) Jason R
3702 Werner Ave.
Austin, TX 78722

..2) J Arenas
1600 Malibu
Carrollton, TX 75006

..3) Richonda S
CMR 402 BOX 274
APO, AE 09180

..4) J Roth
2901 Barton Skyway ..3406
Austin, TX 78746

..5)Jesse James
1778 Swift Ave.
Ventura, Ca 93003

STEP 2: Now take the ..1 name off the list that you see above, move the other names up (5 becomes 4, 4 becomes 3, etc...) and add YOUR Name as number 5 on the list.

STEP 3: Change anything you need to, but try to keep this article as close to original as possible. Now, post your amended article to at least 200 newsgroups. (I think there are close to 32,000+) All you need is 200, but remember, the more you post, the more money you make!

This is perfectly legal! If you have any doubts, refer to Title 18 Sec. 1302 & 1341 of the Postal lottery laws. Keep a copy of these steps for yourself and, whenever you need money, you can use it again, and again.

PLEASE REMEMBER that this program remains successful because of the honesty and integrity of the participants and by their carefully adhering to the directions.
Look at it this way. If you are of integrity, the program will continue and the money that so many others have received will come your way.

NOTE:
You may want to retain every name and address sent to you, either on a computer or hard copy and keep the notes people send you. This VERIFIES that you are truly providing a service. (Also, it might be a good idea to wrap the $1 bill in dark paper to reduce the risk of mail theft.)
So, as each post is downloaded and the directions carefully followed, five members will be reimbursed for their participation as a List Developer with one dollar each.
Your name will move up the list geometrically so that when your name reaches the ..1 position you will be receiving thousands of dollars in CASH!!!
What an opportunity for only $5.00 ($1.00 for each of the first five people listed above)
Send it now, add your own name to the list and you're in business!

---DIRECTIONS ----- FOR HOW TO POST TO NEWSGROUPS----------
Step 1)
You do not need to re-type this entire letter to do your own posting. Simply put your cursor at the beginning of this letter and drag your cursor to the bottom of this document, and select 'copy' from the edit menu. This will copy the
entire letter into the computer's memory.
Step 2)
Open a blank 'notepad' file and place your cursor at the top of the blank page. From the 'edit' menu select 'paste'. This will paste a copy of the letter into notepad so that you can add your name to the list.
Step 3) Save your new notepad file as a .txt file. If you want to do your postings in different settings, you'll always have this file to go back to.
Step 4)

Use Netscape or Internet explorer and try searching for various newsgroups (on-line forums, message boards, chat sites, discussions, etc.)
Step 5)
Visit these message boards and post this article as a new message by highlighting the text of this letter and selecting paste from the edit menu. Fill in the Subject, this
will be the header that everyone sees as they scroll through the list of postings in a particular group, click the post message button.
You're done with your first one!
Congratulations...THAT'S IT!
All you have to do is jump to different newsgroups and post away, after you get the hang of it, it will take about 30 seconds for each newsgroup!
REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE MONEY YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200
That's it! You will begin receiving money from around the world within days! You may eventually want to rent a P.O.Box due to the large amount of mail you will receive. If you wish to stay anonymous, you can invent a name to use, as long as the postman will deliver it.
JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT.
Now the WHY part:
Out of 200 postings, say I receive only 5 replies (a very low example). So then I made $5.00 with my name at ..5 on the letter.
Now, each of the 5 persons who just sent me $1.00 make the MINIMUM 200 postings, each with my name at ..5 and only 5 persons respond to each of the original 5, that is another $25.00 for me, now those 25 each make 200 MINIMUM posts with my name at ..4 and only 5 replies each, I will bring in an additional $125.00!
Now, those 125 persons turn around and post the MINIMUM 200 with my name at ..3 and only receive 5 replies each, I will make an additional $626.00!
OK, now here is the fun part, each of those 625 persons post a MINIMUM 200 letters with my name at ..2 and they each only receive 5 replies, that just made me $3,125.00!!!
Those 3,125 persons will all deliver this message to 200 newsgroups with my name at ..1 and if still ONLY 5 persons per 200 newsgroups react I will receive $15,625,00!
With an original investment of only $5.00! AMAZING! When your name is no longer on the list, you just take the latest posting in the newsgroups, and send out another $5.00 to names on the list, putting your name at number 5 again. And start posting again.
The thing to remember is do you realize that thousands of people all over the world are joining the internet and reading these articles everyday?, JUST LIKE YOU are now!!
So, can you afford $5.00 and see if it really works?? I think so...
People have said, "what if the plan is played out and no one sends you the money? So what! What are the chances of that happening when there are tons of new honest users and new honest people who are joining the internet and newsgroups everyday and are willing to give it a try?

Estimates are at 20,000 to 50,000 new users, every day, with thousands
of those joining the actual internet.
Remember, play FAIRLY and HONESTLY and this will really work!!!

1127. Re: The FAQ (Well, Question 1, at least)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-19 14:26:13 UTC
From: David Reed <dave@reed001.freeserve.co.uk>
Message-ID: <cv7i8jitb1@newsg1.svr.pol.co.uk>
Source record: 20260
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Doesn't it say in the licence conditions that the licence is for the self
learning of the licensee?
or are you saying that everybody should know absolutely everything about
radio before you can even get a licence?
Didn't you also learn about radio!
"Airy R.Bean" <Me@privacy.net> wrote in message
news:37jboqF5clhohU1@individual.net...
> What is Ham Radio?
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.
>
> Ham Radio awakens in its aficionados a whole-life
> fascination with all things technical and gives
> an all-abiding curiosity to improve one's scientific
> knowledge. It's a great swimming pool, please dive in!
>
> This excitement causes a wish to share the experience
> with ones fellow man, and shows itself in the
> gentlemanly traditions of Ham Radio.
>
> Radio Hams are qualified to design, build and then
> operate their own pieces of equipment. They do this
> with gusto, and also repair and modify their own
> equipment.
>
> The excitement that drives a Radio Ham starts with
> relatively simple technologies at first, perhaps making
> his own Wimshurst machine and primary cells. Small pieces
> of test equipment follow, possibly multimeters and signal
> generators. Then comes receivers and transmitters. It is with
> the latter that communication with like-minded technically
> motivated people takes off. The scope for technical
> development grows with the years
> and now encompasses DSP and DDS. There is also a great deal
> of excitement in the areas of computer programming to
> be learnt and applied.
>
> The technical excitement motivates Radio Hams to compete

> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.
>
> -----ooooo----
>
> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large
> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
> repaired; they are not interested in technical discussion
> and sneer at those who are; they have no idea how
> their radios work inside and have no wish to find out;
> they are free with rather silly personal insults;
> they have not satisfied any technical qualification
> and their licences prevent the use of
> self-designed-and-built equipment.
>
> These CB types engage in the competitive activities
> with their Cheque-Book-purchased off-the-shelf radios
> in a forlorn effort to prove that they are Radio Hams.
>
> No _REAL_ Radio Hams are deceived by such people!
>
>
>
>

1128. Re: The FAQ (Well, Question 1, at least)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-19 14:59:48 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <42175321.912746@news.iol.ie>
Source record: 20261
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"real-radio-ham" <real_radio_ham@yahoo.co.uk> wrote:

: individual expressing the view, in your case Walt probably 30 wpm+. My
: view is that a higher level of RAE pass mark should be required but that
: again is just a personal view. Don't deride the amateurs, deride the system

as i said before on this newsgroup.

the poor m3 candidate is ''taught'' and then fed to the cannons in some
sort of ''pump-em-out'' activity to flood amateur radio with
raw-green-beginners in some sort effort that apparently is to lower the
standard and to turn 7mhz into 27mhz.
these unfortunates are then faced with the views of those who know
that the system sucks. these people being those who are not beholding to a
system that requires an rsgb instructor to sign a piece of paper before
they can get a licence.

but as i sad before, m3's themselves should shout for a higher standard.

as i said before...the system is being run by people who refused to
recognise the morse test but now force every candidate to do the morse
assessment!

thats a double-standard if ever there was one.

1129. Re: The FAQ (Well, Question 1, at least)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-19 17:49:53 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <37pd1oF5g6l2pU1@individual.net>
Source record: 20262
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

HYPOCRISY that has arisen from INSECURITY?

"ZZZPK adu2001@mighty.co.za http://dataglobe.hu/skyguru "
<zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net> wrote in
message news:42175321.912746@news.iol.ie...
> as i said before...the system is being run by people who refused to
> recognise the morse test but now force every candidate to do the morse
> assessment!

1130. 2SK408; 2SK409 FETs

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-19 18:00:45 UTC
From: Andrey <a8421@intergate.bc.ca>
Message-ID: <111evk4phf5ld78@corp.supernews.com>
Source record: 20263

Hello All,

I am looking for source of 2SK408; 2SK409 FETs

Apreciate any pointers.

Regards,

Andrey

1131. How do I design an automatic antenna tuner?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-19 21:53:15 UTC
From: WA3LTJ <arm@gnode.ignorethis.org>
Message-ID: <fzORd.27956$uc.2859@trnddc08>
Source record: 20264

I recently built a 100W HF amplifier by modifying existing designs.
Now I'd like to build an automatic antenna tuner. Where can I find some
good articles / web sites on theory, practical design, and tuning
algorithms for the switching circuit. Has anyone published all the
details including source code.

1132. Re: JESUS CHRIST WENT TO THE CROSS SO YOU CAN GO TO HEAVEN - The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel s

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-20 03:24:20 UTC
From: Brian Oakley <brianoakley@ispwest.com>
Message-ID: <cv8vll01qtj@enews2.newsguy.com>
Source record: 20266

"Peter" <microwaves@blueyonder.co.uk> wrote in message
news:42163777.161007015@News.Individual.NET...
> On Wed, 16 Feb 2005 17:44:08 -0600, "Brian Oakley"
> <brianoakley@ispwest.com> wrote:
>
> >> "drwxr-xr-x" <bit-bucket@config.com> schreef in bericht
> > >
> > >You can talk to God anytime. You don't even need a radio or a sked. He's
> > >always there for you. Just call.
> > What frequency? Is he on ssb or cw?

Just call, any mode, He will hear you.
BE

1133. Re: JESUS CHRIST WENT TO THE CROSS SO YOU CAN GO TO HEAVEN - The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel s

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-20 03:26:45 UTC
From: Brian Oakley <brianoakley@ispwest.com>
Message-ID: <cv8vq701r3k@enews2.newsguy.com>
Source record: 20265

"Airy R.Bean" <Me@privacy.net> wrote in message
news:37jaioF5d8oqnU1@individual.net...
> When I was very young, I had a little make-believe friend that I could
> talk to all the time, who was with me all the time and who was
> always on my side. When I grew up, I stopped going to church.
>
Well, I have a real friend, and He never leaves me. I'm sorry your make
believe friend left you. I can tell you about the one that you never found
in the church you went to. He doesn't dwell in buildings, but in us when we
receive His gift of forgiveness and salvation. Jesus is very real.
B

1134. NEEDED 30" of RG-401 hardline - copper

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-20 04:45:05 UTC
From: Photoman <photomanxaa@hotmail.com>
Message-ID: <Mb2dnb3TO4aXi4XfRVn-jA@adelphia.com>
Source record: 20267

I need about 30" of RG-401 hardline with copper outer conductor for phasing harness on antennas.
Reply to:
ken @area-net.com (remove the space)

Thanks,
Ken

--
Have your doctor check your blood sugar at least once a year.

1135. Re: How do I design an automatic antenna tuner?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-20 05:25:42 UTC
From: dplatt@radagast.org
Message-ID: <111g7qmem1tb4fc@corp.supernews.com>
Source record: 20268

>I recently built a 100W HF amplifier by modifying existing designs.
>Now I'd like to build an automatic antenna tuner. Where can I find some
>good articles / web sites on theory, practical design, and tuning
>algorithms for the switching circuit. Has anyone published all the
>details including source code.

QST published a (two-part?) article on an "Easy Tuner" design a couple
of years ago. As I recall it's a microprocessor-controlled tuner of
the T configuration, with a switched tapped shunt inductor, and two
air-variable series capacitors driven by small motors.

I believe that source code was available.

I suspect that most of the ATU-control code out there is proprietary,
and that which isn't is likely at least somewhat specific to a
particular ATU design. Designs using motor-driven capacitors are
going to be at least somewhat different from those which use
relay-switched capacitor sets.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1136. How do I design an automatic antenna tuner with no moving parts?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-20 05:43:57 UTC
From: Andrey <a8421@intergate.bc.ca>
Message-ID: <111g8qnljmlm39d@corp.supernews.com>
Source record: 20269

How do I design an automatic antenna tuner with no moving parts?

This is a good question.

How to do it - without relays, motor driven capacitors and inductor cotacts?

1137. Re: How do I design an automatic antenna tuner with no moving parts?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-20 08:52:15 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <TL1RiXL$+EGCFwBL@g3ohx.demon.co.uk>
Source record: 20270

In message <111g8qnljmlm39d@corp.supernews.com>, Andrey
<a8421@intergate.bc.ca> writes
>How do I design an automatic antenna tuner with no moving parts?
>
>This is a good question.
>
>How to do it - without relays, motor driven capacitors and inductor cotacts?
>
>

To make any tuner variable, you have to vary something (and this can
only be an L or a C).
If you don't vary them physically with moving parts, you have to vary
them electrically.
You can change C using Varicap diodes (where you vary a DC voltage.
You can change L by using inductors with cores which you can partially
saturate by varying a DC current.
Neither technique is really applicable to transmission.
Ian.

--

1138. Re: How do I design an automatic antenna tuner with no moving parts?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-20 08:55:56 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <lcjg111stmh39ajl52o3efpdldvh2cpkdc@4ax.com>
Source record: 20271

On Sat, 19 Feb 2005 21:43:57 -0800, "Andrey" <a8421@intergate.bc.ca>
wrote:

>How do I design an automatic antenna tuner with no moving parts?
>
>This is a good question.
>
>How to do it - without relays, motor driven capacitors and inductor cotacts?

1.) Since you did not specify the power level, use varactor diodes and
inductors on a suitable core material and vary the core permeability
with an external magnet field, controlled by a variable DC-current.

2.) Alternatively, get rid of the antenna tuner by using resonant and
matched broadband antennas.

Paul OH3LWR

1139. 1SV80 PIN diode info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-20 09:08:01 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <RrYRd.247163$w62.23304@bgtnsc05-news.ops.worldnet.att.net>
Source record: 20272

Hi folks,
I am just finishing up a Ten-Tec Model 1254 receiver.
Originally, this unit used these devices, but now, they have thrown in some substitute.
Does anybody know what the on resistance and minority carrier lifetime of this device is? I've got a batch of 1N5767s, which have a minority carrier lifetime of 1.5uSec. How do they compare? Can I use the 1N5767s in place of the Ten-Tec diodes?

Pete

1140. Re: How do I design an automatic antenna tuner with no moving parts?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-20 11:51:47 UTC
From: Verizon News <joe@roccis.com>
Message-ID: <nR_Rd.26600$ya6.7503@trndny01>
Source record: 20273

Here is a link to the original 1996 QST article on homebrewing a tuner called the AT-11. It is now made by LDG Electronics. It uses relays to switch inductive and capacitive elements in an L-network tuner configuration.

http://www.3764.net/qst/1996-1999/automatic_tuner_at11.pdf

The article presents the complete schematic and theory of operation, but there is no microprocessor source code included. The author does say that you can but a programmed chip from him, but I don't know if that's still available. Maybe someone in this group can suggest where to get source code or a hex file of the object code.

Joe
W3JDR

"Paul Keinanen" <keinanen@sci.fi> wrote in message
news:lcjg111stmh39ajl52o3efpdldvh2cpkdc@4ax.com...
> On Sat, 19 Feb 2005 21:43:57 -0800, "Andrey" <a8421@intergate.bc.ca>
> wrote:
>
>>How do I design an automatic antenna tuner with no moving parts?
>>
>>This is a good question.
>>
>>How to do it - without relays, motor driven capacitors and inductor
>>cotacts?
>
> 1.) Since you did not specify the power level, use varactor diodes and
> inductors on a suitable core material and vary the core permeability
> with an external magnet field, controlled by a variable DC-current.
>
> 2.) Alternatively, get rid of the antenna tuner by using resonant and
> matched broadband antennas.
>
> Paul OH3LWR
>

1141. Re: JESUS CHRIST WENT TO THE CROSS SO YOU CAN GO TO HEAVEN - The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel s

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-20 12:43:54 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <37rfbhF5hnfvpU1@individual.net>
Source record: 20275

Sounds like the mental illness of living in the world of make believe to me.

If anyone else went around claiming that there was an invisible parrot
on their shoulder that had all the attributes of this imaginary, "Jesus",
they'd
be very quickly carted off to the loony bin. Why is it any different for
the religionists who are very obvious loonies?

Why should one mental illness, religion, be any more socially acceptable
than others......look at all the death and destruction that has been wrought
upon the world by that religious loony Dubya!

"Brian Oakley" <brianoakley@ispwest.com> wrote in message
news:cv8vq701r3k@enews2.newsguy.com...
> "Airy R.Bean" <Me@privacy.net> wrote in message
> news:37jaioF5d8oqnU1@individual.net...
> > When I was very young, I had a little make-believe friend that I could
> > talk to all the time, who was with me all the time and who was
> > always on my side. When I grew up, I stopped going to church.
> Well, I have a real friend, and He never leaves me. I'm sorry your make
> believe friend left you. I can tell you about the one that you never found
> in the church you went to. He doesn't dwell in buildings, but in us when
we
> receive His gift of forgiveness and salvation. Jesus is very real.

1142. Re: How do I design an automatic antenna tuner?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-20 12:46:29 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <37rfbiF5hnfvpU2@individual.net>
Source record: 20274

The best software for any self-respecting _REAL_ Radio Ham is
that which he writes for himself. It is CBer who buy such things
off-the-shelf.

It is very much the case with software that you can manufacture a much
better
product than any you can buy for a very small percentage of the cost.

"WA3LTJ" <arm@gnode.ignorethis.org> wrote in message
news:fzORd.27956$uc.2859@trnddc08...
> Has anyone published all the
> details including source code.

1143. Re: The FAQ (Well, Question 1, at least)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-20 12:52:43 UTC
From: strangehouse@hotmail.com
Message-ID: <cva18bdnd1@news7.svr.pol.co.uk>
Source record: 20276
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Sussed it 'They' like to be thought of as 'special. I am a radio amateur. I am special.
Then loads of other people realise, there not so special after all, anyone can do it!
As there are now a 'new' breed of sharing radio amateurs, who after years of secrecy are willing to break ranks and tell the less fortunate, the radio secrets. Show them how easy it is to start on the path, to be a radio amateur. The new interested party's take some 'tests' and find them so easy, that they all pass. They are 'baby' radio amateurs, the idea is they learn as they go, pass exams and eventually become full licence radio amateurs.

The old school will never accept it.
Who likes to work and pay for something, then see some one else get it for less?
No one its not human nature.

The Masons will never think the Buffaloes are up to being Masons.
If they dropped all the secrets and made it easy for them to get in.
There would always be a section who moaned about it.
Even if the Buffaloes brought in loads of funds, did loads of good work.
They would always be 2'nd class Masons.
(To the Masons)

The rest of the world don't give a fig!

The older radio amateurs would like to stay special, the elite.
Then someone decided they had been top of the class long enough.
The Ofcom and RSGB are both business, businesses can't afford to be choosy with there clients, can they?
If radio amateur numbers had not increased and they had not received more revenue.
It wouldn't have paid its way, eventually they could have sold it off.
The CB 'licence holders' carried it for years, there numbers paid for the rest of the 'hobby' radio spectrum.
Now that's going, this is another way of getting the hobby radio users paying for our bit of the radio spectrum. If we cant pay for it they will sell it some one else, because to them, its not personal, its only business.

1144. Re: How do I design an automatic antenna tuner with no moving parts?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-20 12:59:52 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <GX%Rd.6204$CA6.2315@fe07.lga>
Source record: 20277

"Andrey" <a8421@intergate.bc.ca> wrote in message
news:111g8qnljmlm39d@corp.supernews.com...
> How do I design an automatic antenna tuner with no moving parts?
>
> This is a good question.
>
> How to do it - without relays, motor driven capacitors and inductor
cotacts?

I'm not so sure that is really all that off the wall.

Most autotuners are pretty mindless ... you only need to get down to a "reasonable" SWR, so you can use a finite number of LC circuits. Most tuners count frequency (easy) and use that to look up where they were the last time they were near that frequency, so they randomly try everything at first, but then use their experience to get there quicker the next time. A few actually look at the phase angle to figure out which way to go, but they are in a minority and it isn't all that clear that they do much better than just guessing.

Typically, relays are used in commercial autotuners. Latching relays are simple, cheap, and require very little power. But I can see no reason why one couldn't use PIN diodes if the "no moving parts" was a requirement. It would ratchet up the price a bit, and probably also the power consumption, so I can see why it wouldn't be a common commercial approach, but if the no moving parts limitation is a hard requirement I can't see why it wouldn't work.

I would also think about the "why" on the no moving parts. Something like PIN diodes is going to mean constant power consumption, which in turn means constant generated heat. It isn't obvious to me that this will result in better reliability than latching relays, which are pretty darned good these days as far as reliability is concerned. It will also end up (I think) increasing the parts count quite a bit, which again will hurt the reliability, to say nothing of the cost.

..

1145. Re: The FAQ (Well, Question 1, at least)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-20 13:24:27 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <37rhccF5g37eqU1@individual.net>
Source record: 20278
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

<strangehouse@hotmail.com> wrote in message
news:cva18bdnd1@news7.svr.pol.co.uk...
> Sussed it 'They' like to be thought of as 'special. I am a radio amateur.
I
> am special.
> Then loads of other people realise, there not so special after all, anyone
> can do it!
> As there are now a 'new' breed of sharing radio amateurs, who after years
of
> secrecy are willing to break ranks and tell the less fortunate, the radio
> secrets. Show them how easy it is to start on the path, to be a radio
> amateur. The new interested party's take some 'tests' and find them so
easy,
> that they all pass. They are 'baby' radio amateurs, the idea is they learn
> as they go, pass exams and eventually become full licence radio amateurs.

Good description. The bit you missed is that those who always seem to rant
about how hard it used to be are usually the least technically able.

>
> The old school will never accept it.
> Who likes to work and pay for something, then see some one else get it for
> less?
> No one its not human nature.
>
> The Masons will never think the Buffaloes are up to being Masons.
> If they dropped all the secrets and made it easy for them to get in.
> There would always be a section who moaned about it.
> Even if the Buffaloes brought in loads of funds, did loads of good work.
> They would always be 2'nd class Masons.
> (To the Masons)

First time I've heard that expressed. There are actually a whole range of
such organisations, Round Table, Rotary, Loins, Odd Fellows, Ancient Order
of Forresters, Masons (mainstream, female, and mixed), ... All no
doubt some members each of will think 'their's is the best', truth is,
most are much the same and many have surprisingly similar aims. At the end
of the day, if you find one you enjoy then it is the best for you.

> The rest of the world don't give a fig!

But some decide to make an issue of it.

--
Brian Reay

www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

1146. Recent own goals..... (Was: Re: The FAQ (Well, Question 1, at least))

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-20 14:49:30 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <37rmj9F5fsmr9U2@individual.net>
Source record: 20280
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Well, you used to rant on about the 12WPM Morse test, and just
consider the areas in which you are not technically able.....

You suggested that resistors were polarised,..... that
motion was possible without power transmission,..... that e^(-jwt)
was a function that decreased with increasing t,..... that ever larger
negative numbers were decreasing in size,..... that Reg Varney the comic
actor was G5RV,..... referred to the posited Pederson Rays as, "Peterson
Rays",..... displayed amazing ignorance about Eddystone receivers,.....
spent 15 months in this NG promoting your sexual perversion
with sheep shagging,..... were too lazy or too stupid, or both, to be able
to tackle and pass a 12 WPM Morse Test that otherwise-unqualified
self-taught 14-year-olds were taking in their stride,..... despite
TWO DEGREES, one of them in _ELECTRONICS_, didn't know how to
design a common collector stage to give a power gain..... don't
know what a woodpecker is..... doesn't understand vectors.....
finds it hard to fit an N-plug.....

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:37rhccF5g37eqU1@individual.net...
>
> Good description. The bit you missed is that those who always seem to rant
> about how hard it used to be are usually the least technically able.

1147. Re: JESUS CHRIST WENT TO THE CROSS SO YOU CAN GO TO HEAVEN - The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel s

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-20 16:15:05 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <37rrimF5hp2crU1@individual.net>
Source record: 20279

When you look at the lectors, acolytes, deacons, priests, bishops
and cardinals that all appear dressed in their magic robes when
church "services" feature in the news, you wonder whether the
same degree of magic could not be achieved more simply
by waving a stick painted black in the middle, white at the
ends, and intoning, "Abracadabra"?

"Airy R.Bean" <Me@privacy.net> wrote in message
news:37rfbhF5hnfvpU1@individual.net...
> Sounds like the mental illness of living in the world of make believe to
me.
>
> If anyone else went around claiming that there was an invisible parrot
> on their shoulder that had all the attributes of this imaginary, "Jesus",
> they'd
> be very quickly carted off to the loony bin. Why is it any different for
> the religionists who are very obvious loonies?
>
> Why should one mental illness, religion, be any more socially acceptable
> than others......look at all the death and destruction that has been
wrought
> upon the world by that religious loony Dubya!
>
> "Brian Oakley" <brianoakley@ispwest.com> wrote in message
> news:cv8vq701r3k@enews2.newsguy.com...
> > "Airy R.Bean" <Me@privacy.net> wrote in message
> > news:37jaioF5d8oqnU1@individual.net...
> > > When I was very young, I had a little make-believe friend that I could
> > > talk to all the time, who was with me all the time and who was
> > > always on my side. When I grew up, I stopped going to church.
> > Well, I have a real friend, and He never leaves me. I'm sorry your make
> > believe friend left you. I can tell you about the one that you never
found
> > in the church you went to. He doesn't dwell in buildings, but in us when
> we
> > receive His gift of forgiveness and salvation. Jesus is very real.
>
>

1148. homebrew hf rig

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-20 19:28:58 UTC
From: Paul <paul@m0eme.freeserve.co.uk>
Message-ID: <cvaodr$42s$1@news7.svr.pol.co.uk>
Source record: 20281

Has anyone got a design for a 10M ssb/cw transceiver for use with a 432MHz transverter for a dedicated eme rig....

--
73's de Paul M0EME
www.qsl.net/m0eme
4 times FO20 432MHz
FT847
100W
Spectran

1149. Re: homebrew hf rig

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-20 19:39:35 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <XH5Sd.13111$g44.9900@attbi_s54>
Source record: 20282

"Paul" <paul@m0eme.freeserve.co.uk> wrote in message
news:cvaodr$42s$1@news7.svr.pol.co.uk...
> Has anyone got a design for a 10M ssb/cw transceiver for use with a 432MHz
> transverter for a dedicated eme rig....
>
> --
> 73's de Paul M0EME

http://uk.groups.yahoo.com/group/picastar/?yguid=166674674

W4ZCB

1150. Re: JESUS CHRIST WENT TO THE CROSS SO YOU CAN GO TO HEAVEN - The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel s

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-20 20:39:44 UTC
From: Gary Cavie <m0jjh@despammed.com>
Message-ID: <MPG.1c8305f09c88d3e79896dc@news.individual.net>
Source record: 20283

In article <37rrimF5hp2crU1@individual.net>, Me@privacy.net says...
> When you look at the lectors, acolytes, deacons, priests, bishops
> and cardinals that all appear dressed in their magic robes when
> church "services" feature in the news, you wonder whether the
> same degree of magic could not be achieved more simply
> by waving a stick painted black in the middle, white at the
> ends, and intoning, "Abracadabra"?
>

I'm curious as to what has happened in your life in the last five years
to totally change your views on religion?

http://www.ringing.org/archives/cr/1999/9181.html

1151. Re: JESUS CHRIST WENT TO THE CROSS SO YOU CAN GO TO HEAVEN - The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel s

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-20 22:33:26 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <37shheF5ii1ffU1@individual.net>
Source record: 20284
Cross-posted to: rec.radio.amateur.homebrew;,uk.radio.amateur

Camilla Bean (CB), Chippenham Breaker (CB) scrawled drunkenly:
> When I was very young, I had a little make-believe friend that I could
> talk to all the time, who was with me all the time and who was
> always on my side. When I grew up, I stopped going to church.
>
Would that have Bean the start of the 'voices in your head'?
...(_!_)...

1152. Switching power supply - 1000V/2A

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-20 23:42:20 UTC
From: wb0gaz <wb0gaz@hotmail.com>
Message-ID: <1108942940.458260.25400@z14g2000cwz.googlegroups.com>
Source record: 20285

I'm looking for design (or at least pointer to some information about)
for a switching power supply that would provide about 1KV @ 2A given
110/220VAC input. A commercial product would work too, but I've never
seen such a thing. It need not be regulated, but I would want it to be
switching (to reduce weight/size.) I am having trouble getting started
on my search for information.

73 Dave WB0GAZ wb0gaz@hotmail.com

1153. Re: How do I design an automatic antenna tuner with no moving parts?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 00:06:39 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <111i9gjign0bs6f@corp.supernews.com>
Source record: 20286

As others have noted, it's certainly possible to do with the only moving parts being relays -- there are several commercial tuners on the market in this category.

But it'll be awfully tough to replace the relays, if your intention is to transmit. Relay contacts have very high impedance (low capacitance) when off, and very low resistance when on. They'll handle very large voltages and currents. And the impedance, both on and off, doesn't change with applied signal level. There isn't any other component that has all these characteristics, and some or all are required in a wide range tuner. You might, by very careful analysis of the circuitry under various load conditions, come up with some sort of switch (e.g., PIN diode, VMOS FET, etc.) which can handle the voltages and currents at each switch point, while having acceptable on resistance, off capacitance, and linearity (non-variation with signal level). But it won't be a simple task. And you'll probably still have to sacrifice some efficiency and tuning range.

In a receive-only tuner, you still have the problem of getting adequate on and off impedances, but you are relieved of the voltage and current requirements.

Relays are just simply very hard to beat for some applications -- and this is one of them.

Of course, you can try varying the L and/or C by a number of methods, such as others suggested -- using saturable reactors for L and varicaps for C. Again, though, you run into voltage and current limitations. And these devices tend to be nonlinear -- that is, the L or C depends also on instantaneous signal level. So when they encounter a large signal, they create distortion which produces harmonics. This would be a fine approach for a receive-only tuner, but not a good one if you want to use it for transmitting.

So, that's how you do it. Good luck!

Roy Lewallen, W7EL

Andrey wrote:
> How do I design an automatic antenna tuner with no moving parts?
>
> This is a good question.
>
> How to do it - without relays, motor driven capacitors and inductor cotacts?
>
>

1154. Re: Switching power supply - 1000V/2A

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 00:14:03 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <fJ9Sd.9163$6p7.8254@news01.roc.ny>
Source record: 20287

wb0gaz wrote:
> I'm looking for design (or at least pointer to some information about)
> for a switching power supply that would provide about 1KV @ 2A given
> 110/220VAC input. A commercial product would work too, but I've never
> seen such a thing. It need not be regulated, but I would want it to be
> switching (to reduce weight/size.) I am having trouble getting started
> on my search for information.

Hi Dave,
QEX had an article in the February 1991 issue by W9QQ about such a
beast, with a corrigendum in the August '91 issue and a comment in the
December, '91 issue.

I was well along in the paper phase of a design when I saw an ad in QST for
http://www.wattsunlimited.com/
where you can get a kit or assembled HV switching supply. They claim
1.1 amps at 2500 VDC, you could probably wind the secondary for 1 kV or
have them do it for you.

I haven't sunk the money in it yet, other things getting in the way but
it looks like an easy way to get HV at an amp or two.

W8LNA

1155. Re: Switching power supply - 1000V/2A

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 00:18:23 UTC
From: bigamps <bigamps@louder.net>
Message-ID: <jN9Sd.9166$6p7.7947@news01.roc.ny>
Source record: 20288

gwatts wrote:

> QEX had an article in the February 1991 issue by W9QQ...
> http://www.wattsunlimited.com/
> where you can get a kit or assembled HV switching supply. They claim...

A quick look at a call lookup page and tech above web page show that
'they' is W9QQ, or at least 'they're' at the same address.

1156. Re: Switching power supply - 1000V/2A

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 00:20:53 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <FP9Sd.9169$6p7.8689@news01.roc.ny>
Source record: 20289

gwatts wrote:

> wb0gaz wrote:
>
>> I'm looking for design (or at least pointer to some information about)
>> for a switching power supply that would provide about 1KV @ 2A...
> QEX had an article in the February 1991 issue by W9QQ...
> http://www.wattsunlimited.com/

A quick look at a call lookup page and tech above web page show that
'they' is W9QQ, or at least 'they're' at the same address.

W8LNA

1157. Secret Marconi Day Station - South Dorset Radio Society

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 00:59:36 UTC
From: Jon <jon@portlandbill.co.uk>
Message-ID: <cvbbqp$2kr$7@newsg3.svr.pol.co.uk>
Source record: 20290

Secret Marconi Day Station - South Dorset Radio Society

Just to let you all know that the South Dorset Radio Society will be running a Marconi Day special event station from the little known Marconi site at Portland Bill. The site was used by Marconi to make first contact with Gibraltar.

It is so secret that the members don't even know about it yet and the RSGB have not published details of the special callsign. This is due to the fact that they don't want the Portland club knowing that they are invading for the weekend. So SSSSHHHH! Don't tell anyone.

Reply to Carol 2E1RBH, but don't look at the spelling on her emails. 2e1rbh@g3sds.org.uk

Jon

1158. WTB: OCXO, 20-120MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 01:42:52 UTC
From: "Odd Erling N. Eriksen" <odderi@pvv.org>
Message-ID: <cvbeas$9hq$1@orkan.itea.ntnu.no>
Source record: 20291

Hi,

I am currently in need of a very stable, low phase-noise oscillator for use in a 1296MHz beacon project.

The PLL I intend to use (ADF4007) can run its PFD at up to 120MHz, so taking advantage of this to keep the phase noise contribution of the OCXO reference down + provide simpler filtering of the reference spurs is a high priority. The higher the OCXO frequency, the happier I am. :)

Supply voltage/current consumption/packaging is not important - most important is to find a good reference which will not shoot my budget down in flames.

So - does anyone have something which may be of interest in their junkboxes, as well as being willing to ship internationally? (To Norway, to be more precise. :)

TIA,
--
73 de LB1LF

Odd Erling, ARK

Love is Hate. War is Peace. Windows is stable.

1159. Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 04:49:50 UTC
From: Sparky <sparky@sparky.com>
Message-ID: <snpi119vq1cln27qnal404g4sjuh2d1lvj@4ax.com>
Source record: 20293

The transmitter alignment instructions for my Icom 751A tranceiver calls for a 2 tone input during the alignment process....

"Insert 2 audio signals into the MIC Connector
1.9kHz at 3mV
1.3kHz at 3mV

Are there AF generators out ther that will generate more than one tone? The units I am seeing seem to generate just one tone (or at least the used stuff out ther that I could afford)
Thanks!

1160. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 05:13:56 UTC
From: dplatt@radagast.org
Message-ID: <111irgk63p8t6fd@corp.supernews.com>
Source record: 20292

>The transmitter alignment instructions for my Icom 751A tranceiver
>calls for a 2 tone input during the alignment process....
>
>"Insert 2 audio signals into the MIC Connector
>1.9kHz at 3mV
>1.3kHz at 3mV
>
>Are there AF generators out ther that will generate more than one
>tone?

They do exist - I'm in the process of doing some restoration on an old Singer tone generator which does arbitrary pairs of frequencies.

These days, the easiest way to create a tone combination is usually to use PC software. Generate two sinewave tones at the two frequencies you want, with 50% amplitude or less, then mix 'em with the appropriate relative amplitudes. There's lotsa free software which will do this - e.g. Audacity on Linux and no doubt many others.

You can then play the mixed file out through your PC sound card, or burn it to a CD-R and use a portable CD player to reproduce the sound... whichever is most convenient. In either case, feed the line-level output signal to a fixed or variable attenuator to get the voltage level you need.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1161. Re: homebrew hf rig

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 08:29:15 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <l16j119fdbaraj49moba3hj1k12oviiauh@4ax.com>
Source record: 20294

On Sun, 20 Feb 2005 19:28:58 -0000, "Paul"
<paul@m0eme.freeserve.co.uk> wrote:

>Has anyone got a design for a 10M ssb/cw transceiver for use with a 432MHz
>transverter for a dedicated eme rig....

What modes are you planning to use ? CW only or some other digital
modes intended for EME ? Is the 432.000 - 432.025 MHz tuning range
enough ? Which end of the link is responsible for compensating for the
lunar doppler in each particular mode ?

If you are only operating at a very narrow segment, a VCXO could be
enough and get away with the synthesiser noise. A 12.9 MHz VCXO
followed by a tripler would generate the 38,7 MHz, which could be used
to mix down to 10.7 MHz IF. The required crystal pulling range for 25
kHz wide reception range would be about 650 ppm.

The doppler requirement may require that you must be able to operate
split, so two VCXOs would be needed.

Paul OH3LWR

1162. Re: Switching power supply - 1000V/2A

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 10:08:32 UTC
From: Andre <andre.walker@gmail.com>
Message-ID: <4219b325$0$31619$afc38c87@news.optusnet.com.au>
Source record: 20198

Local metal work shop have them.....they are called Arc welders!!! LOL

Andre
"gwatts" <gwatts@frontiernet.net> wrote in message
news:fJ9Sd.9163$6p7.8254@news01.roc.ny...
> wb0gaz wrote:
> > I'm looking for design (or at least pointer to some information about)
> > for a switching power supply that would provide about 1KV @ 2A given
> > 110/220VAC input. A commercial product would work too, but I've never
> > seen such a thing. It need not be regulated, but I would want it to be
> > switching (to reduce weight/size.) I am having trouble getting started
> > on my search for information.
>
> Hi Dave,
> QEX had an article in the February 1991 issue by W9QQ about such a
> beast, with a corrigendum in the August '91 issue and a comment in the
> December, '91 issue.
>
> I was well along in the paper phase of a design when I saw an ad in QST
for
> http://www.wattsunlimited.com/
> where you can get a kit or assembled HV switching supply. They claim
> 1.1 amps at 2500 VDC, you could probably wind the secondary for 1 kV or
> have them do it for you.
>
> I haven't sunk the money in it yet, other things getting in the way but
> it looks like an easy way to get HV at an amp or two.
>
> W8LNA

1163. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 14:06:43 UTC
From: John Walton <jdwalton@comcast.net>
Message-ID: <Ru6dnWJfIL4UdITfRVn-oA@comcast.com>
Source record: 20297

A Square Wave is all the harmonics of the fundamental, so a 1.9kHz square wave will have all the harmonics which will complicate the measurement --

If you take a square wave and filter it you can get a relatively low distortion fundamental -- it's much easier than you might think -- use an NE556 dual timer to generate 1.9kHz and 1.3kHz square waves, combine with 10k resistors into an opamp buffer, filter with an MF-10 (now upgraded to LMF100) switched capacitor low pass filter -- voila.

"Dave Platt" <dplatt@radagast.org> wrote in message news:111irgk63p8t6fd@corp.supernews.com...
> >The transmitter alignment instructions for my Icom 751A tranceiver
> >calls for a 2 tone input during the alignment process....
> >
> >"Insert 2 audio signals into the MIC Connector
> >1.9kHz at 3mV
> >1.3kHz at 3mV
> >
> >Are there AF generators out ther that will generate more than one
> >tone?
>
> They do exist - I'm in the process of doing some restoration on an old
> Singer tone generator which does arbitrary pairs of frequencies.
>
> These days, the easiest way to create a tone combination is usually to
> use PC software. Generate two sinewave tones at the two frequencies
> you want, with 50% amplitude or less, then mix 'em with the
> appropriate relative amplitudes. There's lotsa free software which
> will do this - e.g. Audacity on Linux and no doubt many others.
>
> You can then play the mixed file out through your PC sound card, or
> burn it to a CD-R and use a portable CD player to reproduce the
> sound... whichever is most convenient. In either case, feed the
> line-level output signal to a fixed or variable attenuator to get the
> voltage level you need.
>
> --
> Dave Platt <dplatt@radagast.org> AE6EO
> Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

1164. Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 14:29:07 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1108996147.426032.37080@c13g2000cwb.googlegroups.com>
Source record: 20296
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

For the past several years I've irregularly posted my experiences ordering over the web from several catalog houses/surplus suppliers with online ordering.

My hope in doing this was not just to give pointers to other small-timers like myself as to which ones are the best sites, but to give feedback to the companies to get them to improve their interfaces.

But since my first online order (1997 or so) one outfit has risen way above the others: Digikey. Digikey's website leaves all the others in the dust. Their search engine and selection forms for picking out components is simply superb, and is getting better all the time. If I want to know what X5R dielectric capacitors are available in 0402 form factor, the answer is just a couple of clicks and a few seconds away. This is simply amazing.

Semiconductor search is not quite so slick, but I cannot blame Digikey for not trying. They do a good job, especially seeing as how 7 different vendors describe their similar parts with slightly different wording. For product lines where categorization and selection menus might be able to work well, they've coerced everything into selection menus that are simply superb. And datasheets and sometimes photos are always just a mouse click away for the real comparison.

Don't get me wrong: Newark, Mouser, Allied, Jameco, and a few others that I order over the web from have pretty good web-order-entry systems. They've all improved since they first began taking orders over the web. Many of them now have near-real-time stock and shipping status. They let me do my hobby shopping at home at night without having to call during the day. But they have pretty much zero search and selection ability.

Digikey, keep doing it right!

Tim.

1165. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 14:41:01 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <37uaeaF5du4esU1@individual.net>
Source record: 20295

All the _ODD_ harmonics (including the fundamental as the 1st)
in inverse proportion to their harmonic number.

"John Walton" <jdwalton@comcast.net> wrote in message
news:Ru6dnWJfIL4UdITfRVn-oA@comcast.com...
> A Square Wave is all the harmonics of the fundamental, so a 1.9kHz square
> wave will have all the harmonics which will complicate the measurement --

1166. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 15:33:16 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <4219ff3d$0$2762$cc9e4d1f@news-text.dial.pipex.com>
Source record: 20207
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
news:1108996147.426032.37080@c13g2000cwb.googlegroups.com...
> For the past several years I've irregularly posted my experiences
> ordering over the web from several catalog houses/surplus suppliers
> with online ordering.
>
> My hope in doing this was not just to give pointers to other
> small-timers like myself as to which ones are the best sites, but to
> give feedback to the companies to get them to improve their interfaces.
>
> But since my first online order (1997 or so) one outfit has risen way
> above the others: Digikey. Digikey's website leaves all the others in
> the dust. Their search engine and selection forms for picking out
> components is simply superb, and is getting better all the time. If I
> want to know what X5R dielectric capacitors are available in 0402 form
> factor, the answer is just a couple of clicks and a few seconds away.
> This is simply amazing.
>
> Semiconductor search is not quite so slick, but I cannot blame Digikey
> for not trying. They do a good job, especially seeing as how 7
> different vendors describe their similar parts with slightly different
> wording. For product lines where categorization and selection menus
> might be able to work well, they've coerced everything into selection
> menus that are simply superb. And datasheets and sometimes photos are
> always just a mouse click away for the real comparison.
>
> Don't get me wrong: Newark, Mouser, Allied, Jameco, and a few others
> that I order over the web from have pretty good web-order-entry
> systems. They've all improved since they first began taking orders over
> the web. Many of them now have near-real-time stock and shipping
> status. They let me do my hobby shopping at home at night without
> having to call during the day. But they have pretty much zero search
> and selection ability.
>
> Digikey, keep doing it right!

Have a look at the Farnell and RS websites (UK):

http://uk.farnell.com/jsp/home/homepage.jsp

http://rswwww.com

I prefer them to DigiKey.

Leon

1167. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 15:57:52 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <cvd0e0$j71$1@theodyn.ncf.ca>
Source record: 20199

"John Walton" (jdwalton@comcast.net) writes:
> A Square Wave is all the harmonics of the fundamental, so a 1.9kHz square
> wave will have all the harmonics which will complicate the measurement --
>
> If you take a square wave and filter it you can get a relatively low
> distortion fundamental -- it's much easier than you might think -- use an
> NE556 dual timer to generate 1.9kHz and 1.3kHz square waves, combine with
> 10k resistors into an opamp buffer, filter with an MF-10 (now upgraded to
> LMF100) switched capacitor low pass filter -- voila.
>
And why not start with a sinewave oscillator in the first place? That's
the way it used to be done, two transistors each making up phase shift
oscillators.

A sqarewave won't complicate measurements, it will downright give
different results. The whole point of two-tone testing is that the
first tone causes a "carrier" out of the SSB transmitter (the single
tone translates to an RF frequency), and the second tone adds modulation.
If the tones aren't pure sinewave, the output of the transmitter will
be radically different.

Michael VE2BVW

>
> "Dave Platt" <dplatt@radagast.org> wrote in message
> news:111irgk63p8t6fd@corp.supernews.com...
>> >The transmitter alignment instructions for my Icom 751A tranceiver
>> >calls for a 2 tone input during the alignment process....
>> >
>> >"Insert 2 audio signals into the MIC Connector
>> >1.9kHz at 3mV
>> >1.3kHz at 3mV
>> >
>> >Are there AF generators out ther that will generate more than one
>> >tone?
>>
>> They do exist - I'm in the process of doing some restoration on an old
>> Singer tone generator which does arbitrary pairs of frequencies.
>>
>> These days, the easiest way to create a tone combination is usually to
>> use PC software. Generate two sinewave tones at the two frequencies
>> you want, with 50% amplitude or less, then mix 'em with the
>> appropriate relative amplitudes. There's lotsa free software which
>> will do this - e.g. Audacity on Linux and no doubt many others.
>>

>> You can then play the mixed file out through your PC sound card, or
>> burn it to a CD-R and use a portable CD player to reproduce the
>> sound... whichever is most convenient. In either case, feed the
>> line-level output signal to a fixed or variable attenuator to get the
>> voltage level you need.
>>
>> --
>> Dave Platt <dplatt@radagast.org> AE6EO
>> Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
>> I do _not_ wish to receive unsolicited commercial email, and I will
>> boycott any company which has the gall to send me such ads!
>
>

1168. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 16:30:11 UTC
From: Luhan Monat <x@y.z>
Message-ID: <q8nSd.77787$Yu.12442@fed1read01>
Source record: 20204
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Tim Shoppa wrote:
> For the past several years I've irregularly posted my experiences
> ordering over the web from several catalog houses/surplus suppliers
> with online ordering.
>
> My hope in doing this was not just to give pointers to other
> small-timers like myself as to which ones are the best sites, but to
> give feedback to the companies to get them to improve their interfaces.
>
> But since my first online order (1997 or so) one outfit has risen way
> above the others: Digikey. Digikey's website leaves all the others in
> the dust. Their search engine and selection forms for picking out
> components is simply superb, and is getting better all the time. If I
> want to know what X5R dielectric capacitors are available in 0402 form
> factor, the answer is just a couple of clicks and a few seconds away.
> This is simply amazing.
>
> Semiconductor search is not quite so slick, but I cannot blame Digikey
> for not trying. They do a good job, especially seeing as how 7
> different vendors describe their similar parts with slightly different
> wording. For product lines where categorization and selection menus
> might be able to work well, they've coerced everything into selection
> menus that are simply superb. And datasheets and sometimes photos are
> always just a mouse click away for the real comparison.
>
> Don't get me wrong: Newark, Mouser, Allied, Jameco, and a few others
> that I order over the web from have pretty good web-order-entry
> systems. They've all improved since they first began taking orders over
> the web. Many of them now have near-real-time stock and shipping
> status. They let me do my hobby shopping at home at night without
> having to call during the day. But they have pretty much zero search
> and selection ability.
>
> Digikey, keep doing it right!
>
> Tim.
>
Hi,

I agree entirely about DigiKey. However, when I want to order just a
few parts (rather than dozens at a time), Mouser has a much better price
for small quantities. Also, they will ship via 1st class mail - saving
on shipping costs.

So I use the search on DigiKey, check the price, then search by the exact part number on Mouser to see if the price is much lower.

--
Luhan Monat (luhanis 'at' yahoo 'dot' com)
"The future is not what it used to be..."
http://members.cox.net/berniekm

1169. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 16:47:06 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <111k4448587ae62@corp.supernews.com>
Source record: 20202
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

That's an interesting perspective, Tim. I find it easier to search Digikey for passives and Mouser for semiconductors/actives. Jameco has them all beat for their specialties like wall warts, motors, solenoids, solar stuff, and tools/solder stations.

That's my triumvirate...they all have stuff they do best, and I really have no need for other catalogs to cobble up the bench.

For onesie, twosies they all have about the same prices, but when you start buying in thousands, Mouser has them beat by a mile.

Jim

"> Don't get me wrong: Newark, Mouser, Allied, Jameco, and a few others
> that I order over the web from have pretty good web-order-entry
> systems.

1170. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 16:55:57 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <111k4knbl8tcdf9@corp.supernews.com>
Source record: 20201

Michael Black wrote:

> "John Walton" (jdwalton@comcast.net) writes:
>
>>A Square Wave is all the harmonics of the fundamental, so a 1.9kHz square
>>wave will have all the harmonics which will complicate the measurement --
>>
>>If you take a square wave and filter it you can get a relatively low
>>distortion fundamental -- it's much easier than you might think -- use an
>>NE556 dual timer to generate 1.9kHz and 1.3kHz square waves, combine with
>>10k resistors into an opamp buffer, filter with an MF-10 (now upgraded to
>>LMF100) switched capacitor low pass filter -- voila.
>>
>
> And why not start with a sinewave oscillator in the first place? That's
> the way it used to be done, two transistors each making up phase shift
> oscillators.

A square wave oscillator followed by a filter is, in some ways, easier
to implement than a phase-shift oscillator -- particularly if you want
well controlled frequency and amplitude without having to use
sophisticated AGC circuits.
>
> A sqarewave won't complicate measurements, it will downright give
> different results. The whole point of two-tone testing is that the
> first tone causes a "carrier" out of the SSB transmitter (the single
> tone translates to an RF frequency), and the second tone adds modulation.
> If the tones aren't pure sinewave, the output of the transmitter will
> be radically different.
>
That's probably why the guy doesn't advocate using it: he's recommending
a square wave that's heavily low-pass filtered to get rid of the
harmonics. If done right this will result in a clean stable sine wave
at the desired frequency.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

1171. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 16:58:26 UTC
From: Ol' Duffer <DontSend@MeSpam.net>
Message-ID: <MPG.1c83dcaa9d6ba4e8989698@news.bright.net>
Source record: 20205
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Their pricing doth truly suck sometimes, but on the good side they stock most of the stuff in their catalogs (and then some), as opposed to some "other" distributors whose catalogs might be characterized as vaporware.

I wonder sometimes how much they spend printing catalogs every two months, which always seemed excessive to me. I'd have thought twice a year would be plenty.

1172. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 17:27:34 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnd1k6g6.8pp.bit-bucket@shell.config.com>
Source record: 20203

On Sun, 20 Feb 2005 20:49:50 -0800, Sparky wrote:
> The transmitter alignment instructions for my Icom 751A tranceiver
> calls for a 2 tone input during the alignment process....
>
> "Insert 2 audio signals into the MIC Connector
> 1.9kHz at 3mV
> 1.3kHz at 3mV
>
> Are there AF generators out ther that will generate more than one
> tone? The units I am seeing seem to generate just one tone (or at
> least the used stuff out ther that I could afford)

Yep. To add to the other reponses, there are two-tone audio
generators used for two-tone control testing of commercial gear.
I've got one from my dad's estate that does two-tone-sequential
with adjustable duration for each tone, and two-tone-combined, and
single-tone. Thumbwheel freq(s) select from <100 cps to 9.999 kcs.
Pot adjustable tone durations (and delays), and levels.
It's probably 15-20 years old: Automated Industrial Electroncis
Corp., Model 2TSG-1.

They must show up on eBay from time-to-time. Google claims several
'hits' there -- but a search on eBay at this time shows none.

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

1173. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 17:36:46 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <O_oSd.33552$xt.27048@fed1read07>
Source record: 20206

Just FYI -- the Kenwood Station Monitor SM-230 provides a two tone output
for testing

But the IF input for the bandscope is for older Kenwood transceivers.

--
Caveat Lector (Reader Beware)
Help The New Hams
Someone Helped You
Or did You Forget That ?

1174. Just say NO to Bin Ladin!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 17:39:24 UTC
From: angelonmyshoulder61@yahoo.com
Message-ID: <1109007564.199600.129300@c13g2000cwb.googlegroups.com>
Source record: 20200

Hi all I am helping a friend promote a web site. You see a childhood friend of hers lost her husband at the World Trade Center on Sept. 11, 2001. She has run into some hard times and my freind wants to help her. So she came up with the idea to market Just say NO to Bin Ladin dartboards and punching bag covers. Not only is she going to donate part of the proceeds to her freind but an additional part of the proceeds will go to the Firemans Fund. If you could take the time to check out the web site it would be much appreciated!! The web site addy is:

http://www.angelonmyshoulder.4t.com

Thanks so much everyone!!

1175. 6 Meter Homebrew Project

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 17:54:50 UTC
From: "theologygeek@gmail.com" <theologygeek@gmail.com>
Message-ID: <1109008490.039459.200000@z14g2000cwz.googlegroups.com>
Source record: 20208

Hello all,

I'm currently studying code so I can pass my General class license test. I am also interested in homebrewing and QRP. I am looking for plans for building a homebrew 6 meter transmitter. I know that the propagation is not favorable for 6M right now, but until I gain my General class license, I think such a project will be a good place to start. I would appreciate any help that you can offer. Thanks.

Jason Evans
KI4GMX

1176. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 18:35:40 UTC
From: Chris Carlen <crcarle@BOGUS.sandia.gov>
Message-ID: <cvd9lr0nm6@news2.newsguy.com>
Source record: 20209
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Tim Shoppa wrote:
> For the past several years I've irregularly posted my experiences
> ordering over the web from several catalog houses/surplus suppliers
> with online ordering.
>
> My hope in doing this was not just to give pointers to other
> small-timers like myself as to which ones are the best sites, but to
> give feedback to the companies to get them to improve their interfaces.
>
> But since my first online order (1997 or so) one outfit has risen way
> above the others: Digikey. Digikey's website leaves all the others in
> the dust. Their search engine and selection forms for picking out
> components is simply superb, and is getting better all the time. If I
> want to know what X5R dielectric capacitors are available in 0402 form
> factor, the answer is just a couple of clicks and a few seconds away.
> This is simply amazing.
>
> Semiconductor search is not quite so slick, but I cannot blame Digikey
> for not trying. They do a good job, especially seeing as how 7
> different vendors describe their similar parts with slightly different
> wording.

Yes. For this, they might benefit from hiring a person with some real
electronics knowledge, who might be able to standardize the terms used
in the database, and thus would have to translate any non-standard
compliant terminology from their vendors into the terms used in the
database. That would make even the semis consistent.

Good day!

--

____
Christopher R. Carlen
Principal Laser/Optical Technologist
Sandia National Laboratories CA USA
crcarle@sandia.gov -- NOTE: Remove "BOGUS" from email address to reply.

1177. Re: 6 Meter Homebrew Project

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 19:16:46 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <ysqSd.33560$xt.23800@fed1read07>
Source record: 20210

Try kits at AC6V's site URL:
http://ac6v.com/kits.htm#HAM

--
Caveat Lector (Reader Beware)
Help The New Hams
Someone Helped You
Or did You Forget That ?

<theologygeek@gmail.com> wrote in message
news:1109008490.039459.200000@z14g2000cwz.googlegroups.com...
> Hello all,
>
> I'm currently studying code so I can pass my General class license
> test. I am also interested in homebrewing and QRP. I am looking for
> plans for building a homebrew 6 meter transmitter. I know that the
> propagation is not favorable for 6M right now, but until I gain my
> General class license, I think such a project will be a good place to
> start. I would appreciate any help that you can offer. Thanks.
>
> Jason Evans
> KI4GMX
>

1178. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 19:19:22 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1109013562.825699.225170@l41g2000cwc.googlegroups.com>
Source record: 20211
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

> Mouser has a much better price
> for small quantities. Also, they
> will ship via 1st class mail saving
> on shipping costs.

Well, Digikey will ship for free if you mail in your order with payment. Not awfully relevant to me because it's been years since I ordered by any method except the web.

> So I use the search on DigiKey,
> check the price, then search by
> the exact part number on
> Mouser to see if the price is
> much lower.

I'd feel guilty doing that, but I cannot fault you for being thrifty :-)

Tim.

1179. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 20:00:33 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1109016033.280906.133200@z14g2000cwz.googlegroups.com>
Source record: 20212
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

> Have a look at the Farnell

Farnell seems to be the same back-end as Newark with a different name on the front.. (Err, now it's "Newark-in-one", but I've always been oblivious to name changes.)

Tim.

1180. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 20:31:41 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <421a452e$0$2763$cc9e4d1f@news-text.dial.pipex.com>
Source record: 20213
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
news:1109016033.280906.133200@z14g2000cwz.googlegroups.com...
>> Have a look at the Farnell
>
> Farnell seems to be the same back-end as Newark with a different name
> on the front.. (Err, now it's "Newark-in-one", but I've always been
> oblivious to name changes.)

Farnell took Newark over a few years ago.

Leon
--
Leon Heller, G1HSM
http://www.geocities.com/leon_heller

1181. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 20:53:49 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1109019228.970062.188620@o13g2000cwo.googlegroups.com>
Source record: 20214
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

> Farnell took Newark over a few years ago.

OK, that explains it :-).

Newark always had some interesting semiconductor stock from HP (now Agilent... too many name changes!). Finding what they have in stock is certainly easier now that I can search on the web, but I'd probably buy more from them if they improved their web interface so I didn't have to type in every single part number that may be useful to me just to see if they carry it.

I just tried Newark/Farnell for some passive searches and indeed they've recently updated their search interface so that it's a lot like Digikey's.

Tim.

1182. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 21:00:56 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_421a4ec7@fidonet.org>
Source record: 20223

"Caveat Lector" bravely wrote to "All" (21 Feb 05 09:36:46)
--- on the heady topic of "Re: Are there multi-tone AF generators?"

CL> From: "Caveat Lector" <CL@barahmas.com>
CL> Xref: aeinews rec.radio.amateur.homebrew:2274

CL> Just FYI -- the Kenwood Station Monitor SM-230 provides a two tone
CL> output for testing

A piano even does semi-tones... 10 at a time, 11 if you use your nose!

A*s*i*m*o*v

... Hanging: Early form of bungee jumping practiced in the old west.

1183. Re: 6 Meter Homebrew Project

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 22:18:54 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <i7tSd.549$Bw5.197@newsfe2-gui.ntli.net>
Source record: 20215

> I'm currently studying code so I can pass my General class license
> test. I am also interested in homebrewing and QRP. I am looking for
> plans for building a homebrew 6 meter transmitter. I know that the
> propagation is not favorable for 6M right now, but until I gain my
> General class license, I think such a project will be a good place to
> start. I would appreciate any help that you can offer. Thanks.
==========
To my knowledge a 5 wpm code test is currently only required for the Amateur
Extra class of licence.

Frank GM0CSZ / KN6WH

1184. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 22:21:37 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <R9tSd.553$Bw5.540@newsfe2-gui.ntli.net>
Source record: 20216
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

```
> Have a look at the Farnell and RS websites (UK):
>
> http://uk.farnell.com/jsp/home/homepage.jsp
>
> http://rswwww.com
============================
A bit cumbersome for hams based in the uS
```

1185. Re: How do I design an automatic antenna tuner?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 22:31:35 UTC
From: john graesser <graesser@tca.net>
Message-ID: <111ko7gk8rlibbb@corp.supernews.com>
Source record: 20217

"Airy R.Bean" <Me@privacy.net> wrote in message
news:37rfbiF5hnfvpU2@individual.net...
> The best software for any self-respecting _REAL_ Radio Ham is
> that which he writes for himself. It is CBer who buy such things
> off-the-shelf.
>
> It is very much the case with software that you can manufacture a much
> better
> product than any you can buy for a very small percentage of the cost.

Oh, so we can be sure that you wrote the operating system and mail program
that you are using to access the newsgroup? Or do you have no self respect?

Perhaps you have enough time to generate the software for the rest of us
that don't have the time to spend even more time coding than we have to
already. Unless you are a professional coder, then don't disrespect the
profession by suggesting that anyone can hack up a program for lower cost
with better performance. If you are a professional coder then considering
your posts, perhaps anyone could output code that is better than what you
are being paid for, so anyone could produce code with better performance
than what you can output.

If you are a professional at anything, then stay with your field of
expertise. Can you cite any accomplishments that you have achieved?
thanks, John.
KC5DWD

1186. Re: 6 Meter Homebrew Project

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 22:42:48 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <lttSd.33610$xt.17641@fed1read07>
Source record: 20218

"Highland Ham" <abcgm0csz.kn6whxyz@abcntlworldxyz.com> wrote in message
news:i7tSd.549$Bw5.197@newsfe2-gui.ntli.net...
>> I'm currently studying code so I can pass my General class license
>> test. I am also interested in homebrewing and QRP. I am looking for
>> plans for building a homebrew 6 meter transmitter. I know that the
>> propagation is not favorable for 6M right now, but until I gain my
>> General class license, I think such a project will be a good place to
>> start. I would appreciate any help that you can offer. Thanks.
> ==========
> To my knowledge a 5 wpm code test is currently only required for the
> Amateur
> Extra class of licence.
>
> Frank GM0CSZ / KN6WH
>
>--
Nope -- 5 wpm is required for the general class also
URL:
http://www.arrl.org/FandES/ead/classes.html

Also be sure to read URL:
http://ve.wb7tjd.org/

Read the latter for Examination credits for licenses if you previously
passed a code test

Caveat Lector (Reader Beware)
Help The New Hams
Someone Helped You
Or did You Forget That ?

1187. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 22:55:14 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <8mpk119dpu00ktind063mu82vtjofa277i@4ax.com>
Source record: 20219

On 21 Feb 2005 17:27:34 GMT, Allodoxaphobia <bit-bucket@config.com>
wrote:

>On Sun, 20 Feb 2005 20:49:50 -0800, Sparky wrote:
>> The transmitter alignment instructions for my Icom 751A tranceiver
>> calls for a 2 tone input during the alignment process....
>>
>> "Insert 2 audio signals into the MIC Connector
>> 1.9kHz at 3mV
>> 1.3kHz at 3mV
>>
>> Are there AF generators out ther that will generate more than one
>> tone? The units I am seeing seem to generate just one tone (or at
>> least the used stuff out ther that I could afford)
>
>Yep. To add to the other reponses, there are two-tone audio
>generators used for two-tone control testing of commercial gear.
>I've got one from my dad's estate that does two-tone-sequential
>with adjustable duration for each tone, and two-tone-combined, and
>single-tone. Thumbwheel freq(s) select from <100 cps to 9.999 kcs.
>Pot adjustable tone durations (and delays), and levels.
>It's probably 15-20 years old: Automated Industrial Electroncis
>Corp., Model 2TSG-1.
>
>They must show up on eBay from time-to-time. Google claims several
>'hits' there -- but a search on eBay at this time shows none.
>
>73
>Jonesy

That two tone generator is only two sequential tones. It will not
produce two tones at the same time. It is also pretty much of a square
wave coming out of it too. No good for ssb testing.
It was made for pager testing.

73
Gary K4FMX

1188. Re: 6 Meter Homebrew Project

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-21 23:02:17 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <5spk11t8sfbjonanbvqr4asn7h0f07jc7d@4ax.com>
Source record: 20220

On Mon, 21 Feb 2005 22:18:54 GMT, "Highland Ham"
<abcgm0csz.kn6whxyz@abcntlworldxyz.com> wrote:

>> I'm currently studying code so I can pass my General class license
>> test. I am also interested in homebrewing and QRP. I am looking for
>> plans for building a homebrew 6 meter transmitter. I know that the
>> propagation is not favorable for 6M right now, but until I gain my
>> General class license, I think such a project will be a good place to
>> start. I would appreciate any help that you can offer. Thanks.
>==============================
>To my knowledge a 5 wpm code test is currently only required for the Amateur
>Extra class of licence.
>
Negative.

The US FCC regs require the 5 wpm Morse for General and for Extra.

The lowest license class of the three, Technician, does not require
Morse. However, any licensed Technician who has also passed the 5 wpm
Morse can add privileges on HF in what used to be called the Novice or
Tech Plus bands.

Happy trails,
Gary (net.yogi.bear)
----
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

1189. Re: Switching power supply - 1000V/2A

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 00:08:15 UTC
From: marsgal42@hotmail.com
Message-ID: <d42b5a72.0502211608.31906bb8@posting.google.com>
Source record: 20221

"wb0gaz" <wb0gaz@hotmail.com> wrote in message
news:<1108942940.458260.25400@z14g2000cwz.googlegroups.com>...
> I'm looking for design (or at least pointer to some information about)
> for a switching power supply that would provide about 1KV @ 2A given
> 110/220VAC input. A commercial product would work too, but I've never
> seen such a thing. It need not be regulated, but I would want it to be
> switching (to reduce weight/size.) I am having trouble getting started
> on my search for information.

You might want to consider a linear supply anyway.

You may have difficulty lifting a 2000 watt linear supply,
but you can be highly confident that it will work. In
most cases, this is what really matters...

Laura Halliday VE7LDH "Que les nuages soient notre
Grid: CN89mg pied a terre..."
ICBM: 49 16.05 N 122 56.92 W - Hospital/Shafte

1190. Re: 6 Meter Homebrew Project

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 00:40:29 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <d62dnQyCfp4I4offRVn-vg@bright.net>
Source record: 20222

Well, I would take minor exception to the statement that 6M is not so good right now. We have nearly daily openings from the upper midwest to the Rockie Mountains and the Gulf coast via sporadic E openings. Aurora enhanced operation is somewhat limited lately. That is why 6M is called the "magic band". It can open at noon or 9PM on Monday, Thursday or Sunday...or not at all for several days...

It has been and probably always will be my favorite band!

Scott
N0EDV

theologygeek@gmail.com wrote:

> Hello all,
>
> I'm currently studying code so I can pass my General class license
> test. I am also interested in homebrewing and QRP. I am looking for
> plans for building a homebrew 6 meter transmitter. I know that the
> propagation is not favorable for 6M right now, but until I gain my
> General class license, I think such a project will be a good place to
> start. I would appreciate any help that you can offer. Thanks.
>
> Jason Evans
> KI4GMX
>

1191. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 01:42:40 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <k6wSd.33642$xt.33388@fed1read07>
Source record: 20224

"Asimov" <Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote in message
news:MSGID_1=3a167=2f133.0_421a4ec7@fidonet.org...
> "Caveat Lector" bravely wrote to "All" (21 Feb 05 09:36:46)
> --- on the heady topic of "Re: Are there multi-tone AF generators?"
>
> CL> From: "Caveat Lector" <CL@barahmas.com>
> CL> Xref: aeinews rec.radio.amateur.homebrew:2274
>
> CL> Just FYI -- the Kenwood Station Monitor SM-230 provides a two tone
> CL> output for testing
>
> A piano even does semi-tones... 10 at a time, 11 if you use your nose!
>
> A*s*i*m*o*v
>
> ... Hanging: Early form of bungee jumping practiced in the old west.

Great device (piano) for checking transmitters
In the off chance you or others don't know
2-tone IMD testing was the original topic --- see URL:
http://www.w8ji.com/transmitter_splatter.htm

1192. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 01:52:20 UTC
From: mc <mc_no_spam@uga.edu>
Message-ID: <421a9716$1@mustang.speedfactory.net>
Source record: 20140
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
news:1109013562.825699.225170@l41g2000cwc.googlegroups.com...

>> So I use the search on DigiKey,
>> check the price, then search by
>> the exact part number on
>> Mouser to see if the price is
>> much lower.
>
> I'd feel guilty doing that, but I cannot fault you for being thrifty
> :-)

Why feel guilty for getting competitive bids? It's standard practice.

1193. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 01:52:28 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <LdwSd.13514$u87.5233@bignews6.bellsouth.net>
Source record: 20225
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Tim Shoppa wrote:
> For the past several years I've irregularly posted my experiences
> ordering over the web from several catalog houses/surplus suppliers
> with online ordering.
>
> My hope in doing this was not just to give pointers to other
> small-timers like myself as to which ones are the best sites, but to
> give feedback to the companies to get them to improve their interfaces.
>
> But since my first online order (1997 or so) one outfit has risen way
> above the others: Digikey. Digikey's website leaves all the others in
> the dust. Their search engine and selection forms for picking out
> components is simply superb, and is getting better all the time. If I
> want to know what X5R dielectric capacitors are available in 0402 form
> factor, the answer is just a couple of clicks and a few seconds away.
> This is simply amazing.
>
> Semiconductor search is not quite so slick, but I cannot blame Digikey
> for not trying. They do a good job, especially seeing as how 7
> different vendors describe their similar parts with slightly different
> wording. For product lines where categorization and selection menus
> might be able to work well, they've coerced everything into selection
> menus that are simply superb. And datasheets and sometimes photos are
> always just a mouse click away for the real comparison.
>
> Don't get me wrong: Newark, Mouser, Allied, Jameco, and a few others
> that I order over the web from have pretty good web-order-entry
> systems. They've all improved since they first began taking orders over
> the web. Many of them now have near-real-time stock and shipping
> status. They let me do my hobby shopping at home at night without
> having to call during the day. But they have pretty much zero search
> and selection ability.
>
> Digikey, keep doing it right!
>
> Tim.
>
For those who joined the hobby after the early 70's let me point out
that DigiKey's name comes from an electronic digital keyer that the
company sold via ad's in QST. It was a small circuit board (about
2"x2") using RTL (IIRC) Ic's. After a few years the company transformed
from ham radio stuff to a part's mail order biz. Digikey didn't forget
their ham radio roots, they are happy to sell parts in onezes to

hobby buyers today.

1194. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 01:53:15 UTC
From: Eric Smith <eric@brouhaha.com>
Message-ID: <qh3bvpjr78.fsf@ruckus.brouhaha.com>
Source record: 20226
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Tim Shoppa wrote:
> But since my first online order (1997 or so) one outfit has risen way
> above the others: Digikey. Digikey's website leaves all the others in
> the dust.

Agreed. Digikey and Mouser are my main suppliers. As a rule of thumb,
if you can't get it from Digikey or Mouser, it doesn't really exist.

1195. FA:GREENLEE Punches: 7/8, 1.250" + other stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 03:20:58 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <uyxSd.258152$w62.246892@bgtnsc05-news.ops.worldnet.att.net>
Source record: 20227

See this item or items and others too at address below:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

tnx for looking, heytubeguy

1196. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 04:12:10 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_421ab7c5@fidonet.org>
Source record: 20231

"Caveat Lector" bravely wrote to "All" (21 Feb 05 17:42:40)
--- on the heady topic of "Re: Are there multi-tone AF generators?"

CL> From: "Caveat Lector" <CL@barahmas.com>
CL> Xref: aeinews rec.radio.amateur.homebrew:2292

CL> "Asimov" <Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote in
CL> message news:MSGID_1=3a167=2f133.0_421a4ec7@fidonet.org...
> "Caveat Lector" bravely wrote to "All" (21 Feb 05 09:36:46)
> --- on the heady topic of "Re: Are there multi-tone AF generators?"
>
> CL> From: "Caveat Lector" <CL@barahmas.com>
> CL> Xref: aeinews rec.radio.amateur.homebrew:2274
>
> CL> Just FYI -- the Kenwood Station Monitor SM-230 provides a two tone
> CL> output for testing
>
> A piano even does semi-tones... 10 at a time, 11 if you use your nose!
>
> A*s*i*m*o*v
>
> ... Hanging: Early form of bungee jumping practiced in the old west.

CL> Great device (piano) for checking transmitters
CL> In the off chance you or others don't know
CL> 2-tone IMD testing was the original topic --- see URL:
CL> http://www.w8ji.com/transmitter_splatter.htm

I wrote that facetiously but I was really hinting of using a pc
soundcard. A sound card can produce very pure sinewaves from its FM
generator IC and most can play many dozens of notes at a time.

A*s*i*m*o*v

... ...on the other hand, you also have 5 fingers.

1197. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 05:18:30 UTC
From: mc <mc_no_spam@uga.edu>
Message-ID: <421ac76b@mustang.speedfactory.net>
Source record: 20139
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Eric Smith" <eric@brouhaha.com> wrote in message
news:qh3bvpjr78.fsf@ruckus.brouhaha.com...
> Tim Shoppa wrote:
>> But since my first online order (1997 or so) one outfit has risen way
>> above the others: Digikey. Digikey's website leaves all the others in
>> the dust.
>
> Agreed. Digikey and Mouser are my main suppliers. As a rule of thumb,
> if you can't get it from Digikey or Mouser, it doesn't really exist.

Does anybody remember the days of Allied and Lafayette?

1198. Re: Switching power supply - 1000V/2A

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 08:04:58 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <7qkl11df4dc015m7ohmlo6thtlctjkp9pa@4ax.com>
Source record: 20229

On 20 Feb 2005 15:42:20 -0800, "wb0gaz" <wb0gaz@hotmail.com> wrote:

>I'm looking for design (or at least pointer to some information about)
>for a switching power supply that would provide about 1KV @ 2A given
>110/220VAC input. A commercial product would work too, but I've never
>seen such a thing.

One thing that might be interesting to study is to get some commercial (surplus) product having 200-400 V secondary and adding some voltage multiplier stages after it. At frequencies well above the mains frequency, quite small capacitors are required in the voltage multiplier.

Depending on the multiplier chosen, the primary switcher should either be symmetric (push-pull) or asymmetric. Due to the limited isolation voltage between the primary and secondary, it might be a good idea of choosing a multiplier configuration, in which the secondary is close to ground (e.g. one side or CT grounded). As with all switcher rectifiers and capacitors, great care is required in selecting components with sufficiently low ESR at the actual operating frequency and low inductances, otherwise they might explode.

Paul OH3LWR

1199. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 08:04:59 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <o4ml11905ecfq4vmfklmkqp8t3tpd2knlg@4ax.com>
Source record: 20228

On Monday, 21 Feb 2005 16:00:56 -500, "Asimov"
<Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote:

>>"Insert 2 audio signals into the MIC Connector
>>1.9kHz at 3mV
>>1.3kHz at 3mV

>A piano even does semi-tones... 10 at a time, 11 if you use your nose!

With some kind of PC, search for a program that can generate multiple tones (e.g. some electronic instrument imitations) or use two programs capable of generating a sine wave and mix them together with the PC's audio mixer and run the combined signal to the sound card output and to an audio amplifier.

The hardest part is getting some kind of calibrated output level.

One way of doing this with very simple test gear would be to put a low impedance 40 dB attenuator between the audio amplifier and the mic input.

Using a single 50 or 60 Hz sine tone from the sound card and a DVM at the amplifier output, adjust the amplifier output voltage to 300 mVrms, the microphone input will now be 3 mVrms. It is important to use 50/60 Hz, since a typical DVM frequency response would be quite bad at 1.3 or 1.9 kHz.

Now turn the 1.3 and 1.9 kHz tones on and make the transmitter adjustments.

Paul OH3LWR

1200. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 08:10:15 UTC
From: Robert Baer <robertbaer@earthlink.net>
Message-ID: <421AE92D.6F121965@earthlink.net>
Source record: 20230
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Ol' Duffer wrote:
>
> Their pricing doth truly suck sometimes, but on the good
> side they stock most of the stuff in their catalogs (and
> then some), as opposed to some "other" distributors whose
> catalogs might be characterized as vaporware.
>
> I wonder sometimes how much they spend printing catalogs
> every two months, which always seemed excessive to me.
> I'd have thought twice a year would be plenty.

If you noticed, each newer catalog has *more* parts; more brands, more
variety, more types, etc.

1201. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 10:04:37 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <111m0lh3j881udb@corp.supernews.com>
Source record: 20232
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
news:1108996147.426032.37080@c13g2000cwb.googlegroups.com...
> For the past several years I've irregularly posted my experiences
> ordering over the web from several catalog houses/surplus suppliers
> with online ordering.
>
> My hope in doing this was not just to give pointers to other
> small-timers like myself as to which ones are the best sites, but to
> give feedback to the companies to get them to improve their
interfaces.
>
> But since my first online order (1997 or so) one outfit has risen way
> above the others: Digikey. Digikey's website leaves all the others in
> the dust. Their search engine and selection forms for picking out
> components is simply superb, and is getting better all the time. If I
> want to know what X5R dielectric capacitors are available in 0402 form
> factor, the answer is just a couple of clicks and a few seconds away.
> This is simply amazing.
>
> Semiconductor search is not quite so slick, but I cannot blame Digikey
> for not trying. They do a good job, especially seeing as how 7
> different vendors describe their similar parts with slightly different
> wording. For product lines where categorization and selection menus
> might be able to work well, they've coerced everything into selection
> menus that are simply superb. And datasheets and sometimes photos are
> always just a mouse click away for the real comparison.
>
> Don't get me wrong: Newark, Mouser, Allied, Jameco, and a few others
> that I order over the web from have pretty good web-order-entry
> systems. They've all improved since they first began taking orders
over
> the web. Many of them now have near-real-time stock and shipping
> status. They let me do my hobby shopping at home at night without
> having to call during the day. But they have pretty much zero search
> and selection ability.
>
> Digikey, keep doing it right!
>
> Tim.

Now, if their prices were only as low as Mouser's..

1202. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 10:23:55 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <111m1pnkfv7145f@corp.supernews.com>
Source record: 20233
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Eric Smith" <eric@brouhaha.com> wrote in message
news:qh3bvpjr78.fsf@ruckus.brouhaha.com...
> Tim Shoppa wrote:
> > But since my first online order (1997 or so) one outfit has risen
way
> > above the others: Digikey. Digikey's website leaves all the others
in
> > the dust.
>
> Agreed. Digikey and Mouser are my main suppliers. As a rule of
thumb,
> if you can't get it from Digikey or Mouser, it doesn't really exist.

That's pure nonsense. I've tried to get specialized semi's from both, and having failed that, I've found what I needed at other online sources. One recent example comes to mind: Futurlec. www.futurlec.com has a number of things much cheaper than D-K or M - and they're international.

Another is ultrabright LEDs. D-K or M have nothing worthwhile. You have to go to another supplier to get 'em.

And maybe the best example is the source(s) of many of our small qty parts: Ebay. ;-)

But on Ebay, read *all* the info in the auction. I see shysters, especially foreign shysters, who will sell you parts dirt cheap, and rip you off with the shipping/handling. :-(

1203. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 10:30:27 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <111m25upmt8mja3@corp.supernews.com>
Source record: 20234
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Robert Baer" <robertbaer@earthlink.net> wrote in message
news:421AE92D.6F121965@earthlink.net...
> Ol' Duffer wrote:
> >
> > Their pricing doth truly suck sometimes, but on the good
> > side they stock most of the stuff in their catalogs (and
> > then some), as opposed to some "other" distributors whose
> > catalogs might be characterized as vaporware.
> >
> > I wonder sometimes how much they spend printing catalogs
> > every two months, which always seemed excessive to me.
> > I'd have thought twice a year would be plenty.
>
> If you noticed, each newer catalog has *more* parts; more brands,
more
> variety, more types, etc.

... Higher prices, less quantity price breaks, etc., etc. Oh, did I
mention, higher prices..

I just love wotking on the PCs in our Purchasing Dept. :-/ They have a
whole shelf full of janitorial supply catalogs. Just think, if we could
only gwt all these catalogs and paper towels recycled, we'd save a whole
continent of forests..

1204. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 10:55:06 UTC
From: Pig Bladder <pigbladder@neodruid.net>
Message-ID: <pan.2005.02.22.10.55.05.766547@neodruid.net>
Source record: 20235
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Tue, 22 Feb 2005 02:23:55 -0800, Watson A.Name - "Watt Sun, the Dark
> And maybe the best example is the source(s) of many of our small qty
> parts: Ebay. ;-)
>
> But on Ebay, read *all* the info in the auction. I see shysters,
> especially foreign shysters, who will sell you parts dirt cheap, and rip
> you off with the shipping/handling. :-(

It is morally wrong to allow a sucker to keep his money.
--
The Pig Bladder From Uranus, Still Waiting for
Some Hot Babe to Ask What My Favorite Planet Is.

1205. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 12:24:01 UTC
From: Bill M <dontspamoleexray@coqui.net>
Message-ID: <111m9321qd6shf5@corp.supernews.com>
Source record: 20236
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Robert Baer wrote:
> Ol' Duffer wrote:

>>I wonder sometimes how much they spend printing catalogs
>>every two months, which always seemed excessive to me.
>>I'd have thought twice a year would be plenty.
>
>
> If you noticed, each newer catalog has *more* parts; more brands, more
> variety, more types, etc.

I wonder how long Mouser can keep up the quarterly catalogs. They are getting huge these days! About 3 times the size of what they were just 2-3 years ago.

I'm not griping mind you, but I'd hate to have to do all my daydreaming and parts selections online.

-Bill

1206. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 13:07:56 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <mcbm11t99mddc83lo1j2rfuoa3icdpegd4@4ax.com>
Source record: 20237
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Tue, 22 Feb 2005 02:30:27 -0800, the renowned "Watson A.Name -
\"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com> wrote:

>
>"Robert Baer" <robertbaer@earthlink.net> wrote in message
>news:421AE92D.6F121965@earthlink.net...
>> Ol' Duffer wrote:
>> >
>> > Their pricing doth truly suck sometimes, but on the good
>> > side they stock most of the stuff in their catalogs (and
>> > then some), as opposed to some "other" distributors whose
>> > catalogs might be characterized as vaporware.
>> >
>> > I wonder sometimes how much they spend printing catalogs
>> > every two months, which always seemed excessive to me.
>> > I'd have thought twice a year would be plenty.
>>
>> If you noticed, each newer catalog has *more* parts; more brands,
>more
>> variety, more types, etc.
>
>... Higher prices, less quantity price breaks, etc., etc. Oh, did I
>mention, higher prices..
>
>I just love wotking on the PCs in our Purchasing Dept. :-/ They have a
>whole shelf full of janitorial supply catalogs. Just think, if we could
>only gwt all these catalogs and paper towels recycled, we'd save a whole
>continent of forests..

Those janitorial supply guys have *really* high prices. Between
telephone directories, Mouser, Digikey, trade rags, paper packing and
EEM, the recycling box is never hungry. A few printouts don't amount
to much, and the few newspapers tend to get used for packing, which is
lighter than that recycled paper packing that Digikey uses.

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

1207. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 13:50:30 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1109080230.113330.323080@o13g2000cwo.googlegroups.com>
Source record: 20238
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

> Have a look at the Farnell

I spent some time playing around with the Farnell/Newark web selectors
and they actually are pretty decent. Just like Digikey, they sometime
get tripped up by obscure numbering (for example, Newark/Farnell
calling 0603 size SMT parts 603 in many instances) or other gotchas,
but in principle the two mechanisms seem to be approximately
equivalent.

So, attaboy Newark/Farnell! Maybe they'll get more than one order
every 5 years from me now :-)

Tim.

1208. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 14:07:06 UTC
From: Daniel Haude <haude@kir.physnet.uni-hamburg.de>
Message-ID: <slrnd1mf4b.1gc.haude@kir.physnet.uni-hamburg.de>
Source record: 20239
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

["Followup-To:" header set to sci.electronics.design.]
On Mon, 21 Feb 2005 15:33:16 -0000,
Leon Heller <leon_heller@hotmail.com> wrote
in Msg. <4219ff3d$0$2762$cc9e4d1f@news-text.dial.pipex.com>
>> and selection ability.
>>
>> Digikey, keep doing it right!
>
> Have a look at the Farnell and RS websites (UK):

You've got to be kidding. I find the RS website impossible to use. I
always refer to the printed catalog. Also they want me to register to
access data sheets etc.

Of course it's easy to just punch in a part number and get taken to the
appropriate result. But if you're searching a bit less specific -- say,
for a certain kind of connector you've seen somewhere, everything falls
apart because there's no such thing as a parametric search engine. Turning
tha pages of the paper catalog is much quicker.

--Daniel

1209. Re: 6 Meter Homebrew Project

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 15:39:34 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <87jm11lg73gcl55ota6adk01g9h77eg08g@4ax.com>
Source record: 20241

On 21 Feb 2005 09:54:50 -0800, "theologygeek@gmail.com"
<theologygeek@gmail.com> wrote:

>I'm currently studying code so I can pass my General class license
>test. I am also interested in homebrewing and QRP. I am looking for
>plans for building a homebrew 6 meter transmitter. I know that the
>propagation is not favorable for 6M right now, but until I gain my
>General class license, I think such a project will be a good place to
>start. I would appreciate any help that you can offer. Thanks.
>
>Jason Evans
>KI4GMX

Ok go for it. There are openings on 6m even now, maybe less frequent
but they are there. I've only worked Florida and Alabama twice this
last week on 6w and 4 elements at 31FT from Massachusetts. Actually
6M is a fun bad and when it opens it can be amazing. It's possible to
do real DX. I've worked 7 countries so far at low power. In a few
years when the cycle starts toward peak again it should be
interesting.

Now heres a suggestion for a project, or more correctly a series of
them that will get you on 6m.

An inexpensive transverter kit from 20m to 6m from TenTec 1208
139$ US. This will get you 8-10w on 6m, plenty believe me with an
inexpensive 3 element beam as high as you can get it. Come to think
of it, you could build the beam too!

The second part assumes that once you have the code and general
license you want a HF rig for use.

Now you need a 20m SSB transceiver, either a used commercial one or
build one. You can find pleny of HF radios that do low power that
either have 6m already or need the transverter to get there. There
are several kits that are candidates. Note: that transverter does not
require much power (under 5w) from the 20M rig so something that only
does a few watts is ideal. There is also a design on the net, see:

http://www.phonestack.com/farhan/

It's a build it from scratch but do able if you've built some before
and can get assistance. Why build a 20m rig and use a transverter?
Simple working with RF at 20m is far less critical than at 6m and
the transverter kit has a nice board that removes that problem.

Finally, even as a no-code tech you can use code! Just remember send QRS if they are too fast. So 6m can be used to practice and gain skill. There are a bunch of low power 20m CW only tranceivers that would drive the TenTec nicely. Most of them will recieve SSB but your limited to CW transmit.

As I said some suggestions.

Allison
KB1GMX fn42

1210. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 15:56:08 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <111mlgcmlgnhpb4@corp.supernews.com>
Source record: 20240
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

I remember Jerry Mouser in his claptrap pickup truck peddling "jappo crappo" capacitors and resistors out of the bed of the truck at a lot of the companies in San Diego in the late '60s.

Things have changed...

Jim

">
> I wonder how long Mouser can keep up the quarterly catalogs.

1211. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 16:03:37 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <421b57d8$0$2761$cc9e4d1f@news-text.dial.pipex.com>
Source record: 20242
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
news:1109080230.113330.323080@o13g2000cwo.googlegroups.com...
>> Have a look at the Farnell
>
> I spent some time playing around with the Farnell/Newark web selectors
> and they actually are pretty decent. Just like Digikey, they sometime
> get tripped up by obscure numbering (for example, Newark/Farnell
> calling 0603 size SMT parts 603 in many instances) or other gotchas,
> but in principle the two mechanisms seem to be approximately
> equivalent.
>
> So, attaboy Newark/Farnell! Maybe they'll get more than one order
> every 5 years from me now :-)

The nice thing about Farnell is that they don't charge for normal delivery
and I usually get what I order the following day. That's in the UK, of
course.

Leon

1212. pumping the T2-exciter board with a squarewave signal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 16:58:31 UTC
From: andreas magun <achmagun@bluewin.ch>
Message-ID: <421b643a$1_1@news.bluewin.ch>
Source record: 20243

Hi,

I have assembled a T2 phasing exciter (KK7B) and looked
at its output spectrum with a spectrum analyzer.

When pumping the exciter with quadrature sine wave signals it
works as expected (output power roughly 3 mW, sideband supression
better than 40 db).

However, when pumping with quadrature squarewave
signals of approximately the same power, the output power
drops by a factor of at least 20 db! I would have expected
much more power, similar to that obtained with sine wave pumping.

The quadrature phase signal was generated with a 74F74, the
quadrature signals being attenuated to give a power of approx. 10 dbm
and output impedances of approx. 50 Ohms.

There must be an explanation.

Thanks
Andreas

1213. FT: 2-01C Used In HP-410A/B

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 17:00:44 UTC
From: BillMe <billme@handy.net>
Message-ID: <1109091645.7332a22ea4e2aac71b8a20190697813a@teranews>
Source record: 20244

I have a few NOS, in the box, 2-01C diodes used in the RF probe for the HP-410A/B VTVM. This is the tube that usually keeps one of the best VTVMs ever made from being 100%. The cost of this tube is over $30 on the net. I'd like to trade for equivalent value tubes such as 811A, 6293's, 3TF7, etc.

If interested please email be at
wabateATdandyDOTnet

Thanks,

Bill, K 3 P G B

FT: 2-01C Used In HP-410A/B

1214. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 17:23:11 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnd1mqjv.1o98.bit-bucket@shell.config.com>
Source record: 20245

On Mon, 21 Feb 2005 17:55:14 -0500, Gary Schafer wrote:
> On 21 Feb 2005 17:27:34 GMT, Allodoxaphobia <bit-bucket@config.com>
> wrote:
>
>>On Sun, 20 Feb 2005 20:49:50 -0800, Sparky wrote:
>>> The transmitter alignment instructions for my Icom 751A tranceiver
>>> calls for a 2 tone input during the alignment process....
>>>
>>> "Insert 2 audio signals into the MIC Connector
>>> 1.9kHz at 3mV
>>> 1.3kHz at 3mV
>>>
>>> Are there AF generators out ther that will generate more than one
>>> tone? The units I am seeing seem to generate just one tone (or at
>>> least the used stuff out ther that I could afford)
>>
>>Yep. To add to the other reponses, there are two-tone audio
>>generators used for two-tone control testing of commercial gear.
>>I've got one from my dad's estate that does two-tone-sequential
>>with adjustable duration for each tone, and two-tone-combined, and
>>single-tone. Thumbwheel freq(s) select from <100 cps to 9.999 kcs.
>>Pot adjustable tone durations (and delays), and levels.
>>It's probably 15-20 years old: Automated Industrial Electroncis
>>Corp., Model 2TSG-1.
>>
>>They must show up on eBay from time-to-time. Google claims several
>>'hits' there -- but a search on eBay at this time shows none.
>
> That two tone generator is only two sequential tones. It will not
> produce two tones at the same time. It is also pretty much of a square
> wave coming out of it too. No good for ssb testing.
> It was made for pager testing.
> 73
> Gary K4FMX

Right you are!! My apologies!
I just fired it up and verified: 2-tone, combined is _not_ an option.

(Damn! The older I get - the more wrong stuff I remember...)

One way to 'fix' a square wave is to push it through one or more
audio transformers.

73
Jonesy

```
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK
```

1215. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 17:39:19 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <sgrm11123l173ah05entegr6u2pua83si5@4ax.com>
Source record: 20246

On 22 Feb 2005 17:23:11 GMT, Allodoxaphobia <bit-bucket@config.com>
wrote:

>On Mon, 21 Feb 2005 17:55:14 -0500, Gary Schafer wrote:
>> On 21 Feb 2005 17:27:34 GMT, Allodoxaphobia <bit-bucket@config.com>
>> wrote:
>>
>>>On Sun, 20 Feb 2005 20:49:50 -0800, Sparky wrote:
>>>> The transmitter alignment instructions for my Icom 751A tranceiver
>>>> calls for a 2 tone input during the alignment process....
>>>>
>>>> "Insert 2 audio signals into the MIC Connector
>>>> 1.9kHz at 3mV
>>>> 1.3kHz at 3mV
>>>>
>>>> Are there AF generators out ther that will generate more than one
>>>> tone? The units I am seeing seem to generate just one tone (or at
>>>> least the used stuff out ther that I could afford)
>>>
>>>Yep. To add to the other reponses, there are two-tone audio
>>>generators used for two-tone control testing of commercial gear.
>>>I've got one from my dad's estate that does two-tone-sequential
>>>with adjustable duration for each tone, and two-tone-combined, and
>>>single-tone. Thumbwheel freq(s) select from <100 cps to 9.999 kcs.
>>>Pot adjustable tone durations (and delays), and levels.
>>>It's probably 15-20 years old: Automated Industrial Electroncis
>>>Corp., Model 2TSG-1.
>>>
>>>They must show up on eBay from time-to-time. Google claims several
>>>'hits' there -- but a search on eBay at this time shows none.
>>
>> That two tone generator is only two sequential tones. It will not
>> produce two tones at the same time. It is also pretty much of a square
>> wave coming out of it too. No good for ssb testing.
>> It was made for pager testing.
>> 73
>> Gary K4FMX
>
>Right you are!! My apologies!
>I just fired it up and verified: 2-tone, combined is _not_ an option.
>
>(Damn! The older I get - the more wrong stuff I remember...)
>
>One way to 'fix' a square wave is to push it through one or more

>audio transformers.
>
>73
>Jonesy

Automated Industrial Electronics had an option where you could tie two of those boxes together and generate two tones at once if I remember right. Pretty rare though.

They did also make a specific two tone generator box for ssb. They did have a pretty good sine wave out. You probably won't see many around though.

73
Gary K4FMX

1216. Re: pumping the T2-exciter board with a squarewave signal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 18:04:34 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <421b7432$0$10937$cc9e4d1f@news-text.dial.pipex.com>
Source record: 20247

"andreas magun" <achmagun@bluewin.ch> wrote in message
news:421b643a$1_1@news.bluewin.ch...
> Hi,
>
> I have assembled a T2 phasing exciter (KK7B) and looked
> at its output spectrum with a spectrum analyzer.
>
> When pumping the exciter with quadrature sine wave signals it
> works as expected (output power roughly 3 mW, sideband supression
> better than 40 db).
>
> However, when pumping with quadrature squarewave
> signals of approximately the same power, the output power
> drops by a factor of at least 20 db! I would have expected
> much more power, similar to that obtained with sine wave pumping.
>
> The quadrature phase signal was generated with a 74F74, the
> quadrature signals being attenuated to give a power of approx. 10 dbm and
> output impedances of approx. 50 Ohms.

Have you checked the RF power from your quadrature driver with resistive
loads? It can be very misleading if you measure it whilst connected to the
mixers.

Leon

1217. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 18:32:18 UTC
From: AB7RU <spamcatcher1@mparkes.com>
Message-ID: <vium11p5aatio9g1eohrvunvu29tbdqje2@4ax.com>
Source record: 20148

I wonder what kind of unit ICOM would use when they got to this step
in the transmitter alignment for my 751A when they are suppossed to
use the 2 tones... I emailed them, I'll post back what they say.
Mike AB7RU

>
>Automated Industrial Electronics had an option where you could tie two
>of those boxes together and generate two tones at once if I remember
>right. Pretty rare though.
>
>They did also make a specific two tone generator box for ssb. They did
>have a pretty good sine wave out. You probably won't see many around
>though.
>
>73
>Gary K4FMX

1218. Re: The FAQ (Well, Question 1, at least)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 19:04:32 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <421b8225.686140@news.iol.ie>
Source record: 20149
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote:

: Good description. The bit you missed is that those who always seem to rant
: about how hard it used to be are usually the least technically able.

do i have to re-post all your own howlings+moanings about the morse test ?

1219. Radio Problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 19:11:29 UTC
From: stryped@hotmail.com
Message-ID: <1109099489.957658.272690@l41g2000cwc.googlegroups.com>
Source record: 20150

I have an Alinco DR590. I replaced the battery in it. I can turn it off and back on and it stays on the channel I left it on. If I turn it off and leave it off for an hour or so it always goes back to 145.000 and 445.000.

It is constantly hooked up to my 12 volt battery.

What could htis be?

1220. Re: pumping the T2-exciter board with a squarewave signal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 19:52:13 UTC
From: andreas magun <achmagun@bluewin.ch>
Message-ID: <421b8cf0$1_1@news.bluewin.ch>
Source record: 20151

Leon Heller wrote:
> "andreas magun" <achmagun@bluewin.ch> wrote in message
Thanks for your reply,

I have checked the output power (voltage) from my quadrature driver
with a 50 Ohm load. The output voltage dropped by a factor 2,
indicating a good match. The same happened when I attached the
mixers (SBL-1) instead. I assumed that the LO-input resistance of an
SBL-1 at 7 MHz is close to 50 Ohm and purely resistive.

If there is not a plausible explanation for my results I will redo
the measurements, to exclude measuring errors.

Andreas

> news:421b643a$1_1@news.bluewin.ch...
>
>>Hi,
>>
>> I have assembled a T2 phasing exciter (KK7B) and looked
>>at its output spectrum with a spectrum analyzer.
>>
>>When pumping the exciter with quadrature sine wave signals it
>>works as expected (output power roughly 3 mW, sideband supression
>>better than 40 db).
>>
>>However, when pumping with quadrature squarewave
>>signals of approximately the same power, the output power
>>drops by a factor of at least 20 db! I would have expected
>>much more power, similar to that obtained with sine wave pumping.
>>
>>The quadrature phase signal was generated with a 74F74, the
>>quadrature signals being attenuated to give a power of approx. 10 dbm and
>>output impedances of approx. 50 Ohms.
>
>
> Have you checked the RF power from your quadrature driver with resistive
> loads? It can be very misleading if you measure it whilst connected to the
> mixers.
>
> Leon
>
>

1221. Re: Radio Problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 19:58:20 UTC
From: cl <clfurent@Yahoo.Com>
Message-ID: <s9MSd.46305$NC6.20298@newsread1.mlpsca01.us.to.verio.net>
Source record: 20152

I said in a previous post.....

He has been told this at least a dozen times in former posts..... in at least half a dozen news groups. He was given some very explicit directions on what to do. Failing that, he needs to send it to Alinco, since it seems all help has fallen on deaf ears or blind eyes. There is nothing wrong with asking for help, but this has reached the point of trolling.

cl

<stryped@hotmail.com> wrote in message
news:1109099489.957658.272690@l41g2000cwc.googlegroups.com...
>I have an Alinco DR590. I replaced the battery in it. I can turn it off
> and back on and it stays on the channel I left it on. If I turn it off
> and leave it off for an hour or so it always goes back to 145.000 and
> 445.000.
>
> It is constantly hooked up to my 12 volt battery.
>
> What could htis be?
>

1222. Re: Radio Problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 22:01:07 UTC
From: stryped@hotmail.com
Message-ID: <1109106583.174173.188500@g14g2000cwa.googlegroups.com>
Source record: 20153

cl wrote:
> I said in a previous post.....
>
> He has been told this at least a dozen times in former posts..... in
at
> least half a dozen news groups. He was given some very explicit
directions
> on what to do. Failing that, he needs to send it to Alinco, since it
seems
> all help has fallen on deaf ears or blind eyes. There is nothing
wrong with
> asking for help, but this has reached the point of trolling.
>
> cl
>
> <stryped@hotmail.com> wrote in message
> news:1109099489.957658.272690@l41g2000cwc.googlegroups.com...
> >I have an Alinco DR590. I replaced the battery in it. I can turn it
off
> > and back on and it stays on the channel I left it on. If I turn it
off
> > and leave it off for an hour or so it always goes back to 145.000
and
> > 445.000.
> >
> > It is constantly hooked up to my 12 volt battery.
> >
> > What could htis be?
> >

Told what? I said I replaced the battery and I did a hard reboot.

1223. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-22 23:42:00 UTC
From: LenAnderson@ieee.org
Message-ID: <1109115720.196691.176240@o13g2000cwo.googlegroups.com>
Source record: 20154

From: Paul Keinanen on Tues, Feb 22 2005 12:04 am:

>On Monday, 21 Feb 2005 16:00:56 -500, "Asimov"
><Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote:
>
>>>"Insert 2 audio signals into the MIC Connector
>>>1.9kHz at 3mV
>>>1.3kHz at 3mV
>
>>A piano even does semi-tones... 10 at a time, 11 if you use your
nose!
>
>With some kind of PC, search for a program that can generate multiple
>tones (e.g. some electronic instrument imitations) or use two programs
>capable of generating a sine wave and mix them together with the PC's
>audio mixer and run the combined signal to the sound card output and
>to an audio amplifier.
>
>The hardest part is getting some kind of calibrated output level.

Paul, I don't want to sound critical here, but this newsgroup is
about "homebrew." In that light, I'd suggest a simple quad
op-amp circuited as two phase-shift oscillators (pick the AF
desired) out of two of the op-amps in the quad package, use
the third as a resistive summing mixer. The summing mixer
will have a low output impedance capable of driving anything
from low-Z to high-Z. Almost any quad op-amp IC will work
if their open-loop frequency response unity gain is at least
1 MHz (which is to say just about all of them). Use whatever
DC supply is handy (within the op-amp supply ranges).

The fourth op-amp in the package is either spare or can be
made into a preamp with its output mixing in the summing
mixer. Basic op-amp circuits and how to calculate them
are mature subjects and found in many texts and on the
Internet.

I doubt there is a "typical" DVM (of the handheld variety)
that cannot reach into AF with calibration, made anywhere.
Checking the DVM specs is a must if it is unknown. Even
the ultra-cheap oscilloscopes have response beyond AF.
[I had one of the original Heathkit model O-1 'scopes
made from a kit a half century ago, reached 50 KHz+
before rolling off 3 db in response...gave it away a decade
ago... :-)]

"Hard to get a calibrated output?" I'll disagree if using the simple single-IC generator I've described in general. A phase-shift oscillator uses an R-C network which can be configured as a low-pass filter (R in series, C in shunt). Many textbooks have easy formulas for parts values. The AF R-C filter loss is a known quantity at 180 degree phase shift for oscillatory feedback...combine that with an op-amp gain set by resistor feedback (the DVM can check the resistance values rather accurately) and the output sine voltage will be constant. The summing mixer output can have a gain of unity if desired, or any value needed. The output into a microphone input can be done with a one- or two-stage resistive voltage divider (depending on parts values available). The ohmmeter part of a DVM can check the resistor values and the level into the microphone input can be calculated on paper.

No computer with sound card needed. Just a little perf-board assembly (if quick assembly desired), may be battery powered or by a cheap series regulator IC from a cheap wall-wart. The op-amps insure low distortion at AF from all the negative feedback setting the closed-loop gains low. Output AF voltage stability will be good if the DC supply is stable.

For those that don't want to go through the hassle of calculating anything, use a DTMF assembly from a junked telephone (of the North American variety, haven't checked other world regions). They automatically generate two simultaneous audio tones out of a choice of 8 frequencies; four frequencies in a "low band," four in a "high band" the "bands" on either side of about 1 KHz.

If I remember correctly from a project of three decades ago, the Bell System specifications required a fairly pure sine for each of the tones selected. Don't have the specs now. As I recall, the early Western Electric telephone sets used only two transistors for DTMF generation so a homebuilt two-tone generator is NOT difficult to make from scratch.

LenAnderson@ieee.org

retired (from regular hours) electronic engineer person

1224. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 00:04:30 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <44in11tms27l5e6s5c6un9ombha0t354rg@4ax.com>
Source record: 20155

I can't imagine what they want a two tone signal for in alignment.
Maybe to set the alc level?

To do much else with it you also need a spectrum analyzer.

73
Gary K4FMX

On Tue, 22 Feb 2005 10:32:18 -0800, AB7RU <spamcatcher1@mparkes.com>
wrote:

>I wonder what kind of unit ICOM would use when they got to this step
>in the transmitter alignment for my 751A when they are suppossed to
>use the 2 tones... I emailed them, I'll post back what they say.
>Mike AB7RU
>
>>
>>Automated Industrial Electronics had an option where you could tie two
>>of those boxes together and generate two tones at once if I remember
>>right. Pretty rare though.
>>
>>They did also make a specific two tone generator box for ssb. They did
>>have a pretty good sine wave out. You probably won't see many around
>>though.
>>
>>73
>>Gary K4FMX

1225. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 00:51:08 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <0sQSd.34516$xt.29126@fed1read07>
Source record: 20156

It is a standard transmitter test for IMD determination
See URL:
http://rfdesign.com/mag/radio_twotone_imd_measurement/

--
Caveat Lector (Reader Beware)
Help The New Hams
Someone Helped You
Or did You Forget That ?

"Gary Schafer" <gaschafer@comcast.net> wrote in message
news:44in11tms27l5e6s5c6un9ombha0t354rg@4ax.com...
>I can't imagine what they want a two tone signal for in alignment.
> Maybe to set the alc level?
>

1226. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 01:59:12 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <drnn11ljm0ghckdq8o0ius2lism5v3s9ao@4ax.com>
Source record: 20157

On 22 Feb 2005 15:42:00 -0800, LenAnderson@ieee.org wrote:

> Paul, I don't want to sound critical here, but this newsgroup is
> about "homebrew." In that light, I'd suggest a simple quad
> op-amp circuited as two phase-shift oscillators (pick the AF
> desired) out of two of the op-amps in the quad package, use
> the third as a resistive summing mixer.

Did I miss something or are you suggesting using a Wien bridge circuit as an audio oscillator ? How should the amplitude be stabilised in order to get nearly a sine wave output ?

While I guess that quite a few radio amateurs with professional background in electronics are following this newsgroup, do not forget that most young radio amateurs (with limited test equipments) are much more used to playing with computer programming and computer hardware than working with circuit design.

Both the traditional approach as well as some more day to day approach is required, in order to make amateur radio a viable hobby even in the future.

Paul OH3LWR

1227. FS / FA : ICOM IC-251 A/E SERVICE MANUAL / MAINTANCE MANUAL

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 04:00:26 UTC
From: Greg <gkm@deakin.edu.au.removethisbit>
Message-ID: <421bffd9$0$15545$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 20158

I Have ICOM IC-251 A / E SERVICE / MAINTANANCE Manual on CD. The CD
contains over 80 Pages of high resoulution(600DPI) scanned images from
Icom's service/maintance manual for this rig(Over 300Meg).
Good info for Repair/Realignment of this radio.
e-mail me
wecreate@iinet.net.au
or check out EBAY australia
http://cgi.ebay.com.au/ws/eBayISAPI.dll?ViewItem&category=1502&item=5754225238&rd=1

1228. Re: pumping the T2-exciter board with a squarewave signal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 04:28:27 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <421c066a$0$10939$cc9e4d1f@news-text.dial.pipex.com>
Source record: 20159

"andreas magun" <achmagun@bluewin.ch> wrote in message
news:421b8cf0$1_1@news.bluewin.ch...
> Leon Heller wrote:
>> "andreas magun" <achmagun@bluewin.ch> wrote in message
> Thanks for your reply,
>
> I have checked the output power (voltage) from my quadrature driver with
> a 50 Ohm load. The output voltage dropped by a factor 2,
> indicating a good match. The same happened when I attached the
> mixers (SBL-1) instead. I assumed that the LO-input resistance of an SBL-1
> at 7 MHz is close to 50 Ohm and purely resistive.

Diode mixers make a real mess of the input LO signal, if you look at what
happens to it with a 'scope. They have to be fed from a 50 ohm resistive
source, but they are not really resistive themselves.

Leon

1229. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 08:11:08 UTC
From: Robert Baer <robertbaer@earthlink.net>
Message-ID: <421C3AE4.DCF2F041@earthlink.net>
Source record: 20160
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

```
"Watson A.Name - \"Watt Sun, the Dark Remover\"" wrote:
>
> "Robert Baer" <robertbaer@earthlink.net> wrote in message
> news:421AE92D.6F121965@earthlink.net...
> > Ol' Duffer wrote:
> > >
> > > Their pricing doth truly suck sometimes, but on the good
> > > side they stock most of the stuff in their catalogs (and
> > > then some), as opposed to some "other" distributors whose
> > > catalogs might be characterized as vaporware.
> > >
> > > I wonder sometimes how much they spend printing catalogs
> > > every two months, which always seemed excessive to me.
> > > I'd have thought twice a year would be plenty.
> >
> > If you noticed, each newer catalog has *more* parts; more brands,
> more
> > variety, more types, etc.
>
> ... Higher prices, less quantity price breaks, etc., etc. Oh, did I
> mention, higher prices..
>
> I just love wotking on the PCs in our Purchasing Dept. :-/ They have a
> whole shelf full of janitorial supply catalogs. Just think, if we could
> only gwt all these catalogs and paper towels recycled, we'd save a whole
> continent of forests..

...and if all spam could be stopped, trillions of dollars per year would
be saved, as well as all of the power required to run all of the
involved computers.
```

1230. SSB demodulator

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 10:27:53 UTC
From: mrkrishnan@gmail.com
Message-ID: <1109154473.078854.291410@g14g2000cwa.googlegroups.com>
Source record: 20161

Hello,

I am trying to implement an SSB phasing receiver using the GNU Radio
toolkit [1]. I do not have an RF frontend yet, so I had to depend on
those fortunate folks who had the required hardware to get some real
world samples. They samples are captured as given below:

```
50.25 mhz
cos
---- x ------- I
|
|
fc=50.30Mhz ADC ->
|
|
---- x ------- Q
sin
50.25 mhz
```

The LSB signal which was transmitted at 50.30 mhz is digitally
downconverted with an IF of 50.25mhz. The complex samples I have is
centered at 50 khz. Now
I do exactly as described in the KK7B article on phasing receiver[2].
The I and Q signals are downconverted to baseband, and lowpass
filtered. The I channel is delayed and Q channel is passed thru hilbert
filter.

I get the audio output, when the I and Q are subtracted. Fine. But I
get audio even when they are summed together!!! i.e There is no
sideband suppression. I am wondering what the problem is. I looked at
the hilbert transformer freq response. It looks okay (allpass, with
nulls at zero and fs/2), could this null at zero cause a problem,
because the input is already at baseband?

Any advise/help will be greatly appreciated.

Thanks
Ramakrishnan

[1] htp://www.gnu.org/software/gnuradio/
[2] http://www.arrl.org/tis/info/pdf/t9301032.pdf

1231. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 12:06:26 UTC
From: Bill M <dontspamoleexray@coqui.net>
Message-ID: <111ose2qqn0n1b0@corp.supernews.com>
Source record: 20162
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Robert Baer wrote:

>>I just love wotking on the PCs in our Purchasing Dept. :-/ They have a
>>whole shelf full of janitorial supply catalogs. Just think, if we could
>>only gwt all these catalogs and paper towels recycled, we'd save a whole
>>continent of forests..
>
>
> ...and if all spam could be stopped, trillions of dollars per year would
> be saved, as well as all of the power required to run all of the
> involved computers.

Think of the unemployment that would result.
:)

-Bill

1232. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 12:52:27 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <421C7C86.BFF8075F@earthlink.net>
Source record: 20163
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Bill M wrote:
>
> Robert Baer wrote:
> >
> > ...and if all spam could be stopped, trillions of dollars per year would
> > be saved, as well as all of the power required to run all of the
> > involved computers.
>
> Think of the unemployment that would result.
> :)
>
> -Bill

Think about all the extra bandwidth on the net after the spam died!
So what if some sleaze balls stare to death? They should have had
honest jobs like cleaning toilets and digging ditches.

--
Beware of those who suffer from delusions of adequacy!

Michael A. Terrell
Central Florida

1233. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 13:17:07 UTC
From: Bill M <dontspamoleexray@coqui.net>
Message-ID: <111p0illvkldv05@corp.supernews.com>
Source record: 20164
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Michael A. Terrell wrote:

> Bill M wrote:
>
>>Robert Baer wrote:
>>
>>>...and if all spam could be stopped, trillions of dollars per year would
>>>be saved, as well as all of the power required to run all of the
>>>involved computers.
>>
>>Think of the unemployment that would result.
>>:)
>>
>>-Bill
>
>
> Think about all the extra bandwidth on the net after the spam died!
> So what if some sleaze balls stare to death? They should have had
> honest jobs like cleaning toilets and digging ditches.
>

What about all the honest workers like power company employees who have
a job thanks to spam? Should they also "stare to death"?
:)
-Bill

1234. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 13:32:44 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <421C85F5.7BA648F6@earthlink.net>
Source record: 20165
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Bill M wrote:
>
> Michael A. Terrell wrote:
> >
> > Think about all the extra bandwidth on the net after the spam died!
> > So what if some sleaze balls stare to death? They should have had
> > honest jobs like cleaning toilets and digging ditches.
> >
>
> What about all the honest workers like power company employees who have
> a job thanks to spam? Should they also "stare to death"?
> :)
> -Bill

No, just let them catch up on maintenance that gets pushed aside, or
let them go to work for the cable company! :) They are still doing
repairs in Ocala from last year's hurricanes and its almost time for
hurricane season again. I saw some wires still on the ground along I-75
near Gainsville a couple weeks ago that went down during Frances.
Progress energy just repaired a damaged pole near my house that was
damaged during Frances.

--
Beware of those who suffer from delusions of adequacy!

Michael A. Terrell
Central Florida

1235. Re: SSB demodulator

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 15:37:41 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1109173061.456027.314890@g14g2000cwa.googlegroups.com>
Source record: 20166

> But I get audio even when
> they are summed together!!! i.e > There is no sideband suppression.

There is no sideband suppression with I/Q demodulation until you get your carrier synchronized to the transmitter's carrier. If there's no mechanism for doing this, you don't get sideband suppresion through I/Q demodulation. (Well, you may experience rapid fading if you're within a few Hz, but I don't think you want that!)

There are some homebrewers who do not-completely-suppressed carrier with synchronous detection. It's sort of SSB but not traditional ham radio SSB. In traditional ham radio SSB you try to suppress as much of the carrier as you can, and this won't help you synchronously demodulate it.

Without that synchronization, just use a bandpass (IF+300 Hz to IF+3000 Hz for example for USB).

Tim.

1236. Re: pumping the T2-exciter board with a squarewave signal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 15:52:33 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <uj9p11tik1l6dde0infff0o3kvque22u4j@4ax.com>
Source record: 20167

On Wed, 23 Feb 2005 04:28:27 -0000, "Leon Heller"
<leon_heller@hotmail.com> wrote:

>Diode mixers make a real mess of the input LO signal, if you look at what
>happens to it with a 'scope. They have to be fed from a 50 ohm resistive
>source, but they are not really resistive themselves.

yes they do. I've also used square wave drive and found that you have
to be sure your really driving them with 7-10DBM. A 74F74 really
can't do that though it looks that way. I found I had to use a
parallel group of 74HCT244 buffers (minimum of three) to get good
drive.

Allison

1237. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 15:59:04 UTC
From: Bill M <dontspamoleexray@coqui.net>
Message-ID: <111pa2fi8mbepa8@corp.supernews.com>
Source record: 20168
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Michael A. Terrell wrote:

> I saw some wires still on the ground along I-75
> near Gainsville a couple weeks ago that went down during Frances.
> Progress energy just repaired a damaged pole near my house that was
> damaged during Frances.

Bummer isn't it? One of the unforeseen costs of spam.

-Bill

1238. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 16:19:45 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <111pb8npe88fr2a@corp.supernews.com>
Source record: 20169
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Why did I know in my gut that a decent conversation on a relevant topic
would degenerate into the usual bunch of crap within a couple of days?

Jim

>
> ...and if all spam could be stopped, trillions of dollars per year would
> be saved, as well as all of the power required to run all of the
> involved computers.

1239. Re: SSB demodulator

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 16:56:42 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <cvickaouj1@theodyn.ncf.ca>
Source record: 20170

"Tim Shoppa" (shoppa@trailing-edge.com) writes:
>> But I get audio even when
>> they are summed together!!! i.e > There is no sideband suppression.
>
> There is no sideband suppression with I/Q demodulation until you get
> your carrier synchronized to the transmitter's carrier. If there's no
> mechanism for doing this, you don't get sideband suppresion through I/Q
> demodulation. (Well, you may experience rapid fading if you're within
> a few Hz, but I don't think you want that!)
>
> There are some homebrewers who do not-completely-suppressed carrier
> with synchronous detection. It's sort of SSB but not traditional ham
> radio SSB. In traditional ham radio SSB you try to suppress as much of
> the carrier as you can, and this won't help you synchronously
> demodulate it.
>
> Without that synchronization, just use a bandpass (IF+300 Hz to IF+3000
> Hz for example for USB).
>
> Tim.
>

But he's not talking about synchronized demodulation, he's talking about
SSB demodulation.

Phasing demodulation was around before "synchronous detection" was described
in CQ in the late fifties. Where the carrier comes from is irrelevant, it's
about the proper combination of phase shifts to select which sideband
is being received. Add the outputs, and you get one sideband, subtract
them and you get the other.

Synchronous detection merely adds a means of locking the locally generated
"carrier" to the incoming signal. And of course, one can have sync
detection without selectable sideband.

But he's talking about SSB, and there's neither a carrier, nor two
sidebands to sync to.

But if he is doing this right, he should not receive the incoming sideband
if he has the combinations set up for receiving the other sideband.

I have no idea what's wrong, but this has nothing to do with synchronous
detection.

Michael VE2BVW

1240. Re: pumping the T2-exciter board with a squarewave signal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 18:26:35 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <421ccad9$0$10950$cc9e4d1f@news-text.dial.pipex.com>
Source record: 20171

<nospam@nouce.bellatlantic.net> wrote in message
news:uj9p11tik1l6dde0infff0o3kvque22u4j@4ax.com...
> On Wed, 23 Feb 2005 04:28:27 -0000, "Leon Heller"
> <leon_heller@hotmail.com> wrote:
>
>>Diode mixers make a real mess of the input LO signal, if you look at what
>>happens to it with a 'scope. They have to be fed from a 50 ohm resistive
>>source, but they are not really resistive themselves.
>
> yes they do. I've also used square wave drive and found that you have
> to be sure your really driving them with 7-10DBM. A 74F74 really
> can't do that though it looks that way. I found I had to use a
> parallel group of 74HCT244 buffers (minimum of three) to get good
> drive.

I suppose what the OP needs is the square wave equivalent of a +7 dBm sine
wave. I'm not sure what that is.

Leon

1241. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 19:44:10 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <fglp119kmv60vjgr871ek1orn547nta752@4ax.com>
Source record: 20172

Yes I know it is a standard IMD test. :>) That is why I asked what
they were doing with two tones without a spectrum analyzer.

You left out the last part of my post.
"To do much else with it you also need a spectrum analyzer."

73
Gary K4FMX

On Tue, 22 Feb 2005 16:51:08 -0800, "Caveat Lector" <CL@barahmas.com>
wrote:

>It is a standard transmitter test for IMD determination
>See URL:
>http://rfdesign.com/mag/radio_twotone_imd_measurement/
>
>--
>Caveat Lector (Reader Beware)
>Help The New Hams
>Someone Helped You
>Or did You Forget That ?
>
>
>
>"Gary Schafer" <gaschafer@comcast.net> wrote in message
>news:44in11tms27l5e6s5c6un9ombha0t354rg@4ax.com...
>>I can't imagine what they want a two tone signal for in alignment.
>> Maybe to set the alc level?
>>
>

1242. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 19:44:40 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <421CDD24.34F5AD02@earthlink.net>
Source record: 20173
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

RST Engineering wrote:
>
> Why did I know in my gut that a decent conversation on a relevant topic
> would degenerate into the usual bunch of crap within a couple of days?
>
> Jim

I guess it finally degenerated enough for you to join in? :)

Actually, with less spam on the net you could brows the vendor's
websites faster because there would be more bandwidth free for real
browsing.

--
Beware of those who suffer from delusions of adequacy!

Michael A. Terrell
Central Florida

1243. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 19:57:12 UTC
From: dplatt@radagast.org
Message-ID: <111po0ot0au3sf8@corp.supernews.com>
Source record: 20174

In article <fglp119kmv60vjgr871ek1orn547nta752@4ax.com>,
Gary Schafer <gaschafer@comcast.net> wrote:

>Yes I know it is a standard IMD test. :>) That is why I asked what
>they were doing with two tones without a spectrum analyzer.
>
>You left out the last part of my post.
>"To do much else with it you also need a spectrum analyzer."

Here's my guess: it's a standard, which would be available in almost
any professional radio test lab.

Hence, it may simply be a convenient signal to use when performing
ALC and audio-pathway calibrations.

As is sometimes said, "The best thing about a standard is, sometimes,
that it's a standard. If it happens to be a _good_ standard, so much
the better!"

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1244. Re: pumping the T2-exciter board with a squarewave signal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 20:25:56 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <421ce6d3$0$2761$cc9e4d1f@news-text.dial.pipex.com>
Source record: 20175

"Leon Heller" <leon_heller@hotmail.com> wrote in message
news:421ccad9$0$10950$cc9e4d1f@news-text.dial.pipex.com...
> <nospam@nouce.bellatlantic.net> wrote in message
> news:uj9p11tik1l6dde0infff0o3kvque22u4j@4ax.com...
>> On Wed, 23 Feb 2005 04:28:27 -0000, "Leon Heller"
>> <leon_heller@hotmail.com> wrote:
>>
>>>Diode mixers make a real mess of the input LO signal, if you look at what
>>>happens to it with a 'scope. They have to be fed from a 50 ohm resistive
>>>source, but they are not really resistive themselves.
>>
>> yes they do. I've also used square wave drive and found that you have
>> to be sure your really driving them with 7-10DBM. A 74F74 really
>> can't do that though it looks that way. I found I had to use a
>> parallel group of 74HCT244 buffers (minimum of three) to get good
>> drive.
>
> I suppose what the OP needs is the square wave equivalent of a +7 dBm sine
> wave. I'm not sure what that is.

To answer my own post: I think it should be 1V p-p for the equivalent square
wave, which is the same power as a 0.5V rms sine wave into 50 ohms (+7 dBm).

Leon

1245. Re: SSB demodulator

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 22:34:08 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <sv0q11t1edqdcon7o2l8uso7lh7vgmdd1t@4ax.com>
Source record: 20176

On 23 Feb 2005 07:37:41 -0800, "Tim Shoppa" <shoppa@trailing-edge.com>
wrote:

>> There are some homebrewers who do not-completely-suppressed carrier
>with synchronous detection. It's sort of SSB but not traditional ham
>radio SSB. In traditional ham radio SSB you try to suppress as much of
>the carrier as you can, and this won't help you synchronously
>demodulate it.

I got the impression he was using an I-Q system to implment a hilbert
transform. The result is an image suppressing system that can
demodulate SSB with a baseband IF.

Essentually what a KK7B R2/miniR2/R2pro(RX) and the companion T2
(transmit) using aboth a 90degree I-Q RF path and an +45 and -45
degree audio processing path.

Allison

1246. Re: SSB demodulator

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 22:46:18 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <6a1q11hlv542gsjkhigipnglu4dmd9g9d9@4ax.com>
Source record: 20177

On 23 Feb 2005 02:27:53 -0800, mrkrishnan@gmail.com wrote:

>The LSB signal which was transmitted at 50.30 mhz is digitally
>downconverted with an IF of 50.25mhz. The complex samples I have is
>centered at 50 khz. Now

As someone running a 6m analog phasing rig what your describing makes
little sense to me.

Will not work unless you down covert again to baseband.

The signal you should be looking at is SSB rf source at 50.250 with
a 90 degree I-Q local osc at 50.250 and an audio baseband. Then
sample at greater than 20Ks/S with two channels and process them by
placeing phase delay of 90 degrees on one path and the and summing
them.

>I do exactly as described in the KK7B article on phasing receiver[2].
>The I and Q signals are downconverted to baseband, and lowpass
>filtered. The I channel is delayed and Q channel is passed thru hilbert
>filter.

No it is not.

>I get the audio output, when the I and Q are subtracted. Fine. But I
>get audio even when they are summed together!!! i.e There is no
>sideband suppression. I am wondering what the problem is. I looked at
>the hilbert transformer freq response. It looks okay (allpass, with
>nulls at zero and fs/2), could this null at zero cause a problem,
>because the input is already at baseband?

Unless your considering baseband signal desired to be the 50khz signal
then what you've done is created an image reject mixer with a 50khz
output and not an SSB detector. The image reject mixer case means
your signal is in the output passband at LO+ 50khz but not at
LO-50khz. You'd still have to repeat the process again to get from
50khz to recovered audio with a 50khz digitally derived LO and mixing
process. You can do that. In the end your doing something that
needs only to be done once. Look at EMDRF [Experimental Methods in RF
design] doing SSB in DSP is coverd there.

Allison

1247. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 23:35:04 UTC
From: LenAnderson@ieee.org
Message-ID: <1109201704.617417.180680@z14g2000cwz.googlegroups.com>
Source record: 20178

>On 22 Feb 2005 15:42:00 -0800, LenAnderson@ieee.org wrote:
>
>> Paul, I don't want to sound critical here, but this newsgroup is
>> about "homebrew." In that light, I'd suggest a simple quad
>> op-amp circuited as two phase-shift oscillators (pick the AF
>> desired) out of two of the op-amps in the quad package, use
>> the third as a resistive summing mixer.
>
>Did I miss something or are you suggesting using a Wien bridge circuit
>as an audio oscillator ? How should the amplitude be stabilised in
>order to get nearly a sine wave output ?

I suggested an R-C Phase Shift oscillator. With a resistor
feedback to set the gain of the op-amp to just overcome the
loss in the R-C network (3 caps, same value; 3 resistors,
same value) feeding back to itself. It isn't much used but it
has appeared in nearly all textbooks I've got. With stable
supply voltages, the sinewave output will be fairly pure and
reasonably constant in amplitude.

>While I guess that quite a few radio amateurs with professional
>background in electronics are following this newsgroup, do not forget
>that most young radio amateurs (with limited test equipments) are much
>more used to playing with computer programming and computer hardware
>than working with circuit design.

Well that may be, but consider that a personal computer
CANNOT build all of the simple sources (and attenuator)
necessary for a two-tone IMD test of a transmitter.

Don't get me wrong on computers. I think they are one
of the miracles of technology of the last millennium. I've
written my own circuit analysis program(s) and wrote a
filter component synthesis (and response analysis)
program on my PC and have used them extensively. They
are excellent in SIMULATING a given circuit (with the
proper modeling). Computers cannot build a circuit and
sometimes need extra, out-board circuits to function in
a particular application (a 40 db attenuator for example).

A single DVM and a hot soldering iron are basic tools
for any hobby electronics workshop, but they have
limitations on what they can do. If I wanted a "first
look" on the purity of a sinewave, I'd check it with an
oscilloscope first. A DVM would read the average (or
whatever) amplitude, depending on its AC limitations,

but that's about the limit. A simple oscilloscope doesn't cost the same as a couple of mortgage payments but it WILL show the purity of a generated sinewave, something necessary to prove that an IMD two-tone test source IS good enough for test purposes. There are limitations on what a particular hobby workshop can do; sometimes what one wants to do conflicts with what must be there to accomplish something. That alone will determine what "the future" planning must be.

>Both the traditional approach as well as some more day to day approach
>is required, in order to make amateur radio a viable hobby even in the
>future.

I don't know what the "traditional approach" is in regards to a hobby activity (homebrewing IS a hobby activity). I've been a hobbyist in various electronics since 1947, a computer programming hobbyist since 1976. Doing some things requires more workshop equipment than a DVM and a hot soldering iron. Doing some things requires self-education into the whichness of the what in circuitry in order to accomplish something. That's just the way things are in a technologically oriented hobby...like amateur radio activity beyond just using radio equipment to talk to people far away.

LenAnderson@ieee.org

1248. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 23:42:26 UTC
From: Bill M <dontspamoleexray@coqui.net>
Message-ID: <111q5741lhnbfd7@corp.supernews.com>
Source record: 20179

LenAnderson@ieee.org wrote:

>
> Well that may be, but consider that a personal computer
> CANNOT build all of the simple sources (and attenuator)
> necessary for a two-tone IMD test of a transmitter.

Might not be able to 'build' a tone generator but can certainly generate
a pair of tones...adjustable to boot.

-Bill

1249. MFJ-8100

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-23 23:44:42 UTC
From: sipa <sipa@hrtv.net>
Message-ID: <cvj4l4$ac7$1@ls219.htnet.hr>
Source record: 20180

Anyone have a homebrew project or just schematics of this shortwave reciever (mfj-8100)?
Pls give me a link :)

tnx!
73 de 328-SU-035

1250. Re: pumping the T2-exciter board with a squarewave signal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-24 07:07:49 UTC
From: andreas magun <achmagun@bluewin.ch>
Message-ID: <421d7cc4$1_2@news.bluewin.ch>
Source record: 20181

>
> To answer my own post: I think it should be 1V p-p for the equivalent square
> wave, which is the same power as a 0.5V rms sine wave into 50 ohms (+7 dBm).
>
> Leon
>
>

1 Vpp square wave into 50 Ohms would be +13 dbm. What is the maximum
power a SBL-1 mixer will survive?

Andreas

1251. Re: SSB demodulator

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-24 08:14:25 UTC
From: rkrishnan <mrkrishnan@gmail.com>
Message-ID: <1109232865.335892.7390@g14g2000cwa.googlegroups.com>
Source record: 20182

nospam@nouce.bellatlantic.net wrote:
>
> Unless your considering baseband signal desired to be the 50khz
signal
> then what you've done is created an image reject mixer with a 50khz
> output and not an SSB detector. The image reject mixer case means
> your signal is in the output passband at LO+ 50khz but not at
> LO-50khz. You'd still have to repeat the process again to get from
> 50khz to recovered audio with a 50khz digitally derived LO and mixing
> process. You can do that. In the end your doing something that
> needs only to be done once. Look at EMDRF [Experimental Methods in
RF
> design] doing SSB in DSP is coverd there.

Thanks for the ideas. I will try to acquire EMFRD and look for more
details.

I am not having an RF frontend, the samples I have are in a file
captured by someone else and they are centered around 50 khz. I am
doing the mixing again to baseband, so yes, I am unnecessarily doing it
twice instead of once, but since I have no access to hardware now, I
have no other option. I will verify the waveforms at various points
again and get back.

Thanks again for the helpful comments. It was a bit confusing for me
initially to work with the complex digitally downconverted samples. I
think a bit of confusion still persists. I will go through the whole
thing again.

Thanks
Ramakrishnan

1252. Re: SSB demodulator

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-24 10:11:45 UTC
From: David J Windisch <davidjw@cinci.rr.com>
Message-ID: <BLhTd.7074$Sa6.765@fe2.columbus.rr.com>
Source record: 20183

Look at the data at

sdradio.org

73, Dave, N3HE

"rkrishnan" <mrkrishnan@gmail.com> wrote in message
news:1109232865.335892.7390@g14g2000cwa.googlegroups.com...
> nospam@nouce.bellatlantic.net wrote:
>>
>> Unless your considering baseband signal desired to be the 50khz
> signal
>> then what you've done is created an image reject mixer with a 50khz
SNIP

1253. Re: pumping the T2-exciter board with a squarewave signal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-24 10:47:33 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <421db0c5$0$10951$cc9e4d1f@news-text.dial.pipex.com>
Source record: 20184

"andreas magun" <achmagun@bluewin.ch> wrote in message
news:421d7cc4$1_2@news.bluewin.ch...
>>
>> To answer my own post: I think it should be 1V p-p for the equivalent
>> square wave, which is the same power as a 0.5V rms sine wave into 50 ohms
>> (+7 dBm).
>>
>> Leon
>
> 1 Vpp square wave into 50 Ohms would be +13 dbm.

I don't think it is, the average value (same as RMS) will be 0.5V, which is
+7 dBm.

What is the maximum
> power a SBL-1 mixer will survive?

I think it will take +13 dBm, performance will suffer if it is overdriven.

73, Leon

--
Leon Heller, G1HSM
http://www.geocities.com/leon_heller

1254. Re: pumping the T2-exciter board with a squarewave signal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-24 11:05:46 UTC
From: Verizon News <joe@roccis.com>
Message-ID: <eyiTd.30724$ya6.12939@trndny01>
Source record: 20185

Keepthis in mind:
+7dbm (the recommended RMS input for a level 7 mixer) is about 1.5Vpp sine. This holds up to reason, as a DBM has two diode-drops that the LO must overcome in order to switch the diodes properly. Therefore, if you use a square wave, you also need to supply about 1.5Vpp, or the diodes won't switch.

There are two common misconceptions many people hold about these devices. One is that they are inherently 50 ohm devices. In reality you will only see 50 ohms on a given port if the other two ports are also terminated in 50 ohms. You could run the device just as well at 75 ohms if you keep it balanced properly. Also, many people think that the LO input is power dependent. This only partially true. It's really voltage dependent, requiring sufficient drive voltage to turn on the diodes and pump an amount of current through them that is large compared to the expected input RF signal.

There is no magic in these things. They're just diode DPDT switches that reverse the polarity of the RF signal at a rate determined by the LO frequency. This is essentially the same as multiplying the RF signal by +/-1 at the LO rate. Simple math shows that this multiplication process yields the sum and difference frequency products. The more symmetrical the LO switching waveform, the more perfect the multiplication. This is why square wave LO drive is preferred.

Joe
W3JDR

"andreas magun" <achmagun@bluewin.ch> wrote in message
news:421d7cc4$1_2@news.bluewin.ch...
>>
>> To answer my own post: I think it should be 1V p-p for the equivalent
>> square wave, which is the same power as a 0.5V rms sine wave into 50 ohms
>> (+7 dBm).
>>
>> Leon
>
> 1 Vpp square wave into 50 Ohms would be +13 dbm. What is the maximum power
> a SBL-1 mixer will survive?
>
> Andreas

1255. QRP 7 mw

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-24 13:21:02 UTC
From: Peter Barbella <nonobar@verizon.net>
Message-ID: <2xkTd.30756$ya6.20070@trndny01>
Source record: 20186

I've built a little 80 meter transmitter that seems to be putting out about
7 milliwatts. By my caculation, that should be good for about 40 miles.
Anyone have any experience with low a power output?

Pete
KB1LZH

1256. Re: pumping the T2-exciter board with a squarewave signal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-24 14:58:25 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <ctpr11do3h76ll4pus72614atnbqv77im9@4ax.com>
Source record: 20187

On Thu, 24 Feb 2005 11:05:46 GMT, "Verizon News" <joe@roccis.com>
wrote:

>Keepthis in mind:
>+7dbm (the recommended RMS input for a level 7 mixer) is about 1.5Vpp sine.
>This holds up to reason, as a DBM has two diode-drops that the LO must
>overcome in order to switch the diodes properly. Therefore, if you use a
>square wave, you also need to supply about 1.5Vpp, or the diodes won't
>switch.
>
>There are two common misconceptions many people hold about these devices.
>One is that they are inherently 50 ohm devices. In reality you will only see
>50 ohms on a given port if the other two ports are also terminated in 50
>ohms. You could run the device just as well at 75 ohms if you keep it
>balanced properly. Also, many people think that the LO input is power
>dependent. This only partially true. It's really voltage dependent,
>requiring sufficient drive voltage to turn on the diodes and pump an amount
>of current through them that is large compared to the expected input RF
>signal.
>
>There is no magic in these things. They're just diode DPDT switches that
>reverse the polarity of the RF signal at a rate determined by the LO
>frequency. This is essentially the same as multiplying the RF signal by +/-1
>at the LO rate. Simple math shows that this multiplication process yields
>the sum and difference frequency products. The more symmetrical the LO
>switching waveform, the more perfect the multiplication. This is why square
>wave LO drive is preferred.
>
>Joe
>W3JDR

Thank you. I've worked with them for years and the number of myths
are amazing. An SBL-1 is an amazingly rugged device and +13Dbm
is not a problem.

One problem with using digital logic, especially ttl to drive them is
that TTL is a current and voltage limited output with a variable
output impedence. A logic low can sink more current that a logic high
can source and that means significant non-linear behavour.
Also bipolar TTL logic high is not 5V, typically is around 3.2-3.5V at
rated current load and worse at higher currrent. When you drive a
DBM with it that tends to show as degraded signals, spurs, level
problems. When I drive a DBM with logic I use CMOS drivers as they
offer near symetrical drive for both levels and better overall output
voltage. So it's important to know the driver can supply the current

(about 30ma P-P) and the average 74F74 can do that only marginally and if there is any attenuation between the '74 and the DBM it's not going to work. Buffer it with a 74CH244 (octal buffer) with 4 buffers in parallel and you can easily push the 60maP-P at 5VP-P and allow for a 50ohm 5db attenuator for a more correct level. However, pay attention to grounding and bypassing the CMOS under those uses they can send annoying high current spikes into the power sources.

Allison

1257. Re: QRP 7 mw

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-24 15:46:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <111rtneffbp8icd@corp.supernews.com>
Source record: 20188

I don't have experience with a power level that low, but I'm curious
about what assumptions you made about atmospheric noise and antenna gain
to arrive at the 40 mile figure.

Roy Lewallen, W7EL

Peter Barbella wrote:
> I've built a little 80 meter transmitter that seems to be putting out about
> 7 milliwatts. By my caculation, that should be good for about 40 miles.
> Anyone have any experience with low a power output?
>
> Pete
> KB1LZH
>
>

1258. Re: Are there multi-tone AF generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-24 18:28:20 UTC
From: John Walton <jdwalton@comcast.net>
Message-ID: <NoednVXpSMPFhoPfRVn-jA@comcast.com>
Source record: 20189

I can get down to 0.01% THD with 4th order active filtering of a square wave -- as measured on an HP339 THD analyzer. For the fellow who had asked the original question I suggested the switched cap filter -- but there is always going to be some noise clocking through. Using the interactive filter software on Analog Devices or Texas Instruments website is pretty easy, but necessitates more parts.

Sorry not to have included "odd harmonics" but I guess you know what I meant.

"Tim Wescott" <tim@wescottnospamdesign.com> wrote in message news:111k4knbl8tcdf9@corp.supernews.com...
> Michael Black wrote:
>
> > "John Walton" (jdwalton@comcast.net) writes:
> >
> >>A Square Wave is all the harmonics of the fundamental, so a 1.9kHz square
> >>wave will have all the harmonics which will complicate the measurement --
> >>
> >>If you take a square wave and filter it you can get a relatively low
> >>distortion fundamental -- it's much easier than you might think -- use an
> >>NE556 dual timer to generate 1.9kHz and 1.3kHz square waves, combine with
> >>10k resistors into an opamp buffer, filter with an MF-10 (now upgraded to
> >>LMF100) switched capacitor low pass filter -- voila.
> >>
> >
> > And why not start with a sinewave oscillator in the first place? That's
> > the way it used to be done, two transistors each making up phase shift
> > oscillators.
>
> A square wave oscillator followed by a filter is, in some ways, easier
> to implement than a phase-shift oscillator -- particularly if you want
> well controlled frequency and amplitude without having to use
> sophisticated AGC circuits.
> >
> > A sqarewave won't complicate measurements, it will downright give
> > different results. The whole point of two-tone testing is that the
> > first tone causes a "carrier" out of the SSB transmitter (the single
> > tone translates to an RF frequency), and the second tone adds modulation.

> > If the tones aren't pure sinewave, the output of the transmitter will
> > be radically different.
> >
> That's probably why the guy doesn't advocate using it: he's recommending
> a square wave that's heavily low-pass filtered to get rid of the
> harmonics. If done right this will result in a clean stable sine wave
> at the desired frequency.
>
> --
>
> Tim Wescott
> Wescott Design Services
> http://www.wescottdesign.com

1259. Re: pumping the T2-exciter board with a squarewave signal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-24 19:45:40 UTC
From: andreas magun <achmagun@bluewin.ch>
Message-ID: <421e2e63_3@news.bluewin.ch>
Source record: 20190

Verizon News wrote:
> Keepthis in mind:
> +7dbm (the recommended RMS input for a level 7 mixer) is about 1.5Vpp sine.
> This holds up to reason, as a DBM has two diode-drops that the LO must
> overcome in order to switch the diodes properly. Therefore, if you use a
> square wave, you also need to supply about 1.5Vpp, or the diodes won't
> switch.
>
> There are two common misconceptions many people hold about these devices.
> One is that they are inherently 50 ohm devices. In reality you will only see
> 50 ohms on a given port if the other two ports are also terminated in 50
> ohms. You could run the device just as well at 75 ohms if you keep it
> balanced properly. Also, many people think that the LO input is power
> dependent. This only partially true. It's really voltage dependent,
> requiring sufficient drive voltage to turn on the diodes and pump an amount
> of current through them that is large compared to the expected input RF
> signal.
>
> There is no magic in these things. They're just diode DPDT switches that
> reverse the polarity of the RF signal at a rate determined by the LO
> frequency. This is essentially the same as multiplying the RF signal by +/-1
> at the LO rate. Simple math shows that this multiplication process yields
> the sum and difference frequency products. The more symmetrical the LO
> switching waveform, the more perfect the multiplication. This is why square
> wave LO drive is preferred.
>
> Joe
> W3JDR
>
>

Thank you all for your help, suggestions and especially for the simple explanation that the mixer diode pairs need enough voltage for switching. I will remeasure with higher voltages and use buffers that supply enough current to drive the mixer.

Andreas

1260. Re: QRP 7 mw

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-24 20:40:27 UTC
From: Peter Barbella <nonobar@verizon.net>
Message-ID: <%YqTd.42865$t46.13891@trndny04>
Source record: 20191

Hi Roy,

I made no assumptions about the atmosphere, neither loss, nor noise.

I did assume that my antenna is about 0 dB gain and I further assumed about 10 dB loss for the temporary wire running through the wall of my house to the antenna (just a simple piece of wire running up a maple tree). I thought the 10 dB would be generous.

I assumed that the antenna of the person receiving was also 0 dB and I assumed that his receiver would have a sensitivity of about -80 dBm. I think that's pretty conservative. I would guess that modern receivers go well under -100 dBm for sensitivity; especially for CW operation.

As I said, I assumed nothing about atmospheric loss. I'm not quite sure what atmospheric "noise" is. Where does that come from? Is it what you call atmospheric loss, or is it something else? In any event, I would consider that to be a "receive end" problem.

I got a not from someone who worked a 500 mile contact with another QRP crazy who was using 50 micro (not milli, micro) watts. That's amazing. It gives me hope that I'll get my first contact soon.

Thanks for the reply.

Peter Barbella
KB1LZH

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:111rtneffbp8icd@corp.supernews.com...
>I don't have experience with a power level that low, but I'm curious about
>what assumptions you made about atmospheric noise and antenna gain to
>arrive at the 40 mile figure.
>
> Roy Lewallen, W7EL
>
> Peter Barbella wrote:
>> I've built a little 80 meter transmitter that seems to be putting out
>> about 7 milliwatts. By my caculation, that should be good for about 40
>> miles. Anyone have any experience with low a power output?
>>
>> Pete
>> KB1LZH

1261. Re: QRP 7 mw

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-24 21:24:12 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnd1shfs.1c8t.bit-bucket@shell.config.com>
Source record: 20192

On Thu, 24 Feb 2005 20:40:27 GMT, Peter Barbella wrote:
>
> I got a note from someone who worked a 500 mile contact with another QRP
> crazy who was using 50 micro (not milli, micro) watts. That's amazing. It
> gives me hope that I'll get my first contact soon.

There's a Real Cult of QRPp'ers - extra, extra low power ops - that try
to achieve ever higher and higher "Millions of Miles per Watt" numbers.
(Of course, BPL will kill them if it rolls out.)
Just imagine _accurately_ measuring power out at the microWatt levels!

This ol' hobby has a lot of interesting nooks and crannies.

gl with your project.
73
Jonesy

1262. Re: QRP 7 mw

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-24 21:39:38 UTC
From: garigue <garigue@comcast.net>
Message-ID: <mPSdnXLi3LN61YPfRVn-og@comcast.com>
Source record: 20193

Hello Pete .....I worked a fellow on my SMT with 360 mw who was using 16 mw from his car using a hamstick. He was from the Annapolis MD area and I am from nr Pittsburgh. The thing that got me was that he was using a 40 meter Hamstick. Therefore the antenna efficiency at this freq. would be, to say the least, ..marginal. I don't remember the call or report as it is in my logs in storage somewhere. I will be retrieving them when the new radio room goes into operation hopefully in a few months. Give me an e-mail Pete if you want to try a sked one night ...nothing ventured nothing gained ....

God Bless 73 Tom Popovic KI3R Belle Vernon Pa.

> I've built a little 80 meter transmitter that seems to be putting out about
> 7 milliwatts. By my caculation, that should be good for about 40 miles.
> Anyone have any experience with low a power output?
>
> Pete
> KB1LZH

1263. Building a Pixie2 CW Transmitter for SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-24 22:35:47 UTC
From: n1zjd <vbtek@tds.net>
Message-ID: <421e5404$1_3@newspeer2.tds.net>
Source record: 20194

I'm fairly new to homebrewing but I have a basic understanding of transmitters and recievers. I'd like to know what is necessary for building basic transmitters for modes other than cw. Specifically I'm interested in SSB. I have a book called Electronics Communications thats deals with the different types of modulated transmissions. Any help with this would be greatly appreciated. Thanks in advance. n1zjd

1264. Re: QRP 7 mw

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-24 23:23:33 UTC
From: default <none@defaulter.net>
Message-ID: <maos1190f798jodf33e2aoj7g17an84jep@4ax.com>
Source record: 20195

On Thu, 24 Feb 2005 07:46:53 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>I don't have experience with a power level that low, but I'm curious
>about what assumptions you made about atmospheric noise and antenna gain
>to arrive at the 40 mile figure.
>
>Roy Lewallen, W7EL
>
>Peter Barbella wrote:
>> I've built a little 80 meter transmitter that seems to be putting out about
>> 7 milliwatts. By my caculation, that should be good for about 40 miles.
>> Anyone have any experience with low a power output?
>>
>> Pete
>> KB1LZH
>>
>>
You don't have an 80 meter parabolic dish in your back yard? (aimed
horizontally . . .)

Maybe with a power line running the 40 miles and some filters . . .

1265. Re: QRP 7 mw

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 00:41:18 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cvls7e$i9m$1@hercules.btinternet.com>
Source record: 20196

> I've built a little 80 meter transmitter that seems to be putting out
about
> 7 milliwatts. By my caculation, that should be good for about 40 miles.
> Anyone have any experience with low a power output?
>
==========

I once worked 10 miles on CW, with 10 milliwatts on 160 meters, in daylight with my 20 feet long antenna lying on the ground, and a local noise level of S6. The other fellow had a half-wave dipole running 40 watts. He copied me OK.

Propagation must have been by groundwave (on account of time of day) partly over densely populated industrial areas and partly farm land.

But to translate from this information the possibility of acheiving 40 miles on 80 meters with 7 miliwatts requires some extra information from your end.

It's best to begin calculation with some sort of standard - some facts which you already know by experiment or hearsay and can reasonably be depended upon.

Suppose it is already known that with 100 watts on 80 meters, between two not necessarily identical antennas, of unequal efficiencies, with a radio path length of 100 miles, gives an S-meter reading of S-9 + 12 dB at one end of the path.

At 6dB per S-unit, this reading is 2 S-units greater than S-9. If you like, call it S-11.

Suppose the power of the transmitter at the other end goes QRP and is turned down to 10 milliwatts. This is 1/10,000 of the original power, or 40dB down, or 40/6 = 6.7 S-units smaller in received signal strength.

S-11 minus S-6.7 = S-4.3

So provided the noise level is less than about S-4, the 10 milliwatt transmission will be fairly easily copied at a distance of 100 miles. Which is now not so ridiculous as it may first sound without some thought being given to it.

Reg, G4FGQ

1266. Power supply common emitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 02:49:06 UTC
From: SMJ <smjorgensenusa@yahoo.com>
Message-ID: <1109299745.967069.65630@l41g2000cwc.googlegroups.com>
Source record: 20197

Anyone know where I can see a schematic of a common emitter power supply? I've always read about using the emitter of a pass transistor as the positive terminal output (Common collector). Taking apart this trip lite power supply I see that they have the negative terminal connecting to the collector of the npn pass transistors. This seems like it would extremely complicate the regulation design. Can anyone explain the benefits, and where I can learn more about this design technique?

1267. Re: Building a Pixie2 CW Transmitter for SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 04:02:28 UTC
From: Brian - KB9BVN <kb9bvn@arrl.net>
Message-ID: <orxTd.5344$873.2927@newsread3.news.pas.earthlink.net>
Source record: 20098

Hi there

Grab a copy of the ARRL Radio Handbook from the library or buy one from the
ARRL site. Lots of projects and SSB info in there.

73

"n1zjd" <vbtek@tds.net> wrote in message
news:421e5404$1_3@newspeer2.tds.net...
> I'm fairly new to homebrewing but I have a basic understanding of
> transmitters and recievers. I'd like to know what is necessary for
> building basic transmitters for modes other than cw. Specifically I'm
> interested in SSB. I have a book called Electronics Communications
> thats deals with the different types of modulated transmissions. Any
> help with this would be greatly appreciated. Thanks in advance. n1zjd

1268. Re: Building a Pixie2 CW Transmitter for SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 04:26:38 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <cvm9du$q26$1@theodyn.ncf.ca>
Source record: 20099

"Brian - KB9BVN" (kb9bvn@arrl.net) writes:
> Hi there
>
> Grab a copy of the ARRL Radio Handbook from the library or buy one from the
> ARRL site. Lots of projects and SSB info in there.
>
> 73
>
Actually, I'd rate the handbook as less and less about useful projects.
I'd recommend everyone have one, at least one, but it seems less about
building these days. I'm not sure if it's because they are including
fewer construction pieces, or if the theory has gotten larger so it
dwarfs the projects.

The ARRL has books that are much more about construction articles,
as they've always had. They used to have a slew of books about
specific categories (ssb, mobile, VHF, etc), that were only reprints
of QST articles, and the focus was on building. They phased those
out years ago, but in recent years they've come back. Things like
W1FB's "Notebooks", and "QRP Power", little of it is theory so
rather than selecting one sample of a transmitter and a receiver, etc,
you get pages of it. If you don't have a good selection of QSTs,
then these books are a great source, and they've kept relatively low
prices compared to the Handbook. (I paid $4.50 for my first Handbook,
back in 1971, and all the other ARRL books were the same or less. The
Handbook has ballooned to fifty dollars or so (at least here in Canada),
but you can get many of the other ARRL books for ten or twenty dollars.)

I finally got a copy of the relatively new ARRL book, "Experimental Methods
in RF Design" in December, and it is so much more filling than the last
Handbook I bought, a few years back. Just as "SOlid State Design for
the Radio Amateur" from 1977, the focus is on building, but also about
topics that often aren't covered in the Handbook.

Michael VE2BVW

1269. Re: JESUS CHRIST WENT TO THE CROSS SO YOU CAN GO TO HEAVEN - The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel s

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 05:49:22 UTC
From: hexter@blazenet.net
Message-ID: <111tf32p5p3thbe@corp.supernews.com>
Source record: 20100

>It would be better for the LORD if HE homebrewed HIS own radio.
>We could talk !
>
Religion is a virus that runs on carbon based life forms.

You just got to love a god that turns people to pillars of salt,
and commands fathers to kill sons just to test faith.

I MEAN YOU JUST GOT TO LOVE THAT GOD!!!! DAMMIT, HE COMMANDS YOU!!!!

Not me, actions speak louder than words. I pulled a man from a burning
car, and have performed several rescues at sea. Not because DOG (ooops
there goes my dislexia again) commands me to, but because a long time
ago I made a choice to just be a decent fellow. It makes me feel good
at the end of my day. Something god could never do when my life was
upside down. I chose to make my life rightside up.

Don't worry, Be happy. A Navy Chief will save your ass! Just ask the Chief!

1270. Re: Power supply common emitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 07:40:15 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <421ed65a$0$10951$cc9e4d1f@news-text.dial.pipex.com>
Source record: 20101

"SMJ" <smjorgensenusa@yahoo.com> wrote in message
news:1109299745.967069.65630@l41g2000cwc.googlegroups.com...
> Anyone know where I can see a schematic of a common emitter power
> supply? I've always read about using the emitter of a pass transistor
> as the positive terminal output (Common collector). Taking apart this
> trip lite power supply I see that they have the negative terminal
> connecting to the collector of the npn pass transistors. This seems
> like it would extremely complicate the regulation design. Can anyone
> explain the benefits, and where I can learn more about this design
> technique?

It sounds like a standard constant current supply circuit - the collector
current is fairly constant with a varying load if the base is held at a
fixed voltage.

Leon
--
Leon Heller, G1HSM
http://www.geocities.com/leon_heller

1271. Re: Something like a diplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 07:53:08 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <M_2dnWcNzpfJRIPfRVn-uw@comcast.com>
Source record: 20102

Hi guys,

"budgie" <me@privacy.net> wrote in message
news:hpoa119i3nm6vustjpjarhcdjfbrra1bjk@4ax.com...
> If I understood the O/P he was trying to split and then recombine the
> 25-3000
> band with a split ("crossover") at 500 MHz. Assuming a 50R in/out
> impedance
> across the passband, the fiter sections presumably present a substantially
> different (usually much higher) port impedance out of band.

Yes, this is correct; the problem is that close to the 500MHz split, the filters combine together so as to create several resonances. I'll try the T combiner approach; this should tend to 'de-Q' the resonances.

An isolator (or circulator) would work here, but I'm not aware of any that cover such a wide bandwidth.

The suggestions for 'quarter wavelength' anythings aren't appropriate given the wide bandwidth.

Thanks for all the help,
---Joel Kolstad

1272. Re: Power supply common emitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 08:04:41 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <omkt11dphd2asfmppmoajih8h32ha5q1jv@4ax.com>
Source record: 20103

On 24 Feb 2005 18:49:06 -0800, "SMJ" <smjorgensenusa@yahoo.com> wrote:

>Anyone know where I can see a schematic of a common emitter power
>supply? I've always read about using the emitter of a pass transistor
>as the positive terminal output (Common collector). Taking apart this
>trip lite power supply I see that they have the negative terminal
>connecting to the collector of the npn pass transistors. This seems
>like it would extremely complicate the regulation design. Can anyone
>explain the benefits, and where I can learn more about this design
>technique?

With the NPN collector as the negative output terminal, which is
usually also connected the chassis ground, you can install the TO-3
transistors directly to the chassis without insulation :-).

Seriously, the standard emitter follower configuration requires quite
a lot of base current, especially if bad transistors, such as 2N3055
are used. These have a low current gain and high Vbe even at moderate
currents. Now the question is, where does this current come from ? In
high current supplies there are usually an other emitter follower
driving the series pass transistors and this driver has also a Vbe
drop. Thus, even higher voltages are needed to drive the base current
into the driver.

The regulator needs to operate quite a few voltages higher than the
final output voltage. In addition some extra margin is needed to allow
for the voltage drop during capacitor discharging. If you take the
regulator voltage from the same capacitors as the series pass
transistor, the capacitor voltage may have to be 5-10 V higher than
the output voltage. This excessive voltage needs to be dissipated in
the series pass transistors at high currents, creating a lot of heat.

One way to avoid this, is to use a separate medium current secondary
winding to drive the regulator at a higher voltage and use a slightly
lower voltage, high current secondary winding.

To avoid this a PNP transistor is used on the positive side or a NPN
on the negative side. It may be easier to look at the situation with a
PNP in the positive side.

In this circuit, the current needed by the regulator flows from the
positive capacitor end through the emitter and out from the base
through the regulator to the negative end of the capacitor. Now the
regulator voltage is below both the output voltage and the capacitor
voltage and the emitter needs to be only about 1-2 V above the output
voltage. You can even drive the series pass transistor into saturation

(which requires quite a lot of base current) and hence reduce the capacitor-output voltage difference even further, since it is now easy to sink the base current.

This is how the LDO (Low Drop Out voltage) regulators are implemented.

Paul OH3LWR

1273. Re: Power supply common emitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 08:15:10 UTC
From: Krzysztof <kryho@mitr.p.lodz.pl>
Message-ID: <cvmmra$j8$1@kujawiak.man.lodz.pl>
Source record: 20104

Hi,
try http://ftp.qrz.ru/pub/hamradio/schemes/yaesu/FT-707_Manual.pdf and look
on the page 11: FP-707 power supply circuit diagram.
Transistor Q101 (2SK19-TM/BL) + R101 (56 ohm) acts as an Idss current source
(6-14 mA for TM or 12-24 mA for BL), limiting supply output current to
about: hFE(Q1) x hFE(Q102) x Idss.

73's de Chris SP7ICE

Uzytkownik "SMJ" <smjorgensenusa@yahoo.com> napisal w wiadomosci
news:1109299745.967069.65630@l41g2000cwc.googlegroups.com...
> Anyone know where I can see a schematic of a common emitter power
> supply? I've always read about using the emitter of a pass transistor
> as the positive terminal output (Common collector). Taking apart this
> trip lite power supply I see that they have the negative terminal
> connecting to the collector of the npn pass transistors. This seems
> like it would extremely complicate the regulation design. Can anyone
> explain the benefits, and where I can learn more about this design
> technique?
>

1274. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 12:47:31 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <111u7at17lq22f7@corp.supernews.com>
Source record: 20105
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Bill M" <dontspamoleexray@coqui.net> wrote in message
news:111m9321qd6shf5@corp.supernews.com...
> Robert Baer wrote:
> > Ol' Duffer wrote:
>
> >>I wonder sometimes how much they spend printing catalogs
> >>every two months, which always seemed excessive to me.
> >>I'd have thought twice a year would be plenty.
> >
> >
> > If you noticed, each newer catalog has *more* parts; more brands,
more
> > variety, more types, etc.
>
> I wonder how long Mouser can keep up the quarterly catalogs. They are
> getting huge these days! About 3 times the size of what they were
just
> 2-3 years ago.
>
> I'm not griping mind you, but I'd hate to have to do all my
daydreaming
> and parts selections online.

If you don't, you're already missing out on some things. The paper
catalog doesn't have everything that's online.

> -Bill

1275. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 12:52:01 UTC
From: Bill M <dontspamoleexray@coqui.net>
Message-ID: <111u7rh3pqj1mea@corp.supernews.com>
Source record: 20106
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Watson A.Name - "Watt Sun, the Dark Remover" wrote:

>>and parts selections online.
>
>
> If you don't, you're already missing out on some things. The paper
> catalog doesn't have everything that's online.

Maybe so, but so far I've always been able to find everything I need in
the paper catalog so it still gets a big thumbs up from me for convenience.

-Bill

1276. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 13:01:01 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <111u847djt9pobc@corp.supernews.com>
Source record: 20107
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
news:421C7C86.BFF8075F@earthlink.net...
> Bill M wrote:
> >
> > Robert Baer wrote:
> > >
> > > ...and if all spam could be stopped, trillions of dollars per year
would
> > > be saved, as well as all of the power required to run all of the
> > > involved computers.
> >
> > Think of the unemployment that would result.
> > :)
> >
> > -Bill
>
> Think about all the extra bandwidth on the net after the spam died!
> So what if some sleaze balls stare to death? They should have had
> honest jobs like cleaning toilets and digging ditches.

Problem is, a lot of the spammers are down there in your area, in Boca
Raton. I wish the hurricanes had wiped them out!
http://www.businessweek.com/bwdaily/dnflash/sep2004/nf20040915_0180_db03
5.htm

> --
> Beware of those who suffer from delusions of adequacy!
>
> Michael A. Terrell
> Central Florida

1277. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 13:10:13 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <421F23AA.515FE39E@earthlink.net>
Source record: 20108
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Watson A.Name - \"Watt Sun, the Dark Remover\"" wrote:
>
> "Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
> news:421C7C86.BFF8075F@earthlink.net...
> >
> > Think about all the extra bandwidth on the net after the spam died!
> > So what if some sleaze balls stare to death? They should have had
> > honest jobs like cleaning toilets and digging ditches.
>
> Problem is, a lot of the spammers are down there in your area, in Boca
> Raton. I wish the hurricanes had wiped them out!
> <http://www.businessweek.com/bwdaily/dnflash/sep2004/nf20040915_0180_db035.htm>

They interviewed one of the spammers on local TV just before
Hurricane Frances went through. She was bragging about how easy it was
to opt out but couldn't see what was wrong with getting plastered with
her crap in the first place.

The bandwidth problem here is getting worse. If you don't go
broadband you might as well give up accessing the net until midnight.
Also, newer web design software is so bloated some servers crawl to the
point they don't have the capacity or bandwidth to do their job.

--
Beware of those who post from srvinet.com!

Michael A. Terrell
Central Florida

1278. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 13:53:50 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <111ub78pr7p7n55@corp.supernews.com>
Source record: 20109
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
news:421F23AA.515FE39E@earthlink.net...
> "Watson A.Name - \"Watt Sun, the Dark Remover\"" wrote:
> >
> > "Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
> > news:421C7C86.BFF8075F@earthlink.net...
> > >
> > > Think about all the extra bandwidth on the net after the spam
died!
> > > So what if some sleaze balls stare to death? They should have had
> > > honest jobs like cleaning toilets and digging ditches.
> >
> > Problem is, a lot of the spammers are down there in your area, in
Boca
> > Raton. I wish the hurricanes had wiped them out!
> >
<http://www.businessweek.com/bwdaily/dnflash/sep2004/nf20040915_0180_db0
35.htm>
>
>
> They interviewed one of the spammers on local TV just before
> Hurricane Frances went through. She was bragging about how easy it
was
> to opt out but couldn't see what was wrong with getting plastered with
> her crap in the first place.
>
> The bandwidth problem here is getting worse. If you don't go
> broadband you might as well give up accessing the net until midnight.
> Also, newer web design software is so bloated some servers crawl to
the
> point they don't have the capacity or bandwidth to do their job.

Must've been sht Spam Queen. Bitch.
http://spam.surferbeware.com/spam-spam-queen.htm

> --
> Beware of those who post from srvinet.com!
>
> Michael A. Terrell
> Central Florida

1279. Avantek YIG oscillator datsheet

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 14:38:10 UTC
From: dan_partelly@rdsor.ro
Message-ID: <87ea0e52.0502250638.7594eae6@posting.google.com>
Source record: 20110

Hello all,

Im looking for the datasheet of an Avantek YIG tuned oscillator ,
namely part number (stamped on it):

Model: Y084-1679
Freq: 1-404672/B

so I can use it whithout fear of destroying it.

Thank you , Dan

1280. Re: QRP 7 mw

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 15:38:48 UTC
From: Spajky <Spajky@##volja.net>
Message-ID: <aghu11tbgdsf7nplu89ek73614ic5pcb7b@4ax.com>
Source record: 20111

On Thu, 24 Feb 2005 13:21:02 GMT, "Peter Barbella"
<nonobar@verizon.net> wrote:

>I've built a little 80 meter transmitter that seems to be putting out about
>7 milliwatts. By my caculation, that should be good for about 40 miles.

IMHO not, (practically maximum about 10x less probably with good
simple antennas & RX-ver & not too much noise & disturbances & w/o big
obstacles & using narrowBand CW modulation for solid reception of
direct surface wave ...

http://www.radioinnovation.com/Howto/how_far.htm

if your Qrp TX puts to antenna 7mW /0.6Vrms-50ohm/ & an average RX has
sensitivity around 0.6microVolts/50ohm, there is difference in
voltages about 1 million times (120db) !

for a 40 mile distance you would need approx. a 1/2W TX or even more
IMHO @ your 3,75MHz TX! you can gain something with both side very
good antennas ...

I am not really an expert in the matter, but I was also searching for
years for some kind of "idiot proof" but simple (not complicated math)
formula for receiving range but for higher frequencies like 40MHz or
so .. Since the recieving of a signal is proportional with voltages on
antenna (& reverse proportional to rise of frequencies) I time ago
derived/simplified a lot the math formula (confirmed myself by some
experiments I made).

you need on TX antenna /Vrms=Eff@50ohm/ minimum:

50mV/1km/1MHz [simpliest as possible formula!] for 1/4 wavelenght
or such/similar gain antennas.

that means in your case 0,19V/1km (@3,75MHz) & since you have 0,6Vrms
on TX output means that can you reach normally 3-4km (2-3 miles!)

But I could be also wrong ... :-)

To enhance reception double the TX output voltage/power or make more
efficient antennas. Thats easier with higher frequencies to make high
gain ones & not to be really monster big on big towers ...

PS.: another simplified answer derived from above simplified formula:
your 7mw TX has a range (@80m wavelenght) for about 40x the wavelenght
receipt with an ordinary common RX .. :-) ....

hope it was enough simple explanation ...
--
Regards , SPAJKY ®
& visit my site @ http://www.spajky.vze.com
"Tualatin OC-ed / BX-Slot1 / inaudible setup!"
E-mail AntiSpam: remove ##

1281. Re: Power supply common emitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 15:49:53 UTC
From: John Walton <jdwalton@comcast.net>
Message-ID: <1oudnXVbhuwp2oLfRVn-2A@comcast.com>
Source record: 20112

...to help him out, I would suggest taking a look at National Semi's LDO Tutorial -- all you have to do is plug "LDO" and "Compensation" in their search engine and the differences between NPN and PNP regulators are explained.

"Paul Keinanen" <keinanen@sci.fi> wrote in message news:omkt11dphd2asfmppmoajih8h32ha5q1jv@4ax.com...
> On 24 Feb 2005 18:49:06 -0800, "SMJ" <smjorgensenusa@yahoo.com> wrote:
>
> >Anyone know where I can see a schematic of a common emitter power
> >supply? I've always read about using the emitter of a pass transistor
> >as the positive terminal output (Common collector). Taking apart this
> >trip lite power supply I see that they have the negative terminal
> >connecting to the collector of the npn pass transistors. This seems
> >like it would extremely complicate the regulation design. Can anyone
> >explain the benefits, and where I can learn more about this design
> >technique?
>
> With the NPN collector as the negative output terminal, which is
> usually also connected the chassis ground, you can install the TO-3
> transistors directly to the chassis without insulation :-).
>
> Seriously, the standard emitter follower configuration requires quite
> a lot of base current, especially if bad transistors, such as 2N3055
> are used. These have a low current gain and high Vbe even at moderate
> currents. Now the question is, where does this current come from ? In
> high current supplies there are usually an other emitter follower
> driving the series pass transistors and this driver has also a Vbe
> drop. Thus, even higher voltages are needed to drive the base current
> into the driver.
>
> The regulator needs to operate quite a few voltages higher than the
> final output voltage. In addition some extra margin is needed to allow
> for the voltage drop during capacitor discharging. If you take the
> regulator voltage from the same capacitors as the series pass
> transistor, the capacitor voltage may have to be 5-10 V higher than
> the output voltage. This excessive voltage needs to be dissipated in
> the series pass transistors at high currents, creating a lot of heat.
>
> One way to avoid this, is to use a separate medium current secondary
> winding to drive the regulator at a higher voltage and use a slightly
> lower voltage, high current secondary winding.
>
> To avoid this a PNP transistor is used on the positive side or a NPN

> on the negative side. It may be easier to look at the situation with a
> PNP in the positive side.
>
> In this circuit, the current needed by the regulator flows from the
> positive capacitor end through the emitter and out from the base
> through the regulator to the negative end of the capacitor. Now the
> regulator voltage is below both the output voltage and the capacitor
> voltage and the emitter needs to be only about 1-2 V above the output
> voltage. You can even drive the series pass transistor into saturation
> (which requires quite a lot of base current) and hence reduce the
> capacitor-output voltage difference even further, since it is now easy
> to sink the base current.
>
> This is how the LDO (Low Drop Out voltage) regulators are implemented.
>
> Paul OH3LWR
>

1282. NE604 for Spectrum Display IF

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 16:06:19 UTC
From: Brian Hill <releif@last.net>
Message-ID: <d9lTd.3780$RC1.2985@fe06.lga>
Source record: 20113

Hi all. I'm in the process of trying to match the IF of my R-5000 receiver to the input of my WJ/CEI spectrum display unit. I've heard that this can be acomplished useing the NE604 mixer. The SDU uses 21.4 mhz and the R-5000's 1st IF is 58.1125 mhz. Any help would be most apreciated. Thanks

--
73 and good DXing.
Brian
~~~~~~
A lot of radios and 100' of rusty wire!
Zumbrota, Southern MN
Brian's Radio Universe
http://webpages.charter.net/brianhill/

EMAIL- brianehill@$100charter.net
(Hide the $100 to reply!)
~~~~~~

1283. Re: QRP 7 mw

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 16:53:52 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <qRITd.3789$XV2.2045@fe06.lga>
Source record: 20114

"Spajky" <Spajky@##volja.net> wrote in message

> IMHO not, (practically maximum about 10x less probably with good

The current record on 80 meters is 546.8 miles with 0.0406 mW. By comparison, your transmitter is QRO. Of course, that was with good antennas. The transmitter was an off-center fed dipole, the receiver a 1000 ft. beverage.

80 meters is a pretty QRP-unfriendly band. But on a cold winter night when the sun is behaving, it can be pretty good.

You might want to rummage around on the archives of QRP-L
http://mailman.qth.net/pipermail/qrp-l/
There are a fair number of folks fooling with this kind of setup.

..

1284. Re: Power supply common emitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 17:12:48 UTC
From: SMJ <smjorgensenusa@yahoo.com>
Message-ID: <1109351568.207071.234710@z14g2000cwz.googlegroups.com>
Source record: 20115

Thanks for all the feedback. I tryed some of the websites you suggested
but came up with nothing. Anyone know where I can find a book, or
something online to learn more about this?

1285. Re: NE604 for Spectrum Display IF

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 19:15:11 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <3PKTd.77177$Th1.15251@bgtnsc04-news.ops.worldnet.att.net>
Source record: 20116

Hi Brian,
What you can use is low-side injection at 36.7125MHz.
Normally, high-side injection is used since it has fewer in-band spurs. A freeware program such as AppCad will generate spur charts for you, and you can see what happens. Because you are only interested in one frequency, it is pretty unlikely that you will have any problems.
The circuit topology can be like this: your I.F. output will feed into the RF port of the NE602 mixer. Because this mixer has an IP3 of only -10dBm or so, your 1dB compression point will be at around -24dBm. Your RF level should be at least 10dB below that point.....-40dBm is a good figure to shoot for. This corresponds to a 2.24mV level into 50 ohms. It is a good idea to have a "pi" type of resistive attenuator ahead of that NE602.....this way, you can adjust the input level as needed. The 50 ohm figure is good to shoot for, but there are always imaginary terms (reactance) at the mixer input so calculations are only a starting point.
You can use the on-board oscillator of the NE602 for you LO. A 3rd overtone crystal would do the trick. You can actually use a Colpitts scheme, adjusting the feedback capacitor values so that they have a high reactance at the fundamental frequency of the crystal; this way, only the harmonic will be generated. Over the years, I would use a 4:1 ratio of the top cap vs the grounded cap. An example is 120 over 30pF for a 10.7MHz oscillator, but your mileage may vary.
Your I.F. output really should go through some type of 21.4MHz tuned filter, because you are going to have two sidebands coming out of that mixer. The lower sideband (the desired one) will be a 21.4MHz, while the upper sideband (the image) will be at 94.82MHz. You don't want to have this response.
Since the NE602 has a good NF and has gain, you shouldn't need a buffer amp, unless the WJ unit presents a 50 ohm load. You need to know what level the WJ unit requires, so that you can provide the proper level from your translater.
I hope this helps.

Pete

"Brian Hill" <releif@last.net> wrote in message
news:d9ITd.3780$RC1.2985@fe06.lga...
> Hi all. I'm in the process of trying to match the IF of my R-5000 receiver
> to the input of my WJ/CEI spectrum display unit. I've heard that this can
> be
> acomplished useing the NE604 mixer. The SDU uses 21.4 mhz and the R-5000's
> 1st IF is 58.1125 mhz. Any help would be most apreciated. Thanks
>
> --
> 73 and good DXing.
> Brian

> ~~~~~~
> A lot of radios and 100' of rusty wire!
> Zumbrota, Southern MN
> Brian's Radio Universe
> http://webpages.charter.net/brianhill/
>
> EMAIL- brianehill@$100charter.net
> (Hide the $100 to reply!)
>
>
>
>
>

1286. Re: NE604 for Spectrum Display IF

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 19:34:24 UTC
From: W8KZW <w8kzw@hotmail.com>
Message-ID: <111uvgjr2e4gm37@corp.supernews.com>
Source record: 20117
Body handling: HTML body converted to readable text

Pete ... thanks for the help!

I am planning to build a similar mixer to allow use of my Kenwood SM-220 / BP-8 panadapter (I think those are the model numbers) with my FT-1000D.

I will keep your suggestions in mind!

I wonder if someone hasn't already done this ????

73,
Jeff
W8KZW

"Pete KE9OA" wrote in message
news:3PKTd.77177$Th1.15251@bgtnsc04-news.ops.worldnet.att.net...
> Hi Brian,
> What you can use is low-side injection at 36.7125MHz.
> Normally, high-side injection is used since it has fewer in-band spurs. A
> freeware program such as AppCad will generate spur charts for you, and you
> can see what happens. Because you are only interested in one frequency, it
> is pretty unlikely that you will have any problems.
> The circuit topology can be like this: your I.F. output will feed into the
> RF port of the NE602 mixer. Because this mixer has an IP3 of only -10dBm
or
> so, your 1dB compression point will be at around -24dBm. Your RF level
> should be at least 10dB below that point.....-40dBm is a
> good figure to shoot for. This corresponds to a 2.24mV level into 50 ohms.
> It is a good idea to have a "pi" type of resistive attenuator ahead of
that
> NE602.....this way, you can adjust the input level as needed. The
50
> ohm figure is good to shoot for, but there are always imaginary terms
> (reactance) at the mixer input so calculations are only a starting point.
> You can use the on-board oscillator of the NE602 for you LO. A 3rd
overtone
> crystal would do the trick. You can actually use a Colpitts scheme,
> adjusting the feedback capacitor values so that they have a high reactance
> at the fundamental frequency of the crystal; this way, only the harmonic
> will be generated. Over the years, I would use a 4:1 ratio of the top cap
vs
> the grounded cap. An example is 120 over 30pF for a 10.7MHz oscillator,
but
> your mileage may vary.
> Your I.F. output really should go through some type of 21.4MHz tuned
filter,

> because you are going to have two sidebands coming out of that mixer. The
> lower sideband (the desired one) will be a 21.4MHz, while the upper
sideband
> (the image) will be at 94.82MHz. You don't want to have this response.
> Since the NE602 has a good NF and has gain, you shouldn't need a buffer
amp,
> unless the WJ unit presents a 50 ohm load. You need to know what level the
> WJ unit requires, so that you can provide the proper level from your
> translater.
> I hope this helps.
>
> Pete
>
> "Brian Hill" wrote in message
> news:d9ITd.3780$RC1.2985@fe06.lga...
> > Hi all. I'm in the process of trying to match the IF of my R-5000
receiver
> > to the input of my WJ/CEI spectrum display unit. I've heard that this
can
> > be
> > acomplished useing the NE604 mixer. The SDU uses 21.4 mhz and the
R-5000's
> > 1st IF is 58.1125 mhz. Any help would be most apreciated. Thanks
> >
> > --
> > 73 and good DXing.
> > Brian
> > ~~~~~~
> > A lot of radios and 100' of rusty wire!
> > Zumbrota, Southern MN
> > Brian's Radio Universe
> > http://webpages.charter.net/brianhill/
> >
> > EMAIL- brianehill@$100charter.net
> > (Hide the $100 to reply!)
> >
> >
> >
> >
> >
>
>

1287. Re: NE604 for Spectrum Display IF

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 19:48:22 UTC
From: Brian Hill <releif@last.net>
Message-ID: <vjLTd.10245$FP2.8080@fe02.lga>
Source record: 20118
Body handling: HTML body converted to readable text

"Pete KE9OA" wrote in message
news:3PKTd.77177$Th1.15251@bgtnsc04-news.ops.worldnet.att.net...
> Hi Brian,
> What you can use is low-side injection at 36.7125MHz.
> Normally, high-side injection is used since it has fewer in-band spurs. A
> freeware program such as AppCad will generate spur charts for you, and you
> can see what happens. Because you are only interested in one frequency, it
> is pretty unlikely that you will have any problems.
> The circuit topology can be like this: your I.F. output will feed into the
> RF port of the NE602 mixer. Because this mixer has an IP3 of only -10dBm
or
> so, your 1dB compression point will be at around -24dBm. Your RF level
> should be at least 10dB below that point.....-40dBm is a
> good figure to shoot for. This corresponds to a 2.24mV level into 50 ohms.
> It is a good idea to have a "pi" type of resistive attenuator ahead of
that
> NE602.....this way, you can adjust the input level as needed. The
50
> ohm figure is good to shoot for, but there are always imaginary terms
> (reactance) at the mixer input so calculations are only a starting point.
> You can use the on-board oscillator of the NE602 for you LO. A 3rd
overtone
> crystal would do the trick. You can actually use a Colpitts scheme,
> adjusting the feedback capacitor values so that they have a high reactance
> at the fundamental frequency of the crystal; this way, only the harmonic
> will be generated. Over the years, I would use a 4:1 ratio of the top cap
vs
> the grounded cap. An example is 120 over 30pF for a 10.7MHz oscillator,
but
> your mileage may vary.
> Your I.F. output really should go through some type of 21.4MHz tuned
filter,
> because you are going to have two sidebands coming out of that mixer. The
> lower sideband (the desired one) will be a 21.4MHz, while the upper
sideband
> (the image) will be at 94.82MHz. You don't want to have this response.
> Since the NE602 has a good NF and has gain, you shouldn't need a buffer
amp,
> unless the WJ unit presents a 50 ohm load. You need to know what level the
> WJ unit requires, so that you can provide the proper level from your
> translater.
> I hope this helps.
>

> Pete

Thanks Pete. Would it be possible to fabricate the design in such a way as
to acomodate differant IFs. Maybe some type of switchable or multiport setup
so it can be used on differant receivers?

--
73 and good DXing.
Brian
~~~~~~
A lot of radios and 100' of rusty wire!
Zumbrota, Southern MN
Brian's Radio Universe
http://webpages.charter.net/brianhill/

EMAIL- brianehill@$100charter.net
(Hide the $100 to reply!)
~~~~~~

1288. Re: NE604 for Spectrum Display IF

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 21:04:07 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <bpMTd.77465$Th1.62917@bgtnsc04-news.ops.worldnet.att.net>
Source record: 20119
Body handling: HTML body converted to readable text

You could so a universal PC board layout, as long as you use the same form factor for the components of the different iterations. To have a "bandswitched" unit isn't a trivial factor. You would need relays, PIN diodes, or RF switches to switch in the different crystals, I/O filters, etc. Don't forget that you would also need an adjustable attenuator for the different receivers' I.F. outputs, and maybe, different gain in the output stage of your translator. The LO crystal's feedback components probably would also have to be changed in value. You would be better off doing a board layout and building the different versions as you need them. Another thing to consider.....does your receiver already have a bufferred I.F. output? You need that, so that you don't load the crystal filter of your receiver, thereby changing its response.

Pete

"Brian Hill" wrote in message
news:vjLTd.10245$FP2.8080@fe02.lga...
>
> "Pete KE9OA" wrote in message
> news:3PKTd.77177$Th1.15251@bgtnsc04-news.ops.worldnet.att.net...
>> Hi Brian,
>> What you can use is low-side injection at 36.7125MHz.
>> Normally, high-side injection is used since it has fewer in-band spurs. A
>> freeware program such as AppCad will generate spur charts for you, and
>> you
>> can see what happens. Because you are only interested in one frequency,
>> it
>> is pretty unlikely that you will have any problems.
>> The circuit topology can be like this: your I.F. output will feed into
>> the
>> RF port of the NE602 mixer. Because this mixer has an IP3 of only -10dBm
> or
>> so, your 1dB compression point will be at around -24dBm. Your RF level
>> should be at least 10dB below that point.....-40dBm is
>> a
>> good figure to shoot for. This corresponds to a 2.24mV level into 50
>> ohms.
>> It is a good idea to have a "pi" type of resistive attenuator ahead of
> that
>> NE602.....this way, you can adjust the input level as needed. The
> 50
>> ohm figure is good to shoot for, but there are always imaginary terms
>> (reactance) at the mixer input so calculations are only a starting point.
>> You can use the on-board oscillator of the NE602 for you LO. A 3rd

> overtone
>> crystal would do the trick. You can actually use a Colpitts scheme,
>> adjusting the feedback capacitor values so that they have a high
>> reactance
>> at the fundamental frequency of the crystal; this way, only the harmonic
>> will be generated. Over the years, I would use a 4:1 ratio of the top cap
> vs
>> the grounded cap. An example is 120 over 30pF for a 10.7MHz oscillator,
> but
>> your mileage may vary.
>> Your I.F. output really should go through some type of 21.4MHz tuned
> filter,
>> because you are going to have two sidebands coming out of that mixer. The
>> lower sideband (the desired one) will be a 21.4MHz, while the upper
> sideband
>> (the image) will be at 94.82MHz. You don't want to have this response.
>> Since the NE602 has a good NF and has gain, you shouldn't need a buffer
> amp,
>> unless the WJ unit presents a 50 ohm load. You need to know what level
>> the
>> WJ unit requires, so that you can provide the proper level from your
>> translater.
>> I hope this helps.
>>
>> Pete
>
> Thanks Pete. Would it be possible to fabricate the design in such a way as
> to acomodate differant IFs. Maybe some type of switchable or multiport
> setup
> so it can be used on differant receivers?
>
> --
> 73 and good DXing.
> Brian
> ~~~~~~
> A lot of radios and 100' of rusty wire!
> Zumbrota, Southern MN
> Brian's Radio Universe
> http://webpages.charter.net/brianhill/
>
> EMAIL- brianehill@$100charter.net
> (Hide the $100 to reply!)
>
>

1289. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 21:57:02 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.02.25.21.57.06.461614@example.net>
Source record: 20120
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Fri, 25 Feb 2005 05:53:50 -0800, Watson A.Name - "Watt Sun, the Dark
> "Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message

>> The bandwidth problem here is getting worse. If you don't go
>> broadband you might as well give up accessing the net until midnight.
>> Also, newer web design software is so bloated some servers crawl to
> the
>> point they don't have the capacity or bandwidth to do their job.
>
> Must've been sht Spam Queen. Bitch.
> http://spam.surferbeware.com/spam-spam-queen.htm
>
The main problem is the morons that comprise the 4 percent that actually
buy crap from the spammers.

FOUR PERCENT! That's a phenomenal return, even for a pre-qualified
mailing list.

As long as they can keep getting paid, they'll keep doing it. It's like
the war on drugs - it's like stopping the tide.

Sigh.
Rich

1290. Re: QRP 7 mw Calculation Assumptions

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-25 23:37:56 UTC
From: Peter Barbella <nonobar@verizon.net>
Message-ID: <oFOTd.32600$ya6.21353@trndny01>
Source record: 20121

"Peter Barbella" <nonobar@verizon.net> wrote in message
news:2xkTd.30756$ya6.20070@trndny01...
> I've built a little 80 meter transmitter that seems to be putting out
> about 7 milliwatts. By my caculation, that should be good for about 40
> miles. Anyone have any experience with low a power output?
>
> Pete
> KB1LZH
>

Guys,

With this post, I have received several useful suggestions and comments. Thank you very much.

Many of you are curious about the assumptions I made when I made my calculation of 40 miles. I simply went with something I know: the radar equation. I made a simple adaptation to the radar equation.

It starts with a simple premise that the power in my transmitter will be radiated equally in all directions. That is equivalent to a zero DB gain antenna. I assumed that the receiver will have a sensitivity of -80 dBm. I then, simply applied the basic fact that power diminishes as the square of the range. That leaves a power density at any given range of P divided by 4 pie R*2. (Forgive the lack of an equation editor)

The next assumption involved the capture area of the receiving antenna. In radar, the capture area of an antenna is proportional to the wavelength squared. With a zero DB receiving antenna, the capture area would be simply lambda squared divided by four pie.

With those simple assumptions you can determine the amount of power available for a receiver. Since my little transmitter is a simple breadboard with three transistors and a wire that runs out of my house and up a maple tree, I made a further assumption that I have about 10 DB of loss delivering my transmitter power to the antenna.

That 10 DB loss along with the assumption of only minus 80 dBm sensitivity in the receiver seemed pretty conservative to me. Most receivers can probably do much better, especially with CW operation.

Of course, as RegEdwards has pointed out, what is really needed is a good benchmark. Several of you provided me with some interesting benchmarks. Thank you very much for your replies.

Regards,
Peter Barbella

KB1LZH

..

1291. Re: JESUS CHRIST WENT TO THE CROSS SO YOU CAN GO TO HEAVEN - The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel s

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 00:52:50 UTC
From: "B.Viel" <sjouk@home.nl>
Message-ID: <cvoh8vdna1@news5.zwoll1.ov.home.nl>
Source record: 20122

> Religion is a virus that runs on carbon based life forms.
God gave us brains to determine when religion is a virus, and when
it is good for our spiritual live.
>
> You just got to love a god that turns people to pillars of salt,
> and commands fathers to kill sons just to test faith.
Shut off your brain and follow, that's what the devil wants.
Drugs alcohol etc. wil help you with that, put a label on it, in name
off God.
I'am just smarter than that.
>
> I MEAN YOU JUST GOT TO LOVE THAT GOD!!!! DAMMIT, HE COMMANDS YOU!!!!
No one commands us ! we may believe in Him.
It's our choice.
You also have to understand "the bible of the devil".
THEN you are able to see when something is right or wrong.

>I made a choice to just be a decent fellow.
Thats positive, stands for live, in harmony with nature.
Nature created by God.
Brains give us the opportunity to have a choice !
Also a gift of God, it's part of our being.
You can use words right or wrong.
For live, or against it.
We need brains to interpret words.

Or follow your hart, when your a good man.
Its just like Abraham Lincoln said:
When I do wrong, I feel bad.
When I do right, I feel good.

The power of words!
You can make tools out of steel, or make guns
from it to end lives.
You are responsable for yourself ! NOT God.
You make choices.
He gave everyone a tiny piece of Himself, the spark
of live.
It's up to us to use it or not, that's His message.

There are so many ways to interpret His Word !
You must read it with a positive attitude, otherwise
it becomes a word of the devil. (negative, against live)

If you have trouble with that, let speak your hart, you did !

"gudmundur" <hexter@blazenet.net> schreef in bericht
news:111tf32p5p3thbe@corp.supernews.com...
> >It would be better for the LORD if HE homebrewed HIS own radio.
> >We could talk !
> >
> Religion is a virus that runs on carbon based life forms.
>
> You just got to love a god that turns people to pillars of salt,
> and commands fathers to kill sons just to test faith.
>
> I MEAN YOU JUST GOT TO LOVE THAT GOD!!!! DAMMIT, HE COMMANDS YOU!!!!
>
> Not me, actions speak louder than words. I pulled a man from a burning
> car, and have performed several rescues at sea. Not because DOG (ooops
> there goes my dislexia again) commands me to, but because a long time
> ago I made a choice to just be a decent fellow. It makes me feel good
> at the end of my day. Something god could never do when my life was
> upside down. I chose to make my life rightside up.
>
> Don't worry, Be happy. A Navy Chief will save your ass! Just ask the
Chief!
>
>

1292. Re: JESUS CHRIST WENT TO THE CROSS SO YOU CAN GO TO HEAVEN - The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel s

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 01:20:03 UTC
From: "B.Viel" <sjouk@home.nl>
Message-ID: <cvoirv$4m9$1@news4.zwoll1.ov.home.nl>
Source record: 20123

I just wonder why you send me an e-mail with the same payload,
and misspelled your name so I could not reply by e-mail.
"You where waiting for attention and did not get it".
"You would let me know your story, and refuse reply".

In a positive way, you just misspelled your name....that's it !

"B.Viel" <sjouk@home.nl> schreef in bericht
news:cvoh8vdna1@news5.zwoll1.ov.home.nl...
> > Religion is a virus that runs on carbon based life forms.
> God gave us brains to determine when religion is a virus, and when
> it is good for our spiritual live.
> >
> > You just got to love a god that turns people to pillars of salt,
> > and commands fathers to kill sons just to test faith.
> Shut off your brain and follow, that's what the devil wants.
> Drugs alcohol etc. wil help you with that, put a label on it, in name
> off God.
> I'am just smarter than that.
> >
> > I MEAN YOU JUST GOT TO LOVE THAT GOD!!!! DAMMIT, HE COMMANDS YOU!!!!
> No one commands us ! we may believe in Him.
> It's our choice.
> You also have to understand "the bible of the devil".
> THEN you are able to see when something is right or wrong.
>
> >I made a choice to just be a decent fellow.
> Thats positive, stands for live, in harmony with nature.
> Nature created by God.
> Brains give us the opportunity to have a choice !
> Also a gift of God, it's part of our being.
> You can use words right or wrong.
> For live, or against it.
> We need brains to interpret words.
>
> Or follow your hart, when your a good man.
> Its just like Abraham Lincoln said:
> When I do wrong, I feel bad.
> When I do right, I feel good.
>
> The power of words!

> You can make tools out of steel, or make guns
> from it to end lives.
> You are responsable for yourself ! NOT God.
> You make choices.
> He gave everyone a tiny piece of Himself, the spark
> of live.
> It's up to us to use it or not, that's His message.
>
> There are so many ways to interpret His Word !
> You must read it with a positive attitude, otherwise
> it becomes a word of the devil. (negative, against live)
>
> If you have trouble with that, let speak your hart, you did !
>
> "gudmundur" <hexter@blazenet.net> schreef in bericht
> news:111tf32p5p3thbe@corp.supernews.com...
> > >It would be better for the LORD if HE homebrewed HIS own radio.
> > >We could talk !
> > >
> > Religion is a virus that runs on carbon based life forms.
> >
> > You just got to love a god that turns people to pillars of salt,
> > and commands fathers to kill sons just to test faith.
> >
> > I MEAN YOU JUST GOT TO LOVE THAT GOD!!!! DAMMIT, HE COMMANDS YOU!!!!
> >
> > Not me, actions speak louder than words. I pulled a man from a burning
> > car, and have performed several rescues at sea. Not because DOG (ooops
> > there goes my dislexia again) commands me to, but because a long time
> > ago I made a choice to just be a decent fellow. It makes me feel good
> > at the end of my day. Something god could never do when my life was
> > upside down. I chose to make my life rightside up.
> >
> > Don't worry, Be happy. A Navy Chief will save your ass! Just ask the
> Chief!
> >
> >
>
>

1293. Re: Power supply common emitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 01:56:32 UTC
From: budgie <me@privacy.net>
Message-ID: <4jlv11dpo0unq86dmualivgni968bhuskt@4ax.com>
Source record: 20124

On Fri, 25 Feb 2005 10:04:41 +0200, Paul Keinanen <keinanen@sci.fi> wrote:

>On 24 Feb 2005 18:49:06 -0800, "SMJ" <smjorgensenusa@yahoo.com> wrote:
>
>>Anyone know where I can see a schematic of a common emitter power
>>supply? I've always read about using the emitter of a pass transistor
>>as the positive terminal output (Common collector). Taking apart this
>>trip lite power supply I see that they have the negative terminal
>>connecting to the collector of the npn pass transistors. This seems
>>like it would extremely complicate the regulation design. Can anyone
>>explain the benefits, and where I can learn more about this design
>>technique?
>
>With the NPN collector as the negative output terminal, which is
>usually also connected the chassis ground, you can install the TO-3
>transistors directly to the chassis without insulation :-).
>
>Seriously, the standard emitter follower configuration requires quite
>a lot of base current, especially if bad transistors, such as 2N3055
>are used. These have a low current gain and high Vbe even at moderate
>currents. Now the question is, where does this current come from ? In
>high current supplies there are usually an other emitter follower
>driving the series pass transistors and this driver has also a Vbe
>drop. Thus, even higher voltages are needed to drive the base current
>into the driver.
>
>The regulator needs to operate quite a few voltages higher than the
>final output voltage. In addition some extra margin is needed to allow
>for the voltage drop during capacitor discharging. If you take the
>regulator voltage from the same capacitors as the series pass
>transistor, the capacitor voltage may have to be 5-10 V higher than
>the output voltage. This excessive voltage needs to be dissipated in
>the series pass transistors at high currents, creating a lot of heat.
>
>One way to avoid this, is to use a separate medium current secondary
>winding to drive the regulator at a higher voltage and use a slightly
>lower voltage, high current secondary winding.
>
>To avoid this a PNP transistor is used on the positive side or a NPN
>on the negative side. It may be easier to look at the situation with a
>PNP in the positive side.

Just what I was going to suggest the O/P do. Apart from the earthing the neg
terminal, using a PNP pass as an afterburner makes a helluva lot of sense. I
did that on my very first home-made bench PSU where a 723 drives the external

PNP (darlington) to >15A. I chose this configuration because the available transformer didn't provide enough headroom for cascaded emitter followers.

(and I absolutely HATE 2N3055's with a passion, for the reasons you state - low HFE at any sort of current worth having).

>In this circuit, the current needed by the regulator flows from the
>positive capacitor end through the emitter and out from the base
>through the regulator to the negative end of the capacitor. Now the
>regulator voltage is below both the output voltage and the capacitor
>voltage and the emitter needs to be only about 1-2 V above the output
>voltage. You can even drive the series pass transistor into saturation
>(which requires quite a lot of base current) and hence reduce the
>capacitor-output voltage difference even further, since it is now easy
>to sink the base current.
>
>This is how the LDO (Low Drop Out voltage) regulators are implemented.

1294. Re: Power supply common emitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 01:58:54 UTC
From: budgie <me@privacy.net>
Message-ID: <7rlv119hm7avc9412190bm65fnnv20r667@4ax.com>
Source record: 20125

On 25 Feb 2005 09:12:48 -0800, "SMJ" <smjorgensenusa@yahoo.com> wrote:

>
>Thanks for all the feedback. I tryed some of the websites you suggested
>but came up with nothing. Anyone know where I can find a book, or
>something online to learn more about this?

Look at data sheets for typical integrated regulators and they usually have sections on external pass transistors for boosted current capability. Most often these show both an NPN emitter follower and a PNP arrangement. Your unit sounds like the PNP configuration inverted.

1295. Re: QRP 7 mw

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 02:21:53 UTC
From: Spajky <Spajky@##volja.net>
Message-ID: <f2mv11lm1mvdhjfsuf21l5jj234nmc3qs9@4ax.com>
Source record: 20126

On Fri, 25 Feb 2005 11:53:52 -0500, "xpyttl"
<xpyttl_NOSPAM@earthling.net> wrote:

>"Spajky" <Spajky@##volja.net> wrote in message
>
>> IMHO not, (practically maximum about 10x less probably with good
>
>The current record on 80 meters is 546.8 miles with 0.0406 mW.

with just probably 40mW IMHO (not 40 microW)

Incredible distance, must had ben hell of a reciever & antennas &
probably a reflected wave ... wow if this is true .. even for very
narrowBand non-modulated carrier CW

BTW, that my simplified formula I calculated for Phono work, with CW
the distances achieved normally I know are few times greater ...
--
Regards , SPAJKY ®
& visit my site @ http://www.spajky.vze.com
"Tualatin OC-ed / BX-Slot1 / inaudible setup!"
E-mail AntiSpam: remove ##

1296. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 03:40:42 UTC
From: mc <mc_no_spam@uga.edu>
Message-ID: <421ff6a1@mustang.speedfactory.net>
Source record: 20136
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

> As long as they can keep getting paid, they'll keep doing it. It's like
> the war on drugs - it's like stopping the tide.

Maybe there should be a law against buying things from spammers.

And a law against knowingly providing credit card, banking, or Internet (web hosting, email) services to spammers.

Especially the last of these.

1297. Re: QRP 7 mw

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 05:23:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11201ums30e1saf@corp.supernews.com>
Source record: 20127

Unless you have an incredibly poor antenna or an incredibly poor receiver, you'll never hear the receiver noise on 80 meters because the atmospheric noise is much greater. There are a number of sources of this noise, man-made and natural, and its level varies a great deal. It's not the same as loss, and although it's a "receive end" problem as you say, it's nothing you can improve by altering the receiver. There's just a little about it in the ARRL Handbook, but I'm sure a web search will reveal a great deal of additional information.

Apparently you assumed that the atmospheric noise is zero. That's not a valid assumption at HF.

I still wouldn't be surprised at a 40 mile contact with 7 mW however.

Roy Lewallen, W7EL

Peter Barbella wrote:
> Hi Roy,
>
> I made no assumptions about the atmosphere, neither loss, nor noise.
>
> I did assume that my antenna is about 0 dB gain and I further assumed about
> 10 dB loss for the temporary wire running through the wall of my house to
> the antenna (just a simple piece of wire running up a maple tree). I
> thought the 10 dB would be generous.
>
> I assumed that the antenna of the person receiving was also 0 dB and I
> assumed that his receiver would have a sensitivity of about -80 dBm. I
> think that's pretty conservative. I would guess that modern receivers go
> well under -100 dBm for sensitivity; especially for CW operation.
>
> As I said, I assumed nothing about atmospheric loss. I'm not quite sure
> what atmospheric "noise" is. Where does that come from? Is it what you
> call atmospheric loss, or is it something else? In any event, I would
> consider that to be a "receive end" problem.
>
> I got a not from someone who worked a 500 mile contact with another QRP
> crazy who was using 50 micro (not milli, micro) watts. That's amazing. It
> gives me hope that I'll get my first contact soon.
>
> Thanks for the reply.
>
> Peter Barbella
> KB1LZH
>

>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:111rtneffbp8icd@corp.supernews.com...
>
>>I don't have experience with a power level that low, but I'm curious about
>>what assumptions you made about atmospheric noise and antenna gain to
>>arrive at the 40 mile figure.
>>
>>Roy Lewallen, W7EL
>>
>>Peter Barbella wrote:
>>
>>>I've built a little 80 meter transmitter that seems to be putting out
>>>about 7 milliwatts. By my caculation, that should be good for about 40
>>>miles. Anyone have any experience with low a power output?
>>>
>>>Pete
>>>KB1LZH
>
>
>

1298. PileupBuster.com - Domain Name is For Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 05:31:57 UTC
From: erfurth@gmail.com
Message-ID: <36ba001b.0502252131.6b550c00@posting.google.com>
Source record: 20128

-NOTICE-

The "PileupBuster.com" domain name is For Sale.

For less then the price of an HF rig you can own the ultimate Ham Radio domain name.

The PileupBuster.com domain has immediate name recognition to everyone associated with Ham Radio. Plus, the sales and marketing potential of this name is unlimited.

The minimum offer on this domain is $1,250.00 (US Dollars). The PileupBuster.com domain name will be sold to the person, company or group that makes the highest offer. International offers are welcome.

This is a Private Auction. No one will see what you offer and you will not be able to see what others are offering.

You may begin submitting your offers on Saturday February 26. No offers will be accepted after 12:00 midnight (Pacific Time) on Friday March 4, 2005.

TO MAKE AN OFFER, GO TO: http://PileupBuster.com When the web page comes up, look right under the PileupBuster.com name. You will see "This domain is For Sale" then click on: "More detailsï¿½" You will then see a box to enter your offer. Enter your offer and then click "Make Offer"

This sale is supervised and regulated by SEDO (sedo.com), a highly respected International domain sales company.

If you have any questions, please feel free to contact me at: erfurth@gmail.com

Good luck.

73s,

Bill

1299. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 05:33:03 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <42200A0A.257BD171@earthlink.net>
Source record: 20129
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Rich Grise wrote:
>
> The main problem is the morons that comprise the 4 percent that actually
> buy crap from the spammers.
>
> FOUR PERCENT! That's a phenomenal return, even for a pre-qualified
> mailing list.
>
> As long as they can keep getting paid, they'll keep doing it. It's like
> the war on drugs - it's like stopping the tide.
>
> Sigh.
> Rich

We should just declare all spammers as terrorist and turn the world's
military loose on them. They obviously use "Weapons of Massive
Disruption"!

--
Beware of those who post from srvinet.com!

Michael A. Terrell
Central Florida

1300. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 05:39:33 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <11202kgto6cvv3a@corp.supernews.com>
Source record: 20130
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Rich Grise" <richgrise@example.net> wrote in message
news:pan.2005.02.25.21.57.06.461614@example.net...
> On Fri, 25 Feb 2005 05:53:50 -0800, Watson A.Name - "Watt Sun, the
Dark
> > "Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
>
> >> The bandwidth problem here is getting worse. If you don't go
> >> broadband you might as well give up accessing the net until
midnight.
> >> Also, newer web design software is so bloated some servers crawl to
> > the
> >> point they don't have the capacity or bandwidth to do their job.
> >
> > Must've been sht Spam Queen. Bitch.
> > http://spam.surferbeware.com/spam-spam-queen.htm
> >
> The main problem is the morons that comprise the 4 percent that
actually
> buy crap from the spammers.
>
> FOUR PERCENT! That's a phenomenal return, even for a pre-qualified
> mailing list.
>
> As long as they can keep getting paid, they'll keep doing it. It's
like
> the war on drugs - it's like stopping the tide.
>
> Sigh.
> Rich

Make everyone take the Boulder Pledge.

1301. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 08:41:15 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.02.26.08.41.16.286280@example.net>
Source record: 20131
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Fri, 25 Feb 2005 21:39:33 -0800, Watson A.Name - "Watt Sun, the Dark

> Make everyone take the Boulder Pledge.

WTF "Boulder Pledge?"

Tks,
R

1302. TS520 Mode Switch?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 10:23:32 UTC
From: Theo <theodore.twyler@ntlworld.com>
Message-ID: <E6YTd.212$lg4.130@newsfe1-gui.ntli.net>
Source record: 20132

I need to replace the MODE switch on my TS520.
It is a rotary wafer switch.
Can anyone help?

Theo

1303. Re: TS520 Mode Switch?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 11:31:12 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <46ZTd.831$4R6.336@newsfe5-gui.ntli.net>
Source record: 20133

"Theo" <theodore.twyler@ntlworld.com> wrote in message
news:E6YTd.212$Ig4.130@newsfe1-gui.ntli.net...
> I need to replace the MODE switch on my TS520.
> It is a rotary wafer switch.
> Can anyone help?
==========
Perhaps you can specify the switch :
1)number of switch positions and the total angle the switch shaft makes.
2)number of switch functions ,identifying the number of separate switches
inside the wafer or wafers.
3)outer diameter
4)depth dimension of the wafer (pack)
5)shaft diameter and the diameter of the screwed thread fixing the switch to
a panel.

The TS-520 is not a recent transceiver ,hence the switch might not be all
that exotic.

If I have a suitable switch in my junk box ,I'll be happy to send it to you
foc.
I understand you are in the UK.

Frank GM0CSZ / KN6WH

1304. [for sale] RCA VOLTOMYST WV-77E

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 12:34:15 UTC
From: UnTale <io@io.it>
Message-ID: <b1_Td.51937$lB4.1405359@twister1.libero.it>
Source record: 20134

RCA VOLTOMYST WV-77E

ohm meter (1Megaohm) AC volt (4000V) and dc volt (positive and negative
+-1500V);
with vacuum tube

http://cgi.ebay.it/ws/eBayISAPI.dll?ViewItem&item=5753212656&ssPageName=MERC_VI_ReBay_Pr4_
PcNo_BID

1305. Re: QRP 7 mw

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 15:29:29 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <sI0Ud.8498$ls2.6205@fe06.lga>
Source record: 20135

"Spajky" <Spajky@##volja.net> wrote in message
news:f2mv11lm1mvdhjfsuf21l5jj234nmc3qs9@4ax.com...

> with just probably 40mW IMHO (not 40 microW)

Yeah, 40 microwatts, really.

I probably should hasten to add that this was not a random QSO. The transmitting station has been sending a beacon at various times, frequencies, and power levels for several weeks. There have probably been several hundred stations listening for that beacon. While this particular one was the best on 80 meters, it really isn't all that much of an outlier. Plenty of other stations were in the same general neighborhood on other nights.

It did surprise me to see this on 80, though. As Roy points out, the absence of atmospheric noise is not a valid assumption on HF, and noise does increase with decreasing frequency. This is exactly the opposite to your radar experience where it is all about receivernoise. Even at 10 MHz, the most basic receiver will be sufficiently sensitive that it is limited by atmospheric noise. This seems to be a particularly bad winter for noise on 80, although there have been occasional evenings when the conditions have been pretty astonishing.

Also, the noise causes in the lower HF region tend to be somewhat different than those in the upper HF. Paul Harden made a couple of nice postings to QRP-L explaining some of that after that quasar whacked us back in December I think it was. Interesting to note that the news media only picked up on that event last week. Pretty astonishing, though, that something millions of light years away could be so energetic as to shut down 80 meters for a couple of days!

By the way, I see that Paul will be speaking at Dayton (FDIM) this year. I was planning to go anyway, but it would be worth the trip just to hear him. This guy *really* understands what space weather does to our propagation.

..

1306. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 16:19:19 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <5b8121la76vvsc36d46pq24rnderc06ka6@4ax.com>
Source record: 20137
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Mon, 21 Feb 2005 20:52:20 -0500, the renowned "mc"
<mc_no_spam@uga.edu> wrote:

>
>"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
>news:1109013562.825699.225170@l41g2000cwc.googlegroups.com...
>
>>> So I use the search on DigiKey,
>>> check the price, then search by
>>> the exact part number on
>>> Mouser to see if the price is
>>> much lower.
>>
>> I'd feel guilty doing that, but I cannot fault you for being thrifty
>> :-)
>
>Why feel guilty for getting competitive bids? It's standard practice.

Bugs me that they don't let you sort by price when you do a search.
Obviously an intentional omission.

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

1307. Re: QRP 7 mw

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 16:28:04 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <u97121hi51p9bfm1iqfu97od7h9fqqfjlp@4ax.com>
Source record: 20138

On Sat, 26 Feb 2005 10:29:29 -0500, "xpyttl"
<xpyttl_NOSPAM@earthling.net> wrote:

>It did surprise me to see this on 80, though. As Roy points out, the
>absence of atmospheric noise is not a valid assumption on HF, and noise does
>increase with decreasing frequency.

However, the noise power is proportional to bandwidth, so if the
throughput rate is not defined, slow down the bit rate to reduce the
required receiver bandwidth, until the noise is weaker than the
signal. While the lower HF noise is not pure white noise, this
principle can still be applied.

For instance on the 135 kHz LF band, it is quite common to use QRSS
with a dot time of several seconds or even a minute and the reception
is done visually on the "Waterfall" (spectrogram) display. Although
the LF transmitter power might be several hundred watts, the
transmitter antenna efficiency is usually much worse than -30 dB, so
the radiated power is well below 1 Werp and the noise level is much
higher than on HF.

Paul OH3LWR

1308. Re: TS-520 Mode Switch?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 17:07:13 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <D4SdnebrLdhXMb3fRVn-tw@comcast.com>
Source record: 20141

"Theo" <theodore.twyler@ntlworld.com> wrote in message
news:E6YTd.212$Ig4.130@newsfe1-gui.ntli.net...
>I need to replace the MODE switch on my TS520.
> It is a rotary wafer switch.
> Can anyone help?
>
> Theo
>
Theo -

OK. you have a Kenwood TS-520.

Do you have the TS-520 Service manual - that identifies all Kenwood parts by their original part numbers?

The TS-520 Service Manual (ZIP file of Adobe Acrobat) is a LARGE file available (download) from MODS DK
http://www.mods.dk/view.php?ListManuals=kenwood

Are you aware that about 86 parts for the TS-520 model are still available from Kenwood Parts? Many are switches - BUT you need to Kenwood part number for the specific bad Mode Switch wafer.
http://www.kenwoodparts.com/parts/search.php

w9gb

1309. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 18:02:45 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.02.26.18.02.49.102721@example.net>
Source record: 20143
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Fri, 25 Feb 2005 22:40:42 -0500, mc wrote:

>
>> As long as they can keep getting paid, they'll keep doing it. It's like
>> the war on drugs - it's like stopping the tide.
>
> Maybe there should be a law against buying things from spammers.
>
> And a law against knowingly providing credit card, banking, or Internet (web
> hosting, email) services to spammers.
>
> Especially the last of these.

There already are, if not laws, at least terms of service that prohibit sending spam - in the US. They don't have any effect on the spammers in, say, Elbonia, however. This is why I'm in favor of some kind of central "spammer-list", where people can download the week's list of what IPs should be just dropped at the firewall. I have a "Blacklist" now that's 8585 entries long. Would you like me to post it?

I don't actually need it, though, since I don't go online with Windoze any more, and I don't answer spam. It's kinda weird, though, to get empty popups. ;-) (the sponsoring page can have a little popup script, that opens a second window, and tries to show a page from a blacklisted spammer.)

Thanks,
Rich

1310. Re: QRP 7 mw

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 18:03:00 UTC
From: Spajky <Spajky@##volja.net>
Message-ID: <moa121104ia1nenk1cf48popgsnmdacori@4ax.com>
Source record: 20142

On Sat, 26 Feb 2005 10:29:29 -0500, "xpyttl"
<xpyttl_NOSPAM@earthling.net> wrote:

>Yeah, 40 microwatts, really.
>
>I probably should hasten to add that this was not a random QSO. The
>transmitting station has been sending a beacon at various times,
>frequencies, and power levels for several weeks. There have probably been
>several hundred stations listening for that beacon.

oh, that was the case ...

... well, I recalculated reached distance for usuable everydays
connection in real normal conditions with average equipment
/forgetting the extremes!/ (after some additional thinking reading
these posts) to even simplier formula than before & more realistic (a
bit larger distances reached) as follows:

to reach the distance of ONE full wavelenght (ex.80m for 3,75MHz) you
approx. need Rf RMS voltage on TX out for antenna (50ohm) :

1mV - for narrowBand unmod.carr.CW
3,16mV - for ordinary CW & SSB (+10dB)
10mV !! - for ordinary FM & AM or other (another +10dB = +20dB)
30mV - for PacketRadio - for no data loss (+ another 10dB)

... so original poster (Peter) could get out of his set normally 5Km
for sure (more than 3 miles with his 7mW-atts).

IMHO this is some kind of reasonable expectations about recieving
range ... bye .. :-)
--
Regards , SPAJKY ®
& visit my site @ http://www.spajky.vze.com
"Tualatin OC-ed / BX-Slot1 / inaudible setup!"
E-mail AntiSpam: remove ##

1311. Re: TS520 Mode Switch?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 18:42:16 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <NbudnfU_yvCJXr3fRVn-uw@comcast.com>
Source record: 20144

"Theo" <theodore.twyler@ntlworld.com> wrote in message
news:E6YTd.212$Ig4.130@newsfe1-gui.ntli.net...
>I need to replace the MODE switch on my TS520.
> It is a rotary wafer switch.
> Can anyone help?
>
> Theo
>
>
IF you are in Europe (and not North America)

Here is the web site for Kenwood Communications UK
http://www.kenwood-electronics.co.uk/products/FirstProd.aspx?k1=3

Kenwood Parts in the UK
Acoustic Services Ltd (Spare Parts Retailer)
142 Uxbridge Road Hanwell
London
W7 3SL
E-mail: acousticservices@btopenworld.com
Phone: 020 8579 2872
Fax: 020 8579 7156

You have 5 Kenwood Service agents in UK for this replacement:
(Castle Electronics; Nevada Electronics; Waters & Stanton; Martin Lynch;
Amateur Radio Comms)
http://www.kenwood-electronics.co.uk/support....23&M3=8

1312. FA:Greenlee Punches x6 + more stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 18:52:02 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <mz3Ud.287519$w62.59559@bgtnsc05-news.ops.worldnet.att.net>
Source record: 20145

See this Greenlee punch and the others plus some other 'stuff' at

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking, 73 Heytubeguy

1313. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 22:14:42 UTC
From: mikea@mikea.ath.cx
Message-ID: <cvqscivit1@puck.litech.org>
Source record: 20146
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

In <pan.2005.02.26.08.41.16.286280@example.net> (rec.radio.amateur.homebrew), Rich Grise wrote:
> On Fri, 25 Feb 2005 21:39:33 -0800, Watson A.Name - "Watt Sun, the Dark

> > Make everyone take the Boulder Pledge.

> WTF "Boulder Pledge?"

Google can be _your_ friend, too.

"Under no circumstances will I ever purchase anything offered to me
as the result of an unsolicited e-mail message. Nor will I forward
chain letters, petitions, mass mailings, or virus warnings to large
numbers of others. This is my contribution to the survival of the
online community."

<http://www.panix.com/~tbetz/boulder.shtml>

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

1314. Jennings Radio Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-26 22:37:49 UTC
From: Ed Bailen <n5kzw@arrl.net>
Message-ID: <8ut1215s3s18undbq6tgccaar1spq7205c@4ax.com>
Source record: 20147

My father-in-law, W9OIB (SK) gave me a couple of Jennings Radio vacuum capacitors several years ago. According to Google, they are 100 pf units. (They measure about 65 pf.)

Jennings Technology no longer makes these particular capacitors, and they never responded to an email I sent them a while back. Current Jennings Technology capacitors with similar dimensions (6.5"L x 2.5"D) are rated at 32 KV peak test voltage, 25 KV working voltage, and 87 A working current.

The devices are labeled "VCC-100 Jennings Radio" on the glass, and the copper electrodes are hand engraved "VCC-100 225-30" on one and "VCC-100 225-4" on the other.

I'm not going to use these and would like to put them up on eBay. To do that, I would want to be able to list their correct specifications. Can anyone on the group tell me what their specs are supposed to be?

Thanks,
Ed Bailen - N5KZW

1315. ne612 IC working on 28mhz

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-27 06:06:22 UTC
From: bruce johnson <vk3mn@hotmail.com>
Message-ID: <42216344$1@news.alphalink.com.au>
Source record: 19998

anybody ever had a NE612 ic working with 28mhz 3rd ot xtals as local int osc
?
bruce vk3mn

1316. Re: ne612 IC working on 28mhz

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-27 11:21:52 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2005.02.27.11.21.51.821557@oceanfree.net>
Source record: 19999

On Sun, 27 Feb 2005 17:06:22 +1100, bruce johnson wrote:

> anybody ever had a NE612 ic working with 28mhz 3rd ot xtals as local int osc
> ?
> bruce vk3mn

The test circuit in the SA612 data sheet uses a 34MHz 3rd OT
oscillator. You should be able to tweak it to run at 28MHz.
The oscillator section appears to be a single NPN transistor.

http://www.qsl.net/wb4vlq/sa612.pdf

73, Ed. EI9GQ.

--
Linux 2.6.10

1317. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-27 13:42:00 UTC
From: Brian - KB9BVN <kb9bvn@arrl.net>
Message-ID: <I6kUd.6897$873.3695@newsread3.news.pas.earthlink.net>
Source record: 20001
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

I have several homebrew QRP rigs that fit in the palm of my hand.

They're all HF...a couple even exceed 3w output.

They make the FT817 seem like a bowling ball in the backpack. <g>

73

"Airy R.Bean" <Me@privacy.net> wrote in message
news:37cbsuF56al3iU1@individual.net...
> Much of the negativity that the CBer-Masquerading-As-A-Radio-Ham
> emits when it is suggested to him that he should build his own rig comes
> from a complaint that it is not possible to miniaturise a rig to the sizes
> that are available from the Nipland CB suppliers, mainly Yaesu and
Kenwood.
>
> But, surely, the size of a rig is irrelevant to anyone interested in
> technical
> performance?
>
> I wonder what size of rig is really acceptable to the _REAL_ Radio Ham
when
> you consider that the RACAL RA17 was a large 19" rack model, and
> when you take into consideration the footprint of desktop PC's that have
> been welcomed so recently into a number of shacks?
>
> How about a foot print of between 12" and 18" square, with a height of
about
> 3"?
>
> That would make a rig about the same size as a DVD player, again, an item
> of consumerist products that until recently was unknown but now is de
> rigeur - again
> pointing out the spurious argument put up against HB.
>
> In a box 18" square by 3" tall, we'd have enough room to manoeuvre and to
> experiment with circuit changes but without worrying that our Henley
"Solon"
> soldering irons were going to melt a component other than the one we're
> currently dealing with.
>
>
>

1318. SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-27 16:35:12 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <1123te3753lohc5@corp.supernews.com>
Source record: 20002
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"mc" <mc_no_spam@uga.edu> wrote in message
news:421ff6a1@mustang.speedfactory.net...
>
> > As long as they can keep getting paid, they'll keep doing it. It's
like
> > the war on drugs - it's like stopping the tide.
>
> Maybe there should be a law against buying things from spammers.

Well, WTF? There's already a law against spamming, and it doesn't do
any good. Why would _you_ think your law would do any better????

> And a law against knowingly providing credit card, banking, or
Internet (web
> hosting, email) services to spammers.

> Especially the last of these.

Well, every ISP or ASP has a clause against spamming in their policy.
But the problem is they ignore it, and sign 'pink' contracts with
spammers. The worst offender by far is UUNet - part of MCI (was
Worldcom) See www.spamhaus.org.

One big problem is that no one wants to bite the hand that feeds them.
The UUNet system supplies connectivity to so many ISPs - it's
everywhere - that disabling it would put a serious dent in the
connectivity in the U.S. Like, 800 pound gorillas tend to get their
way, don'tcha know. :-O

Speaking of connectivity. Yesterday I was walking down the street and
noticed the manhole covers had the XO ground off, and replaced by Level
3. The FO companies spent zillions of dollars putting all that FO in
the ground, and they couldn't get enough of it leased to pay the loans.
So the only alternatives were either bankruptcy or merger. Perhaps this
is why the ISPs are too lenient on letting the spammers keep on
spamming. Money talks, and big money talks loudly. :-/

Wow. I just watched Sunday Morning (CBS). They had a piece on the guy
who invented the intermittent windshield wipers. Turned out he
eventually won $20 million from Chyrsler and $10 million from Ford for
stealing his idea, but ended up paying most of it to the lawyers. For
those who don't know, it's a SCR and a few other electronic parts that
trigger the W-W intermittently.

One thing is certain: the world would be _much_ better off if the LEAs
would enforce the existing laws. That sentence implies that they are

not being enforced at all. Well, we get an occasional sensational headline that says, "Spammer Convicted" (http://www.pcworld.com/news/article/0,aid,118493,00.asp). But they say there are only a couple hundred spammers that are reponsible for most of the spam; if the FTC would simply crack down on a few score, or even a few dozen, it would put a serious dent in the spam traffic. I'm not holding my breath, tho.

Someone should start a donation fund to pay for law enforcement personnel to track down, arrest and prosecute spammers. I heard that Microsoft and some other agency have a reward out for spammers. If people would just put up the money, the spammers could be decimated.

1319. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-27 16:42:35 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <1123trt88d85bce@corp.supernews.com>
Source record: 20004
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Rich Grise" <richgrise@example.net> wrote in message
news:pan.2005.02.26.18.02.49.102721@example.net...
> On Fri, 25 Feb 2005 22:40:42 -0500, mc wrote:
>
> >
> >> As long as they can keep getting paid, they'll keep doing it. It's
like
> >> the war on drugs - it's like stopping the tide.
> >
> > Maybe there should be a law against buying things from spammers.
> >
> > And a law against knowingly providing credit card, banking, or
Internet (web
> > hosting, email) services to spammers.
> >
> > Especially the last of these.
>
> There already are, if not laws, at least terms of service that
prohibit
> sending spam - in the US. They don't have any effect on the spammers
in,
> say, Elbonia, however.

The spammers are here, in the U.S. The laws don't have much of an
effect on them, either.

> This is why I'm in favor of some kind of central "spammer-list",

That's already being done. It's called the SBL. www.spamhaus.org There
are many others, too. Been that way for many years.

> where people can download the week's list of what IPs
> should be just dropped at the firewall. I have a "Blacklist" now
that's
> 8585 entries long. Would you like me to post it?

No, your list isn't a current list; you have to delete the
non-functioning records from the list, too.

[snip]
> Thanks,
> Rich

1320. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-27 16:47:35 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <1123u59bg6c2h86@corp.supernews.com>
Source record: 20003
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Mike Andrews" <mikea@mikea.ath.cx> wrote in message
news:cvqscivit1@puck.litech.org...
> In <pan.2005.02.26.08.41.16.286280@example.net>
(rec.radio.amateur.homebrew), Rich Grise wrote:
> > On Fri, 25 Feb 2005 21:39:33 -0800, Watson A.Name - "Watt Sun, the
Dark
>
> > > Make everyone take the Boulder Pledge.
>
> > WTF "Boulder Pledge?"
>
> Google can be _your_ friend, too.
>
> "Under no circumstances will I ever purchase anything offered to me
> as the result of an unsolicited e-mail message. Nor will I forward
> chain letters, petitions, mass mailings, or virus warnings to large
> numbers of others. This is my contribution to the survival of the
> online community."
>
> <http://www.panix.com/~tbetz/boulder.shtml>
>
> --
> Mike Andrews, W5EGO
> mikea@mikea.ath.cx
> Tired old sysadmin

Thank you. And thank you, Roger Ebert. ;-)

(Watch him and Roeper tonight, Sunday, on ABC.)

1321. Re: ne612 IC working on 28mhz

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-27 16:50:33 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <4221fa4f$0$2779$cc9e4d1f@news-text.dial.pipex.com>
Source record: 20000

"bruce johnson" <vk3mn@hotmail.com> wrote in message
news:42216344$1@news.alphalink.com.au...
> anybody ever had a NE612 ic working with 28mhz 3rd ot xtals as local int
> osc
> ?

Philips has an app note which includes the use of OT crystals.

73, Leon

1322. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-27 17:04:34 UTC
From: Jim Thompson <thegreatone@example.com>
Message-ID: <tqu321dqvbjt3tk5ojuimjbp2qf9ujnfrr@4ax.com>
Source record: 20006
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Sun, 27 Feb 2005 08:42:35 -0800, "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com> wrote:

[snip]
>
>The spammers are here, in the U.S. The laws don't have much of an
>effect on them, either.
>
[snip]
>
>No, your list isn't a current list; you have to delete the
>non-functioning records from the list, too.
>
>[snip]
[snip]

I average 6 spam E-mails per month, all of which are caught by my filtering and go straight to Trash.

All of them go to a specific publicly-known E-mail address which I'm about to replace with a form on my website.

Then I should be receiving zero.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

1323. SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-27 17:25:51 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <11240d71sf1u668@corp.supernews.com>
Source record: 20005
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Jim Thompson" <thegreatone@example.com> wrote in message
news:tqu321dqvbjt3tk5ojuimjbp2qf9ujnfrr@4ax.com...
> On Sun, 27 Feb 2005 08:42:35 -0800, "Watson A.Name - \"Watt Sun, the
> Dark Remover\"" <NOSPAM@dslextreme.com> wrote:
>
> [snip]
> >
> >The spammers are here, in the U.S. The laws don't have much of an
> >effect on them, either.
> >
> [snip]
> >
> >No, your list isn't a current list; you have to delete the
> >non-functioning records from the list, too.
> >
> >[snip]
> [snip]
>
> I average 6 spam E-mails per month, all of which are caught by my
> filtering and go straight to Trash.
>
> All of them go to a specific publicly-known E-mail address which I'm
> about to replace with a form on my website.
>
> Then I should be receiving zero.
>
> ...Jim Thompson
> --

C'mon, Jim. We all know that your son is doing that for you. ;-)

When you say form, what does that say? A specific error message that
refers to another email address?

On occasion I still troll the web for instances of my old email
addresses. I still find them from prehistoric times, back when I had
freebie educational email addresses. They just won't go away, and the
spammers still scrape them off the net, trying to sell millions of them
to other spammers. I was getting spam on my unix shell acct for a
decade, even tho the address hadn't been used for almost that long.

1324. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-27 18:28:09 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.02.27.18.28.15.642580@example.net>
Source record: 20008
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Sat, 26 Feb 2005 22:14:42 +0000, Mike Andrews wrote:

> In <pan.2005.02.26.08.41.16.286280@example.net> (rec.radio.amateur.homebrew), Rich Grise wrote:
>> On Fri, 25 Feb 2005 21:39:33 -0800, Watson A.Name - "Watt Sun, the Dark
>
>> > Make everyone take the Boulder Pledge.
>
>> WTF "Boulder Pledge?"
>
> Google can be _your_ friend, too.
>
> "Under no circumstances will I ever purchase anything offered to me
> as the result of an unsolicited e-mail message. Nor will I forward
> chain letters, petitions, mass mailings, or virus warnings to large
> numbers of others. This is my contribution to the survival of the
> online community."
>
> <http://www.panix.com/~tbetz/boulder.shtml>

Chuckle! "And a remarkable amount of bandwidth is devoted to
undergraduates telling each other they suck..." - Ebert

Thanks!
Rich

1325. Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-27 18:37:45 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.02.27.18.37.50.434417@example.net>
Source record: 20007
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Sat, 26 Feb 2005 22:14:42 +0000, Mike Andrews wrote:

> In <pan.2005.02.26.08.41.16.286280@example.net> (rec.radio.amateur.homebrew), Rich Grise wrote:
>> On Fri, 25 Feb 2005 21:39:33 -0800, Watson A.Name - "Watt Sun, the Dark
>
>> > Make everyone take the Boulder Pledge.
>
>> WTF "Boulder Pledge?"
>
> Google can be _your_ friend, too.
>
> "Under no circumstances will I ever purchase anything offered to me
> as the result of an unsolicited e-mail message. Nor will I forward
> chain letters, petitions, mass mailings, or virus warnings to large
> numbers of others. This is my contribution to the survival of the
> online community."
>
> <http://www.panix.com/~tbetz/boulder.shtml>

Hmmm. Did you also read about the "CAN-SPAM" law? (Link at the bottom
of the BP page).
http://www.angelfire.com/blues2/blowschunks/index.html

It seems Congress has not only de facto legalized spam, they're even
overriding states' rights by pre-empting state anti-spam laws!

There's a list of emails of congresscritters that voted for the law,
and they[0] recommend forwarding all of your spam to them[1].

Thanks!
Rich

[0] the writers of the page
[1] Congress.

1326. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-27 19:28:21 UTC
From: Kryten <kryten_droid_obfusticator@ntlworld.com>
Message-ID: <pbpUd.2276$Qd1.424@newsfe2-gui.ntli.net>
Source record: 20009
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Watson A.Name - "Watt Sun, the Dark Remover"" <NOSPAM@dslextreme.com> wrote
in message news:1123te3753lohc5@corp.supernews.com...

> Money talks, and big money talks loudly. :-/

When money talks, it swears.

> Someone should start a donation fund to pay for law enforcement
> personnel to track down, arrest and prosecute spammers.

> I heard that Microsoft and some other agency have a reward out for
> spammers.

That's rich, seeing as their bug ridden software provides lots of holes for
malware to exploit.

It's like them selling you an animal, but without a decent immune system.
Then you have to buy endless antiviral medication to keep it healthy.

> If people would just put up the money,
> the spammers could be decimated.

We've already paid them to do the job of enforcing the law.

We should threaten to sue them for not doing their job,
not paying extra to do it.

1327. Re: PileupBuster.com - Domain Name is For Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 00:03:22 UTC
From: hexter@blazenet.net
Message-ID: <1124nuahfuf5mb2@corp.supernews.com>
Source record: 20010

Do you still have your grandmothers gold fillings for sale?

You might have better luck marketing "pile-a-shit.com".

Domain name resellers, lower than lawyers, you'll never see
skid marks in front of a domain reseller lying dead in the middle
of the road, just a line of 18 wheelers waiting to hit him a second
time to make sure he can't resell "deaddomainresellerintheroad.com"

Buzz off, go log into screwyourself.com You'll get instant recognition
there also!!!

In article <36ba001b.0502252131.6b550c00@posting.google.com>, erfurth@gmail.com
says...
>
>-NOTICE-
>
>The "PileupBuster.com" domain name is For Sale.
>
>For less then the price of an HF rig you can own the ultimate Ham
>Radio domain name.
>
>The PileupBuster.com domain has immediate name recognition to everyone
>associated with Ham Radio. Plus, the sales and marketing potential of
>this name is unlimited.
>
>The minimum offer on this domain is $1,250.00 (US Dollars). The
>PileupBuster.com domain name will be sold to the person, company or
>group that makes the highest offer. International offers are welcome.
>
>This is a Private Auction. No one will see what you offer and you
>will not be able to see what others are offering.
>
>You may begin submitting your offers on Saturday February 26. No
>offers will be accepted after 12:00 midnight (Pacific Time) on Friday
>March 4, 2005.
>
>TO MAKE AN OFFER, GO TO: http://PileupBuster.com When the web page
>comes up, look right under the PileupBuster.com name. You will see
>"This domain is For Sale" then click on: "More detailsï¿½" You will
>then see a box to enter your offer. Enter your offer and then click
>"Make Offer"
>
>This sale is supervised and regulated by SEDO (sedo.com), a highly
>respected International domain sales company.

>
>If you have any questions, please feel free to contact me at:
>erfurth@gmail.com
>
>Good luck.
>
>73s,
>
>Bill

1328. OT, Maybe (Tower)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 00:29:00 UTC
From: Win <w0lz@winlyn.us>
Message-ID: <bcp4219gi82nnam7to98us36vc2gbdjnf7@4ax.com>
Source record: 20011

I recently purchased an old crank-up motor driven 60 foot tower that I would hope someone could id for me. The motor belt drives a gearbox, which turns the cable pulley. It has a approximately 1 foot by 18 inch control box which has two high current relays and two glass contained relays. The glass-contained relays are in old 8 pin tube sockets.

The tower, itself, is in good shape. I would like to re-build the control circuits and out the tower in service. Any information anyone can give me on this tower will be greatly appreciated. See at www.winlyn.us/tower.jpg.

Win, w0lz
W0lz@winlyn.us

1329. Re: TS520 Mode Switch?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 00:30:16 UTC
From: kenwood_dude <kenwood@nospam.com>
Message-ID: <42226616.9F47E655@nospam.com>
Source record: 20012

Hi Theo,

Discont. S04-5016-05 (D) $25.02

Discontinued in usa, perhaps it is available in UK

regards,
kenwood dude

Theo wrote:

> I need to replace the MODE switch on my TS520.
> It is a rotary wafer switch.
> Can anyone help?
>
> Theo

1330. Sign up for a great free science e-newsletter!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 04:06:52 UTC
From: neutrino750@yahoo.com
Message-ID: <1109563612.282109.236680@g14g2000cwa.googlegroups.com>
Source record: 20013
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

We'd like to invite you to join our free
WORLD SCIENCE e-newsletter, which
contains some of the world's most exciting
science news and photos long before they're
in the papers and magazines. A sample
newsletter is below.

To join, just send an email with "subscribe"
in the subject line to:
neutrino750 @ yahoo.com (remove the spaces).

The newsletter, sent out about every 3-10
days, contains short summaries of our new
stories, with links to web pages containing
the full stories. It's free: no pop-ups, passwords,
spam, or gimmicks -- that's our pledge! The full
story pages do contain small side ads (non
pop-up), which are what supports our news-
letter. YOU pay nothing ever. You can cancel
anytime simply by replying to a newsletter
email and typing "unsubscribe" in the subject
line.

Below is a sample newsletter. It doesn't
contain the full story links because we're not
allowed to provide them here, but the real
newsletter will contain working links.

****
LAST WEEK'S WORLD SCIENCE EMAIL
NEWSLETTER

* Possible dinosaur-bird missing link found:
It's not the first bird-like dinosaur ever found --
but it is the closest yet found to the actual
dinosaur ancestor of birds, researchers say.

Click here for full story (link will work in the real newsletter)

* Science in Images - A more life-friendly Mars:
Most Mars photos show a rocky, dry-looking land-
scape. This is another view: an area of the planet
that researchers think might have once been
habitable. They plan to explore further.

Click here for full story (link will work in the real newsletter)

* Another record: biggest blast ever in our
galaxy:
The most powerful explosion in our galaxy ever
recorded occurred recently when an exotic star's
magnetic field snapped, astronomers say.

Click here for full story (link will work in the real newsletter)

* New robots walk nearly like humans:
An older robot does it too, but it used 10 times as
much energy as humans do, researchers say; that is
changing.

Click here for full story (link will work in the real newsletter)

* Brain doesn't have universal language rules,
researchers claim:
Some researchers argue that language is more like
a creation of itself than a creation of our brains.

Click here for full story (link will work in the real newsletter)

1331. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 04:41:25 UTC
From: mc <mc_no_spam@uga.edu>
Message-ID: <4222a7ed$1@mustang.speedfactory.net>
Source record: 20015
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

> One thing is certain: the world would be _much_ better off if the LEAs
> would enforce the existing laws.

I agree wholeheartedly. Most spam violates pre-existing fraud laws, not
just CAN-SPAM.

1332. SPAM (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 04:44:55 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <112585vaupp2u70@corp.supernews.com>
Source record: 20014
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Rich Grise" <richgrise@example.net> wrote in message
news:pan.2005.02.27.18.37.50.434417@example.net...
> On Sat, 26 Feb 2005 22:14:42 +0000, Mike Andrews wrote:
>
> > In <pan.2005.02.26.08.41.16.286280@example.net>
(rec.radio.amateur.homebrew), Rich Grise wrote:
> >> On Fri, 25 Feb 2005 21:39:33 -0800, Watson A.Name - "Watt Sun, the
Dark
> >
> >> > Make everyone take the Boulder Pledge.
> >
> >> WTF "Boulder Pledge?"
> >
> > Google can be _your_ friend, too.
> >
> > "Under no circumstances will I ever purchase anything offered to me
> > as the result of an unsolicited e-mail message. Nor will I forward
> > chain letters, petitions, mass mailings, or virus warnings to large
> > numbers of others. This is my contribution to the survival of the
> > online community."
> >
> > <http://www.panix.com/~tbetz/boulder.shtml>
>
> Hmmm. Did you also read about the "CAN-SPAM" law? (Link at the bottom
> of the BP page).
> http://www.angelfire.com/blues2/blowschunks/index.html
>
> It seems Congress has not only de facto legalized spam, they're even
> overriding states' rights by pre-empting state anti-spam laws!

I can see you're another sheeple that hasn't learned to think for
himself.

Think about it: How can you 'legalize' something that had no prior
restrictions? Does what you said make any sense?

I agree that it was unwise to override some state laws, especially since
Calif had just toughened the spam laws. But don't try to tell us that
the law legalizes spam. The law puts restriction on spamming where
there were none before (nationally).

[snip]

1333. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 04:57:58 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <11258ufkc5v3661@corp.supernews.com>
Source record: 20016
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Kryten" <kryten_droid_obfusticator@ntlworld.com> wrote in message
news:pbpUd.2276$Qd1.424@newsfe2-gui.ntli.net...
> "Watson A.Name - "Watt Sun, the Dark Remover"" <NOSPAM@dslextreme.com>
wrote
> in message news:1123te3753lohc5@corp.supernews.com...
>
> > Money talks, and big money talks loudly. :-/
>
> When money talks, it swears.
>
> > Someone should start a donation fund to pay for law enforcement
> > personnel to track down, arrest and prosecute spammers.
>
> > I heard that Microsoft and some other agency have a reward out for
> > spammers.
>
> That's rich, seeing as their bug ridden software provides lots of
holes for
> malware to exploit.
>
> It's like them selling you an animal, but without a decent immune
system.
> Then you have to buy endless antiviral medication to keep it healthy.
>
> > If people would just put up the money,
> > the spammers could be decimated.
>
> We've already paid them to do the job of enforcing the law.
>
> We should threaten to sue them for not doing their job,
> not paying extra to do it.

I don't know where you're at, but (the U.S.) congress had the foresight
to include a clause in the act that requires the Federal Trade
Commission to report back to congress in 18 months or so with how well
the law is working. If it finds that the law isn't effective, then it
can change the law, hopefully the worse for spammers. Perhaps when the
FTC reports it will tell congress that there is insufficient funding to
do the job. Then congress can put up some money and hope it helps.

But someday all the i's will get dotted and t's crossed and the spammers
will not have any way to hide. That may take IPV6, which seems like it
should have been implemented long ago, but still hasn't. Don't hold
your breath.

1334. WTB:HOMEBREW 2 METER TUBE AMPLIFIER

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 06:39:45 UTC
From: KC0EH <cvest@cox.net>
Message-ID: <R0zUd.18708$yr.7543@okepread05>
Source record: 20017
Cross-posted to: alt.ham-radio.marketplace,rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Looking for a homebrew tube type 2 meter amplifier. Prefer one that uses the 4(X)CX 150 or 250 series of tubes. No power supply needed.Will consider projects.

...Charlie...KC0EH...

1335. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 07:14:11 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.02.28.07.14.16.708528@example.net>
Source record: 20018
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Sun, 27 Feb 2005 20:57:58 -0800, Watson A.Name - "Watt Sun, the Dark
> "Kryten" <kryten_droid_obfusticator@ntlworld.com> wrote in message

>> We should threaten to sue them for not doing their job,
>> not paying extra to do it.
>
> I don't know where you're at, but (the U.S.) congress had the foresight
> to include a clause in the act that requires the Federal Trade
> Commission to report back to congress in 18 months or so with how well
> the law is working. If it finds that the law isn't effective, then it
> can change the law, hopefully the worse for spammers. Perhaps when the
> FTC reports it will tell congress that there is insufficient funding to
> do the job. Then congress can put up some money and hope it helps.
>
> But someday all the i's will get dotted and t's crossed and the spammers
> will not have any way to hide. That may take IPV6, which seems like it
> should have been implemented long ago, but still hasn't. Don't hold
> your breath.

This law?
http://www.spamlaws.com/federal/108s877.html
Or maybe this one?
http://www.angelfire.com/blues2/blowschunks/index.html

Thanks,
Rich

1336. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 07:30:30 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.02.28.07.30.36.842952@example.net>
Source record: 20019
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Sun, 27 Feb 2005 20:57:58 -0800, Watson A.Name - "Watt Sun, the Dark

> I don't know where you're at, but (the U.S.) congress had the foresight
> to include a clause in the act that requires the Federal Trade
> Commission to report back to congress in 18 months or so with how well
> the law is working. If it finds that the law isn't effective, then it
> can change the law, hopefully the worse for spammers. Perhaps when the
> FTC reports it will tell congress that there is insufficient funding to
> do the job. Then congress can put up some money and hope it helps.
>
> But someday all the i's will get dotted and t's crossed and the spammers
> will not have any way to hide. That may take IPV6, which seems like it
> should have been implemented long ago, but still hasn't. Don't hold
> your breath.

I've tracked down a summary of the alleged "anti-spam" law:
http://thomas.loc.gov/cgi-bin/cpquery/?&db_id=cp108&r_n=sr102.108&sel=TOC_0&
---excerpt---
Calendar No. 209
108TH CONGRESS
Report
SENATE
1st Session
108-102
--CAN-SPAM ACT OF 2003
JULY 16, 2003- Ordered to be printed
Mr. MCCAIN, from the Committee on Commerce, Science, and Transportation,
submitted the following
R E P O R T
[To accompany S. 877]
The Committee on Commerce, Science, and Transportation, to which was
referred the bill (S. 877) to regulate interstate commerce by imposing
limitations and penalties on the transmission of unsolicited commercial
electronic mail via the Internet, having considered the same, reports
favorably thereon with an amendment in the nature of a substitute and
recommends that the bill (as amended) do pass.

PURPOSE OF THE BILL

The purposes of this legislation are to: (i) prohibit senders of
electronic mail (e-mail) for primarily commercial advertisement or
promotional purposes from deceiving intended recipients or Internet
service providers as to the source or subject matter of their e-mail
messages; (ii) require such e-mail senders to give recipients an

opportunity to decline to receive future commercial e-mail from them and to honor such requests; (iii) require senders of unsolicited commercial e-mail (UCE) to also include a valid physical address in the e-mail message and a clear notice that the message is an advertisement or solicitation; and (iv) prohibit businesses from knowingly promoting, or permitting the promotion of, their trade or business through e-mail transmitted with false or misleading sender or routing information. ---end of excerpt---

Let's analyze this.
(i) prohibit senders of electronic mail (e-mail) for primarily commercial advertisement or promotional purposes from deceiving intended recipients or Internet service providers as to the source or subject matter of their e-mail messages

In other words, if you don't overtly lie about your product, you're OK, you can legally send all of the spam that you want to.

(ii) require such e-mail senders to give recipients an opportunity to decline to receive future commercial e-mail from them and to honor such requests;

Yeah, the ever-popular opt-out clause. This does a lot of good, at the bottom of megabytes of popups.

(iii) require senders of unsolicited commercial e-mail (UCE) to also include a valid physical address in the e-mail message and a clear notice that the message is an advertisement or solicitation;

Valid Physical Address. There's a vacant lot just down the street from me. Include a clear notice? How about not send it at all, huh?

and (iv) prohibit businesses from knowingly promoting, or permitting the promotion of, their trade or business through e-mail transmitted with false or misleading sender or routing information.

So, you can't use your anonymizer. Big deal. It still gets sent!

So I tend to agree with this guy:
http://www.angelfire.com/blues2/blowschunks/index.html

I believe I might start spamming with The Boulder Pledge.

Ah Seen Tha Light!

Thanks,
Rich

1337. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 07:38:21 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.02.28.07.38.26.350399@example.net>
Source record: 20020
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Sun, 27 Feb 2005 23:41:25 -0500, mc wrote:

>> One thing is certain: the world would be _much_ better off if the LEAs
>> would enforce the existing laws.
>
> I agree wholeheartedly. Most spam violates pre-existing fraud laws, not
> just CAN-SPAM.

No, the problem is that it doesn't violate any fraud laws. They're not defrauding anybody. The problem is that they're loading up everybody's mailbox in the world with worthless spam email, the equivalent of ordinary junk snail mail. But with junk snail mail, at least you could use it for kindling. It doesn't matter that the content isn't deceptive - it's there, and it's jamming the internet. The only thing you could do is prohibit ISPs from allowing any spam to be sent through them, but as has been noted else-thread, they know which side their bread is margarined on.

Of course, a solution occurs to me, which would, of course, be even worse, and that would be to charge for bytes times # of recipients.

If you send an email with more than five recipients, it costs you a dime apiece for each additional recipient.

And you're not allowed to send any more than one email per, say, ten seconds.

But that will never be implemented. It makes entirely too much sense.

Thanks,
Rich

1338. Re: SPAM (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 07:56:41 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.02.28.07.56.46.330035@example.net>
Source record: 20021
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Sun, 27 Feb 2005 20:44:55 -0800, Watson A.Name - "Watt Sun, the Dark Remover" wrote:

>
> "Rich Grise" <richgrise@example.net> wrote in message
> news:pan.2005.02.27.18.37.50.434417@example.net...
>> On Sat, 26 Feb 2005 22:14:42 +0000, Mike Andrews wrote:
>>
>> > In <pan.2005.02.26.08.41.16.286280@example.net>
> (rec.radio.amateur.homebrew), Rich Grise wrote:
>> >> On Fri, 25 Feb 2005 21:39:33 -0800, Watson A.Name - "Watt Sun, the
> Dark
>> >
>> >> > Make everyone take the Boulder Pledge.
>> >
>> >> WTF "Boulder Pledge?"
>> >
>> > Google can be _your_ friend, too.
>> >
>> > "Under no circumstances will I ever purchase anything offered to me
>> > as the result of an unsolicited e-mail message. Nor will I forward
>> > chain letters, petitions, mass mailings, or virus warnings to large
>> > numbers of others. This is my contribution to the survival of the
>> > online community."
>> >
>> > <http://www.panix.com/~tbetz/boulder.shtml>
>>
>> Hmmm. Did you also read about the "CAN-SPAM" law? (Link at the bottom
>> of the BP page).
>> http://www.angelfire.com/blues2/blowschunks/index.html
>>
>> It seems Congress has not only de facto legalized spam, they're even
>> overriding states' rights by pre-empting state anti-spam laws!
>
> I can see you're another sheeple that hasn't learned to think for
> himself.
>
> Think about it: How can you 'legalize' something that had no prior
> restrictions? Does what you said make any sense?
>
> I agree that it was unwise to override some state laws, especially since
> Calif had just toughened the spam laws. But don't try to tell us that
> the law legalizes spam. The law puts restriction on spamming where

> there were none before (nationally).
>
See my other post else-thread about my opinion of these alleged
"restrictions."

They only make it illegal to defraud, not to send out a hundred million
totally honest advertising spams. They don't care that there are
"restrictions" on "content" - it's still there clogging my inbox!

In a way, it's equivalent to commercials on free TV (and even cable, these
days). I pay for the use of the phone co's and the ISP's equipment and
bandwidth, and spam is just something I'm going to have to deal with as
it presents itself.

Hence, the blacklist.

And, who cares if it's up to date? Some IP numbers are blocked. Big deal.
If you want to take over the IP number of a known spammer who's been sent
out of business, you should be required to submit an approval form.
Otherwise, those IP numbers are blacklisted forever. Fuckem.

And, just because I'm a rebel, here's mine:
http://www.neodruid.net/LATEST_BLACKLIST

Thanks,
Rich

(yes, I own the domains neodruid.com, neodruid.net, and neodruid.org,
although neodruid.org is on the computer that I boot to Doze at least
once a day to do video games and porno, so won't always be available.)

1339. Re: SPAM (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 08:34:47 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <1125lku9fe1sca2@corp.supernews.com>
Source record: 20022
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Rich Grise" <richgrise@example.net> wrote in message
news:pan.2005.02.28.07.56.46.330035@example.net...
> On Sun, 27 Feb 2005 20:44:55 -0800, Watson A.Name - "Watt Sun, the
Dark
> Remover" wrote:
>
> >
> > "Rich Grise" <richgrise@example.net> wrote in message
> > news:pan.2005.02.27.18.37.50.434417@example.net...
> >> On Sat, 26 Feb 2005 22:14:42 +0000, Mike Andrews wrote:
> >>
> >> > In <pan.2005.02.26.08.41.16.286280@example.net>
> > (rec.radio.amateur.homebrew), Rich Grise wrote:
> >> >> On Fri, 25 Feb 2005 21:39:33 -0800, Watson A.Name - "Watt Sun,
the
> > Dark
> >> >
> >> >> > Make everyone take the Boulder Pledge.
> >> >
> >> >> WTF "Boulder Pledge?"
> >> >
> >> > Google can be _your_ friend, too.
> >> >
> >> > "Under no circumstances will I ever purchase anything offered to
me
> >> > as the result of an unsolicited e-mail message. Nor will I
forward
> >> > chain letters, petitions, mass mailings, or virus warnings to
large
> >> > numbers of others. This is my contribution to the survival of the
> >> > online community."
> >> >
> >> > <http://www.panix.com/~tbetz/boulder.shtml>
> >>
> >> Hmmm. Did you also read about the "CAN-SPAM" law? (Link at the
bottom
> >> of the BP page).
> >> http://www.angelfire.com/blues2/blowschunks/index.html
> >>
> >> It seems Congress has not only de facto legalized spam, they're
even
> >> overriding states' rights by pre-empting state anti-spam laws!
> >

> > I can see you're another sheeple that hasn't learned to think for
> > himself.
> >
> > Think about it: How can you 'legalize' something that had no prior
> > restrictions? Does what you said make any sense?
> >
> > I agree that it was unwise to override some state laws, especially
since
> > Calif had just toughened the spam laws. But don't try to tell us
that
> > the law legalizes spam. The law puts restriction on spamming where
> > there were none before (nationally).
> >
> See my other post else-thread about my opinion of these alleged
> "restrictions."
>
> They only make it illegal to defraud, not to send out a hundred
million
> totally honest advertising spams.

"They" in this case meaning the gov't. That's all that's possible to restrict. If the restrictions were on honest spams, then the law would be declared unconstitutional because it restricts free speech.

> They don't care that there are
> "restrictions" on "content" - it's still there clogging my inbox!

"They" in this case meaning spammers.

> In a way, it's equivalent to commercials on free TV (and even cable,
these

No, it's not! Commercials in the media pay their fair share to the media. Spammers, w/o permission, abuse services from the ISPs and our inboxes without paying their fair share. Spammers are thieves.

[snip]

> Thanks,
> Rich

1340. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 08:39:38 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <1125lu0kml9lge4@corp.supernews.com>
Source record: 20023
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Rich Grise" <richgrise@example.net> wrote in message
news:pan.2005.02.28.07.14.16.708528@example.net...
> On Sun, 27 Feb 2005 20:57:58 -0800, Watson A.Name - "Watt Sun, the
Dark
> > "Kryten" <kryten_droid_obfusticator@ntlworld.com> wrote in message
>
> >> We should threaten to sue them for not doing their job,
> >> not paying extra to do it.
> >
> > I don't know where you're at, but (the U.S.) congress had the
foresight
> > to include a clause in the act that requires the Federal Trade
> > Commission to report back to congress in 18 months or so with how
well
> > the law is working. If it finds that the law isn't effective, then
it
> > can change the law, hopefully the worse for spammers. Perhaps when
the
> > FTC reports it will tell congress that there is insufficient funding
to
> > do the job. Then congress can put up some money and hope it helps.
> >
> > But someday all the i's will get dotted and t's crossed and the
spammers
> > will not have any way to hide. That may take IPV6, which seems like
it
> > should have been implemented long ago, but still hasn't. Don't hold
> > your breath.
>
> This law?
> http://www.spamlaws.com/federal/108s877.html
> Or maybe this one?
> http://www.angelfire.com/blues2/blowschunks/index.html

You can't legalize something that had no prior restrictions because it
was _already_ legal.

> Thanks,
> Rich
>

1341. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 08:45:27 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <1125m8tk6p0gc2d@corp.supernews.com>
Source record: 20024
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Rich Grise" <richgrise@example.net> wrote in message
news:pan.2005.02.28.07.38.26.350399@example.net...
> On Sun, 27 Feb 2005 23:41:25 -0500, mc wrote:
>
> >> One thing is certain: the world would be _much_ better off if the
LEAs
> >> would enforce the existing laws.
> >
> > I agree wholeheartedly. Most spam violates pre-existing fraud laws,
not
> > just CAN-SPAM.
>
> No, the problem is that it doesn't violate any fraud laws. They're not

The spam is fraudulent when it uses spoofing to hide its origin.
Virtually all spam does so.

> defrauding anybody. The problem is that they're loading up everybody's
> mailbox in the world with worthless spam email, the equivalent of
> ordinary junk snail mail. But with junk snail mail, at least you could

No, it's not equivalent. Junk mail is paid for by the advertiser.
Spammers pay nothing! They're thieves.

> use it for kindling. It doesn't matter that the content isn't
deceptive -
> it's there, and it's jamming the internet. The only thing you could do
is
> prohibit ISPs from allowing any spam to be sent through them, but as
has
> been noted else-thread, they know which side their bread is margarined
on.

> Of course, a solution occurs to me, which would, of course, be even
worse,
> and that would be to charge for bytes times # of recipients.
>
> If you send an email with more than five recipients, it costs you a
dime
> apiece for each additional recipient.
>
> And you're not allowed to send any more than one email per, say, ten
> seconds.
>
> But that will never be implemented. It makes entirely too much sense.

It already has been implemented by some ISPs. It's called teergrubing.
That's the German word for tarpit.

> Thanks,
> Rich

1342. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 09:58:42 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <2cZYh1BStuICFw1w@jmwa.demon.co.uk>
Source record: 20025
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

I read in sci.electronics.design that Watson A.Name - "Watt Sun, the Dark Remover" <NOSPAM@dslextreme.com> wrote (in <1125lu0kml9lge4@corp.supernews.com>) about 'SPAMMERS (was Re: Digikey doth truly rule', on Mon, 28 Feb 2005:

>You can't legalize something that had no prior restrictions because it
>was _already_ legal.

It depends on how you define 'legalize'. If no law applies to some activity, it could be taken as 'outside the scope of law', so when a law is applied to it, it becomes within the scope of law, and the verb 'legalize' could well be applied to that action of 'bringing within the scope of law'.
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1343. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 10:00:21 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <IswX9DC1uuICFwQ4@jmwa.demon.co.uk>
Source record: 20026
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

I read in sci.electronics.design that Watson A.Name - "Watt Sun, the
Dark Remover" <NOSPAM@dslextreme.com> wrote (in <1125m8tk6p0gc2d@corp.su
pernews.com>) about 'SPAMMERS (was Re: Digikey doth truly rule', on Mon,
28 Feb 2005:
>It already has been implemented by some ISPs. It's called teergrubing.
>That's the German word for tarpit.

Does that make the spammers guilty of moral tarpitude?
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1344. OT: SPA_m

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 11:08:35 UTC
From: David J Windisch <davidjw@cinci.rr.com>
Message-ID: <TYCUd.81$Mu2.20@fe2.columbus.rr.com>
Source record: 20027

Hi, all concerned:

Is not the problem the avarice and greed of the daydream-believers and homecoming queens who've tried the mass-snailmailing GRQ schemes?

Forget the legislative approach. It only codifies that which moral, honest people are already doing. You obey speed limits on the highways, signal lane changes and turns, and declare _all_ your income, don't you?

Get an isp which allows multiple id's, accept the inconvenience of having to change your id fttt, and filter your email with a trainable $pamblocker.

The elephant has worse pests.

73, Dave, N3HE

1345. Re: Minimal "Chassis" size for HB rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 11:13:04 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <38gcsqF5mnc5kU3@individual.net>
Source record: 20028
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Well done, that man!

I bet it's difficult, though, to experiment with the circuit
configuration of any of them!

"Brian - KB9BVN" <kb9bvn@arrl.net> wrote in message
news:I6kUd.6897$873.3695@newsread3.news.pas.earthlink.net...
> I have several homebrew QRP rigs that fit in the palm of my hand.
>
> They're all HF...a couple even exceed 3w output.
>
> They make the FT817 seem like a bowling ball in the backpack. <g>

1346. Re: WTB:HOMEBREW 2 METER TUBE AMPLIFIER

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 13:22:36 UTC
From: whoever <whoever@wherever>
Message-ID: <lKWdnVaG-paFhr7fRVn-2g@centurytel.net>
Source record: 20029
Cross-posted to: alt.ham-radio.marketplace,rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Not homebrew but you might want to look at it?

-------- Original Message --------
Subject: [Amps] FS:DENTRON CLIPPERTON V 2meter amp- JUNK!!!!!
Date: Sun, 27 Feb 2005 13:48:40 EST
From: JimMoci at aol dot com
To: amps@contesting.com

I have for sale a Dentron Clipperton V 2 meter amplifier rated @ 500 watts input with a 4CX250B. It is in pretty good cosmetic shape except for a small ding in the left corners. As far as working condition goes it does work but I think this amp is a piece of junk! (Hey I am honest) It has an LC tank circuit- it is not a stripline design like it probably should be @ 2 meters. It runs awfully hot and has a severly under sized blower. The tank circuit is under sized and runs very hot- so hot that it melted the solder running 200 watts FM. At 300 watts out it runs fine on SSB but I think it is still way to hot. These junkers are going for $600-700 on Ebay. Why? I dont know why but my guess would be a solid state 300watt amp is $700 and you still need an Astron RS70 to run it. I think it would be fine if someone installed a much larger blower but that would require hacking the cabinet which would ruin the collectability of the amp. At least it would be functional and reliable then. Better yet would be to convert it to stripline- there is enough room with some cabinet work and hacking. It would also be an excellent candidate for a six meter conversion where a conventional tank design is usable with a 4CX250B. I would like to sell this Denny Dentron junker -boatanchor for $550 to someone who can appreciate it for what it is!! :)
Thanks & 73, Jim W3ATV

_____
Amps mailing list
Amps@contesting.com
http://lists.contesting.com/mailman/listinfo/amps

KC0EH wrote:

> Looking for a homebrew tube type 2 meter amplifier. Prefer one that uses the
> 4(X)CX 150 or 250 series of tubes. No power supply needed.Will consider
> projects.
>
> ...Charlie...KC0EH...
>
>

1347. VT-138 pinout request

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 13:52:14 UTC
From: Al <no.spam@wanted.com>
Message-ID: <no.spam-CB50FE.08521728022005@news.verizon.net>
Source record: 20030

I have on hand a couple of VT-138 "eye" tubes. I'd like to make an interesting display with them, such winking, blinking eyes. If anyone has a pinout for this tube, pleast post it on alt.binaries.schematics.electronic.

Thanks in advance.

Al

1348. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 14:47:20 UTC
From: mc <mc_no_spam@uga.edu>
Message-ID: <422335f5@mustang.speedfactory.net>
Source record: 20051
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Watson A.Name - "Watt Sun, the Dark Remover"" <NOSPAM@dslextreme.com> wrote in message news:11258ufkc5v3661@corp.supernews.com...

> But someday all the i's will get dotted and t's crossed and the spammers
> will not have any way to hide. That may take IPV6, which seems like it
> should have been implemented long ago, but still hasn't. Don't hold
> your breath.

Yes. And people will whine about the loss of their precious "electronic frontier" as the Internet ceases to be a fantasyland above and beyond the law.

The Internet was designed for use within research establishments where people were all, at some level, accountable and trustworthy. It has become a playground for con artists and pests.

It may take another half century. I'm reminded of the chaos that afflicted radio before WWI. People just chose their own frequencies and hoped nobody would interfere with them, knowingly or unknowingly.

(And thus I bring the subject matter back to that of the newsgroups we're in! :)

1349. Re: WTB:HOMEBREW 2 METER TUBE AMPLIFIER

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 15:43:59 UTC
From: Robert Kubichek <bobn9lvu@sbcglobal.net>
Message-ID: <38gshvF5nk1kcU1@individual.net>
Source record: 20031
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

It is a good amp, if you use it to its rated output.
The 4cx250b is only rated for 250w plate output. Trying to get more from
that tube will shorten life, and produce much more heat.
I have used that amp running at 150w out and it just gets warm, and it
is solid performer.

Bob N9LVU

whoever wrote:
> Not homebrew but you might want to look at it?
>
> -------- Original Message --------
> Subject: [Amps] FS:DENTRON CLIPPERTON V 2meter amp- JUNK!!!!!
> Date: Sun, 27 Feb 2005 13:48:40 EST
> From: JimMoci at aol dot com
> To: amps@contesting.com
>
> I have for sale a Dentron Clipperton V 2 meter amplifier rated @ 500 watts
> input with a 4CX250B. It is in pretty good cosmetic shape except for a
> small
> ding in the left corners. As far as working condition goes it does work
> but I
> think this amp is a piece of junk! (Hey I am honest) It has an LC tank
> circuit-
> it is not a stripline design like it probably should be @ 2 meters. It runs
> awfully hot and has a severly under sized blower. The tank circuit is under
> sized and runs very hot- so hot that it melted the solder running 200
> watts FM. At
> 300 watts out it runs fine on SSB but I think it is still way to hot. These
> junkers are going for $600-700 on Ebay. Why? I dont know why but my
> guess would
> be a solid state 300watt amp is $700 and you still need an Astron RS70
> to run
> it. I think it would be fine if someone installed a much larger blower but
> that would require hacking the cabinet which would ruin the
> collectability of
> the amp. At least it would be functional and reliable then. Better yet
> would be
> to convert it to stripline- there is enough room with some cabinet work and
> hacking. It would also be an excellent candidate for a six meter conversion
> where a conventional tank design is usable with a 4CX250B. I would like
> to sell
> this Denny Dentron junker -boatanchor for $550 to someone who can
> appreciate it

> for what it is!! :)
> Thanks & 73, Jim W3ATV
> _____
> Amps mailing list
> Amps@contesting.com
> http://lists.contesting.com/mailman/listinfo/amps
>
>
>
> KC0EH wrote:
>
>> Looking for a homebrew tube type 2 meter amplifier. Prefer one that
>> uses the 4(X)CX 150 or 250 series of tubes. No power supply
>> needed.Will consider projects.
>>
>> ...Charlie...KC0EH...
>>
>

1350. Re: VT-138 pinout request

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 18:50:39 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <1126pv8s4ghehec@corp.supernews.com>
Source record: 20032

Al wrote:

> I have on hand a couple of VT-138 "eye" tubes. I'd like to make an
> interesting display with them, such winking, blinking eyes. If anyone
> has a pinout for this tube, pleast post it on
> alt.binaries.schematics.electronic.
>
> Thanks in advance.
>
> Al

NJ7P rules.

http://www.nj7p.org/cgi-bin/tube?tube=VT-138

This appears to be the same as a 1629, if that helps.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

1351. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 18:56:57 UTC
From: dplatt@radagast.org
Message-ID: <1126qbpg84t8g5c@corp.supernews.com>
Source record: 20033
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

In article <1125lu0kml9lge4@corp.supernews.com>,
Watson A.Name - \"Watt Sun, the Dark Remover\" <alondra101@hotmail.com> wrote:

>You can't legalize something that had no prior restrictions because it
>was _already_ legal.

There are those who feel that the CAN SPAM law both legitimizes and
legalizes spam, in two ways:

- It sets specific Federal boundaries on what sorts of spam are
illegal (and thus by implication states that spams which don't
cross those boundaries are legitimate), and

- It preempts most State laws which had stronger restrictions on
spamming, and therefore makes legal certain spams which were
previously forbidden by State law.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1352. Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 19:23:50 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1109618629.998142.124510@o13g2000cwo.googlegroups.com>
Source record: 20034
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Are "overtone" crystals cut differently than "fundamental" crystals?
Or are they just specified differently?

In particular, say I took a garden-variety 20MHz fundamental
microprocessor crystal and instead used it at its fifth overtone,
trying to hit 100 MHz. The LC network is there to make sure that it's
on its fifth overtone. Will this "misuse" mean that the oscillator
will be harder to start up, less stable, more noisy, ???, than a
crystal oscillator made out of a real overtone crystal? I don't mind
if I "miss" 100 MHz by a several tens or hundreds of ppm, as long as
it's stable there.

If anyone knows of a place that ships off-the-shelf 100 MHz fifth or
seventh overtone crystals, I can avoid this whole exercise.... :-)

Tim.

1353. FA:HRO-5A1, HFS Orig Manuals + more

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 19:45:11 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <bxKUd.299909$w62.130132@bgtnsc05-news.ops.worldnet.att.net>
Source record: 20035
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

See at :

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking: heytubeguy

1354. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 20:07:49 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <1126ufulsdj5s93@corp.supernews.com>
Source record: 20036
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Tim Shoppa wrote:

> Are "overtone" crystals cut differently than "fundamental" crystals?
> Or are they just specified differently?
>
> In particular, say I took a garden-variety 20MHz fundamental
> microprocessor crystal and instead used it at its fifth overtone,
> trying to hit 100 MHz. The LC network is there to make sure that it's
> on its fifth overtone. Will this "misuse" mean that the oscillator
> will be harder to start up, less stable, more noisy, ???, than a
> crystal oscillator made out of a real overtone crystal? I don't mind
> if I "miss" 100 MHz by a several tens or hundreds of ppm, as long as
> it's stable there.
>
> If anyone knows of a place that ships off-the-shelf 100 MHz fifth or
> seventh overtone crystals, I can avoid this whole exercise.... :-)
>
> Tim.
>

Overtone crystal cuts are not fundamentally different from fundamental crystal cuts, so to a 1st-order approximation they'll work. Crystals do have spurious responses that can cause mode jumping, and these responses don't necessarily map the same way the overtones do, so using a 20MHz crystal at 100MHz may or may not work, depending on the luck of the draw. Other than that I don't know of any differences.

IIRC Digi-Key has 100MHz crystals, but I may be remembering 100MHz oscillators. YMMV. IDNKWTFIAS. Caviat Emptor (so _that's_ what CE means! Here I thought it was a quality mark). Etc.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

1355. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 20:33:32 UTC
From: Tom Bruhns <k7itm@aol.com>
Message-ID: <1109622812.688061.189800@o13g2000cwo.googlegroups.com>
Source record: 20037
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Tim, would a 100MHz oscillator module do for you? See DigiKey
CTX318LVCT-ND, for example.

Cheers,
Tom

1356. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 20:34:30 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <omu621p01vkm51l99jrvtold0pcgkt09rh@4ax.com>
Source record: 20038
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On 28 Feb 2005 11:23:50 -0800, "Tim Shoppa" <shoppa@trailing-edge.com>
wrote:

>Are "overtone" crystals cut differently than "fundamental" crystals?
>Or are they just specified differently?
>
>In particular, say I took a garden-variety 20MHz fundamental
>microprocessor crystal and instead used it at its fifth overtone,
>trying to hit 100 MHz. The LC network is there to make sure that it's
>on its fifth overtone. Will this "misuse" mean that the oscillator
>will be harder to start up, less stable, more noisy, ???, than a
>crystal oscillator made out of a real overtone crystal? I don't mind
>if I "miss" 100 MHz by a several tens or hundreds of ppm, as long as
>it's stable there.

You can use a fundamental mode crystal as an overtone oscillator, but
even if you can get it to oscillate, it won't be generating an
overtone at 100MHz, since overtone modes of oscillation aren't
harmonically related to the fundamental. It's more like the slab of
crystal is vibrating like the drumhead of a steel drum with small
areas of the slab vibrating at higher frequencies, instead of the
entire slab virbarting at just one frequency.

Check out "Chladni patterns" if you're interested.

Here's some pattrens for violin tops and circular plates:

http://www.phys.unsw.edu.au/~jw/chladni.html

>If anyone knows of a place that ships off-the-shelf 100 MHz fifth or
>seventh overtone crystals, I can avoid this whole exercise.... :-)

Anybody who makes crystals ought to be able to help you out; here's a
start:

http://www.icmfg.com/

--
John Fields

1357. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 21:22:48 UTC
From: JeffM <jeffm_@email.com>
Message-ID: <1109625768.112725.288420@f14g2000cwb.googlegroups.com>
Source record: 20039
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

```
>a solution...charge for bytes times # of recipients.
>If you send an email with more than five recipients,
>it costs you a dime apiece for each additional recipient.
> Rich Grise

You'd need a waiver for piclist.
```

1358. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 21:27:04 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <112734jd5n2lf2f@corp.supernews.com>
Source record: 20040
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

John Fields wrote:
> On 28 Feb 2005 11:23:50 -0800, "Tim Shoppa" <shoppa@trailing-edge.com>
> wrote:
>
>
>>Are "overtone" crystals cut differently than "fundamental" crystals?
>>Or are they just specified differently?
>>
>>In particular, say I took a garden-variety 20MHz fundamental
>>microprocessor crystal and instead used it at its fifth overtone,
>>trying to hit 100 MHz. The LC network is there to make sure that it's
>>on its fifth overtone. Will this "misuse" mean that the oscillator
>>will be harder to start up, less stable, more noisy, ???, than a
>>crystal oscillator made out of a real overtone crystal? I don't mind
>>if I "miss" 100 MHz by a several tens or hundreds of ppm, as long as
>>it's stable there.
>
>
> ---
> You can use a fundamental mode crystal as an overtone oscillator, but
> even if you can get it to oscillate, it won't be generating an
> overtone at 100MHz, since overtone modes of oscillation aren't
> harmonically related to the fundamental. It's more like the slab of
> crystal is vibrating like the drumhead of a steel drum with small
> areas of the slab vibrating at higher frequencies, instead of the
> entire slab virbarting at just one frequency.
>
> Check out "Chladni patterns" if you're interested.
>
> Here's some pattrens for violin tops and circular plates:
>
> http://www.phys.unsw.edu.au/~jw/chladni.html
> ---
>
>
>>If anyone knows of a place that ships off-the-shelf 100 MHz fifth or
>>seventh overtone crystals, I can avoid this whole exercise.... :-)
>
>
> ---
> Anybody who makes crystals ought to be able to help you out; here's a
> start:
>

> http://www.icmfg.com/
>

In an AT cut crystal the overtone modes are close, but not exactly on,
the odd harmonics of the fundamental. Furthermore, all of the
literature that I've read on AT cut crystals reports that they vibrate
in the bulk of the crystal, in shear mode -- see figure 7 here:
http://literature.agilent.com/litweb/pdf/5965-7662E.pdf.

Perhaps you're thinking of SAW devices?

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

1359. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 21:29:15 UTC
From: "RST Engineering (jw)" <jim@rstengineering.com>
Message-ID: <112739g53l594ac@corp.supernews.com>
Source record: 20041
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

I don't know why off-the-shelf crystals are needed when Jan Crystal (Ft. Myers FL) will make the crystal to your specifications in a few days for the same amount of money. They can do fifth ot at 100 MHz. quite easily.

Jim

>
> If anyone knows of a place that ships off-the-shelf 100 MHz fifth or
> seventh overtone crystals, I can avoid this whole exercise.... :-)
>
> Tim.
>

1360. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 21:51:10 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <ra4721dkcou7vcful62gesl4oosnu41d6g@4ax.com>
Source record: 20042
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Mon, 28 Feb 2005 13:27:04 -0800, Tim Wescott
<tim@wescottnospamdesign.com> wrote:

>Furthermore, all of the
>literature that I've read on AT cut crystals reports that they vibrate
>in the bulk of the crystal, in shear mode -- see figure 7 here:
>http://literature.agilent.com/litweb/pdf/5965-7662E.pdf.
>
>Perhaps you're thinking of SAW devices?

No, I was thinking they vibrated in thickness compression. Thanks for
the correction.

--
John Fields

1361. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 22:09:48 UTC
From: Larry Brasfield <donotspam_larry_brasfield@hotmail.com>
Message-ID: <OEMUd.305$LH5.1403@news.uswest.net>
Source record: 20043
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Tim Wescott" <tim@wescottnospamdesign.com> wrote
in message news:112734jd5n2lf2f@corp.supernews.com...
...
> In an AT cut crystal the overtone modes are close, but not exactly on, the odd harmonics
of the fundamental. Furthermore, all of
> the literature that I've read on AT cut crystals reports that they vibrate in the bulk of
the crystal, in shear mode -- see figure
> 7 here: http://literature.agilent.com/litweb/pdf/5965-7662E.pdf.

One effect to watch out for with use of unspecified
overtone modes is that the behavior of the resonator
is not ideal; the presence or size of nearby spurs and
the Q depend on how uniform the thickness is that
determines frequency and the placement and size of
contact metal. The wavelength is typically much less
than the dimension along the non-shearing axis, so
having a single mode of resonance near the nominal
frequency or its overtones is not guaranteed, except
by careful construction and verification. So, clearly,
a guarantee about the behavior near the fundamental
resonance cannot be extended to the overtone modes.

If I was trying to build a stable and pure oscillator
operating at a crystal overtone, I would buy the
crystal specified for the overtone I would be using.

--
--Larry Brasfield
email: donotspam_larry_brasfield@hotmail.com
Above views may belong only to me.

1362. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 22:26:23 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <11276jobn8vot2f@corp.supernews.com>
Source record: 20044
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Larry Brasfield wrote:

> "Tim Wescott" <tim@wescottnospamdesign.com> wrote
> in message news:112734jd5n2lf2f@corp.supernews.com...
> ...
>
>>In an AT cut crystal the overtone modes are close, but not exactly on, the odd harmonics of the fundamental. Furthermore, all of
>>the literature that I've read on AT cut crystals reports that they vibrate in the bulk of the crystal, in shear mode -- see figure
>>7 here: http://literature.agilent.com/litweb/pdf/5965-7662E.pdf.
>
>
> One effect to watch out for with use of unspecified
> overtone modes is that the behavior of the resonator
> is not ideal; the presence or size of nearby spurs and
> the Q depend on how uniform the thickness is that
> determines frequency and the placement and size of
> contact metal. The wavelength is typically much less
> than the dimension along the non-shearing axis, so
> having a single mode of resonance near the nominal
> frequency or its overtones is not guaranteed, except
> by careful construction and verification. So, clearly,
> a guarantee about the behavior near the fundamental
> resonance cannot be extended to the overtone modes.
>
> If I was trying to build a stable and pure oscillator
> operating at a crystal overtone, I would buy the
> crystal specified for the overtone I would be using.
>
I pointed that out in a previous post. But hey -- wouldn't it be fun to have an oscillator that yodels?

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

1363. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 22:55:05 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <788721demun3i9d2h37tp2d3e7tjvl39rr@4ax.com>
Source record: 20045
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Mon, 28 Feb 2005 13:29:15 -0800, "RST Engineering \(jw\)"
<jim@rstengineering.com> wrote:

>I don't know why off-the-shelf crystals are needed when Jan Crystal (Ft.
>Myers FL) will make the crystal to your specifications in a few days for the
>same amount of money. They can do fifth ot at 100 MHz. quite easily.
>
>Jim
>
>
>>
>> If anyone knows of a place that ships off-the-shelf 100 MHz fifth or
>> seventh overtone crystals, I can avoid this whole exercise.... :-)
>>
>> Tim.
>>
>
a CB xtal will probably operate on 100MHz, althouth I've only seen
applications for 45 and 81MHz

-jm

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

1364. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 23:03:01 UTC
From: douglas dwyer <dd@ddwyer.demon.co.uk>
Message-ID: <bdN6PZDIM6ICFwQ2@ddwyer.demon.co.uk>
Source record: 20046
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

In message <1109618629.998142.124510@o13g2000cwo.googlegroups.com>, Tim Shoppa <shoppa@trailing-edge.com> writes
>Are "overtone" crystals cut differently than "fundamental" crystals?
>Or are they just specified differently?
>
>In particular, say I took a garden-variety 20MHz fundamental
>microprocessor crystal and instead used it at its fifth overtone,
>trying to hit 100 MHz. The LC network is there to make sure that it's
>on its fifth overtone. Will this "misuse" mean that the oscillator
>will be harder to start up, less stable, more noisy, ???, than a
>crystal oscillator made out of a real overtone crystal? I don't mind
>if I "miss" 100 MHz by a several tens or hundreds of ppm, as long as
>it's stable there.
>
>If anyone knows of a place that ships off-the-shelf 100 MHz fifth or
>seventh overtone crystals, I can avoid this whole exercise.... :-)
>
>Tim.
>
Overtone crystals are mechanical resonators and the overtone shear mode which has additional shear planes within the volume wont occupy exactly the same volume as the fundamental so the frequency will not be exactly 3X or 5X the fundamental but approx 2000ppm high or low?
The fundamental crystal will not be so accurately polished or dimensioned as the overtone so it will not go well if at all also it may have higher levels of spurious.
--
dd

1365. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 23:07:58 UTC
From: moesenpeter@gmx.de
Message-ID: <1eb84d4a.0502281507.73ff7c41@posting.google.com>
Source record: 20047
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
news:<1109618629.998142.124510@o13g2000cwo.googlegroups.com>...
> Are "overtone" crystals cut differently than "fundamental" crystals?
> Or are they just specified differently?
>
> In particular, say I took a garden-variety 20MHz fundamental
> microprocessor crystal and instead used it at its fifth overtone,
> trying to hit 100 MHz. The LC network is there to make sure that it's
> on its fifth overtone. Will this "misuse" mean that the oscillator
> will be harder to start up, less stable, more noisy, ???, than a
> crystal oscillator made out of a real overtone crystal? I don't mind
> if I "miss" 100 MHz by a several tens or hundreds of ppm, as long as
> it's stable there.
>
> If anyone knows of a place that ships off-the-shelf 100 MHz fifth or
> seventh overtone crystals, I can avoid this whole exercise.... :-)
>
> Tim.

Tim,

to get optimum performance one would grind the 100MHz 5.OT finer or
even polish it, and the thickness of the electrodes might be different
to get optimum Q.
But you should be ok by using a 20MHz fundamental in its 5th.

There are also manufacturers that make 100 in fundamental (up to about
200MHz), and many should have 100 in 5th as standard part...

Frank

1366. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 23:24:36 UTC
From: Richard the Dreaded Libertarian <eatmyshorts@doubleclick.net>
Message-ID: <pan.2005.02.28.23.24.42.694111@doubleclick.net>
Source record: 20048
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Mon, 28 Feb 2005 18:56:57 +0000, Dave Platt wrote:

> In article <1125lu0kml9lge4@corp.supernews.com>,
> Watson A.Name - \"Watt Sun, the Dark Remover\" <alondra101@hotmail.com> wrote:
>
>>You can't legalize something that had no prior restrictions because it
>>was _already_ legal.
>
> There are those who feel that the CAN SPAM law both legitimizes and
> legalizes spam, in two ways:
>
> - It sets specific Federal boundaries on what sorts of spam are
> illegal (and thus by implication states that spams which don't
> cross those boundaries are legitimate), and
>
> - It preempts most State laws which had stronger restrictions on
> spamming, and therefore makes legal certain spams which were
> previously forbidden by State law.

And this is the part that really pisses me off, because it is in direct
violation of Article 10:
"The powers not delegated to the United States by the Constitution, nor
prohibited by it to the states, are reserved to the states respectively,
or to the people."

Thanks,
Rich

1367. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 23:28:03 UTC
From: Richard the Dreaded Libertarian <eatmyshorts@doubleclick.net>
Message-ID: <pan.2005.02.28.23.28.12.284354@doubleclick.net>
Source record: 20049
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Mon, 28 Feb 2005 13:22:48 -0800, JeffM wrote:

>>a solution...charge for bytes times # of recipients.
>>If you send an email with more than five recipients,
>>it costs you a dime apiece for each additional recipient.
>> Rich Grise
>
> You'd need a waiver for piclist.

Fine. Put in a mechanism where mailing lists can get a waiver, and if an individual sends a spam to the list, you cut him off. And, of course, configure the majordomo to drop it.

Thanks,
Rich

1368. Re: SPAM (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-02-28 23:33:56 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.02.28.23.34.03.322954@example.net>
Source record: 20050
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Mon, 28 Feb 2005 00:34:47 -0800, Watson A.Name - "Watt Sun, the Dark Remover" wrote:
> "Rich Grise" <richgrise@example.net> wrote in message
...
>> In a way, it's equivalent to commercials on free TV (and even cable,
> these
>
> No, it's not! Commercials in the media pay their fair share to the
> media. Spammers, w/o permission, abuse services from the ISPs and our
> inboxes without paying their fair share. Spammers are thieves.
>

Ok, good point.

So, do _you_ want to volunteer to track them down and arrest them so that
we can lynch them?

In the interim, here's a blacklist:
http://www.neodruid.net/LATEST_BLACKLIST

Just add them to your firewall's "DROP" list.

Cheers!
Rich

1369. Re: JESUS CHRIST WENT TO THE CROSS SO YOU CAN GO TO HEAVEN - The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel s

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 00:32:53 UTC
From: Brian Oakley <brianoakley@ispwest.com>
Message-ID: <d00cvp0b8b@enews2.newsguy.com>
Source record: 20055

"gudmundur" <hexter@blazenet.net> wrote in message
news:111tf32p5p3thbe@corp.supernews.com...
> >It would be better for the LORD if HE homebrewed HIS own radio.
> >We could talk !
> >
> Religion is a virus that runs on carbon based life forms.
>
> You just got to love a god that turns people to pillars of salt,
> and commands fathers to kill sons just to test faith.

Dont you think if God is real and He says to do something that you might should do it? Lots wife made a choice between her love of lifestyle in Sodom over the love of God. And God rescued Issiac from being killed because he doesnt like death of innocents.
>
> I MEAN YOU JUST GOT TO LOVE THAT GOD!!!! DAMMIT, HE COMMANDS YOU!!!!
>
> Not me, actions speak louder than words. I pulled a man from a burning
> car, and have performed several rescues at sea. Not because DOG (ooops
> there goes my dislexia again) commands me to, but because a long time
> ago I made a choice to just be a decent fellow. It makes me feel good
> at the end of my day. Something god could never do when my life was
> upside down. I chose to make my life rightside up.
>
> Don't worry, Be happy. A Navy Chief will save your ass! Just ask the
Chief!
>
God says all your good deeds are as filthy rags. Being benevolent is only half the commandment that Jesus gave to us. Ill let you find the other half. But benevolence without God is only motions. God says all have sinned. ALL. You, me, others that will read this. If we sin once and only once in our life, we need a Savior, because we cannot enter into the presence of God with sin on us. So GOD sent Jesus to take our sin upon Him. Jesus went willingly. He could have just said no. You talk about risking your life to save others. How about Jesus GIVING His life to save you from eternal damnation? If that isn't love, then I don't understand love. Yeah, Ill follow that God. Will you? Your choice, but be careful. Just because you don't believe doesn't make God untrue.
Brian Oakley

1370. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 00:33:04 UTC
From: Active8 <reply2group@ndbbm.net>
Message-ID: <7i8pq2j1g9xz.dlg@ID-222894.news.individual.net>
Source record: 20052
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Mon, 28 Feb 2005 12:07:49 -0800, Tim Wescott wrote:

>
> IIRC Digi-Key has 100MHz crystals, but I may be remembering 100MHz
> oscillators. YMMV. IDNKWTFIAS. Caviat Emptor (so _that's_ what CE
> means! Here I thought it was a quality mark). Etc.

Dialog news reader's tip popped up to say that CE is "creative
editing". It doesn't KWTF IDNKWTFIAS is, but I got everything but
the IAS part.

--
Best Regards,
Mike

1371. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 00:38:59 UTC
From: Active8 <reply2group@ndbbm.net>
Message-ID: <42bhjdzenldi$.dlg@ID-222894.news.individual.net>
Source record: 20053
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Mon, 28 Feb 2005 13:29:15 -0800, RST Engineering (jw) wrote:

> I don't know why off-the-shelf crystals are needed when Jan Crystal (Ft.
> Myers FL) will make the crystal to your specifications in a few days for the
> same amount of money. They can do fifth ot at 100 MHz. quite easily.
>
> Jim
>

Jan's what I was about to suggest. I thought the rock I needed would
have been off the shelf, but they made it and sent the test results.
--
Best Regards,
Mike

1372. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 00:41:28 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <1127eh0occs4oa9@corp.supernews.com>
Source record: 20054
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Active8 wrote:

> On Mon, 28 Feb 2005 12:07:49 -0800, Tim Wescott wrote:
>
>
>>IIRC Digi-Key has 100MHz crystals, but I may be remembering 100MHz
>>oscillators. YMMV. IDNKWTFIAS. Caviat Emptor (so _that's_ what CE
>>means! Here I thought it was a quality mark). Etc.
>
>
> Dialog news reader's tip popped up to say that CE is "creative
> editing". It doesn't KWTF IDNKWTFIAS is, but I got everything but
> the IAS part.
>
IDNKWTFIAS: I Don't Know What I Am Saying.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

1373. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 00:55:25 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <14PUd.1601$C47.713@newssvr14.news.prodigy.com>
Source record: 20056
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Hello Tim,

As Douglas said the frequency may be a bit off unless you get a crystal made for 5th. An alternative for the 20MHz garden variety would be to make a 20MHz oscillator, run it into a fast gate and fish out the 5th the old fashioned way, with an LC circuit. Then run that through a gate again if needed.

Regards, Joerg

http://www.analogconsultants.com

1374. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 00:59:13 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.03.01.00.59.21.321889@example.net>
Source record: 20057
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

```
On Mon, 28 Feb 2005 12:07:49 -0800, Tim Wescott wrote:
>
> IIRC Digi-Key has 100MHz crystals, but I may be remembering 100MHz
> oscillators. YMMV. IDNKWTFIAS. Caviat Emptor (so _that's_ what CE
----------
> means! Here I thought it was a quality mark). Etc.

I Do Not Know WTF I Am Saying?

Thanks,
Rich
```

1375. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 01:26:39 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <1127h5o2fgg5pbb@corp.supernews.com>
Source record: 20058
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Rich Grise wrote:

> On Mon, 28 Feb 2005 12:07:49 -0800, Tim Wescott wrote:
>
>>IIRC Digi-Key has 100MHz crystals, but I may be remembering 100MHz
>>oscillators. YMMV. IDNKWTFIAS. Caviat Emptor (so _that's_ what CE
>
> ----------
>
>>means! Here I thought it was a quality mark). Etc.
>
>
> I Do Not Know WTF I Am Saying?
>
Now Rich, that's being awfully harsh on yourself.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

1376. Re: 6 Meter Homebrew Project

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 01:45:08 UTC
From: george tibbetts <ta.lvr@worldnet.att.net>
Message-ID: <EOPUd.88300$Th1.85403@bgtnsc04-news.ops.worldnet.att.net>
Source record: 20059

<nospam@nouce.bellatlantic.net> wrote in message
news:87jm11lg73gcl55ota6adk01g9h77eg08g@4ax.com...
> On 21 Feb 2005 09:54:50 -0800, "theologygeek@gmail.com"
> <theologygeek@gmail.com> wrote:
>
>>I'm currently studying code so I can pass my General class license
>>test. I am also interested in homebrewing and QRP. I am looking for
>>plans for building a homebrew 6 meter transmitter. I know that the
>>propagation is not favorable for 6M right now, but until I gain my
>>General class license, I think such a project will be a good place to
>>start. I would appreciate any help that you can offer. Thanks.
>>
>>Jason Evans
>>KI4GMX
>
> Ok go for it. There are openings on 6m even now, maybe less frequent
> but they are there. I've only worked Florida and Alabama twice this
> last week on 6w and 4 elements at 31FT from Massachusetts. Actually
> 6M is a fun bad and when it opens it can be amazing. It's possible to
> do real DX. I've worked 7 countries so far at low power. In a few
> years when the cycle starts toward peak again it should be
> interesting.
>
> Now heres a suggestion for a project, or more correctly a series of
> them that will get you on 6m.
>
> An inexpensive transverter kit from 20m to 6m from TenTec 1208
> 139$ US. This will get you 8-10w on 6m, plenty believe me with an
> inexpensive 3 element beam as high as you can get it. Come to think
> of it, you could build the beam too!
>
> The second part assumes that once you have the code and general
> license you want a HF rig for use.
>
> Now you need a 20m SSB transceiver, either a used commercial one or
> build one. You can find pleny of HF radios that do low power that
> either have 6m already or need the transverter to get there. There
> are several kits that are candidates. Note: that transverter does not
> require much power (under 5w) from the 20M rig so something that only
> does a few watts is ideal. There is also a design on the net, see:
>
> http://www.phonestack.com/farhan/
>
> It's a build it from scratch but do able if you've built some before

> and can get assistance. Why build a 20m rig and use a transverter?
> Simple working with RF at 20m is far less critical than at 6m and
> the transverter kit has a nice board that removes that problem.
>
> Finally, even as a no-code tech you can use code! Just remember
> send QRS if they are too fast. So 6m can be used to practice and
> gain skill. There are a bunch of low power 20m CW only tranceivers
> that would drive the TenTec nicely. Most of them will recieve SSB but
> your limited to CW transmit.
>
> As I said some suggestions.
>
> Allison
> KB1GMX fn42

Along the same thought train - I built the t-tec transverter last year. I did fine with it using my scout. This winter my project is to build the the t-tec qrp kit 1320 to drive the xvtr - Im about half way thru with it. when I done I will use it for both monitoring the fifty meter band and qso ing in cw on 50.095 kcs but the down size is that I will only be able to use cw. So you might try a ramsey kit i cant remember if thier kit for 20 meters has ssb or not. For an experimantal antenna I just split some stereo wire 56 inches on each side and took a few laps around a medacine bottle. MFJ has an inexpensive two meter 5/8th verticle that is a quarter wave for 6 meters. These are just temp.ants for testing your kit. I realy think that when the band is open you could just throw out a couple feet of wire (for listening only) and do well.

good luck

george/kf4ucc

1377. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 02:25:30 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_4223d885@fidonet.org>
Source record: 20065

"John Fields" bravely wrote to "All" (28 Feb 05 14:34:30)
--- on the heady topic of "Re: Using non-overtone crystal in overtone mode?"

JF> From: John Fields <jfields@austininstruments.com>
JF> sci.electronics.components:12029 rec.radio.amateur.homebrew:8635

JF> Check out "Chladni patterns" if you're interested.

I've done some putzing with crystals. What frequency say would a
100.3MHz xtal in series with a 100.1Mhz xtal settle on? 100.2Hz?

A*s*i*m*o*v

... It's kind of fun to do the impossible... -Walt Disney

1378. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 02:33:53 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <1127l4j3h5j651d@corp.supernews.com>
Source record: 20060
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

That is total and absolute bullpuckey.

Jim

> ---
> You can use a fundamental mode crystal as an overtone oscillator, but
> even if you can get it to oscillate, it won't be generating an
> overtone at 100MHz, since overtone modes of oscillation aren't
> harmonically related to the fundamental.

1379. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 03:04:35 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <7ZQUd.1708$C47.1205@newssvr14.news.prodigy.com>
Source record: 20061
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Hello Jim,

>That is total and absolute bullpuckey.
>
>

Huh? See the 2nd paragraph (mode):

http://www.euroquartz.co.uk/tech-xtal.htm

Regards, Joerg

http://www.analogconsultants.com

1380. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 04:30:10 UTC
From: Terry Given <my_name@ieee.org>
Message-ID: <ndSUd.5424$1S4.590975@news.xtra.co.nz>
Source record: 20062
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Rich Grise wrote:
> On Mon, 28 Feb 2005 12:07:49 -0800, Tim Wescott wrote:
>
>>IIRC Digi-Key has 100MHz crystals, but I may be remembering 100MHz
>>oscillators. YMMV. IDNKWTFIAS. Caviat Emptor (so _that's_ what CE
>
> ----------
>
>>means! Here I thought it was a quality mark). Etc.
>
>
> I Do Not Know WTF I Am Saying?
>
> Thanks,
> Rich
>

OK, silly I know, but I cant figure out YMMV...

OTOH, WTF, IAAR

Cheers
Terry

1381. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 04:31:12 UTC
From: Terry Given <my_name@ieee.org>
Message-ID: <keSUd.5425$1S4.590975@news.xtra.co.nz>
Source record: 20063
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

RST Engineering wrote:
> That is total and absolute bullpuckey.
>
> Jim
>
>
>
>>---
>>You can use a fundamental mode crystal as an overtone oscillator, but
>>even if you can get it to oscillate, it won't be generating an
>>overtone at 100MHz, since overtone modes of oscillation aren't
>>harmonically related to the fundamental.

sorry dude, 50 years of IEEE UFFC papers suggest *you* are wrong. I was surprised when I learned this too.

Cheers
Terry

1382. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 05:55:47 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <422403D7.6AA060C@earthlink.net>
Source record: 20064
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Terry Given wrote:
>
> OK, silly I know, but I cant figure out YMMV...

Your Mileage May Vary

--
Beware of those who post from srvinet.com!

Michael A. Terrell
Central Florida

1383. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 09:33:20 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <ORUGyOBgbDJCFwqm@jmwa.demon.co.uk>
Source record: 20066
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

I read in sci.electronics.design that Terry Given <my_name@ieee.org>
wrote (in <ndSUd.5424$1S4.590975@news.xtra.co.nz>) about 'Using non-
overtone crystal in overtone mode?', on Tue, 1 Mar 2005:

>OK, silly I know, but I cant figure out YMMV...

Year 2005. (;-)
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1384. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 09:36:15 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <OhfGOYBPeDJCFwJT@jmwa.demon.co.uk>
Source record: 20067
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

I read in sci.electronics.design that douglas dwyer
<dd@ddwyer.demon.co.uk> wrote (in <bdN6PZDlM6ICFwQ2@ddwyer.demon.co.uk>)
about 'Using non-overtone crystal in overtone mode?', on Mon, 28 Feb
2005:
>Overtone crystals are mechanical resonators and the overtone shear mode
>which has additional shear planes within the volume wont occupy exactly
>the same volume as the fundamental so the frequency will not be exactly
>3X or 5X the fundamental but approx 2000ppm high or low?

I remember being told by a crystal 'expert' that with some cuts the
difference can be much larger than that. Is that so?
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1385. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 10:34:17 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <JyXUd.37835$ya6.34602@trndny01>
Source record: 20068

Depending on whether the circuit is designed for overtone oscillation or harmonic generation, how perfect the overtone crystals are, and how the circuit is tuned, I'd expect either:
1) No oscillation
2) Very close to 100.1 MHz
3) Very close to 100.3 MHz

What did you experience?

Joe
W3JDR

"Asimov" <Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote in message news:MSGID_1=3a167=2f133.0_4223d885@fidonet.org...
> "John Fields" bravely wrote to "All" (28 Feb 05 14:34:30)
> --- on the heady topic of "Re: Using non-overtone crystal in overtone
> mode?"
>
> JF> From: John Fields <jfields@austininstruments.com>
> JF> sci.electronics.components:12029 rec.radio.amateur.homebrew:8635
>
> JF> Check out "Chladni patterns" if you're interested.
>
> I've done some putzing with crystals. What frequency say would a
> 100.3MHz xtal in series with a 100.1Mhz xtal settle on? 100.2Hz?
>
> A*s*i*m*o*v
>
> ... It's kind of fun to do the impossible... -Walt Disney
>

1386. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 10:50:38 UTC
From: Paul Burke <paul@scazon.com>
Message-ID: <38j07rF5o6pl4U1@individual.net>
Source record: 20069
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

John Woodgate wrote:
>>OK, silly I know, but I cant figure out YMMV...
> Year 2005. (;-)

Honestly John! That should be AMMV.

1387. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 12:55:15 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <elQC$DEzYGJCFwbj@jmwa.demon.co.uk>
Source record: 20070
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

I read in sci.electronics.design that Paul Burke <paul@scazon.com> wrote
(in <38j07rF5o6pl4U1@individual.net>) about 'Using non-overtone crystal
in overtone mode?', on Tue, 1 Mar 2005:
>John Woodgate wrote:
>>>OK, silly I know, but I cant figure out YMMV...
>> Year 2005. (;-)
>
>Honestly John! That should be AMMV.

The promulgation of a 'horrible hybrid' is justified in pursuit of a
whimsical coincidence.
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1388. The ultimate non-hb receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 13:31:18 UTC
From: John Walton <jdwalton@comcast.net>
Message-ID: <KrKdnff0uaep8LnfRVn-ug@comcast.com>
Source record: 20071

Forgive me, but I only post this as I think it will be of general interest to rrah readers -- i have no financial connection whatsoever -- a Watkins Johnson receiving station which will fill your 1/2 of your shack or basement -- the seller has been good to deal with -- you will be amused:

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=4673&item=5755335998&rd=1

1389. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 14:04:12 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <rht821t7jq4dmt220n9njjjbkihhk29197@4ax.com>
Source record: 20072
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Mon, 28 Feb 2005 18:33:53 -0800, "RST Engineering"
<jim@rstengineering.com> wrote:

>That is total and absolute bullpuckey.
>
>Jim
>
>
>> ---
>> You can use a fundamental mode crystal as an overtone oscillator, but
>> even if you can get it to oscillate, it won't be generating an
>> overtone at 100MHz, since overtone modes of oscillation aren't
>> harmonically related to the fundamental.

RST what???

--
John Fields

1390. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 14:13:15 UTC
From: douglas dwyer <dd@ddwyer.demon.co.uk>
Message-ID: <JAruokA7hHJCFwq7@ddwyer.demon.co.uk>
Source record: 20074
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

In message <1eb84d4a.0502281507.73ff7c41@posting.google.com>, Frank Moe <moesenpeter@gmx.de> writes
>There are also manufacturers that make 100 in fundamental (up to about >200MHz), and many should have 100 in 5th as standard part...
High frequency fundamentals are real and can be purchased to at least 250MHz note they are expensive, their Q which is ultimately material related reduces with increased frequency (loss is per cycle) such that it may be no higher than a SAW resonator . Still better than a SAW as the temperature coefficient for the SAW only has the linear cancelled whereas the AT cut has the parabolic term cancelled.
Finally the 5th overtone will only pull 1/25 times the fundamental.
Finally finally the SAW can be run at much higher power levels so noise floor is much better.
Finally finally finally a SAW needs a mask which gives a high up front cost and lead time.
The difference in frequency for overtone /X fund may be much more than 2000ppm where the plate is not very parallel and the plate back and electrode diameter non optimum. Beware AT cut strip crystals ie a long section of a circular diameter these may not like overtone operation.

not pull with external reactance change perhaps a byt
--
dd

1391. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 14:18:19 UTC
From: douglas dwyer <dd@ddwyer.demon.co.uk>
Message-ID: <lAvloJCrmHJCFwPo@ddwyer.demon.co.uk>
Source record: 20073
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

In message <OhfGOYBPeDJCFwJT@jmwa.demon.co.uk>, John Woodgate
<jmw@jmwa.demon.contraspam.yuk> writes
>I remember being told by a crystal 'expert' that with some cuts the
>difference can be much larger than that. Is that so?
Yes depends on electrode diameter plate diameter plate back (electrode
thickness) and parallelism. ie I would not be surprised at 10000ppm.
--
dd

1392. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 14:40:35 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <D9%Ud.78973$tl3.73822@attbi_s02>
Source record: 20075
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Hi Doug, great to hear from you and the info in your posts. I'm currently using a SAW at 660 MHz for the clock in a 9951 DDS. Actually, it's better than my 200 MHz 7th overtone tripled to 660 with an MMIC although I do think my MMIC tripler is most of the culprit.

Reason for the post, I think you've changed ISP's on me again, my mail to you gets bounced. Would you pse address me a short note to the e-mail address and give me the current one? That is, if it's not me you're trying to get rid of!

Regards

W4ZCB

1393. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 14:57:34 UTC
From: no-one@dont-mail-me.com
Message-ID: <42247f71.6092731@news.provide.net>
Source record: 20076
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

>>> You can use a fundamental mode crystal as an overtone oscillator, but
>>> even if you can get it to oscillate, it won't be generating an
>>> overtone at 100MHz, since overtone modes of oscillation aren't
>>> harmonically related to the fundamental.

There is a related phenomenon in the field of piano tuning. It has long been known that overtones (called "partials" by piano people) of piano notes are not exactly related to pitch of the fundamental frequency by whole numbered ratios. Instead they are related by factors like

1.000
2.003
3.007
4.018
5.039
6.092
7.211
etc.

The amount by which this series deviates from the ideal whole-numbered ratios is called "inharmonicity" and it differs from one string to another. The stiffer the string, the more inharmonicity. Long thin strings, as are found on harpsichords, have almost no inharmonicity. Short strings in the highest section of the piano have the most inharmonicity. Since one of the goals of piano tuning is to make partials of different notes come out the same, this phenomenon of inharmonicity makes piano tuning inherently more difficult than instruments that have no inharmonicity, like pipe organs.

What is perhaps more like quartz crystals is carillon bells. They are tuned at the factory, and each partial is tuned independently and separately by grinding away metal from different levels on the bell. In view of these related phenomena, it is no wonder that overtones of quartz crystals are independent of each other and from the fundamental.

-Robert Scott
Ypsilanti, Michigan

1394. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 15:04:36 UTC
From: kensmith@green.rahul.net
Message-ID: <d020a4$4ft$1@blue.rahul.net>
Source record: 20077
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

In article <1126ufulsdj5s93@corp.supernews.com>,
Tim Wescott <tim@wescottnospamdesign.com> wrote:
[....]
>Overtone crystal cuts are not fundamentally different from fundamental
>crystal cuts, so to a 1st-order approximation they'll work. Crystals do
>have spurious responses that can cause mode jumping, and these responses
>don't necessarily map the same way the overtones do, so using a 20MHz
>crystal at 100MHz may or may not work, depending on the luck of the
>draw. Other than that I don't know of any differences.

There is a whole science of crystals all on its own. When they make a
crystal they make a thin disk of material. You would normally expect the
edge of the disk to simply be at right angles. Instead it looks like
this:

****
*
*
*
*
****

The exact angle and depth of that chamfer is how they control which
overtones are selected for and which are supressed. In fundamental
crystals, the maker usually grinds the chamfer so as to reduce the 3rd
harmonic responce.

--
--
kensmith@rahul.net forging knowledge

1395. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 15:07:27 UTC
From: kensmith@green.rahul.net
Message-ID: <d020ff$4ft$2@blue.rahul.net>
Source record: 20078
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

In article <11276jobn8vot2f@corp.supernews.com>,
Tim Wescott <tim@wescottnospamdesign.com> wrote:
[....]
>I pointed that out in a previous post. But hey -- wouldn't it be fun to
>have an oscillator that yodels?

No, it isn't fun. Trust me :<

--
--
kensmith@rahul.net forging knowledge

1396. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 15:21:42 UTC
From: kensmith@green.rahul.net
Message-ID: <d021a6$4ft$3@blue.rahul.net>
Source record: 20079
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

In article <omu621p01vkm51l99jrvtold0pcgkt09rh@4ax.com>,
John Fields <jfields@austininstruments.com> wrote:
[..]
>You can use a fundamental mode crystal as an overtone oscillator, but
>even if you can get it to oscillate, it won't be generating an
>overtone at 100MHz, since overtone modes of oscillation aren't
>harmonically related to the fundamental. It's more like the slab of
>crystal is vibrating like the drumhead of a steel drum with small
>areas of the slab vibrating at higher frequencies, instead of the
>entire slab virbarting at just one frequency.

No, its more like a jello when you jiggle the dish side to side. The main
action of an AT cut is shear mode. In the harmonics, the motion looks
kind of like this:

>>>>>>>>>>>>>>
<<<<<<<<<<<<<<
>>>>>>>>>>>>>>
<<<<<<<<<<<<<<
>>>>>>>>>>>>>>
<<<<<<<<<<<<<<

If you think about the top two lines of text in my little drawing. I
think it is obvious that if the maker thinned it down by one line of text
just as you come to the edge, that portion of the crystal would not work
well at this harmonic. This is what they do in crystals intended for
fundamental operation. It knocks that activity down by several dB at the
overtone. This makes it very unlikely that a simple oscillator will take
off at an overtone.
--
--
kensmith@rahul.net forging knowledge

1397. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 15:34:58 UTC
From: kensmith@green.rahul.net
Message-ID: <d02232$4ft$4@blue.rahul.net>
Source record: 20080
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

In article <112734jd5n2lf2f@corp.supernews.com>,
Tim Wescott <tim@wescottnospamdesign.com> wrote:
[...]
>In an AT cut crystal the overtone modes are close, but not exactly on,
>the odd harmonics of the fundamental. Furthermore, all of the
>literature that I've read on AT cut crystals reports that they vibrate
>in the bulk of the crystal, in shear mode -- see figure 7 here:
>http://literature.agilent.com/litweb/pdf/5965-7662E.pdf.

Yes

In the ideal AT cut crystal "c mode" shear is the only activity. In the SC
cut, the "b" and "a" modes appear. The extra complexity of the mode
selection circuit is part of the reason that SC based OCXOs cost so much.

--
--
kensmith@rahul.net forging knowledge

1398. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 16:12:48 UTC
From: "RST Engineering (jw)" <jim@rstengineering.com>
Message-ID: <11295445so5g311@corp.supernews.com>
Source record: 20081
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Sorry, dude, 50 years of designing with crystals, right from when I ground my first surplus WWII rock on a piece of glass with toothpaste as the abrasive says that what the original poster asked is correct.

Will the harmonic be precise? No. Will it be "close", which is what the original poster asked? You bet. Depending on the oscillator circuit, can it be "pulled" on frequency? Perhaps.

But to say that the crystal doesn't resonate anywhere near the harmonic is, as I said, bullpuckey.

Jim

"Terry Given" <my_name@ieee.org> wrote in message
news:keSUd.5425$1S4.590975@news.xtra.co.nz...
> RST Engineering wrote:
>> That is total and absolute bullpuckey.
>>
>> Jim
>
> sorry dude, 50 years of IEEE UFFC papers suggest *you* are wrong. I was
> surprised when I learned this too.
>
> Cheers
> Terry

1399. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 16:57:16 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <ts6921d632jtuabnv9d0n9b0hv5mlb573i@4ax.com>
Source record: 20082
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Tue, 1 Mar 2005 08:12:48 -0800, "RST Engineering \(jw\)"
<jim@rstengineering.com> wrote:

>Sorry, dude, 50 years of designing with crystals, right from when I ground
>my first surplus WWII rock on a piece of glass with toothpaste as the
>abrasive says that what the original poster asked is correct.
>
>Will the harmonic be precise? No. Will it be "close", which is what the
>original poster asked? You bet. Depending on the oscillator circuit, can
>it be "pulled" on frequency? Perhaps.
>
>But to say that the crystal doesn't resonate anywhere near the harmonic is,
>as I said, bullpuckey.

Sorry, dude, no matter how much time you've got in, if you go back
and read my post, you'll find that I wrote:

"You can use a fundamental mode crystal as an overtone oscillator, but
even if you can get it to oscillate, it won't be generating an
overtone at 100MHz, since overtone modes of oscillation aren't
harmonically related to the fundamental."

and that you replied with:

"That is total and absolute bullpuckey."

Notice that I didn't say "near", I said "at".

If you can find fault with anything I wrote in that post, I'd
appreciate specific criticism instead of that broad brush you painted
with.

--
John Fields

1400. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 19:24:02 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <mj3Vd.8232$OU1.3254@newssvr21.news.prodigy.com>
Source record: 20083
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Hello John,

>"You can use a fundamental mode crystal as an overtone oscillator, but
>even if you can get it to oscillate, it won't be generating an
>overtone at 100MHz, since overtone modes of oscillation aren't
>harmonically related to the fundamental."
>
>

When you look at older (pre-PLL) VHF communication gear of the more professional kind they didn't use 5th or higher overtones but employed frequency multiplier stages. For good reason, one being the offset you had mentioned. I'd never run a crystal on its umpteenth harmonic and always designed in multiplier stages like the radio folks did. With today's cheap logic chips that doesn't even cost much in extra parts.

>and that you replied with:
>
>
>"That is total and absolute bullpuckey."
>
>

Look on the bright side. Some of us, including me, didn't know the expression "bullpuckey". I got a kick out of it.

Regards, Joerg

http://www.analogconsultants.com

1401. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 20:34:16 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1109709256.878652.134120@f14g2000cwb.googlegroups.com>
Source record: 20084
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Harold Johnson wrote:

> I'm currently
> using a SAW at 660 MHz for the clock in a 9951 DDS.

Interesting factoid: I was looking to experiment with 100MHz oscillators largely as a clock source for my own AD9951 experimentation (using the AD9951's built-in PLL multiplier at 4x). I was hoping to experiment a bit with 20 MHz crystals I already had in hand before ordering some "real overtone" crystals cut just for me. I've been looking at AD app note AN-419 and it's Butler oscillator, in particular, although the clock input of the AD9951 probably has different requirements than the AD9850 targetted in AN-419.

Does the AD9951 really work at 660MHz? I thought it was only good to 400MHz...

So far my experimenting has used the on-chip oscillator at 25MHz and the PLL at 16x to get to 400MHz.

> Actually, it's better
> than my 200 MHz 7th overtone tripled to 660

We bandied about "non-harmonic" relations here but how you get from 200 to 660, I don't know.

Tim.

1402. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 21:11:34 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_4225583b@fidonet.org>
Source record: 19949

"W3JDR" bravely wrote to "All" (01 Mar 05 10:34:17)
--- on the heady topic of "Re: Using non-overtone crystal in overtone mode?"

It did oscillate. I was some really oddball frequency inbetween but as
I recall it was neither the mean nor any other obvious relation. I
suppose it was where their response curves complimented but I'm not
sure. Did it only for curiosity's sake to see if it they could be used
for filtering but tried making them oscillate for fun. I know, simple
pleasures... ;-)

A*s*i*m*o*v

W3> Reply-To: "W3JDR" <joe@roccis.com>
W3> Xref: aeinews rec.radio.amateur.homebrew:8665

W3> Depending on whether the circuit is designed for overtone oscillation
W3> or harmonic generation, how perfect the overtone crystals are, and how
W3> the circuit is tuned, I'd expect either:
W3> 1) No oscillation
W3> 2) Very close to 100.1 MHz
W3> 3) Very close to 100.3 MHz

W3> What did you experience?

W3> Joe
W3> W3JDR

W3> "Asimov" <Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote in
W3> message news:MSGID_1=3a167=2f133.0_4223d885@fidonet.org...
> "John Fields" bravely wrote to "All" (28 Feb 05 14:34:30)
> --- on the heady topic of "Re: Using non-overtone crystal in overtone
> mode?"
>
> JF> From: John Fields <jfields@austininstruments.com>
> JF> sci.electronics.components:12029 rec.radio.amateur.homebrew:8635
>
> JF> Check out "Chladni patterns" if you're interested.
>
> I've done some putzing with crystals. What frequency say would a
> 100.3MHz xtal in series with a 100.1Mhz xtal settle on? 100.2Hz?
>

... All things are possible. Except skiing through a revolving door.

1403. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 21:44:33 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <5n5Vd.81237$tl3.38005@attbi_s02>
Source record: 20085
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

> Interesting factoid: I was looking to experiment with 100MHz
> oscillators largely as a clock source for my own AD9951 experimentation
> (using the AD9951's built-in PLL multiplier at 4x). I was hoping to
> experiment a bit with 20 MHz crystals I already had in hand before
> ordering some "real overtone" crystals cut just for me. I've been
> looking at AD app note AN-419 and it's Butler oscillator, in
> particular, although the clock input of the AD9951 probably has
> different requirements than the AD9850 targetted in AN-419.

The built-in multiplier is quite noisy and makes the 9951 run terribly hot.
>
> Does the AD9951 really work at 660MHz? I thought it was only good to
> 400MHz...

Yes, if you DON'T use the on board multiplier. I've had it to 750 MHz just to check it since I had heard of some DL's overclocking it to that frequency. Properly heat sunk to the eval board, and without the multiplier, it's cool as a cucumber. AD rates it only to 400 MHz but a sample of 6 units all operate well at 660 MHz.
>
> So far my experimenting has used the on-chip oscillator at 25MHz and
> the PLL at 16x to get to 400MHz.
>
> > Actually, it's better
> > than my 200 MHz 7th overtone tripled to 660
>
> We bandied about "non-harmonic" relations here but how you get from 200
> to 660, I don't know.

Well, this one is a 220 MHz 7th overtone from ICL specially surface treated for low noise and operating in a Stephensen bipolar/FET Butler. But as I mentioned to Doug, afraid my MMIC tripler makes a bad job of the 660 output despite a 3 pole final filter. The SAW is not near the Q of the crystal, but the SNR is much better.

Regards

W4ZCB

1404. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 22:58:29 UTC
From: douglas dwyer <dd@ddwyer.demon.co.uk>
Message-ID: <9pgzSKFVOPJCFwOS@ddwyer.demon.co.uk>
Source record: 20086
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

In message <mj3Vd.8232$OU1.3254@newssvr21.news.prodigy.com>, Joerg
<notthisjoergsch@removethispacbell.net> writes
>
>When you look at older (pre-PLL) VHF communication gear of the more
>professional kind they didn't use 5th or higher overtones but employed
>frequency multiplier stages. For good reason, one being the offset you
>had mentioned. I'd never run a crystal on its umpteenth harmonic and
>always designed in multiplier stages like the radio folks did. With
>today's cheap logic chips that doesn't even cost much in extra parts.
Often cheaper to multiply up than buy an expensive 5th overtone that was
difficult to pull onto frequency and fussy to set up.
The exception would be current and size saving for some portables.
--
dd

1405. TS-850S region change

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-01 23:50:17 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <VA.000000b1.007b5ef2@btinternet.com>
Source record: 20087

Hi,

As I would like to take advantage of the recent increase in
the 40m allocation here in the UK, I wonder if anyone has made
any sense of the diode table (D8 - D12) on the TS-850S digital
board schematic. This as far as I can see determines the
destination region and thus the rig's operating band limits.

I know that it is possible to change the existing arrangement
to give general coverage to the transmitter but would rather not
do that. Initially I did a hex dump of the ROM but found it too
big a task to decode without experience with the particular
processor code - a uPD78C10.

73 de Joe, G3LLV

1406. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-02 00:59:00 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <od8Vd.10531$Pz7.308@newssvr13.news.prodigy.com>
Source record: 20088
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Hello Douglas,

> Often cheaper to multiply up than buy an expensive 5th overtone that
> was difficult to pull onto frequency and fussy to set up.

And these special cuts can indeed be fussy. They can also be a procurement nightmare.

> The exception would be current and size saving for some portables.

Even then it could be done. Besides the discrete solution there are blazingly fast logic inverters such as the ALVC series. These are usually under 20 cents and come in the super tiny TSSOP format. Now I just wish they had unbuffered versions to do the oscillator part with. If a 74HCU04 is needed for other jobs on the board it could run the oscillator but for any reasonable speed these require more than 4V.

Regards, Joerg

http://www.analogconsultants.com

1407. Re: TS-850S region change

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-02 01:15:17 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <0N6dnbTQxsM0jrjfRVn-vA@comcast.com>
Source record: 20089

"Joe McElvenney" <ximac@btinternet.com> wrote in message
news:VA.000000b1.007b5ef2@btinternet.com...
> Hi,
>
> As I would like to take advantage of the recent increase in
> the 40m allocation here in the UK, I wonder if anyone has made
> any sense of the diode table (D8 - D12) on the TS-850S digital
> board schematic. This as far as I can see determines the
> destination region and thus the rig's operating band limits.
>
> I know that it is possible to change the existing arrangement
> to give general coverage to the transmitter but would rather not
> do that. Initially I did a hex dump of the ROM but found it too
> big a task to decode without experience with the particular
> processor code - a uPD78C10.
>
>
> 73 de Joe, G3LLV
>

Ofcom and the RSGB have announced that all UK radio amateurs are now allowed
access to the extended 40-metre band.
For further information on specific updates and conversions of Kenwood
amateur radios -
PLEASE e-mail comms@kenwood-electronics.co.uk

Authorized Amateur Radio Dealers in UK
http://www.kenwood-electronics.co.uk/company/Menu3distributors.aspx?men=1&M2=17&M3=2

Spare parts, accessories and manuals for communications equipment
can be obtained from the following companies in the UK.

Acoustic Services LTD
142 Uxbridge Road
Hanwell
London
W7 3SL
Tel no: 0208 579 2872
Opening hours: Monday to Friday 9.00 to 5.30

Fullers LTD
Riverside View
Wickham Market
Ipswich
IP13 0TA
Tel no: 01728 746500

Fax no: 01728 746900
E-mail: spares@kenwoodspares.co.uk
Opening hours: Monday to Thursday 9.00 to 5.30, Friday 9.30 to 4.30

1408. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-02 01:30:48 UTC
From: don@manx.misty.com
Message-ID: <slrnd2a5q7.dre.don@manx.misty.com>
Source record: 20090
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

In article <11295445so5g311@corp.supernews.com>, RST Engineering \(jw\) wrote:
>Sorry, dude, 50 years of designing with crystals, right from when I ground
>my first surplus WWII rock on a piece of glass with toothpaste as the
>abrasive says that what the original poster asked is correct.
>
>Will the harmonic be precise? No. Will it be "close", which is what the
>original poster asked? You bet. Depending on the oscillator circuit, can
>it be "pulled" on frequency? Perhaps.
>
>But to say that the crystal doesn't resonate anywhere near the harmonic is,
>as I said, bullpuckey.

This reminds me of a colleague who can easily tell everyone
qualitatively that a situation deviates from theoretical ideals and as a
result (using my words and not his) "$#!+ (poop) will splatter!" But he
at least often in my experience have trouble saying this quantatively!

For one project, I decide to try something, and tell my boss what I am
trying. This colleague of mine says (using words of mine and not his),
"slop will spatter"! (As in light for adding optics to a light source for
a specific application. This application has multiple LEDs shining onto
an optical device with multiple elements.)
Boss tells me that what I delivered to him and he found working should
not have worked according to this colleague of mine, due to stray beams
forming. So what do I do - I send photos to the boss of the beam pattern
including the stray beams predicted by my colleague. I even named these
stray beams after my colleague. But they were minor due to most light
produced by the light source being on paths that resulted in adding to the
desired beam combination as opposed to the undesired stray beams.
Furthermore, my boss's industrial designer designed a baffling system
that blocked the small amount of light from the multi-element light source
that was on paths towards the stray beams as opposed to the desired rays
that were "on course" to be utilized by the multi-elemt optical assembly
as planned.

So beware that the situation may not be much worse than ideal when
someone can tell you how you are deviating from ideal!

1409. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-02 01:41:06 UTC
From: don@manx.misty.com
Message-ID: <slrnd2a6dh.dre.don@manx.misty.com>
Source record: 20091
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

In article <ts6921d632jtuabnv9d0n9b0hv5mlb573i@4ax.com>, John Fields wrote:
>On Tue, 1 Mar 2005 08:12:48 -0800, "RST Engineering \(jw\)"
><jim@rstengineering.com> wrote:
>
>>Sorry, dude, 50 years of designing with crystals, right from when I ground
>>my first surplus WWII rock on a piece of glass with toothpaste as the
>>abrasive says that what the original poster asked is correct.
>>
>>Will the harmonic be precise? No. Will it be "close", which is what the
>>original poster asked? You bet. Depending on the oscillator circuit, can
>>it be "pulled" on frequency? Perhaps.
>>
>>But to say that the crystal doesn't resonate anywhere near the harmonic is,
>>as I said, bullpuckey.
>
>---
>Sorry, dude, no matter how much time you've got in, if you go back
>and read my post, you'll find that I wrote:
>
>"You can use a fundamental mode crystal as an overtone oscillator, but
>even if you can get it to oscillate, it won't be generating an
>overtone at 100MHz, since overtone modes of oscillation aren't
>harmonically related to the fundamental."
>
>
>and that you replied with:
>
>"That is total and absolute bullpuckey."
>
>Notice that I didn't say "near", I said "at".
>
>If you can find fault with anything I wrote in that post, I'd
>appreciate specific criticism instead of that broad brush you painted
>with.

Now suppose someone makes a crystal oscillate in some overtone mode that
the crystal manufacturer recommends against and is predicted to be
"inharmonic" but turns out to be only a few hundred or even sometimes a
few 10's of KHz from a multiple of a frequency that results from being
used as directed?

As I said in different words in a different post - correctly predicting
that $#!+ (AKA "slop") will spatter does not necessarily that much will
spatter nor that any will spatter far, and maybe in many cases it is

doubtful that both much will spatter and that much will spatter far.

- Don Klipstein (don@misty.com)

1410. Re: Power supply common emitter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-02 02:29:05 UTC
From: Tom Mills <tsmills@bellsouth.net>
Message-ID: <tw9Vd.40294$RI5.27263@bignews4.bellsouth.net>
Source record: 20092

August 1984 73 Magazine has one called the Cheap Power Ploy. I built one years ago, it works great. Page 10

tom
"SMJ" <smjorgensenusa@yahoo.com> wrote in message news:1109299745.967069.65630@l41g2000cwc.googlegroups.com...
> Anyone know where I can see a schematic of a common emitter power
> supply? I've always read about using the emitter of a pass transistor
> as the positive terminal output (Common collector). Taking apart this
> trip lite power supply I see that they have the negative terminal
> connecting to the collector of the npn pass transistors. This seems
> like it would extremely complicate the regulation design. Can anyone
> explain the benefits, and where I can learn more about this design
> technique?
>

1411. Re: TS-850S region change

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-02 03:20:37 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <Q_adnaZYr9marLjfRVn-3Q@comcast.com>
Source record: 20093

"Joe McElvenney" <ximac@btinternet.com> wrote in message
news:VA.000000b1.007b5ef2@btinternet.com...
> Hi,
>
> As I would like to take advantage of the recent increase in
> the 40m allocation here in the UK, I wonder if anyone has made
> any sense of the diode table (D8 - D12) on the TS-850S digital
> board schematic. This as far as I can see determines the
> destination region and thus the rig's operating band limits.
>
> I know that it is possible to change the existing arrangement
> to give general coverage to the transmitter but would rather not
> do that. Initially I did a hex dump of the ROM but found it too
> big a task to decode without experience with the particular
> processor code - a uPD78C10.
>
>
> 73 de Joe, G3LLV
>

Data Sheet for the NEC uPD78C10
http://www.baradine.com/ftp/public/uPD78C10_Summary.pdf

NEC Emulator debugger
http://www.baradine.com/ftp/public/Em7811users.pdf

1412. Re: SPAM (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-02 07:03:31 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <112ap1fnuh37a46@corp.supernews.com>
Source record: 20094
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Rich Grise" <richgrise@example.net> wrote in message
news:pan.2005.02.28.23.34.03.322954@example.net...
> On Mon, 28 Feb 2005 00:34:47 -0800, Watson A.Name - "Watt Sun, the
Dark Remover" wrote:
> > "Rich Grise" <richgrise@example.net> wrote in message
> ...
> >> In a way, it's equivalent to commercials on free TV (and even
cable,
> > these
> >
> > No, it's not! Commercials in the media pay their fair share to the
> > media. Spammers, w/o permission, abuse services from the ISPs and
our
> > inboxes without paying their fair share. Spammers are thieves.
> >
>
> Ok, good point.
>
> So, do _you_ want to volunteer to track them down and arrest them so
that
> we can lynch them?

I did my volunteering back in the mid- to late-'90s. I'm long past the
point of being burned out. I used to keep a blacklist of recipes for
the procmail filter that I ran on my unix shell acct. I used to get the
original King of Spam, Spamford Wallace's Cyberpromo spams. He's
recently been in the news for infecting PCs with a spyware in order to
sell them a spyware removal program. Dirty, stinking, filthy,
ex-spammer rat!

BTW, there are spam filters that will run under Procmail or Perl
scripts. Check them out, especially if they're Bayesian filters.

> In the interim, here's a blacklist:
> http://www.neodruid.net/LATEST_BLACKLIST
>
> Just add them to your firewall's "DROP" list.
>
> Cheers!
> Rich
>

1413. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-02 07:06:16 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <112ap6gql29dt90@corp.supernews.com>
Source record: 20095
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"John Woodgate" <jmw@jmwa.demon.contraspam.yuk> wrote in message
news:IswX9DC1uuICFwQ4@jmwa.demon.co.uk...
> I read in sci.electronics.design that Watson A.Name - "Watt Sun, the
> Dark Remover" <NOSPAM@dslextreme.com> wrote (in
<1125m8tk6p0gc2d@corp.su
> pernews.com>) about 'SPAMMERS (was Re: Digikey doth truly rule', on
Mon,
> 28 Feb 2005:
> >It already has been implemented by some ISPs. It's called
teergrubing.
> >That's the German word for tarpit.
>
> Does that make the spammers guilty of moral tarpitude?

Dunno, but I'm not shedding a teer for the grubby little bastards!

> --
> Regards, John Woodgate, OOO - Own Opinions Only.
> The good news is that nothing is compulsory.
> The bad news is that everything is prohibited.
> http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1414. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-02 07:11:44 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <112apgog0r5t42f@corp.supernews.com>
Source record: 20096
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"mc" <mc_no_spam@uga.edu> wrote in message
news:422335f5@mustang.speedfactory.net...
>
> "Watson A.Name - "Watt Sun, the Dark Remover"" <NOSPAM@dslextreme.com>
wrote
> in message news:11258ufkc5v3661@corp.supernews.com...
>
> > But someday all the i's will get dotted and t's crossed and the
spammers
> > will not have any way to hide. That may take IPV6, which seems like
it
> > should have been implemented long ago, but still hasn't. Don't hold
> > your breath.
>
> Yes. And people will whine about the loss of their precious
"electronic
> frontier" as the Internet ceases to be a fantasyland above and beyond
the
> law.

Only in their minds.

> The Internet was designed for use within research establishments where
> people were all, at some level, accountable and trustworthy. It has
become
> a playground for con artists and pests.

All, at some level, accountable and trustworthy? Not really. The first
spam was in 1978, so there were problems from the beginning.

Basically what you have is the virtual world has become a microcosm of
the real world. Nothing more, nothing less.

> It may take another half century. I'm reminded of the chaos that
afflicted
> radio before WWI. People just chose their own frequencies and hoped
nobody
> would interfere with them, knowingly or unknowingly.

Well, they say that 5 years in the virtual world is an eternity...

> (And thus I bring the subject matter back to that of the newsgroups
we're
> in! :)

1415. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-02 07:33:14 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <112aqp2qdba2a99@corp.supernews.com>
Source record: 20097
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Dave Platt" <dplatt@radagast.org> wrote in message
news:1126qbpg84t8g5c@corp.supernews.com...
> In article <1125lu0kml9lge4@corp.supernews.com>,
> Watson A.Name - \"Watt Sun, the Dark Remover\"
<alondra101@hotmail.com> wrote:
>
> >You can't legalize something that had no prior restrictions because
it
> >was _already_ legal.
>
> There are those who feel that the CAN SPAM law both legitimizes and
> legalizes spam, in two ways:
>
> - It sets specific Federal boundaries on what sorts of spam are
> illegal (and thus by implication states that spams which don't
> cross those boundaries are legitimate), and

In order to be constitutional the law has to meet certain criteria. One
is that it has to put limits on commercial speech without being
burdensome. The law has to be explicit enough to keep itr from being
defeated on appeal.

> - It preempts most State laws which had stronger restrictions on
> spamming, and therefore makes legal certain spams which were
> previously forbidden by State law.

For five years, Calif had laws that were on the books but were
unenforced. They were challengd as unconstitutional. They and 35 other
state laws weren't consistent, making it a mess for the courts and
lawyers in every state. We had 36 different tools but they were largely
unused. Now there is a consistent set of national laws with much better
chance of being enforced. Someone has to light a fire under the feds to
get them to step up the enforcement. All this bitching, whining and
nmoaning about what used to be and how bad it is now is a huge waste of
time. Get over it and proceed on with the tools given to us, and hammer
the spammers.

> --
> Dave Platt <dplatt@radagast.org>
AE6EO
> Hosting the Jade Warrior home page:
http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

1416. Re: 2m VCO?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-02 08:13:42 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <WAeVd.92682$Th1.54978@bgtnsc04-news.ops.worldnet.att.net>
Source record: 19948

A Mini-Circuits POS-150 would do the trick.....about 22 dollars.

Pete

"budgie" <me@privacy.net> wrote in message
news:jsk8v098c8sfs79ev7irvgu1c4li0dptp6@4ax.com...
> On Mon, 24 Jan 2005 00:10:08 +0000 (UTC), "James Bond"
> <justmereally@hotmail.com> wrote:
>
>>i'm after a circuit for a 2m VCO.
>>
>>basically i'm planning to homebrew a kind of tracking generator, where I
>>can
>>sweep across 2m to look at filter shapes, etc.
>>
>>my plan is to sweep, using a vco, across 2m using a sawtooth waveform.
>>this
>>waveform will also be amplified and fed to an oscilliscope, to give me a
>>horizontal sweep.
>>
>>the output from the filter will then be fed to a RF millivoltmeter circuit
>>(again, anyone got any good circuits?) and this will then be fed into a
>>logarithmic converter then be put onto the Y deflection, to give me
>>amplitude.
>
> That's called a spectrum analyser ...>
>
>>calibration will be by putting the system into "manual" mode and
>>connecting
>>to a frequency counter, then sweeping up and down until get specific
>>frequency, then the x-centering be used to set this on a known point.
>
> Another way to provide cal information is with a comb generator. Add a
> controlled amount of this to your detector input and you get blips on the
> screen
> at comb spacings. Obviously have this switchable.
>
>>basically anything that having say 1-6V in giving a 140 to 150mhz sweep
>>would be grand, then i can play with amplifiers to get it just as i want.
>
> Pinch the Tx VCO out of a highband mobile.

1417. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-02 11:37:04 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <AzhVd.53326$sR5.31120@trndny05>
Source record: 19950

Was it crystal-locked, or free-running....did it change frequency when you
tuned the circuit? If it wasn't crystal locked, then the experiment wasn't
too meaningful

Joe
W3JDR

"Asimov" <Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote in message
news:MSGID_1=3a167=2f133.0_4225583b@fidonet.org...
> "W3JDR" bravely wrote to "All" (01 Mar 05 10:34:17)
> --- on the heady topic of "Re: Using non-overtone crystal in overtone
> mode?"
>
> It did oscillate. I was some really oddball frequency inbetween but as
> I recall it was neither the mean nor any other obvious relation. I
> suppose it was where their response curves complimented but I'm not
> sure. Did it only for curiosity's sake to see if it they could be used
> for filtering but tried making them oscillate for fun. I know, simple
> pleasures... ;-)
>
> A*s*i*m*o*v
>
>
> W3> Reply-To: "W3JDR" <joe@roccis.com>
> W3> Xref: aeinews rec.radio.amateur.homebrew:8665
>
> W3> Depending on whether the circuit is designed for overtone oscillation
> W3> or harmonic generation, how perfect the overtone crystals are, and
> how
> W3> the circuit is tuned, I'd expect either:
> W3> 1) No oscillation
> W3> 2) Very close to 100.1 MHz
> W3> 3) Very close to 100.3 MHz
>
> W3> What did you experience?
>
> W3> Joe
> W3> W3JDR
>
>
> W3> "Asimov" <Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote in
> W3> message news:MSGID_1=3a167=2f133.0_4223d885@fidonet.org...
> > > "John Fields" bravely wrote to "All" (28 Feb 05 14:34:30)
> > > --- on the heady topic of "Re: Using non-overtone crystal in overtone
> > > mode?"

> >
> > JF> From: John Fields <jfields@austininstruments.com>
> > JF> sci.electronics.components:12029 rec.radio.amateur.homebrew:8635
> >
> > JF> Check out "Chladni patterns" if you're interested.
> >
> > I've done some putzing with crystals. What frequency say would a
> > 100.3MHz xtal in series with a 100.1Mhz xtal settle on? 100.2Hz?
> >
>
> ... All things are possible. Except skiing through a revolving door.
>

1418. Re: TS-850S region change

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-02 12:06:23 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <VA.000000b3.001e9076@btinternet.com>
Source record: 19951

GB,

Thanks for that address and the 78C10 info. Have emailed them over the modification and await results. If I don't get anywhere, I'll extend the diode array out to a proto-board and play around until the sweet-spot shows itself. What I'm looking for really is the North American setting as they have had the extended 40M allocation from the start.

Cheers - Joe, G3LLV

1419. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-02 13:02:39 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <otcb21ptuof1vqpk01vvqna2573sm8vgrk@4ax.com>
Source record: 19952
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Wed, 2 Mar 2005 01:41:06 +0000 (UTC), don@manx.misty.com (Don
Klipstein) wrote:

>In article <ts6921d632jtuabnv9d0n9b0hv5mlb573i@4ax.com>, John Fields wrote:
>>On Tue, 1 Mar 2005 08:12:48 -0800, "RST Engineering \(jw\)"
>><jim@rstengineering.com> wrote:
>>
>>>Sorry, dude, 50 years of designing with crystals, right from when I ground
>>>my first surplus WWII rock on a piece of glass with toothpaste as the
>>>abrasive says that what the original poster asked is correct.
>>>
>>>Will the harmonic be precise? No. Will it be "close", which is what the
>>>original poster asked? You bet. Depending on the oscillator circuit, can
>>>it be "pulled" on frequency? Perhaps.
>>>
>>>But to say that the crystal doesn't resonate anywhere near the harmonic is,
>>>as I said, bullpuckey.
>>
>>---
>>Sorry, dude, no matter how much time you've got in, if you go back
>>and read my post, you'll find that I wrote:
>>
>>"You can use a fundamental mode crystal as an overtone oscillator, but
>>even if you can get it to oscillate, it won't be generating an
>>overtone at 100MHz, since overtone modes of oscillation aren't
>>harmonically related to the fundamental."
>>
>>
>>and that you replied with:
>>
>>"That is total and absolute bullpuckey."
>>
>>Notice that I didn't say "near", I said "at".
>>
>>If you can find fault with anything I wrote in that post, I'd
>>appreciate specific criticism instead of that broad brush you painted
>>with.
>
> Now suppose someone makes a crystal oscillate in some overtone mode that
>the crystal manufacturer recommends against and is predicted to be
>"inharmonic" but turns out to be only a few hundred or even sometimes a
>few 10's of KHz from a multiple of a frequency that results from being
>used as directed?

If it's not an integer multiple of the fundamental then it won't be a
harmonic.

> As I said in different words in a different post - correctly predicting
>that $#!+ (AKA "slop") will spatter does not necessarily that much will
>spatter nor that any will spatter far, and maybe in many cases it is
>doubtful that both much will spatter and that much will spatter far.

If the prediction came true, then it came true.

--
John Fields

1420. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-02 14:51:07 UTC
From: mc <mc_no_spam@uga.edu>
Message-ID: <4225d9e9@mustang.speedfactory.net>
Source record: 19900
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

>> The Internet was designed for use within research establishments where
>> people were all, at some level, accountable and trustworthy. It has
> become
>> a playground for con artists and pests.
>
> All, at some level, accountable and trustworthy? Not really. The first
> spam was in 1978, so there were problems from the beginning.

There was very little until the 1990s, and if the first spam was in 1978,
then we had about 7 years of good networking before there was any.

1421. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-02 15:20:08 UTC
From: mikea@mikea.ath.cx
Message-ID: <d04lj8rql3@puck.litech.org>
Source record: 19953
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

In <112aqp2qdba2a99@corp.supernews.com> (rec.radio.amateur.homebrew), "Watson A.Name - \"Watt Sun, the Dark Remover\"" wrote:

> For five years, Calif had laws that were on the books but were
> unenforced. They were challengd as unconstitutional. They and 35 other
> state laws weren't consistent, making it a mess for the courts and
> lawyers in every state. We had 36 different tools but they were largely
> unused. Now there is a consistent set of national laws with much better
> chance of being enforced. Someone has to light a fire under the feds to
> get them to step up the enforcement. All this bitching, whining and
> nmoaning about what used to be and how bad it is now is a huge waste of
> time. Get over it and proceed on with the tools given to us, and hammer
> the spammers.

Horse exhaust.

You-Can-Spam, under the guise of improving the situation by applying one uniform law everywhere, forced everything into one badly-fitting, Procrustean bed, overriding and effectively nullifying existing state laws, some of which (Washington, California) were *very* much better written and more effective.

Yes, those laws got challenged as unconstitutional. A challenge by itself means nothing; it's the *OUTCOME* of the challenge that means something, and the Washington and California laws survived all the challenges against them. It's because they survived those challenges, thereby putting fear into the cryostats[1] of the folks who run the advertising industry and of the Senators from Coca-Cola, Time-Warner, and the other big owners of federal legislators, that You-Can-Spam came to be.

Private right of action used to exist because of state laws, but that right now has been removed by You-Can-Spam, and only providers and Attorneys General have standing to sue.

You-Can-Spam is tailor-made for the advertising industry, which comes as no surprise to me, because the folks who really wrote it certainly appear to have been advertising industry lobbyists.

If you don't like all the bitching, whining, and moaning about what used to be, then you have the right to move somewhere that prohibits it. Choose carefully: places that prohibit it may not let you move out again. Me, I'll stay here and bitch, whine, moan, and lean hard on my congresscritters.

[1] We can be quite certain that they don't have hearts. A heart is
not capable of pumping liquid Helium.

Followups to news.admin.net-abuse.email, where this subthread belongs.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

1422. Re: Using non-overtone crystal in overtone mode?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-02 16:08:18 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d04odi$2vc$1@titan.btinternet.com>
Source record: 19954
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

A solid slab of crystal naturally oscillates at frequencies at which one of its three dimensions, length, breadth and thickness, is a mechanical 1/2-wavelength. It can easily be induced to oscillate at harmonics of the fundamental.

It can also oscillate in one of several mechanical modes, eg., longitudinal, breadth-wise or in torsion. And in shunt or series-resonant electrical modes.

The circuit it is embedded in can encourage a preferred frequency. It is easy to select harmonics. Self-preference is also given to the frequency which has the highest Q, ie., the least mechanical loss. This is usually the fundamental.

It does not oscillate EXACTLY at multiples simply because it has three dimensions and Length, Breadth and Thickness slightly 'interfere' with each other.

A poorly cut crystal, eg., lack of parallelism, at which there may be no strong preference may jump erratically between two non-harmonically related frequencies.

Frequency versus temperature curves depend on oscillation mode and on the angle at which the slab is cut relative to the direction of the individual crystals in the bulk material lattice as found by optical means. Cubic curves are best because they contain a flat horizontal portion.

1423. WTB: Coil former

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-02 18:51:23 UTC
From: Philip de Cadenet <Philstheboss@thebbc.fslife.co.uk>
Message-ID: <lBAn9nYrsgJCFw+A@philstheboss.freeserve.co.uk>
Source record: 19955

One of those nice ceramic or equivalent coil formers with moulded-in
cut-outs for each turn of wire.

This is for a HF PA coil.

Ideally larger OD than 70mm and longer than13cm.

I'm unable to wind a large enough inductor on the one I have here
(65mm x 13cm).

It can only hold 26 turns with roughly 1-turn spacing.

Dig through your junk boxes please.
--
Philip de Cadenet G4ZOW
Transmitters 'R' Us
http://www.transmittersrus.com

1424. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-03 06:56:10 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <112dcve5atfsl46@corp.supernews.com>
Source record: 19956
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Mike Andrews" <mikea@mikea.ath.cx> wrote in message
news:d04lj8rql3@puck.litech.org...
> In <112aqp2qdba2a99@corp.supernews.com> (rec.radio.amateur.homebrew),
"Watson A.Name - \"Watt Sun, the Dark Remover\"" wrote:
>
> > For five years, Calif had laws that were on the books but were
> > unenforced. They were challengd as unconstitutional. They and 35
other
> > state laws weren't consistent, making it a mess for the courts and
> > lawyers in every state. We had 36 different tools but they were
largely
> > unused. Now there is a consistent set of national laws with much
better
> > chance of being enforced. Someone has to light a fire under the
feds to
> > get them to step up the enforcement. All this bitching, whining and
> > nmoaning about what used to be and how bad it is now is a huge waste
of
> > time. Get over it and proceed on with the tools given to us, and
hammer
> > the spammers.
>
> Horse exhaust.
>
> You-Can-Spam, under the guise of improving the situation by applying
> one uniform law everywhere, forced everything into one badly-fitting,
> Procrustean bed, overriding and effectively nullifying existing state
> laws, some of which (Washington, California) were *very* much better
> written and more effective.
>
> Yes, those laws got challenged as unconstitutional. A challenge by
> itself means nothing; it's the *OUTCOME* of the challenge that means
> something, and the Washington and California laws survived all the
> challenges against them. It's because they survived those challenges,
> thereby putting fear into the cryostats[1] of the folks who run the
> advertising industry and of the Senators from Coca-Cola, Time-Warner,
> and the other big owners of federal legislators, that You-Can-Spam
> came to be.
>
> Private right of action used to exist because of state laws, but that
> right now has been removed by You-Can-Spam, and only providers and
> Attorneys General have standing to sue.
>

> You-Can-Spam is tailor-made for the advertising industry, which comes
> as no surprise to me, because the folks who really wrote it certainly
> appear to have been advertising industry lobbyists.
>
> If you don't like all the bitching, whining, and moaning about what
> used to be, then you have the right to move somewhere that prohibits
> it. Choose carefully: places that prohibit it may not let you move out
> again. Me, I'll stay here and bitch, whine, moan, and lean hard on my
> congresscritters.
>
> [1] We can be quite certain that they don't have hearts. A heart is
> not capable of pumping liquid Helium.
>
> Followups to news.admin.net-abuse.email, where this subthread belongs.
>
> --
> Mike Andrews, W5EGO
> mikea@mikea.ath.cx
> Tired old sysadmin

You can belittle others for their opinions, and bitch and whine about the situation at hand. But like they say, when life hands you a lemon, make lemonade. Quitcherbitchin, and get on with life. You're complaining to the wrong crowd - almost everyone really don't care what you or i think.

1425. Re: pumping the T2-exciter board with a squarewave signal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-03 13:23:08 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <42270FBC.7040705@iinet.net.au>
Source record: 19957

Did the audio go through a LPF for the phasing unit?
Remember that a square wave is made up of the sum of many harmonics -
most of these will have been removed and the amplituyde of the
fundamental may not be that large.

Richard

andreas magun wrote:
> Hi,
>
> I have assembled a T2 phasing exciter (KK7B) and looked
> at its output spectrum with a spectrum analyzer.
>
> When pumping the exciter with quadrature sine wave signals it
> works as expected (output power roughly 3 mW, sideband supression
> better than 40 db).
>
> However, when pumping with quadrature squarewave
> signals of approximately the same power, the output power
> drops by a factor of at least 20 db! I would have expected
> much more power, similar to that obtained with sine wave pumping.
>
> The quadrature phase signal was generated with a 74F74, the
> quadrature signals being attenuated to give a power of approx. 10 dbm
> and output impedances of approx. 50 Ohms.
>
> There must be an explanation.
>
> Thanks
> Andreas

1426. Re: National SW-3 question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-03 16:28:03 UTC
From: Bill M <dontspamoleexray@coqui.net>
Message-ID: <112eeomlq4fl4b@corp.supernews.com>
Source record: 19958
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

Michael Black wrote:
> Bill M (dontspamoleexray@coqui.net) writes:
>
>>I'm toying with the idea of building a SW-3 clone. One thing has me
>>puzzled, though, and thats the 700H choke in the audio coupling circuit.
>>Any ideas how to duplicate that or a simple workaround? Does anyone
>>know the DC resistance of the original unit? I have no idea why such a
>>value was used - any explanation?
>>
>>TIA,
>>Bill
>
>
> IN the early seventies, like 1971 or 72 I'd say, CQ ran an article
> by Bill Orr about making your own National regen receiver. My
> first thought was that it was an SW-3, but I can't remember. But
> if someone can dig that article up easily (it was on the cover),
> it might provide some insight.
>
> Michael
>
I'd like to see that if anyone has it.

-Bill

1427. Re: National SW-3 question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-03 18:13:28 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <VA.000000b6.00335a4d@btinternet.com>
Source record: 19959

Hi,

This Bill Orr article may be what you are looking for -

http://www.thecompendium.net/radio/SW-3/SW3maginfo.pdf

Incidently, the large choke in the audio coupling circuit is
there to obtain as high an AC gain as possible at the expense of
a relatively low DC voltage drop. The fact that the grid leak and
coupling capacitor are all part of the same assembly suggests
that National used the same arrangement is several designs.

Cheers - Joe

1428. Circuit diagram wanted.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-03 19:10:31 UTC
From: Theo <theodore.twyler@ntlworld.com>
Message-ID: <HiJVd.181$wo5.171@newsfe5-gui.ntli.net>
Source record: 19960

I need the circuit diagram for a Mullard LP1156
I.F. module.
I know its vintage stuff, but can anyone help, please?
The only other source requires me to spend £15.00
for a CD containing not just the LP1156 circuit
but information on a mass of equipment that I don't
need!
Please reply soon if you can help, any assistance will
be greatly appreciated.

Theo

1429. Headphone hum on transmit cw

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-03 21:12:03 UTC
From: "G. Doughty" <ki4bbl@cox.net>
Message-ID: <E4LVd.34556$7z6.2389@lakeread04>
Source record: 19961

I have an issue on 40 meters from my tentec scout 555. After the rig is tuned (mfj 901b) and I tx cw, I get an AC hum in my headphones on every key down. This doesn't happen when my audio comes from the rig. I am using an alpha delta loaded antenna in the attic and it is almost certainly putting the tuner to a test. Is there something I can do to alleviate this problem?

Thanks
greg
ki4bbl

1430. Re: National SW-3 question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-03 22:06:07 UTC
From: Bill M <dontspamoleexray@coqui.net>
Message-ID: <112f2ijrcs073e7@corp.supernews.com>
Source record: 19962
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

Joe McElvenney wrote:

> Hi,
>
> This Bill Orr article may be what you are looking for -
>
>
> http://www.thecompendium.net/radio/SW-3/SW3maginfo.pdf
>
>
> Incidently, the large choke in the audio coupling circuit is
> there to obtain as high an AC gain as possible at the expense of
> a relatively low DC voltage drop. The fact that the grid leak and
> coupling capacitor are all part of the same assembly suggests
> that National used the same arrangement is several designs.
>
>
> Cheers - Joe

Great! Thank you very much.

-Bill
>
>

1431. attenuators

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-03 22:28:49 UTC
From: Don <nn8b.oh@gmail.com>
Message-ID: <1109888929.533157.23780@g14g2000cwa.googlegroups.com>
Source record: 19963

Does anyone know of an inexpensive step attenuator that will handle 2 watts of rf from 1 to 30 mhz? Regards,

Don

1432. Re: Headphone hum on transmit cw

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-03 23:38:57 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <leNVd.1259$077.751@newsfe4-gui.ntli.net>
Source record: 19964

> I have an issue on 40 meters from my tentec scout 555. After the rig is
> tuned (mfj 901b) and I tx cw, I get an AC hum in my headphones on every
key
> down. This doesn't happen when my audio comes from the rig. I am using
an
> alpha delta loaded antenna in the attic and it is almost certainly putting
> the tuner to a test. Is there something I can do to alleviate this
problem?
==========
I have the same problem with phone on some higher freq HF bands and solve
the problem by reducing RF output.

Frank GM0CSZ / KN6WH

1433. Re: Headphone hum on transmit cw

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-03 23:54:34 UTC
From: mikea@mikea.ath.cx
Message-ID: <d0883qfvq2@puck.litech.org>
Source record: 19965

G. Doughty <ki4bbl@cox.net> wrote:
> I have an issue on 40 meters from my tentec scout 555. After the rig
> is tuned (mfj 901b) and I tx cw, I get an AC hum in my headphones
> on every key down. This doesn't happen when my audio comes from the
> rig. I am using an alpha delta loaded antenna in the attic and it is
> almost certainly putting the tuner to a test. Is there something I
> can do to alleviate this problem?

So where are your headphones plugged when you hear the hum?

When I'm sending CW on my Icom 751 at full power with the tuner loaded for very low SWR, I hear a pretty good AC ripple over the sidetone. I think it's because I'm dragging a lot of power out of the supply, and it doesn't regulate as well at those power levels as it does at lower levels.

It's not a high enough level to make me think it's a problem; I don't know about your hum, but wonder what a scope would show.

--
Mike Andrews W5EGO 5WPM
mikea@mikea.ath.cx Extra
Tired old sysadmin working on his code speed

1434. Re: Headphone hum on transmit cw

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-04 07:09:50 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <tpuf211knc7fpsefr0pr25odt2lq9r8oui@4ax.com>
Source record: 19966

On Thu, 3 Mar 2005 16:12:03 -0500, "G. Doughty" <ki4bbl@cox.net>
wrote:

>I have an issue on 40 meters from my tentec scout 555. After the rig is
>tuned (mfj 901b) and I tx cw, I get an AC hum in my headphones on every key
>down. This doesn't happen when my audio comes from the rig. I am using an
>alpha delta loaded antenna in the attic and it is almost certainly putting
>the tuner to a test. Is there something I can do to alleviate this problem?

Since you are using an attic antenna, I guess that you must have quite
a large RF field strength inside the house. When there is a headphone
cable connected to the transceiver, quite large RF voltages can be
induced into the wire, feeding it into the headphone jack and possibly
causing some havoc inside the rig.

During a QSO, did you ask about any hum in your transmission when the
headphone was used or when the speaker was used respectively ?

What exactly happens is hard to predict on this description, but here
are some possibilities.

If your rig and antenna are badly grounded, the RF current induced to
the headphone wire will flow through the rig signal ground to the
power supply rectifiers and through the mains transformer stray
capacitances to the mains neutral and then to the ground. Since the
rectifiers are not conducting constantly, but will cut off 100 or 120
times each second, causing some hum. This has been a problem with some
mains operated receivers, requiring some capacitors across the
rectifier diodes or a proper grounding. However, I have never heard
about this with transmitters.

Depending on the wiring code used in your area and if separate
grounding electrodes are used for your antenna and electric system,
some neutral current may flow through your rig to the antenna ground
electrode and from there to the mains ground electrode. This might
cause some strange effects in some special situations especially with
resonant wire sections in the house wiring.

The first thing to try is to wind the headphone cable around a ferrite
rod very close to the headphone plug and check if this helped. Also
putting some ferrites on the power supply mains and/or DC may help,
since apparently there is a quite high RF field strength around, due
to the attic antenna, which can cause all sorts of problems that might
be hard to diagnose.

Paul OH3LWR

1435. Re: Headphone hum on transmit cw

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-04 17:44:16 UTC
From: Larry Gagnon <lagagnon@fakeuniserve.com>
Message-ID: <pan.2005.03.04.17.44.16.890298@fakeuniserve.com>
Source record: 19967

On Thu, 03 Mar 2005 16:12:03 -0500, G. Doughty wrote:

> I have an issue on 40 meters from my tentec scout 555. After the rig is
> tuned (mfj 901b) and I tx cw, I get an AC hum in my headphones on every key
> down. This doesn't happen when my audio comes from the rig. I am using an
> alpha delta loaded antenna in the attic and it is almost certainly putting
> the tuner to a test. Is there something I can do to alleviate this problem?
>
> Thanks
> greg
> ki4bbl

Ferrite isolator clipped around your headphone lead at input to rig should
do the job.

Larry VE7EA

--
****
to reply via email remove "fake"
Microsoft will soon release their newest product: a vacuum cleaner.
It will be their only product which doesn't suck.

1436. Loop Antenna broadband amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-04 17:57:09 UTC
From: Chuck Olson <chuckolson01@REMOVETHIScomcast.net>
Message-ID: <DOGdncxIRZL6PLXfRVn-2Q@comcast.com>
Source record: 19968

I've been searching for some hints as to what may be in the resin-encased amplifier used on the Wellbrook loops without much luck. Their power demand of 130 mA at 12 volts is kind of high for any FET diff-amp, PNP level shift, into a balanced to unbalance output transformer arrangement. I'm using that configuration right now on a tuned loop that only requires 17 mA at 9 volts. Any ideas or links to useful information?

Thanks,

Chuck, w6pkp

1437. Re: Headphone hum on transmit cw

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-04 21:02:26 UTC
From: mike coe <mike.c3@ntlworld.com>
Message-ID: <C14Wd.1821$IQ5.691@newsfe1-gui.ntli.net>
Source record: 19969

G. Doughty wrote:
> I have an issue on 40 meters from my tentec scout 555. After the rig is
> tuned (mfj 901b) and I tx cw, I get an AC hum in my headphones on every key
> down. This doesn't happen when my audio comes from the rig. I am using an
> alpha delta loaded antenna in the attic and it is almost certainly putting
> the tuner to a test. Is there something I can do to alleviate this problem?
>
> Thanks
> greg
> ki4bbl
>
>
More than likely RF feild strengh in the house
you cant beat a good ground and outdoor antenna

1438. Re: Loop Antenna broadband amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-04 22:52:33 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <RE5Wd.28241$uc.2783@trnddc09>
Source record: 19970

"Chuck Olson" <chuckolson01@REMOVETHIScomcast.net> wrote in message
news:DOGdncxIRZL6PLXfRVn-2Q@comcast.com...
> I've been searching for some hints as to what may be in the resin-encased
> amplifier used on the Wellbrook loops without much luck. Their power
demand
> of 130 mA at 12 volts is kind of high for any FET diff-amp, PNP level
shift,
> into a balanced to unbalance output transformer arrangement. I'm using
that
> configuration right now on a tuned loop that only requires 17 mA at 9
volts.
> Any ideas or links to useful information?
>
> Thanks,
>
> Chuck, w6pkp

Hi Chuck,

The hi Ic is usually indicative of a CATV device being run in a hi IP3 mode.
The preamp I am using on my 7' shielded loop was originally published by
Burhans and described in the 1985 June Lowdown- using a J310 followed by a
2N3904 and a pair of Mouser audio tranformers both IN and OUT. The URL
appears to have gone away- I can send the schematic if you are interested.

Dale W4OP
>
>

1439. Re: Loop Antenna broadband amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-05 00:12:59 UTC
From: Chuck Olson <chuckolson01@REMOVETHIScomcast.net>
Message-ID: <y7qdneN-UKJSZLXfRVn-hg@comcast.com>
Source record: 19971

"Dale Parfitt" <par@parelectronics.com> wrote in message
news:RE5Wd.28241$uc.2783@trnddc09...
>
> Hi Chuck,
>
> The hi Ic is usually indicative of a CATV device being run in a hi IP3
mode.
> The preamp I am using on my 7' shielded loop was originally published by
> Burhans and described in the 1985 June Lowdown- using a J310 followed by a
> 2N3904 and a pair of Mouser audio tranformers both IN and OUT. The URL
> appears to have gone away- I can send the schematic if you are
interested.
>
> Dale W4OP

I'm very interested, Dale. I can read wmf, png, jpg, gif and pdf - - maybe a
few more. The png file is usually the most compact.

Thanks,

Chuck

1440. Re: Loop Antenna broadband amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-05 00:27:10 UTC
From: dplatt@radagast.org
Message-ID: <112hv6uqckjdv83@corp.supernews.com>
Source record: 19972

>> The hi Ic is usually indicative of a CATV device being run in a hi IP3
>mode.
>> The preamp I am using on my 7' shielded loop was originally published by
>> Burhans and described in the 1985 June Lowdown- using a J310 followed by a
>> 2N3904 and a pair of Mouser audio tranformers both IN and OUT. The URL
>> appears to have gone away- I can send the schematic if you are
>interested.
>>
>> Dale W4OP
>
>I'm very interested, Dale. I can read wmf, png, jpg, gif and pdf - - maybe a
>few more. The png file is usually the most compact.

I'm interested also. Any chance that a Web-postable file could be
provided?

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1441. Re: Loop Antenna broadband amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-05 00:53:12 UTC
From: Chuck Olson <chuckolson01@REMOVETHIScomcast.net>
Message-ID: <0I6dnaePgY6anrTfRVn-oA@comcast.com>
Source record: 19973

"Dave Platt" <dplatt@radagast.org> wrote in message
news:112hv6uqckjdv83@corp.supernews.com...
> >> The hi Ic is usually indicative of a CATV device being run in a hi IP3
> >mode.
> >> The preamp I am using on my 7' shielded loop was originally published
by
> >> Burhans and described in the 1985 June Lowdown- using a J310 followed
by a
> >> 2N3904 and a pair of Mouser audio tranformers both IN and OUT. The URL
> >> appears to have gone away- I can send the schematic if you are
> >interested.
> >>
> >> Dale W4OP
> >
> >I'm very interested, Dale. I can read wmf, png, jpg, gif and pdf - -
maybe a
> >few more. The png file is usually the most compact.
>
> I'm interested also. Any chance that a Web-postable file could be
> provided?
>
Maybe Dale can post it on alt.binaries.schematics.electronic - - okay Dale?

1442. Re: Headphone hum on transmit cw

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-05 02:16:53 UTC
From: "G. Doughty" <ki4bbl@cox.net>
Message-ID: <BE8Wd.47251$7z6.27639@lakeread04>
Source record: 19974

Well, I went out and got the RS ferrite core and wrapped one around the
headphone line. Still some problems. Then wrapped around the dc pwr line
in the back. less interference. I guess I was having problems at both
ends. thanks for all the suggestions.
73
Greg
ki4bbl

"mike coe" <mike.c3@ntlworld.com> wrote in message
news:C14Wd.1821$IQ5.691@newsfe1-gui.ntli.net...
> G. Doughty wrote:
>> I have an issue on 40 meters from my tentec scout 555. After the rig is
>> tuned (mfj 901b) and I tx cw, I get an AC hum in my headphones on every
>> key down. This doesn't happen when my audio comes from the rig. I am
>> using an alpha delta loaded antenna in the attic and it is almost
>> certainly putting the tuner to a test. Is there something I can do to
>> alleviate this problem?
>>
>> Thanks
>> greg
>> ki4bbl
> More than likely RF feild strengh in the house
> you cant beat a good ground and outdoor antenna

1443. Plan 9 from EMI space?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-05 06:18:57 UTC
From: eternalsquire@comcast.net
Message-ID: <1110003537.443544.115380@f14g2000cwb.googlegroups.com>
Source record: 19975

Hi all,

I've done the google search already, so I hope maybe one of you has an answer.

I am in the beginning stages of setting up my station, and I am getting lots of EMI from various applicances in the apartment. I used an SW pocket radio as a sniffer.

It turns out that most of these are throwing out hash back into the AC line,
and that the AC wall conduits are conducting EMI into the room my wife allows me to use for my station. My station is on the other side of the apartment, but it doesn't matter about the physical distance because the
AC lines are throwing off the worst of the noise. I turned off EVERYTHING
and was able to reduce the problem enough to hear CW on the 7.050 on my

pocket radio without an external antenna.

Throw everything on, and I could barely hear the signal with antenna, because
EVERYTHING is going back into the house wiring!!!

>From worst offenders to least worst, they are:

1) GE Hotpoint refrigerator/freezer.
2) Air conditioning system.
3) Aquarium pump.
4) Overhead florescent lights.
5) Microwave oven (even in in standby mode!).
6) LED alarm clocks (3)
7) Telephone answering machine
8) Cordless telephone base station (900 Mhz)
9) Cable Modem
10) Wireless Router
11) Late model Computer and CRT Monitor.

I have the following assets:

1) I live on the lower floor and have a water pipe just outside the window
of my station room.

2) I just bought 4 each of 3 amp and 30 amp CORCOM line filters on Ebay.

3) A bunch of FT-50-43 cores.

4) My wife's loving patience.

Questions:

1) Ferrite 43 material is supposed to attentuate for 20 Mhz and up, and the
frequencies I want to hear are at 80 thru 20 meters. Should I use the 73
material instead for wrapping AC cords around toroids for common-mode
chokes?

2) Do modern refrigerators in apartments use ordinary AC sockets or
3-phase?

3) I have a 1500 watt microwave oven, can I have it also run off a CORCOM
filter?

3) Can I use a CORCOM filter to isolate EMI from each appliance (30 AMP)
and from the aquarium pump (3 AMP) from the AC lines? Or, do I also
need common-mode chokes?

4) I split the wall wires of the wall wart and would each polarity around
its own FT-50-54 about 4 times. Will this be remotely as effective as
winding the wall-wart cord around a larger toroid?

Suggestions, anyone?

Thanks,

The Eternal Squire

1444. Re: Plan 9 from EMI space?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-05 13:08:08 UTC
From: NoSpam <nospam@no.way>
Message-ID: <YaiWd.103637$Th1.73629@bgtnsc04-news.ops.worldnet.att.net>
Source record: 19976

eternalsquire@comcast.net wrote:

>
> 2) Do modern refrigerators in apartments use ordinary AC sockets or
> 3-phase?
>

It would be an unusual residential apartment which has 3-phase AC service of any kind directly incoming to the individual apartment. Large apartment buildings and complexes may indeed have 3-phase service from the power company, but the electricity would go through distribution transformers in the building before it ever gets to your apartment. 3-phase AC from the enduser point-of-view is used primarily in large commercial and industrial applications for things such as machinery, elevators, high-power transmitters, HVAC, etc.

Your apartment itself is almost certainly fed some sort of 208 VAC (or thereabouts) single-phase 3-wire service where there are 2 "hot" wires and a neutral. The higher voltage for electric ranges, etc. is taken between the two hot conductors while 110 VAC for everything else (such as the refrigerator) is 'derived' off of either one of the hots against the neutral and would be wired to appear on the 2 parallel prongs of an "ordinary" AC wall socket. [I'm presuming you live in North America where we have 110 VAC devices, as opposed to Europe or other overseas locations]

1445. Re: Plan 9 from EMI space?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-05 14:11:44 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <g6fj219nso0f0hevv3jqa9ddura6u0lls2@4ax.com>
Source record: 19977

On Sat, 05 Mar 2005 13:08:08 GMT, NoSpam <nospam@no.way> wrote:

>eternalsquire@comcast.net wrote:
>
>>
>> 2) Do modern refrigerators in apartments use ordinary AC sockets or
>> 3-phase?
>
>It would be an unusual residential apartment which has 3-phase AC
>service of any kind directly incoming to the individual apartment.
>
Not just apartments, but few residences of any type get three phase
power.

In fact, people who want to have a shop with three phase power usually
need to have it added. The usual power setup for residences is what
you have described. 70-200 amp, 110VAC single phase is typical supply
for a home or apartment. The newer the contruction, the more amps in
the supply.

Happy trails,
Gary (net.yogi.bear)
--
At the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

1446. Re: Plan 9 from EMI space?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-05 14:37:28 UTC
From: asta <habla@hotmail.com>
Message-ID: <7vjWd.3513$G64.965@reader1.news.jippii.net>
Source record: 19978

hi!
i've always wondered what phase-shift there is between those two 110V lines
in an USA 220V AC net system.

here we have either one phase of 230V or then 3 phase
with 120 degrees between the phases.
230V between phase to ground or 400V (third root of 3 times 230V of course)
between phases

everyone has direct 3-phase system with 230V to ground in every apartment or
house splitted up to equal load on the phases.

cheers
as

"Gary S."
> On Sat, 05 Mar 2005 13:08:08 GMT, NoSpam <nospam@no.way> wrote:
>
>>eternalsquire@comcast.net wrote:
>>
>>>
>>> 2) Do modern refrigerators in apartments use ordinary AC sockets or
>>> 3-phase?
>>
>>It would be an unusual residential apartment which has 3-phase AC
>>service of any kind directly incoming to the individual apartment.
>>
> Not just apartments, but few residences of any type get three phase
> power.
>
> In fact, people who want to have a shop with three phase power usually
> need to have it added. The usual power setup for residences is what
> you have described. 70-200 amp, 110VAC single phase is typical supply
> for a home or apartment. The newer the contruction, the more amps in
> the supply.
>
> Happy trails,
> Gary (net.yogi.bear)

1447. Re: Plan 9 from EMI space?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-05 14:53:04 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <9jhj219rhqn20athgv3n6hcihbjtrpgfi0@4ax.com>
Source record: 19979

On Sat, 5 Mar 2005 16:37:28 +0200, "asta" <habla@hotmail.com> wrote:

>hi!
>i've always wondered what phase-shift there is between those two 110V lines
>in an USA 220V AC net system.
>
>here we have either one phase of 230V or then 3 phase
>with 120 degrees between the phases.
>230V between phase to ground or 400V (third root of 3 times 230V of course)
>between phases
>
>everyone has direct 3-phase system with 230V to ground in every apartment or
>house splitted up to equal load on the phases.
>
There cannot be any, as they come off the same transformer.

A few appliances in most houses use the full 220 VAC, such as electric
heat, clothes dryer, electric range or oven, so there cannot be a
phase differential.

Industrial electrical installations are a different thing entirely,
even if they come off the same grid and substations as nearby
residential areas. IIRC, power comes to the substation as 480 3 phase,
and it is what happens after that varies between residential and
serious industrial.

Many electricians here do little industrial electrical work after
their testing and concntrae on homes, and there are a few who
specialize in industrial work.

Happy trails,
Gary (net.yogi.bear)
--
At the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

1448. Re: Plan 9 from EMI space?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-05 15:07:03 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <tWjWd.66101$Vf6.1780712@news20.bellglobal.com>
Source record: 19980

"Gary S." <Idontwantspam@net> wrote in message
news:9jhj219rhqn20athgv3n6hcihbjtrpgfi0@4ax.com...
> On Sat, 5 Mar 2005 16:37:28 +0200, "asta" <habla@hotmail.com> wrote:
>
>>hi!
>>i've always wondered what phase-shift there is between those two 110V
>>lines
>>in an USA 220V AC net system.
> There cannot be any, as they come off the same transformer.

Actually, the lines are opposite phase (180 degrees), 110 VAC RMS relative
to neutral/ground. If they were the same phase, then your 220V appliances
would see 0V.

Tom

1449. Re: Plan 9 from EMI space?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-05 16:02:35 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <r4lj21doun6alp57vbklimpfo8ioem8mcm@4ax.com>
Source record: 19981

On Sat, 05 Mar 2005 14:53:04 GMT, Gary S. <Idontwantspam@net> wrote:

>On Sat, 5 Mar 2005 16:37:28 +0200, "asta" <habla@hotmail.com> wrote:
>
>>hi!
>>i've always wondered what phase-shift there is between those two 110V lines
>>in an USA 220V AC net system.

>There cannot be any, as they come off the same transformer.

The phase shift in the Western hemisphere residential power
distribution system is 180 degrees, since the system is basically a
single phase system, with a 2x110 V secondary, with the centre tap
grounded.

The rest of the world is using some three phase systems for
residential distribution, either 127/220 or 230/400 V.

Paul OH3LWR

1450. Re: Plan 9 from EMI space?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-05 17:09:12 UTC
From: asta <habla@hotmail.com>
Message-ID: <mJlWd.3561$kc5.519@reader1.news.jippii.net>
Source record: 19982

hi!
thanks a lot for the info.
it clarified someting i've been wondering for a while.
actually i had come to the same result by myself, just wanted a confirmation
:)
cheers,
ab

"Paul Keinanen"
> On Sat, 05 Mar 2005 14:53:04 GMT, Gary S. >
>>On Sat, 5 Mar 2005 16:37:28 +0200, "asta" >>
>>>hi!
>>>i've always wondered what phase-shift there is between those two 110V
>>>lines
>>>in an USA 220V AC net system.
>
>>There cannot be any, as they come off the same transformer.
>
> The phase shift in the Western hemisphere residential power
> distribution system is 180 degrees, since the system is basically a
> single phase system, with a 2x110 V secondary, with the centre tap
> grounded.
>
> The rest of the world is using some three phase systems for
> residential distribution, either 127/220 or 230/400 V.
>
> Paul OH3LWR
>

1451. Re: Plan 9 from EMI space?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-05 18:39:08 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <o1vj21d79uj81q6c7p8f0a3khsr5rs4jp0@4ax.com>
Source record: 19983

On Sat, 5 Mar 2005 10:07:03 -0500, "Tom Holden"
<holden_family@sympatico.ca> wrote:

>"Gary S." <Idontwantspam@net> wrote in message
>news:9jhj219rhqn20athgv3n6hcihbjtrpgfi0@4ax.com...
>> On Sat, 5 Mar 2005 16:37:28 +0200, "asta" <habla@hotmail.com> wrote:
>>
>>>hi!
>>>i've always wondered what phase-shift there is between those two 110V
>>>lines
>>>in an USA 220V AC net system.
>> There cannot be any, as they come off the same transformer.
>
>Actually, the lines are opposite phase (180 degrees), 110 VAC RMS relative
>to neutral/ground. If they were the same phase, then your 220V appliances
>would see 0V.
>
My bad.

I don't really think of 180 as a phase shift, as much as a reverse
polarity.

Of course, both are true.

The three wire supply coming into the house is pretty standard in the
US residential electrical service, with +120/neutral/-120.

Happy trails,
Gary (net.yogi.bear)
--
At the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

1452. Re: Plan 9 from EMI space?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-05 20:35:04 UTC
From: LenAnderson@ieee.org
Message-ID: <1110054904.870761.299210@g14g2000cwa.googlegroups.com>
Source record: 19984

From: eternalsquire@comcast.net on Fri, Mar 4 2005 10:18 pm:

>I've done the google search already, so I hope maybe one of you has an
>answer.
>
>I am in the beginning stages of setting up my station, and I am
getting
>lots of EMI from various applicances in the apartment. I used an SW
>pocket radio as a sniffer.

Good procedure.

>It turns out that most of these are throwing out hash back into the AC
line,
>and that the AC wall conduits are conducting EMI into the room my wife
>allows me to use for my station. My station is on the other side of
>the apartment, but it doesn't matter about the physical distance
because the
>AC lines are throwing off the worst of the noise. I turned off
EVERYTHING
>and was able to reduce the problem enough to hear CW on the 7.050 on
my
>pocket radio without an external antenna.
>
>Throw everything on, and I could barely hear the signal with antenna,
>because EVERYTHING is going back into the house wiring!!!

Chances are that your apartment structure is not using metal
conduit for the AC lines. That helps quite a bit but is NOT an
option for a renter. :-(

>From worst offenders to least worst, they are:
>
>1) GE Hotpoint refrigerator/freezer.
>2) Air conditioning system.
>3) Aquarium pump.
>4) Overhead florescent lights.
>5) Microwave oven (even in in standby mode!).
>6) LED alarm clocks (3)
>7) Telephone answering machine
>8) Cordless telephone base station (900 Mhz)
>9) Cable Modem
>10) Wireless Router
>11) Late model Computer and CRT Monitor.

Typical household using modern appliances...all with little
electronic
circuits in them generating wideband RF hash. Very good for
reducing the "standby" load to the power company (energy
efficient if they have "power factor correction" circuits) but a
total
#$%!!! for anyone wanting to receive MF to HF signals near them.

>I have the following assets:
>
>1) I live on the lower floor and have a water pipe just outside the
window
> of my station room.

I doubt whether that will help in any real way, except for possible
lightning strike re-direction. Leads to the (grounded, supposedly)
water pipe are inductive and little antennas by themselves.

>2) I just bought 4 each of 3 amp and 30 amp CORCOM line filters on
Ebay.

Seriously, anyone saying "those always work" are probably selling
line
filters. It's a case of trying them out to find out if they do in
that case.

>3) A bunch of FT-50-43 cores.

Better than nothing.

>4) My wife's loving patience.

PRICELESS! Keep that at the expense of everything else!

>Questions:
>
>1) Ferrite 43 material is supposed to attentuate for 20 Mhz and up,
and the
> frequencies I want to hear are at 80 thru 20 meters. Should I
use the 73
> material instead for wrapping AC cords around toroids for
common-mode
> chokes?

Probably, but I suggest trying the 43 first. ANY attenuation at the
offending appliance is better than none. Do it as close to the
appliance as possible, lessen the RF hash dribbling out the lines.

>2) Do modern refrigerators in apartments use ordinary AC sockets or
3-phase?

Both. Depends on model and size. Wife and I had a TOTAL makeover
of our kitchen and laundry alcove in 1999, outlets were on the list
to
check for all new appliances in case of rework of residence wiring

was
needed. We now have an un-fancy fridge/freezer with "old" control system, minimum of EMI-generating circuitry within, no bells or whistles. Most residential refrigerators seem to use 115 VAC single phase with conventional 3-prong connectors. I say "seem to" based on
a three-inch thick notebook of kitchen appliance data researched 5 1/2 years ago.

The front-loading washer and dryer in the laundry alcove had the ordinary synchronous motor driven timers/cyclers, no bells and whistles with little electronic clocks or other dinguses added on (big sales feature in the stores, like seeing digital time is a big plus).

>3) I have a 1500 watt microwave oven, can I have it also run off a CORCOM
> filter?

The 30 A version; 1.5 KW will draw about 14 A through the line. A problem there is that the line filter should be grounded to something close to ground (like the old Los Angeles electrical code which mandated metal conduit everywhere). The case of the microwave is metal and it has lots of shielding for 2 GHz RF.

On the other hand, it may be just the clock/timer/controller that is generating EMI and that is rather low power. All of those use a microcontoller for all those selectable settings and probably have their own internal DC supply in parallel with the heavy-duty magnetron supply. All bets are off if there's a "power factor corrector" circuit in that supply for the maggie...those are modified switchers and may or may not be EMI generators.

>3) Can I use a CORCOM filter to isolate EMI from each appliance (30 AMP)
> and from the aquarium pump (3 AMP) from the AC lines? Or, do I also
> need common-mode chokes?

Again, it's a matter of where to connect the ground/common of the line filter. Filter ground to metal conduit ground works fairly well but
unknown on Romex wiring or PVC conduit electrical line routing. One has to experiment there.

>4) I split the wall wires of the wall wart and would each polarity around
> its own FT-50-54 about 4 times. Will this be remotely as effective as
> winding the wall-wart cord around a larger toroid?

Probably, but that's again a matter of experiment. Ain't NO absolutes

when there's all those other environment unknowns.

Ferrite or iron powder material, any kind, will REDUCE the EMI but none of them can eliminate it completely. Commercial equipment that must meet government radiation specs will use the least amount necessary to save costs and they rarely publish data on the amount of
reduction. All have to experiment with it. For what it's worth, a large toroid can be an advantage in stringing the wall-wart lead-out through it, forming a large common-mode choke. It also costs more. <shrug>

=======

From my own experience in a metal-conduit-AC-line house built in 1962, the worst EMI offenders are the "efficiency" light bulbs which

have switchers of some sort inside their bases. Some brands are low EMI (sold under the GE label), others are high EMI (sold under Philips label). It's a "caveat emptor" thing. :-(

I've done the portable all-band receiver sniffing here (borrowed wide-
band scanner type) and found few real offenders at several feet from their locations. Offhand, I'd say that metal conduit AC distribution
is a real help in reducing EMI. Appliances that include microcontroller devices in all the clocks but one, a bells-and -whistles Amana microwave, a Braun coffee maker (replacing a venerable Mr. Coffee), digital light timers, TV cable set-top box, VCR, cordless phone, combo FAX and phone recorder, electronic thermostat for furnace/air system, radio-alarm in bedroom. All of those do produce some EMI but the sniffer has to be right on top of it for detection. The gas furnace has an electronic ignition which makes an obvious spark, as do the range-top burners in the kitchen; never thought to sniff for those but I've not heard any obvious EMI from those.

An ancient-but-still-in-spec Icom R-70 sits on the arm of a desk in the office room with a fluorescent light bar (two 40 W tubes in an L, home-built) right above it. When the outside long-wire blew down I tried the 8-foot aluminum window frame above it as an indoor antenna and got incredible EMI hash. Fluorescent lights in the kitchen (two) and in the attached garage (also two) are very minor sources of EMI here. When connected to the outside long wire there was no problem light on or off. That includes the kitchen fluorescents, close to the outside coax connection to the long-wire.

Replacing my computer's CRT monitor with an LCD flat monitor helped reduce EMI spritz from my computer. My wife saw the nice thing I got (special sale at Fry's), she wanted one for her computer too! :-) That dropped the internal EMI level (R-70 hasn't been

connected to an outside antenna yet) some more. Both computer boxes are nicely-shielded-case HP Pavilions with internal modems and such...not like the el cheapo PC box obtained in 1998. There are some EMI bursts from the external flat-bed scanner and the inkjet printers but neither scanning nor printing is done at the same
time as receiving HF RF (scanner has its own outside antenna). Battery-powered radio clocks don't seem to radiate much of anything except the correct time. :-)

Using a conductive chassis/enclosure and incorporating any kind of line filter in a piece of equipment will help reduce EMI both coming and going. The line filter common is made right to the chassis/ enclosure and that is the best connection. If the residence has Romex or equivalent wiring, chances are that an HF transmitter will be the major EMI cause for OTHERS, especially in an apartment building. That's worse if the Rx/Tx antenna is IN the apartment.

An outside antenna (if possible) will reduce EMI garbage input to any receiver, any user's environment.

==========

"Outer space" is only a half-hour's drive away...if your car can go straight up... :-)

LenAnderson@ieee.org

1453. Lowe HF150 alignment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-05 23:47:28 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <kyrWd.105167$Th1.71903@bgtnsc04-news.ops.worldnet.att.net>
Source record: 19985

Does anybody have alignment notes on this receiver. Another eBay special that was "working perfectly, but as is". I need to know how to set the carrier injection frequency of the BFO. LSB injection is at the edge of the I.F. passband, resulting in not being able to demodulate these signals. I did adjust the reference oscillator while in the test mode, so that part is ok.
According to the schematic, it appears that the reference oscillator is divided by N so arrive at the carrier injection frequencies but I am not sure. It could also be an I.F. filter that has developed an assymmetrical response. Another thing could be that the 2nd LO is off frequency, but since the BFO is injected at the 455kHz I.F. this is highly unlikely.
Anybody have any experience with this type of situation?

Pete

1454. Re: Lowe HF150 alignment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-05 23:49:39 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <nArWd.105177$Th1.92477@bgtnsc04-news.ops.worldnet.att.net>
Source record: 19986
Body handling: HTML body converted to readable text

Another thing.....I have already e-mailed Lowe UK.....not sure what will turn up. Unfortunately, not technical support in the form of purchased documentation and parts are available to folks in the USA. Some sort of insurance liabilities, so I am really stuck.

Pete

"Pete KE9OA" wrote in message
news:kyrWd.105167$Th1.71903@bgtnsc04-news.ops.worldnet.att.net...
> Does anybody have alignment notes on this receiver. Another eBay special
> that was "working perfectly, but as is". I need to know how to set the
> carrier injection frequency of the BFO. LSB injection is at the edge of
> the I.F. passband, resulting in not being able to demodulate these
> signals. I did adjust the reference oscillator while in the test mode, so
> that part is ok.
> According to the schematic, it appears that the reference oscillator is
> divided by N so arrive at the carrier injection frequencies but I am not
> sure. It could also be an I.F. filter that has developed an assymmetrical
> response. Another thing could be that the 2nd LO is off frequency, but
> since the BFO is injected at the 455kHz I.F. this is highly unlikely.
> Anybody have any experience with this type of situation?
>
> Pete
>

1455. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-06 03:43:16 UTC
From: "R. Steve Walz" <rstevew@armory.com>
Message-ID: <422A7E73.2802@armory.com>
Source record: 19987
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Watson A.Name - "Watt Sun, the Dark Remover" wrote:
>
> You can belittle others for their opinions, and bitch and whine about
> the situation at hand. But like they say, when life hands you a lemon,
> make lemonade. Quitcherbitchin, and get on with life. You're
> complaining to the wrong crowd - almost everyone really don't care what
> you or i think.

There ain't no "life". There are people. When these shit-fucking
mother-pissing bastards hand you lemons you simply gang-up on them
and KILL them. THEN they'll fucking STOP! THAT'S what Democracy is!

-Steve
--
-Steve Walz rstevew@armory.com ftp://ftp.armory.com/pub/user/rstevew
Electronics Site!! 1000's of Files and Dirs!! With Schematics Galore!!
http://www.armory.com/~rstevew or http://www.armory.com/~rstevew/Public

1456. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-06 14:47:31 UTC
From: Pig Bladder <pigbladder@neodruid.net>
Message-ID: <pan.2005.03.06.14.47.51.119770@neodruid.net>
Source record: 19988
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Sun, 06 Mar 2005 03:43:16 +0000, R. Steve Walz wrote:

> Watson A.Name - "Watt Sun, the Dark Remover" wrote:
>>
>> You can belittle others for their opinions, and bitch and whine about
>> the situation at hand. But like they say, when life hands you a lemon,
>> make lemonade. Quitcherbitchin, and get on with life. You're
>> complaining to the wrong crowd - almost everyone really don't care what
>> you or i think.
> --------------------------------
> There ain't no "life". There are people. When these shit-fucking
> mother-pissing bastards hand you lemons you simply gang-up on them
> and KILL them. THEN they'll fucking STOP! THAT'S what Democracy is!

What goes around comes around.
--
Pig Bladder on a Stick

1457. (BPL) Virtual Spectrum- Global Test

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-06 16:34:19 UTC
From: David Stinson <arc5@ix.netcom.com>
Message-ID: <fiGWd.56697$uc.29149@trnddc03>
Source record: 19989

I finally got the Provisional Patent filed for
my BPL work-around, Virtual Spectrum (tm).
Server is up and running and everything is ready.
Next step- some friends will
help with tests- one in Europe, one in
Australia and two in the U.S.
There will be a low bandwidth and
a high-bandwidth trail. First will
stream a few KCs of 40 meters and include
several CW messages at various frequencies,
including a couple close together so we
can figure the best levels without cross-talk.
Next will be a high-bandwidth trial with
CW, SSB, FM and some other mode yet
to be decided, streaming about 40 KC of
the band. Then, a live, continuous
stream of the bottom 40 KC of 20 meters
from my location, which will run for a few days.
I hope they don't put BPL here in the mean time.

After these tests are concluded,
the next step will be configuring for
2-way QSOs, which is just a matter of
setting up the software and T/R switching.
I ain't had this much fun with a radio project
since I was a novice. :-).

73 Dave Stinson AB5S

1458. 1N23E vs. Schottkey?? Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-06 18:04:18 UTC
From: hexter@blazenet.net
Message-ID: <112mhh2cegm2nb6@corp.supernews.com>
Source record: 19990

This is on a 10 gig receive setup. There is no LNFE, just antenna to mixer direct couple in a balanced waveguide mixer assembly. The question is, if I remove the 1N23E/1N23ER pair, and go with a balanced set of schottkey microwave diodes, this would allow me to drop my local oscillator injection perhaps 6db. Will I see any increased sensativity, or should I just keep the 1N23 setup?

1459. FA:IF cans, Choke, Cer. RF sw, shafts + more parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-06 18:31:55 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <v0IWd.107802$Th1.14098@bgtnsc04-news.ops.worldnet.att.net>
Source record: 19991

See listing below for : Cer. RF switch, .250" metal shafts, .250" non-metalic shafts, 1000 pf fed-throu caps, C-1001 choke, Miller IF cans..... check daily:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking, heytubeguy

1460. Need data for RCA R44M10 UHF power module

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-06 21:59:35 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <97vm21hg96vqtnfsok9pnui9408t5tjra2@4ax.com>
Source record: 19992

Hi

wonder if somebody could help me with data and connection for RCA
R44M10 power module which was sold in UK some decades ago?

Jan-Martin

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

1461. Re: 1N23E vs. Schottkey?? Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-07 02:03:20 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <IDOWd.109004$Th1.85195@bgtnsc04-news.ops.worldnet.att.net>
Source record: 19993

I am not sure, but let me know if you need any of them. I've got a partial
reel of HP dual diodes in a SOT-23 package.
They are intended for use in your application.

Pete

"gudmundur" <hexter@blazenet.net> wrote in message
news:112mhh2cegm2nb6@corp.supernews.com...
> This is on a 10 gig receive setup. There is no LNFE, just antenna
> to mixer direct couple in a balanced waveguide mixer assembly.
> The question is, if I remove the 1N23E/1N23ER pair, and go with a
> balanced set of schottkey microwave diodes, this would allow me to
> drop my local oscillator injection perhaps 6db. Will I see any
> increased sensativity, or should I just keep the 1N23 setup?
>
>

1462. This Descrambler Just Arrived+ eZOqcAJ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-07 06:05:36 UTC
From: "Mr. Amazing!!!!!!!!" <9wGA0LQn@mvAVm.com>
Message-ID: <67a4$422bef30$83d8a3c5$4945@allthenewsgroups.com>
Source record: 19994

New XP2500A
The World's #1 Digital Satellite Television
Receiver Descrambler is Now Available to you!!!!!

Order Yours at: http://www.fta9000.3322.org

No Monthly Subscription Charges of ANY Sort!
No Service Contracts of ANY Sort!
No Telephone Connections of ANY Sort!!!!
Does NOT use ANY Sort of Satellite Access Card
The World's Number One "Cardless" Satellite Receiver!!!!

A NEW Product for the NEW Year of 2005
Our New XP2500A Digital Satellite Television Receiver Descrambler allows you to view at your convenience the following with the USA, Canada, Cuba, Bahamas, Jamaica, Virgin Islands and Mexico:

View Over 600+ Digital Television Stations FREE! (Everything!)
View Over 200+ Digital Commercial Free Music Stations FREE !(all categories)
View Over 40 Pay-Per-View Movies Channels FREE!
View 8 HBO's/5 Cinemax's/10 Showtime's/8 Starz, etc. FREE!
View Seven Adult Channels FREE FREE FREE • 24 Hours A Day (Non-Stop Action)!
Boxing/Football/Soccer/Baseball/Basketball • ALL Sports Packages FREE (With No Black Outs)!
Receive Home-Town Local Broadcast Television Stations from 4 Time Zones
Use this New Television Descrambler at Home/Office/Truck/RV etc.
Works In the USA and Canada • plus ALL of North and South America and Territories!
Works on: Nagravision, Seca, Viaccess #1 and #2, Irdeto One and Betacrypt Digital Satellite Signals!!!!

NOTE TO AUSTRAILIANS: We get many request about the Australia•s "Foxtel Channel". Our New XP2500A Receiver works nearly ANY where in the world - but it will NOT receive "Australia•s FOXTEL Broadcast Channel" as of yet.....they use Irdeto #2 a Decoding System.....so wait patiently - our Descrambling Technicians are working HARD on this one, to brake the code.
International Customers.

Our NEW XP2500A Digital Satellite Television Receiver - NOW UNSCRAMBLES THE FOLLOWING SIGNALS:
ABsat
ABS-CBN
Arabesque (ART)
Astro TV
BBC Prime
C+ NL
Canada's Bell ExpressVU
Canal + France
Canal 7 TV Madrid
Canal Pro TV

Canal Rural
Canal Rural
Canal Satellite
Canal Sky-net
Canal+ Digital
Canal+ Digital Aerial
Canal+ Vlanderen
CanalSat
CFI Peco Pro
Channel RAI TV
Cine+ Digital
Cohem sweden
C-SKY NET
CYFRA+
DigiFunClub
Digital+
Dish Network (USA)
Dream TV
EMI Special Channel
Eurosport
Euskaltel
FT Cable
Globe Cast MMBN
GlobeCast
GlobeCast Espana
GlobeCast France
HRT
MCM Europe
Mediaset
Mediavision
MiniMax
MMBN
MTV networks
Orbit Network
ORF Austria
Parabole reunion
Polsat
Premiere
SABC
Selector Tele
Senda/Boxer
SRG Swiss
SVT Europa
Taipei International
TBL TV
Televisa
TPS
TV Cabo
TV Slovenia
TVBS

ViaSat Europe
ViaSat Nordic

Okay.....So STOP PAYING THOSE MONTHLY SUBSCRIPTION COST FOR
SUBSCRIPTION CABLE OR SATELLITE TELEVISION��
Get Our New XP2500A Digital Satellite Television Receiver Now - go to the URL below NOW:

Don't Delay Order Yours at: http://www.fta9000.3322.org

YDn51096312qscEX9x5kW3F1cDjw4V

1463. 70MHz Imagerejection mixer with 2x SA602 (?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-07 08:13:49 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <f23o211molmeqooam13k7o7c1hbvcfvoqk@4ax.com>
Source record: 19995
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Hi

have been examining some surplus mobile telephone base station
equipment and discovered that the 70MHz to 455kHz mixers consists of
2x SA602. Since I've never seen an application using two such items,
my guess it for an image rejection type mixer.
Could somebody please guide me into some notes describing such mixer,
possibly using 2x SA602 (and a crystal osc)

Jan-Martin

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

1464. Re: 70MHz Imagerejection mixer with 2x SA602 (?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-07 11:13:33 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <xHWWd.1833$oN6.1299@newsfe2-gui.ntli.net>
Source record: 19996
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

> have been examining some surplus mobile telephone base station
> equipment and discovered that the 70MHz to 455kHz mixers consists of
> 2x SA602. Since I've never seen an application using two such items,
> my guess it for an image rejection type mixer.
> Could somebody please guide me into some notes describing such mixer,
> possibly using 2x SA602 (and a crystal osc)
==========
Jan-Martin , With 2xSA602 ,are you sure there isn't a 10.7 MHz
'intermediate' IF as well ?

Frank GM0CSZ / KN6WH

1465. Re: 70MHz Imagerejection mixer with 2x SA602 (?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-07 12:32:29 UTC
From: Andrew Holme <ajholme@hotmail.com>
Message-ID: <1110198748.991085.11350@o13g2000cwo.googlegroups.com>
Source record: 19997
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

J M Noeding wrote:
> have been examining some surplus mobile telephone base station
> equipment and discovered that the 70MHz to 455kHz mixers consists of
> 2x SA602. Since I've never seen an application using two such items,
> my guess it for an image rejection type mixer.

An image rejecting mixer requires quadrature inputs (both signal and
LO), two mixers, and summation of the outputs i.e.

sin(A+B) = sin(A)cos(B) + cos(A)sin(B)

Also - you're unlikely to have image problems at the second mixer.

1466. Good fox kit / schematic?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-07 14:55:01 UTC
From: "dave.harper" <dave.harper@gmail.com>
Message-ID: <1110207301.317793.237380@l41g2000cwc.googlegroups.com>
Source record: 19898
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Does anyone have experience with a good (and preferably inexpensive)
fox kit that has a range of atleast 30 miles? I don't have a frequency
range in mind, and am open to suggestions. Any additional suggestions
regarding the best equipment/antenna to track it with is also
appreciated.

Thanks in advance!
Dave

1467. Re: pumping the T2-exciter board with a squarewave signal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-07 16:47:56 UTC
From: andreas magun <achmagun@bluewin.ch>
Message-ID: <422c8528$1_1@news.bluewin.ch>
Source record: 19899

Thanks for replying.

The problem, was that I had not enough LO-power from the 74F74 outputs.
I have buffered them with a 50 Ohm TTL Driver 74AS804 that could deliver
plenty of current into the LO-inputs. I have limited it to approx 10 mA
by a series resistor of 300 Ohm. At a voltage drop of approximately .550
mVpp across the LO-inputs (approx. 5 mW) the exciter works now as expected.

Andreas

Richard Hosking wrote:
> Did the audio go through a LPF for the phasing unit?
> Remember that a square wave is made up of the sum of many harmonics -
> most of these will have been removed and the amplituyde of the
> fundamental may not be that large.
>
> Richard
>
>
> andreas magun wrote:
>
>> Hi,
>>
>> I have assembled a T2 phasing exciter (KK7B) and looked
>> at its output spectrum with a spectrum analyzer.
>>
>> When pumping the exciter with quadrature sine wave signals it
>> works as expected (output power roughly 3 mW, sideband supression
>> better than 40 db).
>>
>> However, when pumping with quadrature squarewave
>> signals of approximately the same power, the output power
>> drops by a factor of at least 20 db! I would have expected
>> much more power, similar to that obtained with sine wave pumping.
>>
>> The quadrature phase signal was generated with a 74F74, the
>> quadrature signals being attenuated to give a power of approx. 10 dbm
>> and output impedances of approx. 50 Ohms.
>>
>> There must be an explanation.
>>
>> Thanks
>> Andreas
>
>

1468. Re: Good fox kit / schematic?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-08 02:59:34 UTC
From: tom <cyberhun@shaw.ca>
Message-ID: <qy8Xd.601383$6l.17225@pd7tw2no>
Source record: 19901
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

http://members.aol.com/homingin/

1469. Re: 1N23E vs. Schottkey?? Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-08 03:16:01 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <JK8Xd.5455$c72.5306@bignews3.bellsouth.net>
Source record: 19902

gudmundur wrote:
> This is on a 10 gig receive setup. There is no LNFE, just antenna
> to mixer direct couple in a balanced waveguide mixer assembly.
> The question is, if I remove the 1N23E/1N23ER pair, and go with a
> balanced set of schottkey microwave diodes, this would allow me to
> drop my local oscillator injection perhaps 6db. Will I see any
> increased sensativity, or should I just keep the 1N23 setup?
>
>
wow, those 1N21/23 diodes are stone age! They are Germanium diodes
and usually have to be biased for lowest noise, best conversion
figure. Also when used in cavities, the diode itself forms part
of the coupling network. The letter in the diode part is a measure
of noise figure, the higher up in the alphabet you go, the lower
the rated noise figure. BTW those diodes a dated from the
1940's!

1470. I Need Instructions to hook up tone encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-08 03:27:51 UTC
From: Doug Davis <dougd@buckeye-express.com>
Message-ID: <n_WdnfenF5cBhrDfRVn-2w@buckeye-express.com>
Source record: 19904
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,alt.ham-radio.vhf-uhf

I have a Kenwood TS-711A. I bought the SS-64 tone encoder from
Communications Specialists at http://www.com-spec.com/ss64.htm
They don't have installation instructions for the TS-711A.

I have 3 wires to hookup:

Red: v+
Black: Ground
Yellow: Modulator

The first two I can handle but the yellow I need help with...

I just received the service manual and schematics today but I still can't
find the modulator.
Does anyone know where to solder the yellow wire for tone out?

Thanks,

Doug
N8DRD

--
OldTimerNews
http://www.oldtimernews.com

1471. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-08 03:28:13 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <112q6lpc584567e@corp.supernews.com>
Source record: 19903
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"mc" <mc_no_spam@uga.edu> wrote in message
news:4225d9e9@mustang.speedfactory.net...
> >> The Internet was designed for use within research establishments
where
> >> people were all, at some level, accountable and trustworthy. It
has
> > become
> >> a playground for con artists and pests.
> >
> > All, at some level, accountable and trustworthy? Not really. The
first
> > spam was in 1978, so there were problems from the beginning.
>
> There was very little until the 1990s, and if the first spam was in
1978,

You're exactly right: there was very little in the early '90s because
the Net was very little until the '90s. Obviously.

> then we had about 7 years of good networking before there was any.

I'm curious as to what you mean by good networking. And what you mean
by 'there was any'. Like, any _what_? Those two idiots Canter & Siegel
were already spamming Usenet in 1994.
http://www.coin.org.uk/roadshow/presentation/canter.html

1472. Re: I Need Instructions to hook up tone encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-08 04:35:47 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <zpqdnbsv2Yc0trDfRVn-ug@comcast.com>
Source record: 19905
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,alt.ham-radio.vhf-uhf

"Doug Davis" <dougd@buckeye-express.com> wrote in message
news:n_WdnfenF5cBhrDfRVn-2w@buckeye-express.com...
>I have a Kenwood TS-711A. I bought the SS-64 tone encoder from
> Communications Specialists at http://www.com-spec.com/ss64.htm
> They don't have installation instructions for the TS-711A.
>
> I have 3 wires to hookup:
>
> Red: v+
> Black: Ground
> Yellow: Modulator
>
> The first two I can handle but the yellow I need help with...
>
> I just received the service manual and schematics today but I still can't
> find the modulator.
> Does anyone know where to solder the yellow wire for tone out?
>
> Thanks,
>
> Doug
> N8DRD
>

Doug -

You can call ComSpec Tech support.
They have hundreds of Application Notes on file on file.
They are slowly moving these paper documents to the Internet web site.

SS-64 General Product Installation Sheet
http://www.com-spec.com/insheet/ss64inst.pdf

The second page of the SS-64 highlights the CTCSS OUTPUT (YELLOW) (PIN 3)
This output generates the CTCSS encode tone. The most common place to connect this line is just prior to the modulation stage in the transmitter. Typical connections would be to the center of the deviation pot. to the varactor diode in the modulator circuit, or to the manufacturer’s suggested connection point. This connection point can vary from radio to radio. [A schematic of the radio is useful]

Do NOT connect the CTCSS Output to the microphone input as the microphone audio stages will distort and attenuate the CTCSS signal. Since the CTCSS Output on the SS-6.4 is tow impedance, you may have to install a series resistor to reduce the loading effects of the CTCSS Output depending on the interface impedance. This is evident in the case of connecting to the center of a 106K deviation pot. In this case, a 106K series resistor will

compensate for the impedance difference. In addition, a slight adjustment of the voice deviation may be required to compensate for the CTCSS Output circuit loading.

Com-Spec
426 West Taft Ave. Orange, California 92865-4224
Phone 714-998-3021 Fax 714-974-3420
Phone 800-854-0547 Fax 800-850-0547
==========
w9gb

1473. Re: I Need Instructions to hook up tone encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-08 11:11:15 UTC
From: Doug Davis <dougd@buckeye-express.com>
Message-ID: <ItidnfS_hqOhFbDfRVn-ow@buckeye-express.com>
Source record: 19906
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,alt.ham-radio.vhf-uhf

Thank you very much! I've found my solder points...now if I could just find
my solder :)

Doug
N8DRD

"gb" <onw9mapsgb@no.arrl.spam.net> wrote in message
news:zpqdnbsv2Yc0trDfRVn-ug@comcast.com...
"Doug Davis" <dougd@buckeye-express.com> wrote in message
news:n_WdnfenF5cBhrDfRVn-2w@buckeye-express.com...
>I have a Kenwood TS-711A. I bought the SS-64 tone encoder from
> Communications Specialists at http://www.com-spec.com/ss64.htm
> They don't have installation instructions for the TS-711A.
>
> I have 3 wires to hookup:
>
> Red: v+
> Black: Ground
> Yellow: Modulator
>
> The first two I can handle but the yellow I need help with...
>
> I just received the service manual and schematics today but I still can't
> find the modulator.
> Does anyone know where to solder the yellow wire for tone out?
>
> Thanks,
>
> Doug
> N8DRD
>

Doug -

You can call ComSpec Tech support.
They have hundreds of Application Notes on file on file.
They are slowly moving these paper documents to the Internet web site.

SS-64 General Product Installation Sheet
http://www.com-spec.com/insheet/ss64inst.pdf

The second page of the SS-64 highlights the CTCSS OUTPUT (YELLOW) (PIN 3)
This output generates the CTCSS encode tone. The most common place to
connect this line is just prior to the modulation stage in the transmitter.
Typical connections would be to the center of the deviation pot. to the

varactor diode in the modulator circuit, or to the manufacturer's suggested connection point. This connection point can vary from radio to radio. [A schematic of the radio is useful]

Do NOT connect the CTCSS Output to the microphone input as the microphone audio stages will distort and attenuate the CTCSS signal. Since the CTCSS Output on the SS-6.4 is tow impedance, you may have to install a series resistor to reduce the loading effects of the CTCSS Output depending on the interface impedance. This is evident in the case of connecting to the center of a 106K deviation pot. In this case, a 106K series resistor will compensate for the impedance difference. In addition, a slight adjustment of the voice deviation may be required to compensate for the CTCSS Output circuit loading.

Com-Spec
426 West Taft Ave. Orange, California 92865-4224
Phone 714-998-3021 Fax 714-974-3420
Phone 800-854-0547 Fax 800-850-0547
==========
w9gb

1474. Re: I Need Instructions to hook up tone encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-08 14:35:12 UTC
From: whoever <whoever@wherever>
Message-ID: <VJmdnS2fpJK9JbDfRVn-hw@centurytel.net>
Source record: 19907
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,alt.ham-radio.vhf-uhf

Doug
Send that back to Com-spec and get the TU-5PX that's made for the
711/811 $60.00 and it's a simple plug-in

http://www.piexx.com/cgi-bin/piexx.cgi?p=tu5&cart_id=3262023.14035

Harry
N8GNI

Doug Davis wrote:

> I have a Kenwood TS-711A. I bought the SS-64 tone encoder from
> Communications Specialists at http://www.com-spec.com/ss64.htm
> They don't have installation instructions for the TS-711A.
>
> I have 3 wires to hookup:
>
> Red: v+
> Black: Ground
> Yellow: Modulator
>
> The first two I can handle but the yellow I need help with...
>
> I just received the service manual and schematics today but I still can't
> find the modulator.
> Does anyone know where to solder the yellow wire for tone out?
>
> Thanks,
>
> Doug
> N8DRD
>
> --
> OldTimerNews
> http://www.oldtimernews.com
>
>

1475. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-08 14:41:45 UTC
From: mc <mc_no_spam@uga.edu>
Message-ID: <422dc0e9@mustang.speedfactory.net>
Source record: 19916
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

>> There was very little until the 1990s, and if the first spam was in
> 1978,
>
> You're exactly right: there was very little in the early '90s because
> the Net was very little until the '90s. Obviously.
>
>> then we had about 7 years of good networking before there was any.
>
> I'm curious as to what you mean by good networking. And what you mean
> by 'there was any'. Like, any _what_? Those two idiots Canter & Siegel
> were already spamming Usenet in 1994.

Yes, because in 1993, commercial public access began. There was very, very little spam during the days when the Internet was confined to academia and research labs. Back then, when people talked about "spam" they generally meant announcements that were on-topic but were considered too commercial.

1476. Re: 70MHz Imagerejection mixer with 2x SA602 (?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-08 17:19:00 UTC
From: Bob Liesenfeld <wb0poq@visi.com>
Message-ID: <422DDE83.51E391AF@visi.com>
Source record: 19908
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

J M Noeding wrote:

> Hi
>
> have been examining some surplus mobile telephone base station
> equipment and discovered that the 70MHz to 455kHz mixers consists of
> 2x SA602. Since I've never seen an application using two such items,
> my guess it for an image rejection type mixer.

Could it be for dual diversity receive?

1477. Re: 70MHz Imagerejection mixer with 2x SA602 (?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-08 20:38:00 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <d43s21lru33e54ia061p10u03r1pu1bhkm@4ax.com>
Source record: 19909
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Tue, 08 Mar 2005 11:19:00 -0600, Bob Liesenfeld <wb0poq@visi.com>
wrote:

>
>
>J M Noeding wrote:
>
>> Hi
>>
>> have been examining some surplus mobile telephone base station
>> equipment and discovered that the 70MHz to 455kHz mixers consists of
>> 2x SA602. Since I've never seen an application using two such items,
>> my guess it for an image rejection type mixer.
>
>
> Could it be for dual diversity receive?

there are 4 receivers, two on each board (with 2x SA604 and 4x SA602),
so I think it is a lot of diversity if it was interesting

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

1478. Re: attenuators

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-08 20:59:01 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1110315541.499582.123320@l41g2000cwc.googlegroups.com>
Source record: 19910

What range and what step size? How inexpensive? How accurate? Manual or electrically driven? You can build your own from SMT attenuator chips which are available from EMC Technology, Cherry Hill, NJ, though they aren't particularly cheap (and are good over a much wider freq range than you are looking for, even assuming you mean MHz instead of mHz). You can also build attenuators from SMT resistors: not all the resistors will have to handle 2 watts, and you can series-parallel resistors to get the power dissipation you need. You probably will find that metal-oxide axial lead resistors will work fine for you up to 30MHz too, if you aren't trying to get exceptional return loss.

Cheers,
Tom

1479. Re: I Need Instructions to hook up tone encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-09 02:07:11 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <422E5A4F.6040209@bloomer.net>
Source record: 19911
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,alt.ham-radio.vhf-uhf

Doug,

Of course, NOW somebody comes up with a link for you for a tone board made specifically for your rig. If you don't want to send back the Spec Com board, I think I know an easy way for you to find the modulation point...looking at the board that is a direct replacement for that rig, it appears the tone board plugs onto 7 or 8 pins that must be present in the radio. One of those MUST be the audio input to the modulator. Check the service manual to find the pinout for that connector and you should be home free...

Scott
N0EDV

Doug Davis wrote:
> I have a Kenwood TS-711A. I bought the SS-64 tone encoder from
> Communications Specialists at http://www.com-spec.com/ss64.htm
> They don't have installation instructions for the TS-711A.
>
> I have 3 wires to hookup:
>
> Red: v+
> Black: Ground
> Yellow: Modulator
>
> The first two I can handle but the yellow I need help with...
>
> I just received the service manual and schematics today but I still can't
> find the modulator.
> Does anyone know where to solder the yellow wire for tone out?
>
> Thanks,
>
> Doug
> N8DRD
>
> --
> OldTimerNews
> http://www.oldtimernews.com
>
>

1480. How to use a PC/soundcard to generate CTCSS tone

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-09 03:41:49 UTC
From: wb0gaz <wb0gaz@hotmail.com>
Message-ID: <1110339708.990066.191380@o13g2000cwo.googlegroups.com>
Source record: 19912

This is probably not that complicated (I hope?!?) but I need a PC program that would just tell a PC soundcard to generate a standard CTCSS tone (example 107.2 Hz) sinewave that could be fed into an older FM amateur transceiver. I don't want to find/buy/build a CTCSS module for it, and will have a PC handy. I imagine a WAV file could be created, but if there is some kind of software (perhaps a "function generator" program) that would be ideal, particularly if you could just give it the frequency in Hz or something like that, and get a steady sine wave out of the sound card.

Very tks,

73 Dave WB0GAZ wb0gaz@hotmail.com

1481. Re: How to use a PC/soundcard to generate CTCSS tone

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-09 05:27:50 UTC
From: dplatt@radagast.org
Message-ID: <112t2ame7dk7i4b@corp.supernews.com>
Source record: 19913

In article <1110339708.990066.191380@o13g2000cwo.googlegroups.com>,
wb0gaz <wb0gaz@hotmail.com> wrote:

>This is probably not that complicated (I hope?!?) but I need a PC
>program that would just tell a PC soundcard to generate a standard
>CTCSS tone (example 107.2 Hz) sinewave that could be fed into an older
>FM amateur transceiver. I don't want to find/buy/build a CTCSS module
>for it, and will have a PC handy. I imagine a WAV file could be
>created, but if there is some kind of software (perhaps a "function
>generator" program) that would be ideal, particularly if you could just
>give it the frequency in Hz or something like that, and get a steady
>sine wave out of the sound card.

Try http://www.goldwave.com/ for a Windows-based solution
(fully-functional demo version can be downloaded).

For Linux, try http://audacity.sourceforge.net/ (free)

Both of these should be able to generate, and then play, a WAV file
having a sinusoid of almost any desired frequency within the PC's
audio bandwidth. I used Audacity to generate precise sinewaves to be
used when calibrating an FM modulation meter via the Bessel-function
null method.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1482. Re: How to use a PC/soundcard to generate CTCSS tone

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-09 05:31:59 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1c982a282a8f81319896e7@localhost>
Source record: 19914

In article <1110339708.990066.191380@o13g2000cwo.googlegroups.com>,
wb0gaz@hotmail.com says...

> This is probably not that complicated (I hope?!?) but I need a PC
> program that would just tell a PC soundcard to generate a standard
> CTCSS tone (example 107.2 Hz) sinewave that could be fed into an older
> FM amateur transceiver. I don't want to find/buy/build a CTCSS module

<snippety>

What you describe is a lot like using a 40mm antiaircraft gun to
shoot down a rubber-band powered model airplane. What happens when you
suddenly need to use your sound card for something other than a PL
encoder?

$28.95 plus a little for shipping will get you a perfectly usable
dedicated CTCSS encoder, as described at this link:

http://www.com-spec.com/ss64.htm

PC's are not, contrary to popular belief, the Answer to All Things
Radio or Technical. This is one area where a dedicated purpose-built
device would be a much better investment of your time and money.

Happy tweaking.

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped
with surreal ports?"

1483. Re: How to use a PC/soundcard to generate CTCSS tone

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-09 05:50:53 UTC
From: mike@corn2.freeserve.co.uk
Message-ID: <422e8d97.594112237@news.freeserve.net>
Source record: 19915

On 8 Mar 2005 19:41:49 -0800, "wb0gaz" <wb0gaz@hotmail.com> wrote:

>This is probably not that complicated (I hope?!?) but I need a PC
>program that would just tell a PC soundcard to generate a standard
>CTCSS

If you are hopeing to get the CTCSS tone through you Microphone,
forget it. The frequency response of the Mic and Modulator will
probably prohibit any success but have a look at this link

http://www.qsl.net/ta2mbd/elektronik/af/ctcss_16c84.htm

It describes a cheap solution to your problem and it does'nt use a
steamhammer to crack a nut.
hth Mike W, G8NXD qthr

1484. Re: 1N23E vs. Schottkey?? Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-09 10:40:36 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <422ed24e.4199909@News.Individual.NET>
Source record: 19917

On Mon, 07 Mar 2005 22:16:01 -0500, Ken Scharf
<wa2mzeNOTTHIS@bellsouth.net> wrote:

>wow, those 1N21/23 diodes are stone age!

> BTW those diodes a dated from the
>1940's!

So am I (1937 actually) but I still work fine!! Just 'coz it's old
doesn't mean it's had it! :-)

Peter, G3PHO

1485. Re: SPAMMERS (was Re: Digikey doth truly rule

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-09 12:48:39 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <112trt2du0l5020@corp.supernews.com>
Source record: 19918
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"mc" <mc_no_spam@uga.edu> wrote in message
news:422dc0e9@mustang.speedfactory.net...
> >> There was very little until the 1990s, and if the first spam was in
> > 1978,
> >
> > You're exactly right: there was very little in the early '90s
because
> > the Net was very little until the '90s. Obviously.
> >
> >> then we had about 7 years of good networking before there was any.
> >
> > I'm curious as to what you mean by good networking. And what you
mean
> > by 'there was any'. Like, any _what_? Those two idiots Canter &
Siegel
> > were already spamming Usenet in 1994.
>
> Yes, because in 1993, commercial public access began. There was very,
very
> little spam during the days when the Internet was confined to academia
and
> research labs.

But, "there was very, very little Internet during the days when the
Internet was confined to academia and research labs." So the effect was
virtually nil.

Or more precisely, if you didn't have any spam because you didn't have
any Internet, then what's the point.

> Back then, when people talked about "spam" they generally
> meant announcements that were on-topic but were considered too
commercial.

But, "back then, when people talked about "spam", there were no people
talking in the general public. In other words, back in "the good ol'
days", there were no good ol' days for the average person.

1486. Re: How to use a PC/soundcard to generate CTCSS tone

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-09 12:53:03 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <wMSdnepws_gobLPfRVn-hA@comcast.com>
Source record: 19919

"wb0gaz" <wb0gaz@hotmail.com> wrote in message
news:1110339708.990066.191380@o13g2000cwo.googlegroups.com...
> This is probably not that complicated (I hope?!?) but I need a PC
> program that would just tell a PC soundcard to generate a standard
> CTCSS tone (example 107.2 Hz) sinewave that could be fed into an older
> FM amateur transceiver. I don't want to find/buy/build a CTCSS module
> for it, and will have a PC handy. I imagine a WAV file could be
> created, but if there is some kind of software (perhaps a "function
> generator" program) that would be ideal, particularly if you could just
> give it the frequency in Hz or something like that, and get a steady
> sine wave out of the sound card.
>
> Very tks,
>
> 73 Dave WB0GAZ wb0gaz@hotmail.com
>

Dave -

You may be missing the point of CTCSS. It is NOT like "Touch Tone" sounds
that can be insert through the microphone input and pass through the audio
chain.

Never insert the CTCSS Output (from any CTCSS encoder board or source) to
the microphone input of a radio.
The radio's microphone audio stages will distort and attenuate the CTCSS
signal (defeating the whole purpose)

The most common place to connect the CTCSS Output to is just prior to the
modulation stage in the transmitter.
Typical connections would be: to the center of the deviation pot, to the
varactor diode in the modulator circuit, or to the manufacturer's suggested
connection point. This connection point for the CTCSS can vary from radio to
radio. A schematic of the radio is very useful.

Since the CTCSS Output from your sound card may be low impedance, you may
have to install a series resistor to reduce the loading effects from the
sound card (CTCSS) Output --- depending on the interface impedance.
This is evident in the case of connecting to the center of a 10K deviation
pot. In this case, a 10K series resistor will compensate for the impedance
difference.
In addition, a slight adjustment of the voice deviation may be required to
compensate for the CTCSS Output circuit loading.

The CTCSS encoders from ComSpec or PIEXX are easy to install and less than
$50 .

gb

1487. Re: 1N23E vs. Schottkey?? Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-09 13:43:09 UTC
From: Murray <me@erewhon.com.au>
Message-ID: <422efd5e$0$31460$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 19920

Youngster - 1936 here
vk4aok

Peter wrote:

> On Mon, 07 Mar 2005 22:16:01 -0500, Ken Scharf
> <wa2mzeNOTTHIS@bellsouth.net> wrote:
>
>
>>wow, those 1N21/23 diodes are stone age!
>
>
>> BTW those diodes a dated from the
>>1940's!
>
>
>
> So am I (1937 actually) but I still work fine!! Just 'coz it's old
> doesn't mean it's had it! :-)
>
> Peter, G3PHO

1488. Re: Plan 9 from EMI space?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-09 16:15:09 UTC
From: Terry <tsanford@nf.sympatico.ca>
Message-ID: <QfFXd.25083$JH1.1051605@news20.bellglobal.com>
Source record: 19921

"asta" <habla@hotmail.com> wrote in message
news:7vjWd.3513$G64.965@reader1.news.jippii.net...
> hi!
> i've always wondered what phase-shift there is between those two 110V
> lines in an USA 220V AC net system.
>
I think the answer to your question is either no phase shift or 180 degrees.
(The two conductors you mention are the two ends of the same phase!)
To explain; coming into the typical North American residence is a three wire
service.
The three wires are the two ends of and the centre tap of a single phase 230
volt secondary winding of the power utility distribution or step down
transformer located nearby. Note 1.
Thus there is 230 volts single phase between the two outer conductors or
legs and 115 volts between each of them and the centre tap. The centre tap
is grounded/earthed at the transformer and again (once only) where the
service enters the house.
It becomes the neutral or zero voltage wire.
Some people, including electricians, incorrectly refer to the two outer
conductors, each at 115v to neutral, as 'Phases'!
They are not and a more understandable designation is 'Legs'.
Typical colour coding is Leg A = Black, Neutral = White, Leg B = Red.
Although this is AC you can, sort of, think of it as Black = Plus 115 volts,
White = 0 volts, Red = Minus 115 volts.
Within the house heavy appliances that require considerable wattage, such as
a water heater or cooking stove are connected to 230 volts through double
pole breakers. (Some also have 115 volt items, e.g. an oven light, so also
use the neutral wire.
Everything in house has a ground/earth (bare or green) wire; which does not
carry any current for safety.
The 115 volt loads comprising lights and outlets are distributed over both
legs in a hopefully balanced manner through single pole breakers. It works
well and the maximum voltage to ground or neutral is 115v AC RMS.
If you want a comparison; think about those single phase safety transformers
they often use now on British construction sites, with 115 volt tools. As I
understand they step down the normal 230v to 115v, that in itself is less
voltage. The centre tap of the 115 volt secondary (again as I understand) is
grounded. Thus the maximum voltage to ground is half the 115 volts. That's
57.5 volts RMS and about 81 volts peak; much safer eh?
So our North American residential service is, sort of, similar.
Any help?
In commercial work you may get into three phase, one voltage used is 347
volts AC RMS e.g. lighting in a say a supermarket.
Note 1. A typical 'primary' distribution voltage from the subsation some 5

kilometres away is around 12.7 kilovolts. The lane behind our house has a single phase 2 wire (live plus neutral) primary; various step down distribution transformers supply groups or individual houses each with a 3 wire 230 volt centre tapped supply. In this area it is all overhead. While o.head distribution can be more easily damaged by weather it is much quicker to repair than underground plant, imagine moving three feet of snow and then digging into frozen ground! And maybe breaking the telephone cable while doing it! The poles are shared with telephone and TV cable systems. Thus in quite small communities we have a choice of internet service from the cable TV provider via their coax, or ADSL from the telco, or dial up over regular telephone etc. In competition with cable TV (analogue and now also digital) we now have two Canadian satellite systems and in many areas of Canada people can subscribe to US satellite services as well.
Long winded answer but hope it helps.
Terry.

1489. Re: Plan 9 from EMI space?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-09 16:25:03 UTC
From: Terry <tsanford@nf.sympatico.ca>
Message-ID: <6pFXd.25126$JH1.1052380@news20.bellglobal.com>
Source record: 19922

<LenAnderson@ieee.org> wrote in message
news:1110054904.870761.299210@g14g2000cwa.googlegroups.com...
> From: eternalsquire@comcast.net on Fri, Mar 4 2005 10:18 pm:
>
Just like to say, without repeating the whole of previous postings, that
your discussion about reducing residential EMI has been most interesting;
thank you.
Terry.

1490. Re: National SW-3 question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-09 16:35:01 UTC
From: Terry <tsanford@nf.sympatico.ca>
Message-ID: <syFXd.25225$JH1.1054814@news20.bellglobal.com>
Source record: 19924
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

"Bill M" <dontspamoleexray@coqui.net> wrote in message
news:112f2ijrcs073e7@corp.supernews.com...
> Joe McElvenney wrote:
>
>> Hi,
>>
>> This Bill Orr article may be what you are looking for -
>> http://www.thecompendium.net/radio/SW-3/SW3maginfo.pdf
>> Incidently, the large choke in the audio coupling circuit is there to
>> obtain as high an AC gain as possible at the expense of a relatively low
>> DC voltage drop. The fact that the grid leak and coupling capacitor are
>> all part of the same assembly suggests that National used the same
>> arrangement is several designs.
>> Cheers - Joe
>
> Great! Thank you very much.
>
> -Bill
>>
Could you use one winding of say an audio output transformer; the primary,
with nothing connected to the secondary?
The primary winding becoming a high inductance choke!
Found that out the hard way one time!
The speaker became disconnected; the primary was in the plate circuit of a
6V6, audio output pentode.
No sound, turned up volume, naturally, like you would!
Result sparks during peaks in the music from the plate pin of the tube
socket to a nearby ground/chassis wire or summat. Ah yes, high inductive
reactance, some audio power and induced voltage.
Lucky didn't burn out the insulated primary of the audio transformer!

1491. Re: The ultimate non-hb receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-09 16:37:04 UTC
From: Terry <tsanford@nf.sympatico.ca>
Message-ID: <nAFXd.25244$JH1.1055267@news20.bellglobal.com>
Source record: 19923

"John Walton" <jdwalton@comcast.net> wrote in message
news:KrKdnff0uaep8LnfRVn-ug@comcast.com...
> Forgive me, but I only post this as I think it will be of general interest
> to rrah readers -- i have no financial connection whatsoever -- a Watkins
> Johnson receiving station which will fill your 1/2 of your shack or
> basement -- the seller has been good to deal with -- you will be amused:
>
> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=4673&item=5755335998&rd=1
>
Wow! ..... Drool .....

1492. Re: 1N23E vs. Schottkey?? Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-09 17:39:46 UTC
From: hexter@blazenet.net
Message-ID: <112ud723dl5cncb@corp.supernews.com>
Source record: 19925

In article <JK8Xd.5455$c72.5306@bignews3.bellsouth.net>,
wa2mzeNOTTHIS@bellsouth.net says...
>
>gudmundur wrote:
>> This is on a 10 gig receive setup. There is no LNFE, just antenna
>> to mixer direct couple in a balanced waveguide mixer assembly.
>> The question is, if I remove the 1N23E/1N23ER pair, and go with a
>> balanced set of schottkey microwave diodes, this would allow me to
>> drop my local oscillator injection perhaps 6db. Will I see any
>> increased sensativity, or should I just keep the 1N23 setup?
>>
>>
>wow, those 1N21/23 diodes are stone age! They are Germanium diodes
>and usually have to be biased for lowest noise, best conversion
>figure. Also when used in cavities, the diode itself forms part
>of the coupling network. The letter in the diode part is a measure
>of noise figure, the higher up in the alphabet you go, the lower
>the rated noise figure. BTW those diodes a dated from the
>1940's!

Yes, they were used in WWII radars with 2K25 klystron locals,
and we call that generation 1, in the late 70's they quit using
ATR/TR tubes on the lower power stuff, and went with circulators
and diode limiters, but the 1N23E/R remained firmly rooted in these
gen 2 radars until the late eighties. Gen 3 brought about the LNFE/MMIC
front end with a double balanced mixer featuring I/Q phase rejection
in the mixer stage producing I.F. output only when the local osc is
above the incoming signal. These front ends have about 6db gain over
the broadband 1N23 setup, and are much quieter, giving about a 10db
better SNR overall. So now the little Gen3 2.2kw units see targets that
the old 4kw units never could!

Yes this is some older stuff I have, a mid eighties radar front end
with a 10gig hamband gunn local, now back to our regularly scheduled
question, Should I buy $70 worth of matched schottkey, or $40 worth
of 1N23EMR. I have to buy something, my old crystals are way shot!!

1493. Re: Freq Converter for Spectrum display

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-09 17:56:29 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <hNGXd.7297$YD4.3790@newssvr12.news.prodigy.com>
Source record: 19926

Looks good, have you tested it yet?

--

73
Hank WD5JFR
"Brian Hill" <releif@last.net> wrote in message
news:144Xd.1808$Wu2.327@fe02.lga...
> Hi all. Ok here's what I came up with after talking to a few of you
> before.
> If you see a bo bo please let me know.
> http://webpages.charter.net/brianhill/conv.jpg
> I was told that a simple input was fine for my application and the Philips
> data sheet shows this config and from what I read it should work. I'm
> taking
> a chance on the inductor? If I can't get the thing to Osc. 21.4MHz, I'll
> swap it out. What uH would be best for my app?
>
> The receivers IFs are:
> 1st- 58.1125MHz
> 2nd- 8.83MHz
>
> The S.D. input needs to be 21.4MHz
>
> Here's what I fabed up.
> http://webpages.charter.net/brianhill/conv2.jpg
> http://webpages.charter.net/brianhill/conv3.jpg
> http://webpages.charter.net/brianhill/conv4.jpg
>
> 73 and good DXing.
> Brian
> ~~~~~~
> A lot of radios and 100' of rusty wire!
> Zumbrota, Southern MN
> Brian's Radio Universe
> http://webpages.charter.net/brianhill/
>
> EMAIL- brianehill@$100charter.net
> (Hide the $100 to reply!)
>
>

1494. Re: 1N23E vs. Schottkey?? Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-09 20:57:34 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <8mou215o7sen8oavgjgmjgcjpfrfgh3c95@4ax.com>
Source record: 19927

On Mon, 07 Mar 2005 22:16:01 -0500, Ken Scharf
<wa2mzeNOTTHIS@bellsouth.net> wrote:

>gudmundur wrote:
>> This is on a 10 gig receive setup. There is no LNFE, just antenna
>> to mixer direct couple in a balanced waveguide mixer assembly.
>> The question is, if I remove the 1N23E/1N23ER pair, and go with a
>> balanced set of schottkey microwave diodes, this would allow me to
>> drop my local oscillator injection perhaps 6db. Will I see any
>> increased sensativity, or should I just keep the 1N23 setup?
>>
>>
>wow, those 1N21/23 diodes are stone age! They are Germanium diodes
>and usually have to be biased for lowest noise, best conversion
>figure. Also when used in cavities, the diode itself forms part
>of the coupling network. The letter in the diode part is a measure
>of noise figure, the higher up in the alphabet you go, the lower
>the rated noise figure. BTW those diodes a dated from the
>1940's!

when the devices were too old, they couldn't use them, and called them
1N451(?), and had modern diodes for another 50 years

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

1495. Re: How to use a PC/soundcard to generate CTCSS tone

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-10 08:39:31 UTC
From: Spajky <Spajky@##volja.net>
Message-ID: <6sbv21dhdtiksofbmoejerbug2ht1r5pdl@4ax.com>
Source record: 19929

On 8 Mar 2005 19:41:49 -0800, "wb0gaz" <wb0gaz@hotmail.com> wrote:

> I need a PC
>program that would just tell a PC soundcard to generate a standard
>CTCSS tone (example 107.2 Hz) sinewave that could be fed into an older
>FM amateur transceiver.

tonegen
>http://www.nch.com.au/
--
¸¸ ¸¸ Regards , SPAJKY ®
\\.//_. mail addr. @ my site @ http://www.spajky.vze.com
\°/ ".. long live & prosper.." - 3rd Anniversary running it:
|| "Tualatin OC-ed / BX-Slot1 / inaudible setup!"

1496. Re: How to use a PC/soundcard to generate CTCSS tone

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-10 12:25:52 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <os2dnargfNJFoa3fRVn-qw@comcast.com>
Source record: 19928

"wb0gaz" <wb0gaz@hotmail.com> wrote in message
news:1110339708.990066.191380@o13g2000cwo.googlegroups.com...
> This is probably not that complicated (I hope?!?) but I need a PC
> program that would just tell a PC soundcard to generate a standard
> CTCSS tone (example 107.2 Hz) sinewave that could be fed into an older
> FM amateur transceiver. I don't want to find/buy/build a CTCSS module
> for it, and will have a PC handy. I imagine a WAV file could be
> created, but if there is some kind of software (perhaps a "function
> generator" program) that would be ideal, particularly if you could just
> give it the frequency in Hz or something like that, and get a steady
> sine wave out of the sound card.
>
> Very tks,
>
> 73 Dave WB0GAZ wb0gaz@hotmail.com
>

Two common suppliers for CTCSS encoding and decoding solutions are ComSpec
and PIEXX.

PIEXX
http://www.piexx.com/cgi-bin/piexx.cgi?p=home.

Com-Spec
http://www.com-spec.com/index1.htm

w9gb

1497. FA:(9 HRS OR LESS),xtal Det.,wrenches set, 1k fed-throu .....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-10 15:47:48 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <E_ZXd.361781$w62.322853@bgtnsc05-news.ops.worldnet.att.net>
Source record: 19930

See these items and others as well at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking, 73 heytubeguy.....more stuff coming too

1498. newbie technical questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-10 20:21:13 UTC
From: razorbladeshoes@gmail.com
Message-ID: <1110486073.267964.53290@l41g2000cwc.googlegroups.com>
Source record: 19931
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

hello, i'm relatively new to ham radio and had a few technical
questions i was hoping to throw out...anyone that can answer these
would be very helpful!

1. i've seen transmitter schematics that were simple, and others that
were complex. as a general rule of thumb, are the more complex ones
trying to compensate for frequency drift, or maybe eliminate higher
harmonics? how efficient and/or stable are the simple transmitter
schematics?

2. other than frequency range, what characteristics are you concerned
about when trying to match a transmitter to an amp?

3. without an amp, couldn't you still run the signal to an antenna and
it would be a weak transmitter? all the amp does is increase the
voltage and current supplied to the antenna, correct?

4. for an FM transmitter, does the modulation occur to oscillator
directly, or is the oscillator's signal modulated after "leaving" the
oscillator? i guess what i'm asking is whether or not there is an input
to the oscillator, or is it just an "output only" frequency generator?

thanks!
jason

1499. Re: newbie technical questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-10 20:49:53 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <nr2Yd.21161$YO5.4539@fe04.lga>
Source record: 19932
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

Hi Jason

Nice questions, let me try to answer a few ..

<razorbladeshoes@gmail.com> wrote in message
news:1110486073.267964.53290@l41g2000cwc.googlegroups.com...

> 1. i've seen transmitter schematics that were simple, and others that
> were complex. as a general rule of thumb, are the more complex ones
> trying to compensate for frequency drift, or maybe eliminate higher
> harmonics? how efficient and/or stable are the simple transmitter
> schematics?

One obvious thing is that CW transmitters tend to be simple, SSB transmitters complex. But there are a thousand design variables. One big one is the complexity of the ICs employed. Today you can have a very stable VFO with just a few parts. You tend to pay a little bit of a price in phase noise, but frequency drift is not an issue. With an analog VFO, you can add a lot of complexity trying to get around frequency drift, but phase noise is never an issue. Years ago, all you had was analog. A few years ago, DDS (direct digital synthesis) was complex and expensive. Today, analog VFOs tend on the expensive side! It is similar with amplifiers. In many radios, all, or most, of the PA is in a single brick, instead of a fistfull of parts. Ditto with almost everything up and down the chain.

Frequency is also an issue and again that is changing with technology. A few years ago, it was hard to get directly to VHF. You typically had several oscillators getting mixed up, frequency multiplied, etc. This was especially true if you had an analog VFO because it is very hard to get stability at VHF, and multiplying the frequency also multiplies the drift in an analog VFO. There are still reasons you might want to do some mixing up to get to VHF with a DDS VFO, but DDS parts up into the gigahertz range are now cheap parts.

It was only a few years ago that a DDS VFO cost hundreds of dollars. Today you can buy a chip with a VHF synthesizer and amplifier and modulator for less than the tuning capacitor in an analog VFO.

> 2. other than frequency range, what characteristics are you concerned
> about when trying to match a transmitter to an amp?

If you are buying commercial, you are looking at price, of course, and expected reliability, along with power consumption. For SSB, you need the amplifier to be linear, which implies lower efficiency. For FM/CW you don't need linear, so the amp can be a lot more efficient. If you are designing the amp, then you are worrying about impedance mathcing, as well.

> 3. without an amp, couldn't you still run the signal to an antenna and
> it would be a weak transmitter? all the amp does is increase the
> voltage and current supplied to the antenna, correct?

Yes of course. There are times when you want a lot of power, but most of the time it really isn't necessary. Also, it is a lot easier to get antenna gain than power to the antenna, especially at higher frequencies. The need for power depends a lot on what you do, what frequencies you operate, and to a degree, what "floats your boat". If you are doing EME or HSMS, you need a fair bit of power - hundreds of watts, anyway. If you are chatting on the local repeater, typically a watt is as good as a kilowatt. Lots of folks called QRPers like to use very low power. For them the "legal limit" is five watts, but many try to see what they can do with milliwatts. The current miles/watt record is held by a guy who operated 40 microwatts over a 500+ mile path.

> 4. for an FM transmitter, does the modulation occur to oscillator
> directly, or is the oscillator's signal modulated after "leaving" the
> oscillator? i guess what i'm asking is whether or not there is an input
> to the oscillator, or is it just an "output only" frequency generator?

Typically you would modulate the oscillator, although these days, the audio may well be simply data to the synthesizer. However, because FM is typically done at VHF and higher, there may well be additional oscillators mixed with the modulated signal to get up into the VHF/UHF range.

Hope this helps

..

1500. Re: newbie technical questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-10 23:36:08 UTC
From: "dave.harper" <dave.harper@gmail.com>
Message-ID: <1110497768.182023.13910@z14g2000cwz.googlegroups.com>
Source record: 19933
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

xpyttl wrote:
> Hi Jason
>
> Nice questions, let me try to answer a few ..
>
> <razorbladeshoes@gmail.com> wrote in message
> news:1110486073.267964.53290@l41g2000cwc.googlegroups.com...
>
> > 1. i've seen transmitter schematics that were simple, and others
that
> > were complex. as a general rule of thumb, are the more complex ones
> > trying to compensate for frequency drift, or maybe eliminate higher
> > harmonics? how efficient and/or stable are the simple transmitter
> > schematics?
>
> One obvious thing is that CW transmitters tend to be simple, SSB
> transmitters complex. But there are a thousand design variables.
One big
> one is the complexity of the ICs employed. Today you can have a very
stable
> VFO with just a few parts. You tend to pay a little bit of a price
in phase
> noise, but frequency drift is not an issue. With an analog VFO, you
can add
> a lot of complexity trying to get around frequency drift, but phase
noise is
> never an issue. Years ago, all you had was analog. A few years ago,
DDS
> (direct digital synthesis) was complex and expensive. Today, analog
VFOs
> tend on the expensive side! It is similar with amplifiers. In many
radios,
> all, or most, of the PA is in a single brick, instead of a fistfull
of
> parts. Ditto with almost everything up and down the chain.
>
> Frequency is also an issue and again that is changing with
technology. A
> few years ago, it was hard to get directly to VHF. You typically had
> several oscillators getting mixed up, frequency multiplied, etc.
This was
> especially true if you had an analog VFO because it is very hard to
get

> stability at VHF, and multiplying the frequency also multiplies the
drift in
> an analog VFO. There are still reasons you might want to do some
mixing up
> to get to VHF with a DDS VFO, but DDS parts up into the gigahertz
range are
> now cheap parts.
>
> It was only a few years ago that a DDS VFO cost hundreds of dollars.
Today
> you can buy a chip with a VHF synthesizer and amplifier and modulator
for

Good info to know. I was kinda looking around to make a (mostly) IC transmitter like that... (anything 70cm and under). Are you aware of any chip PN's or schematics I could dive into to learn?

Thanks,
Dave

1501. Re: newbie technical questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-11 00:24:56 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <wz5Yd.25$ft6.14@fe03.lga>
Source record: 19934
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

"dave.harper" <dave.harper@gmail.com> wrote in message
news:1110497768.182023.13910@z14g2000cwz.googlegroups.com...

> Good info to know. I was kinda looking around to make a (mostly) IC
> transmitter like that... (anything 70cm and under). Are you aware of
> any chip PN's or schematics I could dive into to learn?

Analog Devices' parts are favored by hams. The greatest number of projects out there use the AD9850, but that part is a little older, and does not provide modulation input. Also, it is really only good up to about 30 MHz, you can push a bit past that but the power requirements explode and the noise goes up. Without any component changes it will go down to 1 Hz. Newer AD98xx parts are starting to get more attention, and some of those are useful up into the low 100's of MHz. The 99xx parts have more features yet.

TI has a TRF4400 which is a 440 MHz synthesizer with modulation and an amp (not much of an amp, tho!), and the almost identical 4900 for 900 MHz. Some folks have used these down to 6 meters. The TI parts have greater channel spacing than the AD parts, but that also reduces the frequency of the crystal or oscillator, which has a big effect on the power consumption. TI also has a 2050/1/2 which are synthesizers (I don't recall if they have modulation) up into the gigahertz range. I've been toying with using one of the TI parts as a VFO for an HF rig by using a prescaler to divide down the frequency (and consequsntly the spacing).

The AD parts are pricey, but AD is very good about samples. The TI parts are all in the five buck neighborhood. There are a zillion projects/kits out there based on the AD parts.

If you've ever built an analog VFO, these DDS parts are like black magic. They take little in the way of support circuitry, no fretting about layout, no spending weeks trying to work out the temperature compensation, no moving around because you breathed on it, you just dial in the frequency you want and you are spot on.

..

1502. Re: newbie technical questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-11 13:49:13 UTC
From: razorbladeshoes@gmail.com
Message-ID: <1110548953.740433.8750@g14g2000cwa.googlegroups.com>
Source record: 19935
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

hey, thanks for the info. that was very helpful! as you probably
expected, i would like to ask a couple of follow-ups on 2 of the
questions:

xpyttl wrote:

> > 2. other than frequency range, what characteristics are you
concerned
> > about when trying to match a transmitter to an amp?
>
> If you are buying commercial, you are looking at price, of course,
and
> expected reliability, along with power consumption. For SSB, you
need the
> amplifier to be linear, which implies lower efficiency. For FM/CW
you don't
> need linear, so the amp can be a lot more efficient. If you are
designing
> the amp, then you are worrying about impedance mathcing, as well.

i guess what i meant was more along these lines: you need to make sure
the peak-to-peak input voltage and current capabilities of the input is
matched with the amp, right? or does the amp have a lot of leeway in
those regards?

> > 4. for an FM transmitter, does the modulation occur to oscillator
> > directly, or is the oscillator's signal modulated after "leaving"
the
> > oscillator? i guess what i'm asking is whether or not there is an
input
> > to the oscillator, or is it just an "output only" frequency
generator?
>
> Typically you would modulate the oscillator, although these days, the
audio
> may well be simply data to the synthesizer. However, because FM is
> typically done at VHF and higher, there may well be additional
oscillators
> mixed with the modulated signal to get up into the VHF/UHF range.

just to make sure i have it straight, if i were to transmit a sine wave
at 146mhz, anyone listening in on 146 mhz wouldn't hear anything
(except maybe less noise than usual). if i were to vary the frequency
between 146.0001 and 145.9999 at a rate of 100hz, then anyone recieving
would hear a quiet 100hz tone. now if i were to vary the frequency

between 146.001 and 145.999 (holding all previous listeners constant), then anyone listening would hear a much louder tone...correct? or am i not understanding it yet? ;-)

thanks again for the help!
jason

1503. Homebrew Radio newsgroup

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-11 14:13:08 UTC
From: F.Y.I.
Message-ID: <tq9331tmuum7gcvepkn7u1m2ttlm3a2ebk@4ax.com>
Source record: 19936

This is a monthly reminder that you can easily access
rec.radio.amateur.homebrew via the web at
http://www.ugroups.com/Hobbies/viewforum.php?f=3 without a newsreader.
This message from www.ugroups.com is intended for those who might be interested in free web based access to the newsgroups. Please add to your kill file to avoid future inconvenience.

1504. Re: newbie technical questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-11 14:45:42 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <UbiYd.410$ES4.71@fe02.lga>
Source record: 19937
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

<razorbladeshoes@gmail.com> wrote in message
news:1110548953.740433.8750@g14g2000cwa.googlegroups.com...

> i guess what i meant was more along these lines: you need to make sure
> the peak-to-peak input voltage and current capabilities of the input is
> matched with the amp, right? or does the amp have a lot of leeway in
> those regards?

Actually, no. Typically the amp doesn't have a lot of flexibility there,
but in general the exciter does.

In amateur practice, the impedance of almost anything that connects together
at RF is 50 ohms or converted to 50 ohms. Given that, the power level then
converts directly to voltage and current.

Typically, HF exciters have a lot of range in output power. The FCC
prohibits the sale of HF power amplifiers having a required drive of less
than 80 watts. Since most HF exciters have 100 watts out, the required
input power of HF amps is rarely specified, since it will almost always
match almost all exciters. I don't think other countries have the same
rules, but the FCC also requires that the amps cannot easily be modified to
accept lower drive, so it is expensive for manufacturers to make amps
differently for different markets, since that typically would require a
complete redesign.

On VHF, it's a little different. Most VHF exciters only have a few output
power settings. VHF amps generally specify the input power, and typically,
it will be a fairly wide range. But still, if you want, say, 200 watts at 2
meters, you would buy a different amp for a 5 watt HT than you would for a
50 watt mobile.

> just to make sure i have it straight, if i were to transmit a sine wave
> at 146mhz, anyone listening in on 146 mhz wouldn't hear anything
> (except maybe less noise than usual). if i were to vary the frequency
> between 146.0001 and 145.9999 at a rate of 100hz, then anyone recieving
> would hear a quiet 100hz tone. now if i were to vary the frequency
> between 146.001 and 145.999 (holding all previous listeners constant),
> then anyone listening would hear a much louder tone...correct? or am i
> not understanding it yet? ;-)

That is exactly right.

There is a weird behavior of FM receivers called the "capture effect". A
signal of sufficient amplitude at the input of an FM receiver cose to where
the receiver is tuned will totally quiet the receiver. In an AM, CW or SSB
signal, the amplitude is converted to audio almost directly. As a result,

noise on the input appears as noise on the output.

FM is different, though. In FM, we want to hear the frequency modulation. When there is no signal, we hear the detector randomly wandering around trying to interpret the noise as signal, but the amplitude of the noise really has no effect. Once a signal is detected that is strong enough for the detector to follow, the detector follows the signal and there is no more noise. To exaggerate this effect, most FM receivers amplify the signal so much that the amplifiers become saturated and amplitude variation in the input signal is clipped (well, softly clipped), so that the later stages of the receiver see the same amplitude. This is different than AM/SSB/CW where it is the amplitude changes you are looking for.

This is one of the reasons that FM signals have so much higher quality ... any noise is actually a result of noise in the receiver (or transmitter) rather than the atmosphere. With other modes, not only can you hear the atmospheric noise, but at lower frequencies, the atmospheric noise is many times higher than the noise inherent in the receiver.

The other reason is bandwidth. In amateur practice, FM signals are 5 kHz wide, compared to about 2.5 for SSB. In commercial practice, FM signals are wider still.

There is another "gotcha" in your description above. If you vary the carrier at, say, 1000 Hz, from say, 146.999 to 147.001, the actual bandwidth will be somewhat wider than you expect, and it will be dependent on the frequency of the modulation. I know this doesn't make sense, it has to do with some weird math. If you studied Fourier series back in school it was some abstract mathematical thing that had nothing to do with the real world. Well, guess what. Fourier has everything to do with radio! The result is that to stay within the 5 kHz bandwidth, the highest modulating frequency has to be somewhat lower than 5 kHz. This is one reason why the FCC prohibits amateurs from broadcasting music; reasonable fidelity of music requires higher bandwidth than voice.

..

1505. Re: How to use a PC/soundcard to generate CTCSS tone

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-11 14:59:13 UTC
From: wb0gaz <wb0gaz@hotmail.com>
Message-ID: <1110553153.176238.153770@g14g2000cwa.googlegroups.com>
Source record: 19938

Thanks for the comments - yes, I know using a PC is overkill for this,
but it is what I want to do in this case. tonegen (and searching for
"tone generator") was the clue I was looking for.

Very tks,

73 Dave WB0GAZ wb0gaz@hotmail.com

1506. Re: How to use a PC/soundcard to generate CTCSS tone

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-11 15:11:36 UTC
From: john graesser <graesser@tca.net>
Message-ID: <1133d4ri08p7g76@corp.supernews.com>
Source record: 19939

"Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null> wrote in message
news:MPG.1c982a282a8f81319896e7@localhost...
> In article <1110339708.990066.191380@o13g2000cwo.googlegroups.com>,
> wb0gaz@hotmail.com says...
>
> > This is probably not that complicated (I hope?!?) but I need a PC
> > program that would just tell a PC soundcard to generate a standard
> > CTCSS tone (example 107.2 Hz) sinewave that could be fed into an older
> > FM amateur transceiver. I don't want to find/buy/build a CTCSS module
>
> <snippety>
>
> What you describe is a lot like using a 40mm antiaircraft gun to
> shoot down a rubber-band powered model airplane. What happens when you
> suddenly need to use your sound card for something other than a PL
> encoder?
>
> $28.95 plus a little for shipping will get you a perfectly usable
> dedicated CTCSS encoder, as described at this link:

Considering the fact that the last used pc I bought (p3-500) only cost $20
including a hard drive and sound card, I could have saved $8.95 by going the
sound card route. Depending on how good your source of obsolete computers
is, you can even get them for free. The pc can then also be used for PSK31
or any other use as well. As long a portability isn't an issue the pc can
stand in for quite a bit of hardware.
thanks, John.
KC5DWD

1507. Frequency Divider

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-11 17:52:58 UTC
From: Peter Barbella <nonobar@verizon.net>
Message-ID: <_VkYd.142$qN3.78@trndny01>
Source record: 19940

Hello Gang,

I've got a crystal (7.155 mhz) that I need to use at half frequency. I decided to pump it into a flip flop, but I'm having an awful time using 2n3904 transistors. The triggering seems to be a very challenging design issue.

Anybody have any thoughts, (or other ideas for halving frequency)?

1508. Re: Frequency Divider

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-11 18:33:57 UTC
From: Barrie Hiern <BarrHie@aol.com>
Message-ID: <owlYd.52687$xt.52461@fed1read07>
Source record: 19941

Do you have a trigger before the flip-flop???

"Peter Barbella" <nonobar@verizon.net> wrote in message
news:_VkYd.142$qN3.78@trndny01...
> Hello Gang,
>
> I've got a crystal (7.155 mhz) that I need to use at half frequency. I
> decided to pump it into a flip flop, but I'm having an awful time using
> 2n3904 transistors. The triggering seems to be a very challenging design
> issue.
>
> Anybody have any thoughts, (or other ideas for halving frequency)?
>
>

1509. Re: Frequency Divider

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-11 19:22:12 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <fgr331pct067te11ad2olq9pp557prkigi@4ax.com>
Source record: 19942

On Fri, 11 Mar 2005 17:52:58 GMT, "Peter Barbella"
<nonobar@verizon.net> wrote:

>Hello Gang,
>
>I've got a crystal (7.155 mhz) that I need to use at half frequency. I
>decided to pump it into a flip flop, but I'm having an awful time using
>2n3904 transistors. The triggering seems to be a very challenging design
>issue.
>
>Anybody have any thoughts, (or other ideas for halving frequency)?
>

Lack of info. What kind of OSC? What kind of FF? Is there an
amp/buffer between the OSC and FF?

Generally this is usually a non problem as at 7mhz most flops are easy
to drive. Typical line up I use for this is a 2n3904 osc (any type),
a capactor coupled 2n3904 common emitter amp with a 1k collector load
and about 100 to 300K resistor between the collector and base to bias
it and couple that into the clock input of a 74LS74/74HC74 wired as
/2 or other config as needed. I also try to bias the flops clock
input to about half the VCC for better results. I've never had this
fail and it works fine to about 30-50mhz depending on FF used.

Allison
KB1GMX

1510. Re: Frequency Divider

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-11 19:40:36 UTC
From: Peter Barbella <nonobar@verizon.net>
Message-ID: <UumYd.28$Ue6.6@trndny04>
Source record: 19943

Yes, there is a trigger. Here is the schematic.
http://mysite.verizon.net/nonobar/circuit.jpg

There's actually a capacitor coupling the trigger pulse into the diodes (I forgot to show it).

The two bias resistors going to -15 are critical as are the commutating capacitors (not shown) across the 3.3k resistors.

It wants to work, but in a very unstable manner. I think I simply may be taxing the rise times of the 3904s.

Pete

"Barrie Hiern" <BarrHie@aol.com> wrote in message
news:owlYd.52687$xt.52461@fed1read07...
> Do you have a trigger before the flip-flop???
>
> "Peter Barbella" <nonobar@verizon.net> wrote in message
> news:_VkYd.142$qN3.78@trndny01...
>> Hello Gang,
>>
>> I've got a crystal (7.155 mhz) that I need to use at half frequency. I
>> decided to pump it into a flip flop, but I'm having an awful time using
>> 2n3904 transistors. The triggering seems to be a very challenging design
>> issue.
>>
>> Anybody have any thoughts, (or other ideas for halving frequency)?
>>
>>
>
>

1511. Re: Frequency Divider

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-11 20:00:54 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1110571254.925945.92910@l41g2000cwc.googlegroups.com>
Source record: 19944

> pump it into a flip flop, but I'm having an awful time using
> 2n3904 transistors. The triggering seems to be a very
> challenging design issue.

You built the divider out of discrete transistors and steering diodes?
Running this sort of divider at 7 MHz will be marginal... some "speedup
caps" in parallel with the base drive resistors may help.

> or other ideas for halving frequency?

74HC74.

Tim.

1512. Schematics needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-12 02:17:01 UTC
From: VY2DH <vy2dh@hotmail.com>
Message-ID: <xisYd.19488$ZO2.11457@edtnps84>
Source record: 19945

I am looking for schematics for a few SCADA type transceivers I recently purchased as surplus.

I would like to get the schematics for the transceiver so I can modify them to work within the Amateur radio frequencies.

The transceivers I have currently operate on 172 MHz.
Markings on the transceiver are as follows:
Model # 030261-0114
Unit GND

Please let me know if you are able to help with this matter.

Thanks

Steve - VY2DH

1513. Re: Schematics needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-12 09:35:40 UTC
From: F8BOE <f8boe-8@bluemail.ch>
Message-ID: <4232b7ea$0$30340$626a14ce@news.free.fr>
Source record: 19946

Did you gooooooooooooogle around?

"VY2DH" <vy2dh@hotmail.com> a crit dans le message de news:
xisYd.19488$ZO2.11457@edtnps84...
>I am looking for schematics for a few SCADA type transceivers I recently
> purchased as surplus.
>
> I would like to get the schematics for the transceiver so I can modify
> them
> to work within the Amateur radio frequencies.
>
> The transceivers I have currently operate on 172 MHz.
> Markings on the transceiver are as follows:
> Model # 030261-0114
> Unit GND
>
> Please let me know if you are able to help with this matter.
>
> Thanks
>
> Steve - VY2DH
>
>

1514. HELP!!! Diamond HF Dipole

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-12 12:33:10 UTC
From: andreantunes@sic.pt
Message-ID: <8bf084a1.0503120433.1e6e8907@posting.google.com>
Source record: 19947

Hi all,

I have an "old" W-8010 Diamond antenna that don't use anymore.
Everything is in very good condition.

I would like to transform this antenna into a W-735.

This means that I would like to take my BU-50 balloon and the two 80m
traps from my W-8010 and make an antenna just for 40 and 80 meters.

Would like to know if any of you guys know if this is possible, and if
so, what would be the size (length) of the wires.
Also, would like to know if the 80m traps are the same.

Any help is much apreciated.
Best Regards,

Andre Antunes
CT2GEU
andreantunes@sic.pt
antunes.andre@netcabo.pt

1515. Help: Metheny Corp LJM-RB DTMF Decoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-12 13:19:51 UTC
From: Jim Knoll <jknoll@visi.com>
Message-ID: <1135r3nskt5h2b7@corp.supernews.com>
Source record: 19848

Anyone familiar with the Metheny Corp Madison, IN Model LJM-RB DTMF decoder board? I have two of these on a used VHF Engineering RPT-144 repeater I picked up.

I would like to find the schematic for this board.

Thanks much,

-Jim

1516. Re: Schematics needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-12 15:53:04 UTC
From: VY2DH <vy2dh@hotmail.com>
Message-ID: <AfEYd.22117$ZO2.20933@edtnps84>
Source record: 19849

Yes ... no luck. I even emailed the company but no response yet.

"F8BOE" <f8boe-8@bluemail.ch> wrote in message
news:4232b7ea$0$30340$626a14ce@news.free.fr...
> Did you gooooooooooooogle around?
>
>
>
> "VY2DH" <vy2dh@hotmail.com> a crit dans le message de news:
> xisYd.19488$ZO2.11457@edtnps84...
> >I am looking for schematics for a few SCADA type transceivers I recently
> > purchased as surplus.
> >
> > I would like to get the schematics for the transceiver so I can modify
> > them
> > to work within the Amateur radio frequencies.
> >
> > The transceivers I have currently operate on 172 MHz.
> > Markings on the transceiver are as follows:
> > Model # 030261-0114
> > Unit GND
> >
> > Please let me know if you are able to help with this matter.
> >
> > Thanks
> >
> > Steve - VY2DH
> >
> >
>
>

1517. Re: Schematics needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-12 16:01:15 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <6d4631h67c6ptnb5cedk1fc9r1pfeppd20@4ax.com>
Source record: 19850

On Sat, 12 Mar 2005 15:53:04 GMT, "VY2DH" <vy2dh@hotmail.com> wrote:

>Yes ... no luck. I even emailed the company but no response yet.
>
>"F8BOE" <f8boe-8@bluemail.ch> wrote in message
>news:4232b7ea$0$30340$626a14ce@news.free.fr...
>> Did you gooooooooooooogle around?
>
>> "VY2DH" <vy2dh@hotmail.com> a ï¿½crit dans le message de news:
>> xisYd.19488$ZO2.11457@edtnps84...
>> >I am looking for schematics for a few SCADA type transceivers I recently
>> > purchased as surplus.
>> >
>> > I would like to get the schematics for the transceiver so I can modify
>> > them
>> > to work within the Amateur radio frequencies.
>> >
>> > The transceivers I have currently operate on 172 MHz.
>> > Markings on the transceiver are as follows:
>> > Model # 030261-0114
>> > Unit GND
>> >
With many companies, they are not up to speed on their email
responses, and a phone call in addition may yield more results.

Happy trails,
Gary (net.yogi.bear)
--
At the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

1518. Re: Frequency Divider

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-12 21:10:44 UTC
From: LenAnderson@ieee.org
Message-ID: <1110661844.435797.79870@f14g2000cwb.googlegroups.com>
Source record: 19851

From: "Peter Barbella" on Fri, Mar 11 2005 7:40 pm

>Yes, there is a trigger. Here is the schematic.
>http://mysite.verizon.net/nonobar/circuit.jpg
>
>There's actually a capacitor coupling the trigger pulse into the
diodes (I
>forgot to show it).
>
>The two bias resistors going to -15 are critical as are the
commutating
>capacitors (not shown) across the 3.3k resistors.
>
>It wants to work, but in a very unstable manner. I think I simply may
be
>taxing the rise times of the 3904s.

The legacy transistor 2N3904 (and 2N3906) aren't "taxed"
any rise times. They are old workhorse transistors
which will work on up to 30 MHz (f_t is 150 MHz or
better)...provided the biasing AND the rather large
base-emitter capacitance is compensated. A good text
(also a "legacy" one) is Millman and Taub's "Pulse,
Digital, and Switching Circuits" which has much good
basic information on discrete device non-linear-
operation circuits.

The -15 VDC supply isn't necessary nor is it "sensitive"
if the trigger-switchover voltages are selected with
reasonable care. Ten percent tolerance resistors can
do the job with a single-rail supply of +5 VDC.

The "commutating" capacitors (common term is just
"speed-up") across the collector-to-base resistors
MAY be critical since those compensate for the base
to emitter capacitance and thus set the high frequency
response in that part of the circuit.

Since +5 VDC supply is there, one or two Schmitt
trigger inverters or gates from the oscillator output
(74HC family, for example) to a 74HC74 dual D F-F
will work fine. A quarter for each device and there
will be gates and a flip-flop left over to use
somewhere else. No sweating out component values
for discrete device circuits, response of the 74HC
devices known and dependable.

For that matter, the crystal oscillator itself can use the remaining inverters of a Schmitt trigger hex inverter. An ordinary non-Schmitt inverter (74HC04) can do the oscillator and squaring-up task as well. No sweat on that.

LenAnderson@ieee.org

1519. Re: newbie technical questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-13 04:48:38 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <GCPYd.2634$qW.903@newsread3.news.atl.earthlink.net>
Source record: 19852
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

Does anyone here remember the simple CW transmitter that used a 6146 as a keyed ocillator? It would put out about 60 watts. There was a very low current light bulb in series with the crystal to limit the current that could flow in the crystal circuit. I think it was in the 1959 or 60 HANDBOOK. I used a gaseous regulator tube on the screen. It didn't chirp too badly.....Analog VFO's yes now there is a fun project!

"xpyttl" <xpyttl_NOSPAM@earthling.net> wrote in message
news:wz5Yd.25$ft6.14@fe03.lga...
> "dave.harper" <dave.harper@gmail.com> wrote in message
> news:1110497768.182023.13910@z14g2000cwz.googlegroups.com...
>
>
> If you've ever built an analog VFO, these DDS parts are like black magic.
> They take little in the way of support circuitry, no fretting about
> layout,
> no spending weeks trying to work out the temperature compensation, no
> moving
> around because you breathed on it, you just dial in the frequency you want
> and you are spot on.
>
> ..
>
>

1520. Re: Bill Gates as he presents the Windows Media Player system crash

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-13 14:59:24 UTC
From: "J. D. B." <duffyb01@fuse.net>
Message-ID: <ezYYd.347$185.121@fe37.usenetserver.com>
Source record: 19853
Cross-posted to: rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

WARNING - It's an exe file and not a movie file. God only knows what
damage it will do to your system if you download it and run it.

jasonandrews@yahoo.com wrote:
> The movie clip everyone is looking for, Bill Gates as he presents the Windows Media
Player system crash
>
>
>
>

1521. Re: Frequency Divider

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-13 16:22:00 UTC
From: streamliner@aol.com
Message-ID: <4234682a.1457475@usenet.magma.ca>
Source record: 19854

On Fri, 11 Mar 2005 17:52:58 GMT, "Peter Barbella"
<nonobar@verizon.net> wrote:

Try CD4060 or CD4024, oscillator and multiple divide all done for you
for 69 cents.

>Hello Gang,
>
>I've got a crystal (7.155 mhz) that I need to use at half frequency. I
>decided to pump it into a flip flop, but I'm having an awful time using
>2n3904 transistors. The triggering seems to be a very challenging design
>issue.
>
>Anybody have any thoughts, (or other ideas for halving frequency)?
>
>

1522. Re: Frequency Divider

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-13 16:40:54 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <d11qem$8io$1@theodyn.ncf.ca>
Source record: 19855

VE3ELQ (streamliner@aol.com) writes:
> On Fri, 11 Mar 2005 17:52:58 GMT, "Peter Barbella"
> <nonobar@verizon.net> wrote:
>
> Try CD4060 or CD4024, oscillator and multiple divide all done for you
> for 69 cents.
>
I wouldn't use one of those, unless it was a lower frequency. At 7MHz,
straight versions of those ICs are pushing their limits. And it's
not as if better CMOS devices haven't come along in the 35 years or
so since that series was introduced.

Michael VE2BVW

>>Hello Gang,
>>
>>I've got a crystal (7.155 mhz) that I need to use at half frequency. I
>>decided to pump it into a flip flop, but I'm having an awful time using
>>2n3904 transistors. The triggering seems to be a very challenging design
>>issue.
>>
>>Anybody have any thoughts, (or other ideas for halving frequency)?
>>
>>
>

1523. Re: HELP!!! Diamond HF Dipole

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-13 16:57:53 UTC
From: Terry <tsanford@nf.sympatico.ca>
Message-ID: <Dh_Yd.21$N8.6961@news20.bellglobal.com>
Source record: 19856

"Andr? Antunes" <andreantunes@sic.pt> wrote in message
news:8bf084a1.0503120433.1e6e8907@posting.google.com...
> Hi all,
>
> I have an "old" W-8010 Diamond antenna that don't use anymore.
> Everything is in very good condition.
>
> I would like to transform this antenna into a W-735.
>
> This means that I would like to take my BU-50 balloon and the two 80m
> traps from my W-8010 and make an antenna just for 40 and 80 meters.
>
> Would like to know if any of you guys know if this is possible, and if
> so, what would be the size (length) of the wires.
> Also, would like to know if the 80m traps are the same.
>
> Any help is much apreciated.
> Best Regards,
>
> Andre Antunes
> CT2GEU
> andreantunes@sic.pt
> antunes.andre@netcabo.pt

Would < rec.radio.amateur.antenna > be a better place to post this question?

1524. Re: newbie technical questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-13 17:11:10 UTC
From: mcalhoun@ksu.edu
Message-ID: <d11s7e$7q@unix2.cc.ksu.edu>
Source record: 19857
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

>just to make sure i have it straight, if i were to transmit a sine wave
>at 146mhz, anyone listening in on 146 mhz wouldn't hear anything
>....[snip]....

CW is NOT dead on two meters; anyone listening in CW mode would hear you!
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

1525. Re: Bill Gates as he presents the Windows Media Player system crash

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-13 20:11:15 UTC
From: hhc314@yahoo.com
Message-ID: <1110744675.805145.132030@o13g2000cwo.googlegroups.com>
Source record: 19858
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Given the subject matter and the fact that it's an .exe file, I'll bet you won't get many takers! It's sort of a risk vs. benefits thing. :-)

Harry C.

By the way, I had to trim your group list because you had your post SPAMMED all over the net including groups that don't exist (WHY?)...still another reason for anyone with at least half-a-brain to be very suspicious of your attachment.

1526. Re: 1N23E vs. Schottkey?? Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-13 20:18:53 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <Ab1Zd.16603$c72.2105@bignews3.bellsouth.net>
Source record: 19859

Peter wrote:
> On Mon, 07 Mar 2005 22:16:01 -0500, Ken Scharf
> <wa2mzeNOTTHIS@bellsouth.net> wrote:
>
>
>>wow, those 1N21/23 diodes are stone age!
>
>
>> BTW those diodes a dated from the
>>1940's!
>
>
>
> So am I (1937 actually) but I still work fine!! Just 'coz it's old
> doesn't mean it's had it! :-)
>
> Peter, G3PHO
Never meant to infer that old stuff doesn't work (and sometimes well)
after all some of the guys on this NG also frequent the antique radio
NG. I wasn't aware that the 1n21/23 series diodes were considered
state of the art until the late 70's/early 80's though. Actually
in the 60's many hams used PAR-AMPS (which are a kind of MASER!)
in front of their diode mixers. (I remember an article in QST from
the 60's on a reflex klyston pumped par-amp using an early
varicap diode).

1527. Re: FA: AvCom PSA-65A 2-1000MHz Field Portable Spectrum Analyzer - 003

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-13 20:33:55 UTC
From: hhc314@yahoo.com
Message-ID: <1110746035.582671.281570@z14g2000cwz.googlegroups.com>
Source record: 19860

The nearly paranoid precautions taken by this poster to protect his identity would make be very suspicious about dealing with him on a $750 item, particularly since he has 2 negative eBay feedbacks on his record -- one of which labels him a "fraud". Also, I would not like to be on the eBay record for having dealt with sellers who have "private sales".

What is this guy trying to hide, and why?

Doesn't he realize that any eBay user can easily learn his identity based on his eBay sellier ID, and that the content of his "private" sales are not all that private. Still, not worth the efforts. It makes more sense simply to play it safe and avoid eBay sellers of this type.

Harry C.

1528. Re: 1N23E vs. Schottkey?? Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-13 20:57:26 UTC
From: hhc314@yahoo.com
Message-ID: <1110747446.199717.56980@l41g2000cwc.googlegroups.com>
Source record: 19861

I'm the youngster -- 1938.

Seems that I'm in the right circle of 'Old Farts' to ask: Has anyone a data sheet available on the 723A/B Reflex Klystron? These (along with the 1N21 diodes) were used in the AN/APS-3 RADAR and since have found use in physics demonstration devices, and to a limited extent ham radio (with modifications). It is basically a 3-cm or 10-GHZ oscillator.

I have a pin-out, but not a full-blown data sheet. Can anyone help me out on this?

Thanks in advance, and 73's.

Harry C.

p.s. Evidently a large number of 723A/Bs were produced by Raytheon, but in spite of a 15-year employment with the Raytheon Company, I've never been able to locate a data sheet. Evidently devices of this type were heavily classified during WWII, and consequently most of the documentation was classified and eventually, in accordance with security instructions, destroyed.

1529. Re: Plan 9 from EMI space?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-13 21:17:17 UTC
From: hhc314@yahoo.com
Message-ID: <1110748637.686470.248910@l41g2000cwc.googlegroups.com>
Source record: 19862

Something that is (and I'm assuming that you're posting about a ham radio application) an important question regarding EMI is what kind of antenna are you using, how far is it away from your appartment EMI sources, and what sort of shielded feed are you using to connect your equipment with the antenna?

>From your post, it sounds like most of your EMI sources are in your appartment. You want to have your antenna(s) as far away from these noise sources as possible, as well as shielding the feed from the antenna to your equipment as much as is possible. Generally speaking, coax like RG-8U makes a good antenna feed, but in extreme EMI cases a coax with double shields is a good investment.

Since most of us have the same EMI producing devices in our homes as do you, I'm not sure why you're having any more of a problem than the rest of us, unless of course you haven't yet installed a good, outside antenna system with a properly engineered feedline. If this is the case, no amount of appliance and power line noise suppression will achieve the results you are looking for.

Harry C.

1530. Re: attenuators

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-13 21:22:48 UTC
From: hhc314@yahoo.com
Message-ID: <1110748968.103046.27570@z14g2000cwz.googlegroups.com>
Source record: 19863

What output levels and steps do you need?

Normally, something like this is easily constructed from a series of
low-inductance switcheslow-inductance wiring and carbon resistors
contained in a suitable shielding enclosure.

Harry C.

1531. VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-13 21:42:18 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <iuydnUJtzbkhLqnfRVn-uQ@comcast.com>
Source record: 19864

I'd like to build some homebrew VHF-AM receivers - specifically a receiver for
the VHF 108-118 Mhz band. I've found lots of great ideas and reference designs
out there but they're all constructed of parts made from "unobtainium" (e.g. old
MC13135/6, MC1350, etc., etc.)...

Can anyone on this group point me to some designs/ideas for how to construct
something made from "actually available" components???

Thanks for any help...

1532. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-13 21:52:30 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <yC2Zd.125490$4q6.34953@attbi_s01>
Source record: 19865

> I'd like to build some homebrew VHF-AM receivers - specifically a receiver
> for
> the VHF 108-118 Mhz band. I've found lots of great ideas and reference
> designs
> out there but they're all constructed of parts made from "unobtainium"
(e.g.
> old
> MC13135/6, MC1350, etc., etc.)...
>
> Can anyone on this group point me to some designs/ideas for how to
construct
> something made from "actually available" components???

The band in question is AM and the 13135 is an FM chip with discriminator. A perfectly fine lineup for your needs is any of the DBM's from Mini Circuits Labs or build you own with a few diodes and a couple of ferrite beads, the MC 1496/1596 is still very much available, even made the transition to SSOP if your tastes run to small and surface mount. Low side injection with an AD 9851 or high side with a 9951 DDS. With the channel spacing up there, a selection of an inexpensive Murata filter will do your selectivity, and audio is a VERY wide selection.

W4ZCB

1533. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-13 23:08:19 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d12h53jm1@hercules.btinternet.com>
Source record: 19866

Get youself an inexpensive collection of readily available parts from
rallies and car boot sales and then ask yourself what you can make out of
it.

Reg.

1534. Re: newbie technical questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-13 23:18:03 UTC
From: razorbladeshoes@gmail.com
Message-ID: <1110755883.668992.58630@l41g2000cwc.googlegroups.com>
Source record: 19867
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

thanks again for the help...your answers led me to a couple other
questions, if i may ask?

xpyttl wrote:

> In amateur practice, the impedance of almost anything that connects
together
> at RF is 50 ohms or converted to 50 ohms. Given that, the power
level then
> converts directly to voltage and current.

so if i were to design a transmitter around an COTS amp, how would i
determine what i needed to "drive" it at, in terms of voltage? if i
have 3 variables (V, I, and R) then i'd need to know 2 of the 3, then i
can solve for the third... as it is, i only know R...?

> This is one of the reasons that FM signals have so much higher
quality ...
> any noise is actually a result of noise in the receiver (or
transmitter)
> rather than the atmosphere. With other modes, not only can you hear
the
> atmospheric noise, but at lower frequencies, the atmospheric noise is
many
> times higher than the noise inherent in the receiver.

so i imagine people can do CW over FM, but does it usually occur on (I
guess what would be called) a simplified AM transceiver? either a
signal's present or not?

also, when people refer to ASK and FSK, is ASK basically an audio
output that's been sent over FM? and FSK is more like CW, only to a
receiver that can monitor both mark and space (0 and 1) frequencies?

thanks again!
jason

1535. Re: newbie technical questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-13 23:32:27 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <haj931tptni508nnsc6bsrmch5lt9fifm9@4ax.com>
Source record: 19868
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

On 13 Mar 2005 15:18:03 -0800, razorbladeshoes@gmail.com wrote:

>
>also, when people refer to ASK and FSK, is ASK basically an audio
>output that's been sent over FM? and FSK is more like CW, only to a
>receiver that can monitor both mark and space (0 and 1) frequencies?
>
>thanks again!
>jason

always thought amplitude-shift-keying was mainly used for morse
---
J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

1536. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-13 23:50:35 UTC
From: bigamps <bigamps@louder.net>
Message-ID: <fl4Zd.437$hg.426@news01.roc.ny>
Source record: 19869

Netgeek wrote:
> I'd like to build some homebrew VHF-AM receivers - specifically a receiver
> for
> the VHF 108-118 Mhz band. I've found lots of great ideas and reference
> designs
> out there but they're all constructed of parts made from "unobtainium" (e.g.
> old
> MC13135/6, MC1350, etc., etc.)...
>
> Can anyone on this group point me to some designs/ideas for how to construct
> something made from "actually available" components???
>
> Thanks for any help...
>
>

Kits:
http://www.hamtronics.com/r121.htm
http://www.vectronics.com/products.php?prodid=VEC-131K
http://www.hobbytron.net/R-AR-1.html
http://www.ramseyelectronics.com/cgi-bin/commerce.exe?preadd=action&key=AR1C
schematic and other info on one of the kits:
http://www.uoguelph.ca/~antoon/circ/aviarx/aviarx.html

kits are an easy way to get those Unobtainium plated parts in small
quantities.

1537. Re: newbie technical questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-14 00:32:17 UTC
From: Dee Flint <deeflint01@comcast.net>
Message-ID: <u96dndYtIsMSRqnfRVn-tQ@comcast.com>
Source record: 19870
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

"J M Noeding" <la8ak@online.no> wrote in message
news:haj931tptni508nnsc6bsrmch5lt9fifm9@4ax.com...
> On 13 Mar 2005 15:18:03 -0800, razorbladeshoes@gmail.com wrote:
>
>
>>
>>also, when people refer to ASK and FSK, is ASK basically an audio
>>output that's been sent over FM? and FSK is more like CW, only to a
>>receiver that can monitor both mark and space (0 and 1) frequencies?
>>
>>thanks again!
>>jason
>
> always thought amplitude-shift-keying was mainly used for morse
> ---
> J. M. Noeding, LA8AK, N-4623 Kristiansand
> http://home.online.no/~la8ak/c.htm

I believe he meant AFSK (audio frequency shift keying) vs FSK (frequency
shift keying).

1538. Re: 1N23E vs. Schottkey?? Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-14 01:04:28 UTC
From: Bill Janssen <billj9@ieee.org>
Message-ID: <wq5Zd.407$6w3.23@news02.roc.ny>
Source record: 19871

hhc314@yahoo.com wrote:

>I'm the youngster -- 1938.
>
>Seems that I'm in the right circle of 'Old Farts' to ask: Has anyone a
>data sheet available on the 723A/B Reflex Klystron? These (along with
>the 1N21 diodes) were used in the AN/APS-3 RADAR and since have found
>use in physics demonstration devices, and to a limited extent ham radio
>(with modifications). It is basically a 3-cm or 10-GHZ oscillator.
>
>I have a pin-out, but not a full-blown data sheet. Can anyone help me
>out on this?
>
>Thanks in advance, and 73's.
>
> Harry C.
>
>p.s. Evidently a large number of 723A/Bs were produced by Raytheon, but
>in spite of a 15-year employment with the Raytheon Company, I've never
>been able to locate a data sheet. Evidently devices of this type were
>heavily classified during WWII, and consequently most of the
>documentation was classified and eventually, in accordance with
>security instructions, destroyed.
>
>
>
Well I might have a Ham Radio Handbook with some data in it but I don't
have a "data sheet".
I can tell you that about 250 Volts on the shell and minus 75 to 150
volts on the repeller will work.
You have to adjust the repeller voltage to get the maximum power. Also
the repeller voltage changes
the frequency. And if you adjust the mechanical frequency then the
repeller voltage must be changed.

Never never never run the Klystron without the minus repeller voltage

Hope that is useful.

Bill K7NOM

1539. Re: newbie technical questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-14 02:38:37 UTC
From: razorbladeshoes@gmail.com
Message-ID: <1110767917.711707.123960@f14g2000cwb.googlegroups.com>
Source record: 19872
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

Dee Flint wrote:
> "J M Noeding" <la8ak@online.no> wrote in message
> news:haj931tptni508nnsc6bsrmch5lt9fifm9@4ax.com...
> > On 13 Mar 2005 15:18:03 -0800, razorbladeshoes@gmail.com wrote:
> >
> >
> >>
> >>also, when people refer to ASK and FSK, is ASK basically an audio
> >>output that's been sent over FM? and FSK is more like CW, only to a
> >>receiver that can monitor both mark and space (0 and 1)
frequencies?
> >>
> >>thanks again!
> >>jason
> >
> > always thought amplitude-shift-keying was mainly used for morse
> > ---
> > J. M. Noeding, LA8AK, N-4623 Kristiansand
> > http://home.online.no/~la8ak/c.htm
>
> I believe he meant AFSK (audio frequency shift keying) vs FSK
(frequency
> shift keying).

yes, that is what i meant. i didn't even know amplitude shift keying
existed.

am i correct about afsk being audio tones transmitted over FM, while
fsk is just alternating between two non-modulating frequencies?

jason

1540. Re: Yahoo Group for Radio Shack DX-394 Users

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-14 02:45:12 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <YU6Zd.5126$Jd2.157881@news20.bellglobal.com>
Source record: 19874
Cross-posted to:
rec.radio.shortwave,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

This group has the most complete collection of modifications, usage tips, links to related websites, documentation, and photos along with a user survey and a message forum (3250 messages archived) to help you get the most fun and DX out of your Realistic / Radio Shack DX-394, DX394, DX 394.

Over 90 mods and tips now listed plus a dozen on the To Do or Wish List. More mods than for any other general coverage receiver! Thoroughly documented with a Master Index. If you like to tinker with radios, I know of no other recent model that lends itself to as much fun in this arena as the DX-394. Great platform for learning radio-electronics. Always 1 or more FA on eBay.

Active & friendly user community now with over 800 members. Some members are keen short wave listeners; others are into AM DXing and a few enjoy long wave. Many experiment with antennas and some are ardent modifiers - customising and souping up the rig as hot rodders would do with cars. You'll find lots to interest you and help get the most out of your radio.

Mods & Tips since 17 Oct 04:
- RF: FRONT END PROTECTION FROM HAM TRANSMITTER

- RF: OVERLOAD MITIGATION - WIDEBAND PRESELECTOR

- ANT: WHIP - REPLACEMENT

- RF: OVERLOAD MITIGATION WITH OUTBOARD ATTENUATOR

- AGC: HOTTER S-METER AND AGC ACTION

- DEMOD: SYNCHRONOUS AM DETECTOR

- OSC: UPGRADE STABILITY OF 2nd LOCAL OSCILLATOR

- RF: SHIELDING WITH ALUMINUM DUCT TAPE or STEEL TAPE

- CONTROL: CUSTOM MAIN TUNING KNOB

- AUDIO: ENHANCED ANTI-CHUFF MOD AKA MODE CHANGE CLICK BLANKER

All here at:
http://groups.yahoo.com/group/�RADIOSHACKDX394/

Subscribe on line or email: RADIOSHACKDX394-subscribe@yaho�ogroups.com

73, Tom

1541. Re: newbie technical questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-14 03:00:54 UTC
From: dplatt@radagast.org
Message-ID: <1139vj62uop81b0@corp.supernews.com>
Source record: 19873
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

In article <1110767917.711707.123960@f14g2000cwb.googlegroups.com>,
<razorbladeshoes@gmail.com> wrote:

>yes, that is what i meant. i didn't even know amplitude shift keying
>existed.
>
>am i correct about afsk being audio tones transmitted over FM, while
>fsk is just alternating between two non-modulating frequencies?

That's pretty close, but not exactly on target.

AFSK can be used on top of either AM or FM. In amateur systems it's
most commonly used with FM.

FSK shifts the carrier frequency... a process which counts as a
modulation. The amount of frequency shift (in Hz) and the rate at
which you shift it (also in Hz) vary a lot from one usage to another.
There are both narrow-band and wide-band FSK modulations in use.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1542. Re: newbie technical questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-14 03:22:19 UTC
From: razorbladeshoes@gmail.com
Message-ID: <1110770539.279298.66640@z14g2000cwz.googlegroups.com>
Source record: 19875
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

Dave Platt wrote:
> In article <1110767917.711707.123960@f14g2000cwb.googlegroups.com>,
> <razorbladeshoes@gmail.com> wrote:
>
> >yes, that is what i meant. i didn't even know amplitude shift keying
> >existed.
> >
> >am i correct about afsk being audio tones transmitted over FM, while
> >fsk is just alternating between two non-modulating frequencies?
>
> That's pretty close, but not exactly on target.
>
> AFSK can be used on top of either AM or FM. In amateur systems it's
> most commonly used with FM.
>
> FSK shifts the carrier frequency... a process which counts as a
> modulation. The amount of frequency shift (in Hz) and the rate at
> which you shift it (also in Hz) vary a lot from one usage to another.
> There are both narrow-band and wide-band FSK modulations in use.

thanks! also, i was just reading about mixers... and getting confused.
i've run some matlab programs to figure out how you can take something
at frequency x and frequency y, and end up with an output of frequency
(x-y). one transmitter's mixer i saw took a 160mhz and 14mhz input to
get a 146mhz output. adding or multiplying them together certainly does
not yeild 146mhz. so how does that work?

thanks for the help!
jason

1543. Re: newbie technical questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-14 03:28:24 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <sx7Zd.3092$qf2.2559@newsread2.news.atl.earthlink.net>
Source record: 19876
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

> > I believe he meant AFSK (audio frequency shift keying) vs FSK
> (frequency
> > shift keying).
>
> yes, that is what i meant. i didn't even know amplitude shift keying
> existed.
>
> am i correct about afsk being audio tones transmitted over FM, while
> fsk is just alternating between two non-modulating frequencies?
>
> jason
>

You are partly correct. If audio tones are fed into the microphone input (audio stages) of an AM or FM transmitter you are generating AFSK. If an audio tone is fed into a SSB transmitter it will generate a single output frequency. If the tone is switched off and on , it will be received as a CW transmitter being keyed off and on. Some newer transceivers generate CW this way. If the tone is shifted in frequency , the output will be a carrier shifted the same ammount. This is received the same as a FSK transmitter. You can get the same effect if you have a crystal controled transmiter and switch a capacitor across the crystal to change the frequency.
There is almost no way to tell the differance between the two. If 100% pure tones are used and everything else it 100% correct then there is no differance in the transmitted signals. As always nothing is 100% and you can tell the differance with very close and strong signals. This is still close enough it does not matter.

1544. Re: newbie technical questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-14 03:41:20 UTC
From: dplatt@radagast.org
Message-ID: <113a1v0ipl0o331@corp.supernews.com>
Source record: 19877
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

In article <1110770539.279298.66640@z14g2000cwz.googlegroups.com>,
<razorbladeshoes@gmail.com> wrote:

>thanks! also, i was just reading about mixers... and getting confused.
>i've run some matlab programs to figure out how you can take something
>at frequency x and frequency y, and end up with an output of frequency
>(x-y). one transmitter's mixer i saw took a 160mhz and 14mhz input to
>get a 146mhz output. adding or multiplying them together certainly does
>not yeild 146mhz. so how does that work?

You need a nonlinear function in order to get mixing behavior, and
create the sum and difference frequencies.

If you just add (e.g.) sin 160x and sin 14x, you end up with a simple
sum of sins, and no other frequencies show up - ordinary superposition.

Run the resulting sum through a nonlinear function (e.g. square it, or
take the square root, or clip it whenever its absolute value exceeds
1.0, or something like that), and take a look at the frequency content
of what you get as a result.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1545. Wire gauge for 117 VAC circuit?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-14 04:24:54 UTC
From: Hatfield <utility_infielder@earthlink.net>
Message-ID: <1110774294.380148.179590@o13g2000cwo.googlegroups.com>
Source record: 19878

Hello, in the past, my from scratch contruction has been @ 12 volts.
Now I am going to try a built from scratch tube project which uses 117
volt main xformer, also 117 v on the plate; the whole radio circuit
will be fused through a 2 amp fuse.

What gauge of hook up wire should I use for the project's circuitry,
for safety's sake, I don't want to use too small.

Thanks for any advice.

WKH

1546. Re: newbie technical questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-14 06:53:25 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <5gba31pprsm608562v38llqhcvlqa0ogru@4ax.com>
Source record: 19880
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

On Sun, 13 Mar 2005 19:32:17 -0500, "Dee Flint"
<deeflint01@comcast.net> wrote:

>>>also, when people refer to ASK and FSK, is ASK basically an audio
>>>output that's been sent over FM? and FSK is more like CW, only to a
>>>receiver that can monitor both mark and space (0 and 1) frequencies?

>> always thought amplitude-shift-keying was mainly used for morse

>I believe he meant AFSK (audio frequency shift keying) vs FSK (frequency
>shift keying).

The ITU emission designators for some digital modes and some typical
usage:

* A1A On/Off keying for manual reception (Morse)

* A1D ASK, Amplitude shift keying. The only recent use I have seen
is in some 433 MHz SRD (Short Range Devices)

* F1D Pure FSK (RTTY is classified as F1B)

* F2D Audio subcarrier modulated by amplitude or frequency (e.g.
1200 bit/s AX.25 packet) modulating an FM transmitter

* A2A Audio subcarrier on/off modulated by Morse code modulating
an AM transmitter (e.g. aeronautical beacons in the LF band)

* A2D Audio subcarrier modulated by amplitude or frequency
modulating an AM transmitter

* J2A Audio subcarrier on/off modulated by Morse code modulating
an SSB transmitter (many amateur multimode rigs)

* J2D Audio subcarrier modulated by amplitude or frequency (e.g.
300 bit/s AX.25 packet) modulating an SSB transmitter

On the air A1A and J2A are equivalent.

On the air F1D and J2A are equivalent and can be generated and
detected in both ways.

I hope this clarifies some of the issues.

Paul OH3LWR

1547. Re: Wire gauge for 117 VAC circuit?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-14 07:03:49 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <42353755.9E434EB7@rica.net>
Source record: 19879

Hatfield wrote:
>
> Hello, in the past, my from scratch contruction has been @ 12 volts.
> Now I am going to try a built from scratch tube project which uses 117
> volt main xformer, also 117 v on the plate; the whole radio circuit
> will be fused through a 2 amp fuse.
>
> What gauge of hook up wire should I use for the project's circuitry,
> for safety's sake, I don't want to use too small.
>
> Thanks for any advice.
>
> WKH

The gauge needed is not related to voltage, but to current. Once you
have decided what current each winding must carry, you can choose the
wire size for that current.
Here is a wire table that recommends wire size versus amps that should
serve.
http://www.pupman.com/listarchives/1998/April/msg00189.html
--
John Popelish

1548. Re: Wire gauge for 117 VAC circuit?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-14 08:18:18 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <113ai664a2d2q72@corp.supernews.com>
Source record: 19881

John Popelish wrote:
> Hatfield wrote:
>
>>Hello, in the past, my from scratch contruction has been @ 12 volts.
>>Now I am going to try a built from scratch tube project which uses 117
>>volt main xformer, also 117 v on the plate; the whole radio circuit
>>will be fused through a 2 amp fuse.
>>
>>What gauge of hook up wire should I use for the project's circuitry,
>>for safety's sake, I don't want to use too small.
>>
>>Thanks for any advice.
>>
>>WKH
>
>
> The gauge needed is not related to voltage, but to current. Once you
> have decided what current each winding must carry, you can choose the
> wire size for that current.
> Here is a wire table that recommends wire size versus amps that should
> serve.
> http://www.pupman.com/listarchives/1998/April/msg00189.html

The wiring insulation determines the safe operating voltage -- buy wire
who's insulation is rated for the voltages you want to work with. It
should be readily available, so there's no reason to cut corners here.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

1549. Re: Wire gauge for 117 VAC circuit?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-14 08:21:10 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1110788470.200963.167140@f14g2000cwb.googlegroups.com>
Source record: 19882

Hatfield wrote:
> Hello, in the past, my from scratch contruction has been @ 12 volts.
> Now I am going to try a built from scratch tube project which uses
117
> volt main xformer, also 117 v on the plate; the whole radio circuit
> will be fused through a 2 amp fuse.
>
> What gauge of hook up wire should I use for the project's circuitry,
> for safety's sake, I don't want to use too small.
>
> Thanks for any advice.
>
> WKH

If you are asking this sort of question, then I would seriously doubt your ability to complete a HV project without killing yourself - have you read the section "Electrical Safety" in the ARRL handbook - can recommend it as a good general text on all things electronic.

The size you need is the same as nearly every mains operated appliance in your house - go to your local hardware store and buy as much as you need - dont know what current ratings you use in the USA, but 10 amps is generally more than sufficient for nearly everything. Do you know how to terminate the power plug safely , and properly wire it to the radio you are building? - it is important, and again the ARRL handbook covers such safety issues.

Good luck with the project, you are starting to get into "real" radio.....

73 de VK3BFA Andrew

1550. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-14 14:21:31 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <bOidnfwQHdhoAKjfRVn-oQ@comcast.com>
Source record: 19883

Thanks for the suggestions. I ordered the Ramsey kit as a way to have something to play with for now.

Next step is to lash together either a PLL-VCO combo or DDS to control the tuning from a cheapo processor (e.g. PIC). Any suggested starting points for this would be much appreciated (for example "National LMX2xxx plus Minicircuits xx" or "forget that, AD DDS is better because.....")....8-).

The guts of the Ramsey widget consists of an SA602 and an MC1350 (single conversion with 10.7 Mhz IF). Potential ways to "improve" upon this???

Thanks again.
Bill (RF Newbie - but willing to learn 8-)...

"bigamps" <bigamps@louder.net> wrote in message news:fl4Zd.437$hg.426@news01.roc.ny...
> Kits:
> http://www.hamtronics.com/r121.htm
> http://www.vectronics.com/products.php?prodid=VEC-131K
> http://www.hobbytron.net/R-AR-1.html
>
http://www.ramseyelectronics.com/cgi-bin/commerce.exe?preadd=action&key=AR1C
> schematic and other info on one of the kits:
> http://www.uoguelph.ca/~antoon/circ/aviarx/aviarx.html
>
> kits are an easy way to get those Unobtainium plated parts in small
> quantities.

1551. Re: Wire gauge for 117 VAC circuit?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-14 16:41:13 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnd3bfl9.3iq.bit-bucket@shell.config.com>
Source record: 19884

On 14 Mar 2005 00:21:10 -0800, Andrew VK3BFA wrote:
>
> Hatfield wrote:
>> Hello, in the past, my from scratch construction has been @ 12 volts.
>> Now I am going to try a built from scratch tube project which uses
>> 117 volt main xformer, also 117 v on the plate; the whole radio
>> circuit will be fused through a 2 amp fuse.

> If you are asking this sort of question, then I would seriously doubt
> your ability to complete a HV project without killing yourself - ....

Especially when the OP states that he'll be using "117 v on the plate"!!
Sounds like a 'design' more dangerous than the old AC/DC radios!

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

1552. B- on RF Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-14 18:37:26 UTC
From: hanavin@stimpy.eecis.udel.edu
Message-ID: <d14ll6mmt1@dewey.udel.edu>
Source record: 19885

I was wondering what the advantges are of having B- on RF amplifer instead of just grounding it? I think it may be that the plate meter doesn't have a huge voltage across it, that can arc to ground. But what if you are using a triode and just have a cathode meter, no plate meter is the B- necessary? Any comments are appreciated.

thanks-Chuck (W3FJJ)

1553. Re: newbie technical questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-14 18:47:11 UTC
From: Dan/W4NTI <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <P_kZd.3771$qW.1887@newsread3.news.atl.earthlink.net>
Source record: 19886
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

"Dave Platt" <dplatt@radagast.org> wrote in message
news:1139vj62uop81b0@corp.supernews.com...
> In article <1110767917.711707.123960@f14g2000cwb.googlegroups.com>,
> <razorbladeshoes@gmail.com> wrote:
>
>>yes, that is what i meant. i didn't even know amplitude shift keying
>>existed.
>>
>>am i correct about afsk being audio tones transmitted over FM, while
>>fsk is just alternating between two non-modulating frequencies?
>
> That's pretty close, but not exactly on target.
>
> AFSK can be used on top of either AM or FM. In amateur systems it's
> most commonly used with FM.

That is not correct either. AFSK is used extensively with Amateur Radio
digital systems, such as PSK-31, RTTY, even CW can be and is generated
using AFSK. And the modulation METHOD is not important. It can be either
Amplitude or Frequency Modulation.

Dan/W4NTI

>
> FSK shifts the carrier frequency... a process which counts as a
> modulation. The amount of frequency shift (in Hz) and the rate at
> which you shift it (also in Hz) vary a lot from one usage to another.
> There are both narrow-band and wide-band FSK modulations in use.
>
> --
> Dave Platt <dplatt@radagast.org> AE6EO
> Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

1554. SERIOUS MONEY OPPORTUNITY-$5 INVESTMENT-HIGH RESPONSE RATE-QUICK RETURNS

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-14 21:23:04 UTC
From: feedbackzz@yahoo.com
Message-ID: <1110835384.932175.78420@f14g2000cwb.googlegroups.com>
Source record: 19887

Follow the directions below and you could
have $5000 in your PayPal account in 2 weeks.
There is a very high response rate in this
program because of its low investment, high
yields, and quick return. If you are a skeptic
and doubt that the program will work, I urge
you to give it a try anyway! It REALLY WORKS-
that is why so many thousands are involved in
programs like it. Don't miss this chance.

If you achieve only moderate success, your
PayPal account will still have several hundred
dollars in it within the next couple weeks.
If you actively promote the program, you could
soon have $8,000 in your PayPal account.

SIMPLE: All you need is $5 and a free PayPal
account. Pay $5 to one person.

SECURE: PayPal (BBB member) handles all
transactions. No one sees your bank or credit
card information.

LEGAL: See Title 18, Section 1302 and 1341,
US Postal and Lottery Laws.
The details of this business make it legitimate.
You are using the Internet to advertise your
business opportunity. You have a mail order
business that collects email addresses from
people interested in home-based online business.
You provide a service-mailing list membership-
in return for a small fee. Treat your mailing
list as a business. Keep accurate records,
declare your income, and pay income tax on it.

INSTRUCTIONS

STEP 1: COPY and PASTE this letter onto a
blank notepad file. SAVE as a TEXT FILE.
Keep it for the next time you need the
program.

STEP 2: Get a free PayPal account
(5 minutes setup time) at www.paypal.com.
Register for a PREMIER account (not a

PERSONAL) so that others can send money
to your account.

STEP 3: Using your PayPal account, send $5
(US DOLLARS) to the email address (PayPal
account) in position #1 of the list below.
PayPal will ask for a payment type-select
SERVICE. In the SUBJECT area, enter
"Please add me to your mailing list"
(this is very important). If you prefer
that your email address not be given to
other mailing list businesses, enter
"Please add me ONLY to your mailing list"
in the SUBJECT area. In order to send
money, you can deposit $5 into your PayPal
account with your own credit card, use
your bank account, or register for the
PayPal credit card.

IMPORTANT: IN ORDER FOR YOUR BUSINESS
TO WORK, YOU MUST BE HONEST AND SEND $5.
The mailing list business remains successful
due to the honesty and integrity of those
involved. $5 is a very small investment,
especially when you are about to receive
many times that much! If we are all honest,
we will all make money.

STEP 4: After you send your $5, remove the
address from position #1 of the list below.
Put the address in position #2 into position
#1. Put your own email address (PayPal
account) in position #2. Some engines will
automatically hide part of an email address
when the letter is posted in a newsgroup.
It may look like this:
yournam...@wherever.com

To avoid this complication, enter your
email address using 2 separate lines,
like this:

2) yourname (press ENTER on your keypad)
@wherever.com

(If you ever encounter the dots, click on
SHOW OPTIONS at the top of the letter, then
click on REPLY. Scroll down through the
original letter to find the full addresses.)

Both people on your list have already bought
mailing list memberships for $5! The program

is working! Note: If you put your name in position #1, you will not receive money from the hundreds that other members find.

CURRENT PAYPAL ACCOUNTS:

1) cwhatton22
@charter.net

2) feedbackzz
@yahoo.com

STEP 5: COPY and PASTE this letter (with your address in position #2) in emails to at least 60 newsgroups, chat sites, discussions, message boards, etc. It takes less than a minute to post the letter. The more you post, the more money you can make. People will see the letter heading as they scroll through the list of postings in a particular group. PASTE the heading below into the subject area of your email (you can also write your own heading):

SERIOUS MONEY OPPORTUNITY-
$5 INVESTMENT-HIGH RESPONSE RATE-
QUICK RETURNS

Use the search engines (Internet Explorer, yahoo.com, google.com, altavista.com, excite.com) to find sites. Search for moneymaking forums, moneymaking message board, money chat, employment message board, business message board, business discussions, etc. You can create your own free webpage (try webspawner.com, cmlb.net), then post links to your site. Try posting a notice on community and college bulletin boards to direct people to your webpage.

THIS BUSINESS WORKS

When your name reaches position #1 (usually in less than a week) it will be your turn to receive $5 deposits. If you personally find 20 interested people, and they each find 20, you make $2000. If you find 40 people, and they each find 20, you make $4000. Remember that the response rate is very high. Since there are only 2 names on the list, you can expect 80% of your profits within 2 weeks.

Participants who actively promote their mailing
list average between $5,000 and $8,000 and
receive the funds within 3 weeks.

Relieve your financial stress NOW!
Become a part of the mail order business and
help people to help people.
This program is about helping each other!

1555. Re: newbie technical questions

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-14 23:05:19 UTC
From: NoSpam <nospam@no.way>
Message-ID: <PMoZd.136417$Th1.53705@bgtnsc04-news.ops.worldnet.att.net>
Source record: 19888
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

razorbladeshoes@gmail.com wrote:

>
> thanks! also, i was just reading about mixers... and getting confused.
> i've run some matlab programs to figure out how you can take something
> at frequency x and frequency y, and end up with an output of frequency
> (x-y). one transmitter's mixer i saw took a 160mhz and 14mhz input to
> get a 146mhz output. adding or multiplying them together certainly does
> not yeild 146mhz. so how does that work?
>

That is a fair question, and one which is frequently asked.

Look up the trig identity for (sin a)(sin b). Let a and b each be in the form wt [w stands for greek lower case omega], so a = 2(pi)f1(t) and b = 2(pi)f2(t) where f1 and f2 are your two frequencies in Hz. Do the substitution & algebra on the identity, and then I think you'll see where the signals at the sum and difference of frequencies f1 and f2 come from. :-)

The name "mixer" can be a little misleading.....it doesn't necessarily just sum the two inputs in a linear fashion (by just adding them, like a kitchen mixer combines the ingredients for a cake) but there is also an element of non-linearity in the electrical network.

Depending on the nature of the non-linearity, mixing can also generate other higher-order products, like signals at 2f1+f2, 2f1-f2, etc. Whether this is good or bad depends on your particular application. For example, do some reading on "intermod".

1556. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-14 23:34:24 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <4cpZd.11169$yp.7739@newssvr11.news.prodigy.com>
Source record: 19889

It would be easier to convert an old AM/FM tuner or AM/FM stereo and you can get them all over the place for a few bucks. Tube types are collector items but the older SS ones with discreet components and ICs are considered pretty much obsolete. Find one with an open tuning cap and remove a plate or two, or rewind the coils (too much work) or replace the enclosed tuning cap with an open one. Add an 11 mhz osc and use the 455Kc IF stage and AM detector.

--

73
Hank WD5JFR

"Netgeek" <no_spam@comcast.net> wrote in message
news:iuydnUJtzbkhLqnfRVn-uQ@comcast.com...
> I'd like to build some homebrew VHF-AM receivers - specifically a receiver
> for
> the VHF 108-118 Mhz band. I've found lots of great ideas and reference
> designs
> out there but they're all constructed of parts made from "unobtainium"
> (e.g.
> old
> MC13135/6, MC1350, etc., etc.)...
>
> Can anyone on this group point me to some designs/ideas for how to
> construct
> something made from "actually available" components???
>
> Thanks for any help...
>
>

1557. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-15 00:03:56 UTC
From: LenAnderson@ieee.org
Message-ID: <1110845036.761691.322360@f14g2000cwb.googlegroups.com>
Source record: 19890

From: "Netgeek" on Sun, Mar 13 2005 4:42 pm

>I'd like to build some homebrew VHF-AM receivers - specifically a
receiver
>for
>the VHF 108-118 Mhz band. I've found lots of great ideas and
reference
>designs
>out there but they're all constructed of parts made from "unobtainium"
(e.g.
>old
>MC13135/6, MC1350, etc., etc.)...
>
>Can anyone on this group point me to some designs/ideas for how to
construct
>something made from "actually available" components???

Firstly, 108 to 118 MHz is the international civil aviation radionavigation band. It's not all that interesting to listen to unless a local tower is also repeating voice comms over a VOR or Localizer radionav transmitter nearby on the ground. The civil aviation voice band is 118 to 137 MHz.

Secondly, the MC1350 gain block is available from Jameco (it is still made after buying all the masking and stuff from Motorola). You can get MC1349s, a slightly higher gain version from Dieter Gentzow at Kitsandparts.com; I got 18 of them just before Christmas along with some other good parts. Good service from Kitsandparts, great source of toroid cores.

There's still lots of legacy ICs available out there but you may have to search for sources.

If you are trying to build something at VHF, you will need some reasonably accurate signal sources to check out the receiver. That's not a trivial task unless all you want is to carbon-copy some regen or super-regen tuned-by-a-single-variable sort of receiver.

Jameco sells the MC145151 PLL IC (On Semiconductor the Motorola spin-off still makes them) which, with a prescaler, can make a good, stable LO that is

channelized at 50 KHz increments for precise tuning. MC145151 is parallel-load for division, no extra IC needed to get the right division ratio as in some serial-input PLL or DDS chips.

Lots of inexpensive "all-band" radios off the shelf include the aviation band, those in addition to all the available VHF scanner receivers. Those all work better and more reliably than simple regens and super-regens in my observation.

LenAnderson@ieee.org

1558. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-15 02:20:04 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <w9KdnSIWsq7926vfRVn-1Q@comcast.com>
Source record: 19891

Len,

Thanks for the input and observations! Comments follow:

<LenAnderson@ieee.org> wrote in message
news:1110845036.761691.322360@f14g2000cwb.googlegroups.com...
> Firstly, 108 to 118 MHz is the international civil
> aviation radionavigation band. It's not all that
> interesting to listen to unless a local tower is
> also repeating voice comms over a VOR or Localizer
> radionav transmitter nearby on the ground. The
> civil aviation voice band is 118 to 137 MHz.

Agreed - not that interesting to listen to, but the NAV channels are exactly what I'm interested in - (both VOR and LOC). The "experiment" I have in mind is a processor controlled scanner of sorts that tracks multiple VORs and performs as a backup to GPS. Hence the need for fast/agile tuning (either PLL or DDS). As you may have gathered - I'm not an "RF guy" by any stretch - but I'm attempting to learn (out of sheer necessity 8-).....

> Secondly, the MC1350 gain block is available from
> Jameco (it is still made after buying all the masking
> and stuff from Motorola). You can get MC1349s, a
> slightly higher gain version from Dieter Gentzow at
> Kitsandparts.com

I'm not locked in to the MC1350 - it just happens to be what's used in the "ultra-cheap" kit I ordered. As it turns out, there's a company (Lansdale.com) that seems to be forming a business model around buying "obsolete" IP from Motorola et.al. and keeping the parts available. Interesting idea. As it happens, NTE has a drop-in replacement part for the MC1350 in their "NTE746" - available from Mouser. May be of interest to some on this group???

> If you are trying to build something at VHF, you
> will need some reasonably accurate signal sources
> to check out the receiver. That's not a trivial
> task unless all you want is to carbon-copy some
> regen or super-regen tuned-by-a-single-variable
> sort of receiver.

Well, even though (as I said) I'm not an RF-type I do
have quite a bit of test equipment laying around that I've
collected over the years. Among that stuff is an HP8654A
good to about 520 MHz that I've never used (and for the
life of me can't figure why I bought 8-).....

> Jameco sells the MC145151 PLL IC (On Semiconductor
> the Motorola spin-off still makes them) which, with
> a prescaler, can make a good, stable LO that is
> channelized at 50 KHz increments for precise tuning.
> MC145151 is parallel-load for division, no extra
> IC needed to get the right division ratio as in
> some serial-input PLL or DDS chips.

Thanks for the tip - I'm concerned about how long
such a thing might be available though. For now the
safest bet seems to be the National LMX series (or
the Analog Devices equivalents) - and adding a
processor for control is not a problem.

Thanks again for your input - it is appreciated!!!
Regards,
Bill

1559. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-15 02:33:17 UTC
From: jimp@specsol-spam-sux.com
Message-ID: <d15hhdntk1@mail.specsol.com>
Source record: 19892

Netgeek <no_spam@comcast.net> wrote:
> Len,

> Thanks for the input and observations! Comments follow:

> <LenAnderson@ieee.org> wrote in message
> news:1110845036.761691.322360@f14g2000cwb.googlegroups.com...
> > Firstly, 108 to 118 MHz is the international civil
> > aviation radionavigation band. It's not all that
> > interesting to listen to unless a local tower is
> > also repeating voice comms over a VOR or Localizer
> > radionav transmitter nearby on the ground. The
> > civil aviation voice band is 118 to 137 MHz.

> Agreed - not that interesting to listen to, but the NAV
> channels are exactly what I'm interested in - (both VOR
> and LOC). The "experiment" I have in mind is a processor
> controlled scanner of sorts that tracks multiple VORs
> and performs as a backup to GPS. Hence the need for
> fast/agile tuning (either PLL or DDS). As you may have
> gathered - I'm not an "RF guy" by any stretch - but I'm
> attempting to learn (out of sheer necessity 8-).....

<snip>

Neither the range nor the accuracy of VORs is all that great on
the ground.

What do you intend to do with this doo-dad other than experiment if
I may ask?

--
Jim Pennino

Remove -spam-sux to reply.

1560. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-15 03:06:23 UTC
From: Lawrence Statton N1GAK/XE2 <lawrence@hummer.not-here.mx>
Message-ID: <x7y8cp4ngw.fsf@hummer.i-did-not-set--mail-host-address--so-shoot-me>
Source record: 19893

"Netgeek" <no_spam@comcast.net> writes:

> Len,
>
> Thanks for the input and observations! Comments follow:
>
>
> Agreed - not that interesting to listen to, but the NAV
> channels are exactly what I'm interested in - (both VOR
> and LOC). The "experiment" I have in mind is a processor
> controlled scanner of sorts that tracks multiple VORs
> and performs as a backup to GPS. Hence the need for
> fast/agile tuning (either PLL or DDS). As you may have
> gathered - I'm not an "RF guy" by any stretch - but I'm
> attempting to learn (out of sheer necessity 8-).....

HAH! I did **EXACTLY** that project back in 1996 or so.

Used the 145151 PLL that someone else reccomended.

The RX was the ... crud .. can't remember the part number ... That motorola 3300 part that was so popular. 3356 maybe?

Used a cheap 567 to track the FM part of the signal, and a simple envelope detector for the AM part. It was barely adequate for close-in stuff, and for long range stations, the noise performance was terrible.

The outputs of the two detectors went into a two-channel 8-bit ADC and were read by the CPU.

Used a 68HC000 for the CPU, and had a database of VOR stations burned into the ROM.

The cleverest piece of code was the CW decoder that was used to ID the stations.

It would tune around, listening to IDs and take a best-guess at where it was, then build a list of stations to scan, stopping on each one for a second to get a RMI fix. (There was a little crude LPF to help with the noise performance. Not that it did much good...)

I found some nice 4-line x 20 char LCD displays at a local junque shop, with ENORMOUS characters. 0.6" I Think .. Just HUGE for LCDs ... It would do a scrolling display of the form

SJC 025 nm @ 036
OAK 044 nm @ xxx

etc.

All in all it was a fun project -- with lots of cool learning experiences. In terms of practicality, the performance was never spectacular, RF noise from the CPU section would get into the IF (21.4 MHz)... it made a neat cockpit toy, but I would **NEVER** have considered it even a backup aid to navigation.

Just writing about this is making lots of little details come back to me. Feel free to e-mail and I'll bend your ear.

-- --
Lawrence Statton - lawrenabae@abaluon.abaom s/aba/c/g
Computer software consists of only two components: ones and zeros, in roughly equal proportions. All that is required is to sort them into the correct order.

1561. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-15 04:11:16 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <113co364go7v0a9@corp.supernews.com>
Source record: 19894

> Firstly, 108 to 118 MHz is the international civil
> aviation radionavigation band. It's not all that
> interesting to listen to unless a local tower is
> also repeating voice comms over a VOR or Localizer
> radionav transmitter nearby on the ground. The
> civil aviation voice band is 118 to 137 MHz.

Firstly, the tower does NOT repeat voice comms over a VOR. The local Flight Service Station MIGHT, but in the days of crystal controlled navcoms, the amount of voice traffic on a VOR is next to nothing.

Secondly, the tower/FSS will never in HELL repeat something on a localizer frequency.

You are correct; the civilian aviation voice band is 118.000 to 136.975 MHz.

> Jameco sells the MC145151 PLL IC (On Semiconductor
> the Motorola spin-off still makes them) which, with
> a prescaler, can make a good, stable LO that is
> channelized at 50 KHz increments for precise tuning.
> MC145151 is parallel-load for division, no extra
> IC needed to get the right division ratio as in
> some serial-input PLL or DDS chips.

The 145151 is OK if you don't mind spurs every 25 kHz. from dc to daylight. The 145152 is a much better dual-modulo prescaler that gets rid of a lot of trash and garbage from single modulo prescaling that you probably don't want.

Jim

1562. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-15 04:14:04 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <113co8d98tjs210@corp.supernews.com>
Source record: 19895

>
> I'm not locked in to the MC1350 - it just happens to be
> what's used in the "ultra-cheap" kit I ordered. As it turns
> out, there's a company (Lansdale.com) that seems to be
> forming a business model around buying "obsolete" IP
> from Motorola et.al. and keeping the parts available.
> Interesting idea. As it happens, NTE has a drop-in
> replacement part for the MC1350 in their "NTE746" -
> available from Mouser. May be of interest to some on
> this group???

The absolute minimum operating voltage for the MC1350 is 12 volts. Not 11.9, 12. If this is a mobile application, then figure on a switching power supply to get you up to 15 volts or so.

Among that stuff is an HP8654A
> good to about 520 MHz that I've never used (and for the
> life of me can't figure why I bought 8-).....

Oh, I'll take it off your hands for $20 or so {;-)

Jim

1563. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-15 05:43:05 UTC
From: LenAnderson@ieee.org
Message-ID: <1110865385.911197.293330@g14g2000cwa.googlegroups.com>
Source record: 19896

From: "RST Engineering" <j...@rstengineering.com> Mon, Mar 14 2005 8:11 pm

>> Firstly, 108 to 118 MHz is the international civil
>> aviation radionavigation band. It's not all that
>> interesting to listen to unless a local tower is
>> also repeating voice comms over a VOR or Localizer
>> radionav transmitter nearby on the ground. The
>> civil aviation voice band is 118 to 137 MHz.
>
>Firstly, the tower does NOT repeat voice comms over a VOR. The local Flight
>Service Station MIGHT, but in the days of crystal controlled navcoms, the
>amount of voice traffic on a VOR is next to nothing.

Now, now, Jim. They do.

My residence is a mile and a half from BUR, roughly
eight miles from VNY here in the San Fernando Valley
area of Los Angeles.

Agreed, tower operators SELDOM repeat their transmissions
over the VOR but it is there in case it is needed. I've
heard them often enough.

VOR has an almost enormous bandwidth between 30 Hz and
the 9.96 KHz subcarrier phase reference...which was
INTENDED to carry voice as a conventience to the tower.

BUR, now the Bob Hope Airport, USED to carry the taped
weather broadcasts over their VOR but stopped several
years ago.

>Secondly, the tower/FSS will never in HELL repeat something on a localizer
>frequency.

Calm down. I may still vote for you next election,
but not if you act like Arnie... :-)

Hokay, I may have spoken hastily on the voice over
Localizer. Color me "probably wrong" there.

>You are correct; the civilian aviation voice band is 118.000 to 136.975 MHz.

Thank you. Sigh, I was only in the business of making
civil avionics and their test sets once. :-)

>> Jameco sells the MC145151 PLL IC (On Semiconductor
>> the Motorola spin-off still makes them) which, with
>> a prescaler, can make a good, stable LO that is
>> channelized at 50 KHz increments for precise tuning.
>> MC145151 is parallel-load for division, no extra
>> IC needed to get the right division ratio as in
>> some serial-input PLL or DDS chips.
>
>The 145151 is OK if you don't mind spurs every 25 kHz. from dc to
daylight.

Sorry, I don't agree there. "Spurs" with an ordinary
PLL happen when the loop filter component values are
incorrect...and/or a higher frequency pole is used
(via an extra R and C in loop filter)to reduce higher
frequency components out of the PFD.

I've made a few PLLs with that MC145151 for homebrew
projects and not had any spurs from "DC to daylight"
or within the band of interest.

>The 145152 is a much better dual-modulo prescaler that gets rid of a
lot of
>trash and garbage from single modulo prescaling that you probably
don't
>want.

I've not tried the 145152 but, back a number of years
before On Semi split from Motorola Semi, a Motorola
factory person said the 152 is essentially the same as
the 151 except for the serial data interface. I can't
vouch for that but that's what I remember.

Single modulus prescaling (putting a simple divide by
8 or divide by 10 in series with the VCO and PLL IC
signal input) doesn't produce any more #$%^&!!! stuff
than going direct into the PLL IC signal input. That
is said PROVIDED the loop filter output line to the
VCO it is controlling is "clean" and doesn't pick up
other circuit signals. Such garbage pickup is the
common cause of "spurs" and is layout dependent, NOT
dependent on whether or not any prescaling is done.
There's some dependency on proper supply rail decoupling
for the phase-frequency detector and any active op-amps
used between the loop filter and VCO control input.

By the way, I've used the MC1350 down to 10 V supply
rails with no problem although I do agree with it
running optimally (for gain and noise figure) at 12 V
supply. There's a lot of internal constant current

sources on that IC and that causes the dependency on supply voltage. The same with the MC1349 which I'm working with now as both gain blocks and as mixers. I've worked with the MC1590 metal can original 34 years ago and the plastic package 1350 since 31 years ago. I like it as a little block of gain which has low distortion when running balanced input to balanced output...on up to 70 MHz with hardly any gain rolloff.

LenAnderson@ieee.org

1564. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-15 08:09:02 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <4d0d315m0r8rv0ii51te1a8mfbqvffmkse@4ax.com>
Source record: 19897

On Sun, 13 Mar 2005 16:42:18 -0500, "Netgeek" <no_spam@comcast.net>
wrote:

>I'd like to build some homebrew VHF-AM receivers - specifically a receiver
>for the VHF 108-118 Mhz band.

Note that the FM broadcast band is just below that band with lot of
strong transmitters, so any configuration with low side local
oscillator injection and the more or less standard 10.7 MHz first IF
is most likely going to give image frequency problems from FM
broadcast stations in the 86.6 .. 96.6 MHz range. To avoid this, a
good narrow tunable filter is required in front of the first mixer,
which can be a problem if good frequency agility is required.

One approach would be to use a much larger first IF or put the local
oscillator above the desired band (which also swaps the sidebands)
with image responses in the rest of the aviation band.

One idea would be to use a fixed downconverter e.g. with a 98 MHz
crystal frequency, mixing the VOR band down to 10-20 MHz, filter out
the strong mixing products from the FM broadcast band that is on
frequencies below 10 MHz and use a DDS with I/Q outputs to get I/Q
demodulation of the signal.

Paul OH3LWR

1565. Re: B- on RF Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-15 13:53:17 UTC
From: default <none@defaulter.net>
Message-ID: <iopd3116r9tf1q3chcvk79u5a4orftokcc@4ax.com>
Source record: 19748

On Mon, 14 Mar 2005 18:37:26 +0000 (UTC),
hanavin@stimpy.eecis.udel.edu (Chuck Hanavin) wrote:

>
>
>I was wondering what the advantges are of having B- on RF amplifer
>instead of just grounding it? I think it may be that the plate meter
>doesn't have a huge voltage across it, that can arc to ground. But what
>if you are using a triode and just have a cathode meter, no plate meter
>is the B- necessary? Any comments are appreciated.
>
>thanks-Chuck (W3FJJ)
>
What kind of circuit? Is the B- applied to the grid? What class of
operation? You mention meters so this is the final stage of a
transmitter?

1566. FA:MISC PARTS + CATALOGS + MORE

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-15 14:00:45 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <hUBZd.138525$Th1.28076@bgtnsc04-news.ops.worldnet.att.net>
Source record: 19749

Presently : 60W, 25K power resistors
5Y3WGTB USN
MILLEN RF COKES
PLATE SUPPRESSORS
GONSET SUPER 6
RT-68 SILK SCHEMATIC
3 TYPE OF SOLDERING TIPS
MICRO-SWITCHES + MORE COMING, SEE AT:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking, heytubeguy

1567. Re: B- on RF Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-15 15:11:40 UTC
From: hanavin@stimpy.eecis.udel.edu
Message-ID: <d16tvb$bq1$1@dewey.udel.edu>
Source record: 19750

In article <iopd3116r9tf1q3chcvk79u5a4orftokcc@4ax.com>,
default <none@defaulter.net> wrote:
>On Mon, 14 Mar 2005 18:37:26 +0000 (UTC),
>hanavin@stimpy.eecis.udel.edu (Chuck Hanavin) wrote:
>
>>
>>
>>I was wondering what the advantges are of having B- on RF amplifer
>>instead of just grounding it? I think it may be that the plate meter
>>doesn't have a huge voltage across it, that can arc to ground. But what
>>if you are using a triode and just have a cathode meter, no plate meter
>>is the B- necessary? Any comments are appreciated.
>>
>>thanks-Chuck (W3FJJ)
>>
>What kind of circuit? Is the B- applied to the grid? What class of
>operation? You mention meters so this is the final stage of a
>transmitter?

Class B linear, 3cx3000A7, Can be a final stage or used as
an exciter for 3cx1000000, hi hi, the B- doesn't not go to the grid but to
the centertap of the filimnet tranformer. well throught a cathode DC amp
meter...

On most modern amplifiers schematics they all seem to
use a b- lead which is basically the negative lead of the high voltage
lifted abouve ground by low ohm resister (10 ohms, 25w). Im sure this is
done for a reason. Im looking for input on way this matters,
thanks-Chuck

1568. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-15 16:31:33 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <ArWdnYwzUsVrkKrfRVn-sg@comcast.com>
Source record: 19751

<jimp@specsol-spam-sux.com> wrote in message

> Neither the range nor the accuracy of VORs is all that great on
> the ground.
>
> What do you intend to do with this doo-dad other than experiment if
> I may ask?

For now it is strictly entertainment/education. If it works out, however,
I plan to use it as part of a complete FMS for something like this:

http://members.eaa.org/home/homebuilders/selecting/kits/flying%20flea.html

Good point about the range/accuracy on the ground - I'll do a special
version for Moeller and Bede products 8-).....

1569. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-15 17:10:49 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <E46dnaeTkaK1iqrfRVn-gQ@comcast.com>
Source record: 19752

From: "Lawrence Statton N1GAK/XE2" <lawrence@hummer.not-here.mx>

> HAH! I did **EXACTLY** that project back in 1996 or so.
> snip <
> Used a 68HC000 for the CPU, and had a database of VOR stations burned
> into the ROM.
> All in all it was a fun project -- with lots of cool learning
> experiences.

Sounds like a cool project! *MANY* years ago (circa 1984 or so?)
I had a plan to tear off the front panel of an RST radio I built and
replace it with a display, some controls and a zillion parallel bits to
replace all the thumbwheels switches - all driven by a Z80. I
eventually decided it would take way too long and didn't
accomplish much, besides just being a generally stupid idea 8-)..
So I sold the radio...

Now, twenty years later I'm playing with *this* project! All of
which proves that I now have way too much time on my hands and
I'm getting more stupid as I age 8-)......

Would like to hear more about your experiences. So, what would
you do differently if you were starting over?

I'm thinking that something like a cheapo DSP (or one of the new
dsPIC widgets) might be real handy. But first - I have to get past
the part where I have a reasonable RF front end! I really doubt that
the $40 Ramsey kit is going to do much but I bet I'll learn a few
things 8-).....

1570. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-15 17:27:33 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <WYidnXALy62JhqrfRVn-hg@comcast.com>
Source record: 19753

"RST Engineering" <jim@rstengineering.com> wrote in message

> The absolute minimum operating voltage for the MC1350 is 12 volts. Not
> 11.9, 12. If this is a mobile application, then figure on a switching
power
> supply to get you up to 15 volts or so.

Thanks for that tip - it will be the first "improvement" to the cheapo
Ramsey receiver (which runs off 9 volts). The power supply is something
I *can* handle easily 8-)...

> > Among that stuff is an HP8654A
> > good to about 520 MHz that I've never used (and for the
> > life of me can't figure why I bought 8-).....
>
> Oh, I'll take it off your hands for $20 or so {;-)
> Jim

Well, give it a few weeks! Once the frustration level gets high
enough and I realize that I'm really a bit-banger and not a radio-head
I may be tempted to toss it (and anything else RF related) out the
window - in which case I'll pack it up and donate it to you 8-)...

In the meantime, any other suggested improvements or hints are
most appreciated (e.g. "up the IF from 10.7"?)...!

Thanks,
Bill (Who still thinks the universe *IS* digital - but infinite resolution
8-)

>
>

1571. Re: Frequency Divider

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-15 17:45:33 UTC
From: "Fam J.Hoekstra" <fam-j.hoekstra@zonnet.nl>
Message-ID: <8b3ac$42371fa8$513b885d$21011@news.versatel.nl>
Source record: 19754

WhAT ABOUT A HEF4060?
"Tim Shoppa" <shoppa@trailing-edge.com> schreef in bericht
news:1110571254.925945.92910@l41g2000cwc.googlegroups.com...
> > pump it into a flip flop, but I'm having an awful time using
> > 2n3904 transistors. The triggering seems to be a very
> > challenging design issue.
>
> You built the divider out of discrete transistors and steering diodes?
> Running this sort of divider at 7 MHz will be marginal... some "speedup
> caps" in parallel with the base drive resistors may help.
>
> > or other ideas for halving frequency?
>
> 74HC74.
>
> Tim.
>

1572. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-15 17:49:01 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <xM2dnUivhuuBvarfRVn-oA@comcast.com>
Source record: 19755

"Paul Keinanen" <keinanen@sci.fi> wrote in message

> One idea would be to use a fixed downconverter e.g. with a 98 MHz
> crystal frequency, mixing the VOR band down to 10-20 MHz, filter out
> the strong mixing products from the FM broadcast band that is on
> frequencies below 10 MHz and use a DDS with I/Q outputs to get I/Q
> demodulation of the signal.

Thank you Paul - I'd like to look into this. Can you point me to some practical examples or reference materials to start with? Quite some time ago I ran across the articles from the flex-radio.com guys and was very interested in their approach. It's my understanding (and I mean a fairly fuzzy understanding) that direct conversion has many benefits but is limited to lower bands (unless you're the military with a big budget)??? What are the trade-offs in doing a downconversion followed by DDS-based conversion?

1573. Re: B- on RF Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-15 17:49:53 UTC
From: Roger Leone <raleoneTAKEOUT@sbcglobal.net>
Message-ID: <5fFZd.18956$Pz7.17135@newssvr13.news.prodigy.com>
Source record: 19756

Chuck:

Placing the plate current meter in the B+ lead is risky unless the meter is well insulated from ground and mounted behind a glass or plastic panel so the operator can't accidently come in contact with high voltage.

Isolating the B- from chassis ground allows the plate current meter to be placed between the cathode and the power supply's negative terminal. The meter will then read plate current but won't have the HV B+ on it. A low value resistor is used between B- and the chassis to keep the voltage difference between chassis and B- small.

Is your triode amp configured for grounded grid operation? You can also place a second meter from cathode to chassis ground to read grid current.

If the B- from the power supply is grounded to the chassis and you have a single meter between cathode and ground, it will read cathode current which is the sum of plate and grid currents.

73,

Roger K6XQ

1574. Re: B- on RF Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-15 23:07:22 UTC
From: default <none@defaulter.net>
Message-ID: <acqe31dg932htcngsfr8lb9i25ne66egp0@4ax.com>
Source record: 19757

On Tue, 15 Mar 2005 15:11:40 +0000 (UTC),
hanavin@stimpy.eecis.udel.edu (Chuck Hanavin) wrote:

>In article <iopd3116r9tf1q3chcvk79u5a4orftokcc@4ax.com>,
>default <none@defaulter.net> wrote:
>>On Mon, 14 Mar 2005 18:37:26 +0000 (UTC),
>>hanavin@stimpy.eecis.udel.edu (Chuck Hanavin) wrote:
>>
>>>
>>>
>>>I was wondering what the advantges are of having B- on RF amplifer
>>>instead of just grounding it? I think it may be that the plate meter
>>>doesn't have a huge voltage across it, that can arc to ground. But what
>>>if you are using a triode and just have a cathode meter, no plate meter
>>>is the B- necessary? Any comments are appreciated.
>>>
>>>thanks-Chuck (W3FJJ)
>>>
>>What kind of circuit? Is the B- applied to the grid? What class of
>>operation? You mention meters so this is the final stage of a
>>transmitter?
>
>
>Class B linear, 3cx3000A7, Can be a final stage or used as
>an exciter for 3cx1000000, hi hi, the B- doesn't not go to the grid but to
>the centertap of the filimnet tranformer. well throught a cathode DC amp
>meter...
>
>On most modern amplifiers schematics they all seem to
>use a b- lead which is basically the negative lead of the high voltage
>lifted abouve ground by low ohm resister (10 ohms, 25w). Im sure this is
>done for a reason. Im looking for input on way this matters,
>thanks-Chuck

I think Roger has your answer. I thought you were seeing a B- power
supply - which is sometimes used in Class C finals for CW ops. What
you are dealing with is just a sampling point to sample current
without the high voltage insulation problem you would see with a B+
inserted current meter.

1575. Re: Frequency Divider

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-16 00:22:17 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <auue319q695l47q6akhdhcjtgn78f9t5k0@4ax.com>
Source record: 19758

On Tue, 15 Mar 2005 18:45:33 +0100, "Fam J.Hoekstra"
<fam-j.hoekstra@zonnet.nl> wrote:

>WhAT ABOUT A HEF4060?
>"Tim Shoppa" <shoppa@trailing-edge.com> schreef in bericht
>news:1110571254.925945.92910@l41g2000cwc.googlegroups.com...
>> > pump it into a flip flop, but I'm having an awful time using
>> > 2n3904 transistors. The triggering seems to be a very
>> > challenging design issue.
>>
>> You built the divider out of discrete transistors and steering diodes?
>> Running this sort of divider at 7 MHz will be marginal... some "speedup
>> caps" in parallel with the base drive resistors may help.
>>
>> > or other ideas for halving frequency?
>>
>> 74HC74.
>>
>> Tim.
>>
>

you are asking difficult questions, not everybody over there know
Philips devices, but they usually go twice as high as other standard
devices, so it might work - provided you have it

LA8AK

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

1576. Wilderness Sierra output power slowly increases?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-16 01:47:38 UTC
From: Mike <transtyle@mortimor.com>
Message-ID: <bq3f31te7g61j7sp3aqld1kntuokneo0kl@4ax.com>
Source record: 19759

Trying to figure out what might be wrong with my My Wilderness Sierra. On transmit, the output power slowly goes from 0 to 1 watt after a miinute or 2. (Using a 40 watt band module, but does the same thing with other modules) - normal output should be about 2.5 watts. Maybe the final is going?, any tips before I actually have to start checking components, thanks Mike AB7RU

1577. 1030 MHZ and 1090 MHZ Filter Design

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-16 02:47:56 UTC
From: Stu <stult1@aol.com>
Message-ID: <1110941276.420866.79300@o13g2000cwo.googlegroups.com>
Source record: 19760

Hello!

I have no experience working with frequencies in the gigahertz range, but I am working on a project that broadcasts AM signals on 1030 MHZ and 1090 MHZ. It is the frequencies that airplane transponders communicate with ground stations on.

Does anyone have practical experience building a receiver for frequencies in this range? And what are some good suppliers for components at these frequencies?

I am looking for some example circuit diagrams and pcb layouts or something like that.

Thanks for any help.

1578. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-16 07:31:13 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <5rie31153v2i78jrvr6tbndaj4n71vc61v@4ax.com>
Source record: 19761

On Tue, 15 Mar 2005 12:49:01 -0500, "Netgeek" <no_spam@comcast.net>
wrote:

> It's my understanding (and I
>mean a fairly fuzzy understanding) that direct conversion has many
>benefits but is limited to lower bands (unless you're the military with
>a big budget)??? What are the trade-offs in doing a downconversion
>followed by DDS-based conversion?

My suggestion of using a DDS for direct conversion in the 10-20 MHz
range is based on the assumption that DDS chips running with 50-60 MHz
clock frequency should be available at a quite a reasonable price,
compared to similar chips running at 400 - 500 MHz, which would be
required for direct synthesis in the VHF band.

However, translating the whole band down to HF requires a strong down
converter, especially due to the nearby strong signal broadcast band.
Some flimsy NE602 type converter will not survive very well in such
environment, but a high current preamplifier followed by a diode ring
mixer might be a better converter.

Paul OH3LWR

1579. " BIG BUCKS" WITH ONLY $6.00 INVESTMENT "NO BULL"!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-16 18:43:53 UTC
From: bscruggins2000@yahoo.com
Message-ID: <1110998633.093816.65610@l41g2000cwc.googlegroups.com>
Source record: 19762

HOW TO TURN $6 INTO $6,000!!!!!! READING THIS COULD CHANGE YOUR LIFE!

I found this on a bulletin board and decided to try it. A little while back, I was browsing through newsgroups, just like you are now, and came across an article similar to this that said you could make thousands of dollars within weeks with only an initial investment of $6.00! So I thought, Yeah right, this must be a scam,but like most of us, I was curious, so I kept reading. Anyway, it said that you send $1.00 to each of the 6 names and address stated in the article. You then place your own name and address in the bottom of the list at #6, and post the article in at least 200 newsgroups. (There are thousands) No catch, that was it. So after thinking it over, and talking to a few people first, I thought about trying it. I figured: what have I got to lose except 6 stamps and $6.00, right? Then I invested the measly $6.00. Well GUESS WHAT!!... within 7 days, I started getting money in the mail! I was shocked! I figured it would end soon, but the money just kept coming in. In my first week, I made about $25.00. By the end of the second week I had made a total of over $1,000.00! In the third week I had over $10,000.00 and it`s still growing. This is now my fourth week and I have made a total of just over $42,000.00 and it`s still coming in rapidly. It`s certainly worth $6.00, and 6 stamps, I have spent more than that on the lottery!! Let me tell you how this works and most importantly, why it works....Also, make sure you print a copy of this article NOW, so you can get the information off of it as you need it. I promise you that if you follow the directions exactly, that you will start making more money than you thought possible by doing something so easy!
Suggestion: Read this entire message carefully! (Print it out or download it.) Follow the simple directions and watch the money come in! It`s easy. It`s legal. And, your investment is only $6.00 (Plus postage)

IMPORTANT: This is not a scam; it is not indecent; it is not illegal; and it is virtually no risk - it really works!!!! If all of the following instructions are followed exactly, you will receive extraordinary dividends.

PLEASE NOTE: Please follow these directions PERCISELY, and $50,000 or more can be yours in 20 to 60 days. This program remains successful because of the honesty and integrity of the participants. Please continue its success by carefully adhering to the instructions. You will now become part of the Mail Order business. In this business your product is not solid and tangible, it`s a service. You are in the business of developing Mailing Lists. Many large corporations are happy to pay big bucks for quality lists. However, the money made from the

mailing lists is secondary to the income which is made from people like you and me asking to be included in that list. Here are the 4 easy steps to success:

STEP 1: Get 6 separate pieces of paper and write the following on each piece of paper; PLEASE PUT ME ON YOUR MAILING LIST. Now get 6 US $1.00 bills and place ONE inside EACH of the 6 pieces of paper so the bill will not be seen through the envelope (to prevent thievery). Next, place one paper in each of the 6 envelopes and seal them. You should now have 6 sealed envelopes, each with a piece of paper stating the above phrase, your name and address, and a $1.00 bill. What you are doing is creating a service. THIS IS ABSOLUTELY LEGAL! You are requesting a legitimate service and you are paying for it! Like most of us I was a little skeptical and a little worried about the legal aspects of it all. So I checked it out with the U.S. Post Office (1-800-725-2161) and they confirmed that it is indeed legal! Mail the 6 envelopes to the following addresses:

Mailing Addresses

1. P. FREY, 4577 W. PONDS CIR, LITTLETON, CO 80123
2. E. DE LEON, 14014 Rosecrest, Houston,TX 77045
3. A. Lopez, 810 Ave.J, South Houston TX 77587
4. L. Pacheco, 812 Ave.J, South Houston, TX 77587
5. K. Bat, 9335 Alcona Street, Lanham, MD 20706
6. B. Scruggins, P.O. Box 845 Port Barre, LA 70577

STEP 2: Now take the #1 name off the list that you see above, move the other names up (6 becomes 5, 5 becomes 4, etc...) and add YOUR Name as number 6 on the list.

STEP 3: Change anything you need to, but try to keep this article as close to original as possible. Now, post your amended article to at least 200 newsgroups. (I think there are close to 24,000 groups) All you need is 200, but remember, the more you post, the more money you make! This is perfectly legal! If you have any doubts, refer to Title 18 Sec. 1302 & 1341 of the Postal lottery laws.
Keep a copy of these steps for yourself and, whenever you need money, you can use it again, and again.

PLEASE REMEMBER that this program remains successful because of the honesty and integrity of the participants and by their carefully adhering to the directions. Look at it this way. If you are of integrity, the program will continue and the money that so many others have received will come your way.

NOTE: You may want to retain every name and address sent to you, either on a computer or hard copy and keep the notes people send you. This VERIFIES that you are truly providing a service. (Also, it might be a good idea to wrap the $1 bill in dark paper to reduce the risk of mail theft.)
So, as each post is downloaded and the directions carefully followed,

six members will be reimbursed for their participation as a List Developer with one dollar each. Your name will move up the list geometrically so that when your name reaches the #1 position you will be receiving thousands of dollars in CASH!!! What an opportunity for only $6.00 ($1.00 for each of the first six people listed above) Send it now, add your own name to the list and you`re in business!
---DIRECTIONS ----- FOR HOW TO POST TO NEWSGROUPS---------- Step 1) You do not need to re-type this entire letter to do your own posting. Simply put your cursor at the beginning of this letter and drag your cursor to the bottom of this document, and select `copy` from the edit menu. This will copy the entire letter into the computer`s memory.

Step 2) Open a blank `notepad` file and place your cursor at the top of the blank page. From the `edit` menu select `paste`. This will paste a copy of the letter into notepad so that you can add your name to the list.
Step 3) Save your new notepad file as a .txt file. If you want to do your postings in different settings, you`ll always have this file to go back to.

Step 4) Use Netscape or Internet explorer and try searching for various newsgroups (on-line forums, message boards, chat sites, discussions.) Just example you log on any search engine like, yahoo.com,google.com, altavista.com,excite.com then you search with this subject millionaire message board? or money making message
board? or employment message board? or money making discussions? or money making forum? or business message board? etc. You will find thousand & thousand message board. Click one by one then you will find the option post a new message.
Step 5) Visit these message boards and post this article as a new message by highlighting the text of this letter and selecting paste from the edit menu. Fill in the Subject, this will be the header that everyone sees as they scroll through the list of postings in a particular group, click the post message button. You`re done with your first one! Congratulations...THAT`S IT! All you have to do is jump to different newsgroups and post away, after you get the hang of it, it will take about 30 seconds for each newsgroup!

REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE MONEY YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200
That`s it! You will begin receiving money from around the world within days! You may eventually want to rent a P.O.Box due to the large amount of mail you will receive. If you wish to stay anonymous, you can invent a name to use, as long as the postman will deliver it.
JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT.

Now the WHY part: Out of 200 postings, say I receive only 5 replies (a very low example). So then I made $5.00 with my name at #6 on the letter. Now, each of the 5 persons who just sent me $1.00 make the MINIMUM 200 postings, each with my name at #5 and only 5 persons respond to each of the original 5, that is another $25.00 for me, now

those 25 each make 200 MINIMUM posts with my name at #4 and only 5 replies each, I will bring in an additional $125.00! Now, those 125 persons turn around and post the MINIMUM 200 with my name at #3 and only receive 5 replies each, I will make an additional $626.00! OK, now here is the fun part, each of those 625 persons post a MINIMUM 200 letters with my name at #2 and they each only receive 5 replies, that just made me $3,125.00!!! Those 3,125 persons will all deliver this message to 200 newsgroups with my name at #1 and if still 5 persons per 200 newsgroups react I will receive $15,625,00! With an original investment of only $6.00! AMAZING! When your name is no longer on the list, you just take the latest posting in the newsgroups, and send out another $6.00 to names on the list, putting your name at number 6 again. And start posting again. The thing to remember is: do you realize that thousands of people all over the world are joining the internet and reading these articles everyday?, JUST LIKE YOU are now!! So, can you afford $6.00 and see if it really works?? I think so... People have said, "What if the plan is played out and no one sends you the money? So what! What are the chances of that happening when there are tons of new honest users and new honest people who are joining the internet and newsgroups everyday and are willing to give it a try? Estimates are at 20,000 to 50,000 new users, every day, with thousands of those joining the actual internet.

Remember: Play FAIRLY and HONESTLY and this will really work.

1580. Re: 1030 MHZ and 1090 MHZ Filter Design

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-16 20:56:09 UTC
From: LenAnderson@ieee.org
Message-ID: <1111006569.819489.133620@g14g2000cwa.googlegroups.com>
Source record: 19763

>I have no experience working with frequencies in the gigahertz range,
>but I am working on a project that broadcasts AM signals on 1030 MHZ
>and 1090 MHZ. It is the frequencies that airplane transponders
>communicate with ground stations on.

Slight correction: The 1030/1090 MHz frequencies are
an aid to FAA local search radar to help discriminate
targets and to IDENTIFY targets shown on their radar
display screens. That isn't "communication" per se.

The ground station interrogator antenna physically
rides on top of the search radar dish. It has a VERY
narrow horizontal antenna pattern. The interrogation
signal is a repetitive PULSE pair...fairly high power,
usually better than a hundred Watts peak. An aircraft
transponder receives all signals on that frequency and
uses one of several types of "coincidence detectors"
to separate received pulse pairs from single pulse
signals or "fruit" (avionics term, not mine). At a
fixed time delay, the transponder sends out its own
PULSE pair...plus a PULSE ID code (in octal number
arrangement of two 0-7 numbers or four 0-7 numbers).
The ground station receiver processor strips out the
valid aircraft responses and ID from "fruit" and
sends that to the search radar display unit.

Bandwidth is roughly 30 MHz for those two carrier
frequencies so radar receiver techniques apply.

>Does anyone have practical experience building a receiver for
>frequencies in this range? And what are some good suppliers for
>components at these frequencies?

I do. It's the bottom end of L-Band (1 to 2 GHz) and
in a "nasty" transition range of lumped tuned circuits
into distributed tuned circuits. Cellular and cordless
phones ("old" style in the pulse range, not the newer
2.4 GHz cordless variety) fall into that range.

Ain't NO "good suppliers for components" of front ends
since all of those are designed at the factory or sub-
contracted. Front end tuning is probably simplest using
capacitively-loaded coaxial cavities, whether solid-state
or vacuum-state active devices are used. Stripline can
be used there although those get relatively large at
1 GHz. NOS pencil triodes can be used to achieve high

enough peak RF pulses but I've no experience in AM for
those. Radiosondes/rawinsondes used pencil triodes
crimped into sheet metal cavities at 1.6 GHz. A small
boat radar (short range) used to be sold by a company
called Bonzer three decades ago, used those pencil
triodes with an array of helix antennas in what looks
like a large "TV" style pancake radome. I've seen
lots of similar ones around the marinas here.

IF strips are just radar-style, can be 30 to 60 MHz
center, a relative piece of cake to build, plenty of
textbook data on such from the last 6 decades.

>I am looking for some example circuit diagrams and pcb layouts or
>something like that.

Uh-uh. Good luck when the federal marshalls show up
at your door along with an FCC field engineer, maybe
a pissed FAA official.

INTERFERING, however slight, with an ATC radar
interrogator system, is NOT A GOOD THING. DO NOT
DO THAT!

You just want some "examples?" Buy an aircraft
transponder. Reverse engineer it. Maybe $2K for a
used unit? DO NOT USE IT FOR "COMMUNICATIONS."

If you want to do "piracy" on UHF, there's plenty of
RF space in unused TV channels. FCC has the listings
of old and new (DTV) channel occupancy by city. FCC
also regulates all U.S. civil radio and they do NOT
take kindly to anyone interfering with FAA ATC ops
and those very reserved bandspaces.

LenAnderson@ieee.org

1581. Re: 1030 MHZ and 1090 MHZ Filter Design

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-16 20:56:15 UTC
From: LenAnderson@ieee.org
Message-ID: <1111006575.112032.300390@z14g2000cwz.googlegroups.com>
Source record: 19764

>I have no experience working with frequencies in the gigahertz range,
>but I am working on a project that broadcasts AM signals on 1030 MHZ
>and 1090 MHZ. It is the frequencies that airplane transponders
>communicate with ground stations on.

Slight correction: The 1030/1090 MHz frequencies are
an aid to FAA local search radar to help discriminate
targets and to IDENTIFY targets shown on their radar
display screens. That isn't "communication" per se.

The ground station interrogator antenna physically
rides on top of the search radar dish. It has a VERY
narrow horizontal antenna pattern. The interrogation
signal is a repetitive PULSE pair...fairly high power,
usually better than a hundred Watts peak. An aircraft
transponder receives all signals on that frequency and
uses one of several types of "coincidence detectors"
to separate received pulse pairs from single pulse
signals or "fruit" (avionics term, not mine). At a
fixed time delay, the transponder sends out its own
PULSE pair...plus a PULSE ID code (in octal number
arrangement of two 0-7 numbers or four 0-7 numbers).
The ground station receiver processor strips out the
valid aircraft responses and ID from "fruit" and
sends that to the search radar display unit.

Bandwidth is roughly 30 MHz for those two carrier
frequencies so radar receiver techniques apply.

>Does anyone have practical experience building a receiver for
>frequencies in this range? And what are some good suppliers for
>components at these frequencies?

I do. It's the bottom end of L-Band (1 to 2 GHz) and
in a "nasty" transition range of lumped tuned circuits
into distributed tuned circuits. Cellular and cordless
phones ("old" style in the pulse range, not the newer
2.4 GHz cordless variety) fall into that range.

Ain't NO "good suppliers for components" of front ends
since all of those are designed at the factory or sub-
contracted. Front end tuning is probably simplest using
capacitively-loaded coaxial cavities, whether solid-state
or vacuum-state active devices are used. Stripline can
be used there although those get relatively large at
1 GHz. NOS pencil triodes can be used to achieve high

enough peak RF pulses but I've no experience in AM for
those. Radiosondes/rawinsondes used pencil triodes
crimped into sheet metal cavities at 1.6 GHz. A small
boat radar (short range) used to be sold by a company
called Bonzer three decades ago, used those pencil
triodes with an array of helix antennas in what looks
like a large "TV" style pancake radome. I've seen
lots of similar ones around the marinas here.

IF strips are just radar-style, can be 30 to 60 MHz
center, a relative piece of cake to build, plenty of
textbook data on such from the last 6 decades.

>I am looking for some example circuit diagrams and pcb layouts or
>something like that.

Uh-uh. Good luck when the federal marshalls show up
at your door along with an FCC field engineer, maybe
a pissed FAA official.

INTERFERING, however slight, with an ATC radar
interrogator system, is NOT A GOOD THING. DO NOT
DO THAT!

You just want some "examples?" Buy an aircraft
transponder. Reverse engineer it. Maybe $2K for a
used unit? DO NOT USE IT FOR "COMMUNICATIONS."

If you want to do "piracy" on UHF, there's plenty of
RF space in unused TV channels. FCC has the listings
of old and new (DTV) channel occupancy by city. FCC
also regulates all U.S. civil radio and they do NOT
take kindly to anyone interfering with FAA ATC ops
and those very reserved bandspaces.

LenAnderson@ieee.org

1582. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-16 20:58:44 UTC
From: LenAnderson@ieee.org
Message-ID: <1111006724.403514.22880@o13g2000cwo.googlegroups.com>
Source record: 19765

From: "Netgeek" on Tues, Mar 15 2005 12:49 pm

>"Paul Keinanen" <keinanen@sci.fi> wrote in message
>
>> One idea would be to use a fixed downconverter e.g. with a 98 MHz
>> crystal frequency, mixing the VOR band down to 10-20 MHz, filter out
>> the strong mixing products from the FM broadcast band that is on
>> frequencies below 10 MHz and use a DDS with I/Q outputs to get I/Q
>> demodulation of the signal.
>
>Thank you Paul - I'd like to look into this. Can you point me to some
>practical examples or reference materials to start with? Quite some
>time ago I ran across the articles from the flex-radio.com guys and
>was very interested in their approach. It's my understanding (and I
>mean a fairly fuzzy understanding) that direct conversion has many
>benefits but is limited to lower bands (unless you're the military
with
>a big budget)??? What are the trade-offs in doing a downconversion
>followed by DDS-based conversion?

Direct conversion (DC) won't be effective on this
application for reasons of the civil aviation band
being AM with no pilot carrier or other reference.
Look into the allowed carrier tolerances and you will
see that, unless you can definitely LOCK onto the
incoming carrier, there will be a great change in the
modulation information, both in frequency and phase.

That is particularly true with VOR. The ground
station antenna pattern is (now) electronically
rotated at 30 Hz and the reference phase
(representing magnetic north) is FM on the 9 KHz
subcarrier. Without a proper phase relationship,
the bearing signal will be very inaccurate.

The VOR system was designed/innovated/invented over
a half century ago and was elegant in simplicity
for simple circuitry in vacuum-state hardware. The
first lightweight VOR receivers in light aircraft
used a (very old technology) small goniometer as
part of the OBS or Omni-Bearing Selector and their
accuracies were dependent on how well the goniometer
was designed and manufactured. [a goniometer is a
coaxial spherical toroid pair, best illustrated in
"Lowfer" or low frequency - below AM BC band -

small handbooks and some websites] More modern versions use an electronic equivalent of phase shifting at 30 Hz as part of the OBS subsystem.

A VOR antenna pattern rotation results in about 30% AM at a 30 Hz rate. The magnetic north phase reference is 30 Hz FM on the 9960 KHz subcarrier. The FM demodulation will have a limiter stage ahead of it to effectively wash-out the 30% AM of the ground station antenna pattern rotation. In between the 30 Hz of the ground antenna pattern rotation and about 8 KHz or so of the lower limit of the 30 Hz FM on subcarrier phase reference is "empty space" that was reserved for optional AM from a local Flight Service Station (FSS) or tower transmission. In short, the elegance of the concept was ideally suited to vacuum tube circuitry, that being an almost ultimate simplicity at the time...and very light weight necessary for aircraft.

The "big bucks" of military electronics doesn't go wild over fancy schmancy arrangements of the very "in" modern complications. Those "big bucks" are spent in making the hardware work over the totally gargantuan range of temperatures and physical shock and vibration that would tear apart consumer electronics style structures. The civil avionics market is not, nor has it ever been, large compared to consumer electronics products, hence their costs appear high.

There IS room for experimentation in ways to demodulate the VOR information, don't get me wrong. What you must do is to FIRST concentrate on the characteristics of how the bearing information is conveyed...along with all the problems introduced by multi-path distortion from ground objects around you. Those problems aren't there in the aircraft flying a few thousand feet above all those reflecting objects. [an exception is a VOR in a helicopter and its own rotors...but that is another story in itself]

Just because the FM BC band upper end is at 108 MHz doesn't automatically mean there WILL be RFI to the receiver. That's a matter of checking a local area to find where all those fixed FM BC carriers are and how strong they are. Aircraft VOR receivers have been overflying all sorts of FM BC stations for a half century all over the world and there aren't any stories (except invented horror tales) of terrible interference from FM. Simpler civilian receivers,

not the "big bucks" of military aircraft.

Just offhand, I'd say a simple, even tube-based, bearing information receiver can be hacked together to get +/-5 degrees accuracy using the simplest circuitry with minimum test equipment to check it out. Anything better is just finesse, bottoming out at the basic accuracy of whatever VOR ground station is used. That would be +/-1 degree but worse from any ground reception multi-path effects.

VOR (Very high frequency Omnidirectional radio Range) was designed only for aircraft obtaining bearing information to a fixed ground station. That's a limited application although extremely important to pilots. A half century ago it was a quantum leap above older raw-DF-style radionavigation. GPS it ain't, nor never was...

LenAnderson@ieee.org

1583. Re: 1030 MHZ and 1090 MHZ Filter Design

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-16 21:45:55 UTC
From: Mr Cheese <nothere@nossspam.com>
Message-ID: <39rodoF63forhU1@individual.net>
Source record: 19766

"Stu" <stult1@aol.com> wrote in message
news:1110941276.420866.79300@o13g2000cwo.googlegroups.com...
> Hello!
>
> I have no experience working with frequencies in the gigahertz range,
> but I am working on a project that broadcasts AM signals on 1030 MHZ
> and 1090 MHZ. It is the frequencies that airplane transponders
> communicate with ground stations on.
>
> Does anyone have practical experience building a receiver for
> frequencies in this range? And what are some good suppliers for
> components at these frequencies?
>
> I am looking for some example circuit diagrams and pcb layouts or
> something like that.
>
> Thanks for any help.

They are called transponders.

You can use a generic satellite receiver to pick it up, they tune from about
950 MHz to 1450 MHz, on the cable from the LNA
The old c-band satellite dish stuff, just take off the LNA and put a good
antenna on the end of the cable, you can make one out of a 1 gallon paint
can. You can buy a low end new satellite receiver for $200, or get a used
off ebay.

The band is easy to design in, for receivers.

1584. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-16 22:11:19 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <113hbobf752k919@corp.supernews.com>
Source record: 19767

I'd probably jack the IF up to 45 MHz. (use TV parts; this is the TV IF frequency) or 70 MHz. (satellite IF frequency), and then downconvert to either 21.4 or 10.7...there are cheap crystal filters at both frequencies.

Jim

> In the meantime, any other suggested improvements or hints are
> most appreciated (e.g. "up the IF from 10.7"?)...!

1585. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-16 22:15:52 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <HsWdnV9-VqWyLaXfRVn-tA@comcast.com>
Source record: 19768

<LenAnderson@ieee.org> wrote in message

> Direct conversion (DC) won't be effective on this
> application for reasons of the civil aviation band
> being AM with no pilot carrier or other reference.

< SNIP - [lots of good information]

> VOR (Very high frequency Omnidirectional radio Range)
> was designed only for aircraft obtaining bearing
> information to a fixed ground station. That's a
> limited application although extremely important to
> pilots. A half century ago it was a quantum leap
> above older raw-DF-style radionavigation. GPS it
> ain't, nor never was...
>
> LenAnderson@ieee.org

Well, that was certainly a very informative and well thought
out response! But GEEZ, Len, you're starting to take all the
fun out of this by insisting on injecting reality!!!....8-)

Here I was - with soldering iron warmed up and pile of odd
looking components (SA-614, MC1350, NE567, inductors,
IF transformers and all kinds of other "stuff" that's unfamiliar)
and now my hopes are dashed.....

I even checked Mouser, Digikey et. al. - and they're fresh out
of goniometers - so there goes *that* approach...8-(

But seriously - let's look at the potential utility of a fairly "mindless"
NAV receiver as it might apply to the non-instrumented-rated,
day-VFR "Sport" or "Recreational" pilot. First off, these guys
believe that GPS coupled to a simple moving map display represents
not only the holy grail - but they'd be willing (foolishly) to bet their
lives on this sole-source nav capability (never mind simple "dead
reckoning" or other elementary - e.g. "follow roads" forms of
navigation). If the batteries run out on the GPS - or the guys at
Cheyenne Mountain pull the big red lever marked "scramble GPS"
for whatever reason - they're in big trouble. Standard VOR-based
equipment would give them a way out - but they don't have it ('cause
it costs too much) and they wouldn't know how to effectively use it
anyway ('cause they aren't instrument rated). Some form of relatively
simple (albeit far from accurate) NAV capability would at least give
them a last chance to drag out the sectional and try to determine roughly
where they are - hopefully close enough to find a place to put down.

My ridiculous little experimental project is to try and come up with a "poor man's" (and perhaps "stupid man's 8-) nav capability based on VORs which is inexpensive and SIMPLE. There's no OBS nor any other "normal" features (e.g. ability to drive a CDI) - but it kicks out enough info relative to a few nearby VORs so that you can at least determine what planet you're on 8-).... and provide a few hints as to *where* you are on that planet...

GPS replacement? Absolutely not. TSO'd NAV receiver replacement? Nope - not that either. Inexpensive (enough so that you might actually install one) and simple (enough so that you could derive some useful info with little training) - that would be the goal.

In the meantime, it's really a personal educational and entertainment toy to play with, and nothing more ("amateur", "homebrew", etc. - so it's relevent here, right?).....8-)

I appreciate your thoughts and comments, Len! You obviously have a wealth of experience to draw upon and I thank you for sharing it. Despite more than 25 years in product development, most of this is new territory for me (and I'm enjoying the learning experience!). I've never done an RF design - well - at least not "deliberately"!!!

Regards,
Bill

1586. NEEDED: 3pf 3KV ceramic cap for Kenwood TS-830S

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-16 23:08:01 UTC
From: Photoman <photomanxaa@hotmail.com>
Message-ID: <4tKdnVE9mJvPIaXfRVn-1Q@adelphia.com>
Source record: 19769

A friend of mine is in need of a 3pf, 3kv cap for the feedback circuit in his Kenwood TS-830S. Lots of suppliers list it, like Mouser, but no one has it in stock. Does anyone have one you give or sell to me??????

Thanks,
Ken
Reply to ken*@area-net.com

remove the * to reply.

--
Have your doctor check your blood sugar at least once a year.

1587. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-16 23:10:26 UTC
From: jimp@specsol-spam-sux.com
Message-ID: <d1aed2$95s$1@mail.specsol.com>
Source record: 19770

Netgeek <no_spam@comcast.net> wrote:

<snip>

> But seriously - let's look at the potential utility of a fairly "mindless"
> NAV receiver as it might apply to the non-instrumented-rated,
> day-VFR "Sport" or "Recreational" pilot. First off, these guys
> believe that GPS coupled to a simple moving map display represents
> not only the holy grail - but they'd be willing (foolishly) to bet their
> lives on this sole-source nav capability (never mind simple "dead
> reckoning" or other elementary - e.g. "follow roads" forms of
> navigation). If the batteries run out on the GPS - or the guys at
> Cheyenne Mountain pull the big red lever marked "scramble GPS"
> for whatever reason - they're in big trouble.

If that happened, and that's a pretty big if given the US government
is forcing GPS as the defacto navigation standard for just about
everything, the accuracy would be reduced to such that it would be
impossible to make a precision approach.

The remaining accuracy would be more than enough to find an airport,
especially since Sport and Recreational are limited to day VFR.

Standard VOR-based
> equipment would give them a way out - but they don't have it ('cause
> it costs too much) and they wouldn't know how to effectively use it
> anyway ('cause they aren't instrument rated). Some form of relatively
> simple (albeit far from accurate) NAV capability would at least give
> them a last chance to drag out the sectional and try to determine roughly
> where they are - hopefully close enough to find a place to put down.

Sporty's sells the SP-200 NAV/COM handheld for $299.00 with a $14.95
rebate if you use your AOPA credit card. It has VOR and LOC with a
digital CDI display and 2,280 channel COM. You still would have to
know what 235 FROM means.

IMHO anyone not flying a big turbine with multiple redundent everything
that doesn't have a handheld just in case is foolish.

> My ridiculous little experimental project is to try and come up with a
> "poor man's" (and perhaps "stupid man's 8-) nav capability based on
> VORs which is inexpensive and SIMPLE. There's no OBS nor any
> other "normal" features (e.g. ability to drive a CDI) - but it kicks out
> enough info relative to a few nearby VORs so that you can at least
> determine what planet you're on 8-).... and provide a few hints as to
> *where* you are on that planet...

> GPS replacement? Absolutely not. TSO'd NAV receiver replacement?
> Nope - not that either. Inexpensive (enough so that you might actually
> install one) and simple (enough so that you could derive some useful info
> with little training) - that would be the goal.

> In the meantime, it's really a personal educational and entertainment
> toy to play with, and nothing more ("amateur", "homebrew", etc. - so
> it's relevent here, right?).....8-)

> I appreciate your thoughts and comments, Len! You obviously have a
> wealth of experience to draw upon and I thank you for sharing it. Despite
> more than 25 years in product development, most of this is new territory
> for me (and I'm enjoying the learning experience!). I've never done an
> RF design - well - at least not "deliberately"!!!

> Regards,
> Bill

Decoding the bearing can be done with a PLL running as a 360X frequency
multiplier on one 30 Hz signal and using the other to gate a counter
which is feed the multiplied signal.

I built such a beast in '75 as a senior project with a NIXIE tube
display. Available compenents have improved a lot since '75.

If I were to do something like this today, I think I would look for
someone's receiver module and use a microcontroller to control the
receiver and do most (maybe all with DSP) the decoding, feeding it all
to a PDA with a database of VOR frequencies and locations and use the PDA
to generate a map display.

It would be a fun project.

--
Jim Pennino

Remove -spam-sux to reply.

1588. Diplexer with transition frequency between 108 and 144 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-17 00:48:36 UTC
From: wb0gaz <wb0gaz@hotmail.com>
Message-ID: <1111020516.036467.279660@o13g2000cwo.googlegroups.com>
Source record: 19771
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I am going to use the same car antenna for AM/FM and 2M. This means I need a diplexer that transitions somewhere between 108 and 144 MHz. I haven't seen something like this offered commercially. Has anyone seen a product like this, or failing that, a design I could duplicate? The antenna will be a 1/4 wave on 2M, and would also be used as a (not quite ideal) AM/FM antenna.

73 Dave WB0GAZ wb0gaz@hotmail.com

1589. Re: NEEDED: 3pf 3KV ceramic cap for Kenwood TS-830S

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-17 02:00:49 UTC
From: Larry Gagnon <lagagnon@fakeuniserve.com>
Message-ID: <pan.2005.03.17.02.00.49.352189@fakeuniserve.com>
Source record: 19772

On Wed, 16 Mar 2005 18:08:01 -0500, Photoman wrote:

> A friend of mine is in need of a 3pf, 3kv cap for the feedback circuit in
> his Kenwood TS-830S. Lots of suppliers list it, like Mouser, but no one has
> it in stock. Does anyone have one you give or sell to me??????

Sorry no, but did you try www.rfparts.com ?

Larry VE7EA

1590. Drawing Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-17 02:46:27 UTC
From: Peter Barbella <nonobar@verizon.net>
Message-ID: <7c6_d.6326$qN3.1416@trndny01>
Source record: 19773

Anyone care to weigh in on the "best" program for drawing scematics?

Pete
KB1LZH

1591. Re: Drawing Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-17 02:57:40 UTC
From: ww <w@w.com>
Message-ID: <d1arn4$9gv$1@enyo.uwa.edu.au>
Source record: 19774

Peter Barbella <nonobar@verizon.net> wrote:
> Anyone care to weigh in on the "best" program for drawing scematics?
>
> Pete
> KB1LZH
>
>

Unless I require simulation of some sort, nothing is faster than drawing by hand. When talking to clients, it much faster for me to do a quick back-of-envelope sketch than it is to fire up my comp. My drafting skills are of quite a high standard and there will be times where I won't enter the design into my computer at all.

For final designs(paid ones) I usually use Protel. Its expensive but its widely accepted and its a complete package, and I pass the costs onto my customers anyway.

--

Wing Wong.

1592. Help Re Replacing my 811A's in my Amertron Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-17 03:43:05 UTC
From: DLD <cindyd1@ptd.net>
Message-ID: <P-OdnUDaA6JaYaXfUSdV9g@ptd.net>
Source record: 19775
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Hi All,

I am planning to replace the four 811A's in my AL-811H amp. Is there anything special I need to do to accomplish this?? I have read about "burn in" but is there anything else?

Thanks in advance,

Doug W3IIY

1593. Re: Drawing Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-17 04:22:52 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <4239061C.EA21F554@rica.net>
Source record: 19776

Peter Barbella wrote:
>
> Anyone care to weigh in on the "best" program for drawing scematics?

For just recording circuits for later reference, I really like DraftChoice for Windows (shareware). It is a general purpose drawing program, but is very intuitive and fast to get something down. It allows you to build libraries of symbols and I have a blank schematic drawing all set up with the library included. Then, after you get things connected up, you can select rectangular areas and stretch all the lines passing through that boundary (but the symbols do not stretch) allowing you to straighten the drawing up or make room for changes. Its files are very compact. It also supports many layers and colors and you can turn each layer on or off or protect it from changes as needed. I often put a parts list or theory of operation or other notes on a hidden layer.

Some of its weaknesses are that it does not export to many graphic formats (I usually just hit the print screen key and past to some other graphic program to email a gif) and the symbols do not have text fields, so you have to put the values on as a separate operation.

--
John Popelish

1594. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-17 07:53:46 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <odci31h5tgfjip4um76j2haa7jbff7rm86@4ax.com>
Source record: 19777

On 16 Mar 2005 12:58:44 -0800, LenAnderson@ieee.org wrote:

> Direct conversion (DC) won't be effective on this
> application for reasons of the civil aviation band
> being AM with no pilot carrier or other reference.

If you are running an I/Q DDS feeding I and Q demodulators (mixers) and low-pass filter the quadrature demodulator, producing a DC voltage proportional to the phase error. This could be used through an ADC to control the phase modulator input (or the phase accumulator addend) of the DDS to track the signal. However, DDS chips with only serial input might be too slow to track the signal. The I demodulator output would provide the amplitude modulated information.

Paul OH3LWR

1595. Re: Drawing Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-17 08:40:17 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <42394270$0$2761$cc9e4d1f@news-text.dial.pipex.com>
Source record: 19778

"Peter Barbella" <nonobar@verizon.net> wrote in message
news:7c6_d.6326$qN3.1416@trndny01...
> Anyone care to weigh in on the "best" program for drawing scematics?

I use the schematic capture that comes with the Pulsonix PCB design
software. It is very slick and I can go on to make a PCB from it, of course.

73, Leon

1596. Re: Diplexer with transition frequency between 108 and 144 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-17 09:14:40 UTC
From: nana <nana@netscape.net>
Message-ID: <39t044F65a5rcU1@individual.net>
Source record: 19779
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I think it was made by Antenna Specialist years ago for covert antennas.

Brad.

"wb0gaz" <wb0gaz@hotmail.com> wrote in message
news:1111020516.036467.279660@o13g2000cwo.googlegroups.com...
>I am going to use the same car antenna for AM/FM and 2M. This means I
> need a diplexer that transitions somewhere between 108 and 144 MHz. I
> haven't seen something like this offered commercially. Has anyone seen
> a product like this, or failing that, a design I could duplicate? The
> antenna will be a 1/4 wave on 2M, and would also be used as a (not
> quite ideal) AM/FM antenna.
>
> 73 Dave WB0GAZ wb0gaz@hotmail.com
>

1597. Re: Diplexer with transition frequency between 108 and 144 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-17 11:30:39 UTC
From: nitespark <nitespark@cox.net>
Message-ID: <dTd_d.64710$7z6.59735@lakeread04>
Source record: 19780
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

wb0gaz wrote:
> I am going to use the same car antenna for AM/FM and 2M. This means I
> need a diplexer that transitions somewhere between 108 and 144 MHz. I
> haven't seen something like this offered commercially. Has anyone seen
> a product like this, or failing that, a design I could duplicate? The
> antenna will be a 1/4 wave on 2M, and would also be used as a (not
> quite ideal) AM/FM antenna.
>
> 73 Dave WB0GAZ wb0gaz@hotmail.com
>

Antenna Specialist makes/made them. I may have a few laying around.
A/S also made one for VHF low, which I do use for my 6m mobile.

Andy
WD4KDN

--
I have never met a liberal street cop.

1598. Re: NEEDED: 3pf 3KV ceramic cap for Kenwood TS-830S

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-17 11:42:03 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <f2e_d.144741$4q6.69186@attbi_s01>
Source record: 19781

Try www.surplussales.com

Bill W0IYH

"Photoman" <photomanxaa@hotmail.com> wrote in message
news:4tKdnVE9mJvPIaXfRVn-1Q@adelphia.com...
>A friend of mine is in need of a 3pf, 3kv cap for the feedback circuit in
>his Kenwood TS-830S. Lots of suppliers list it, like Mouser, but no one has
>it in stock. Does anyone have one you give or sell to me??????
>
> Thanks,
> Ken
> Reply to ken*@area-net.com
>
> remove the * to reply.
>
>
>
>
> --
> Have your doctor check your blood sugar at least once a year.
>

1599. Re: Help Re Replacing my 811A's in my Amertron Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-17 13:21:56 UTC
From: COLIN LAMB <k7fm@teleport.com>
Message-ID: <Uvf_d.10983$oO4.7598@newsread3.news.pas.earthlink.net>
Source record: 19782
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

"I am planning to replace the four 811A's in my AL-811H amp. Is there anything special I need to do to accomplish this?? I have read about "burn in" but is there anything else?

Remove power. Make sure voltage is zero. Remove plate caps on old tubes. Remove tubes. Put in new tubes. Replace plate caps. Close cover before striking. Turn power on. Light up cigar.

Colin K7FM

1600. using icom internal power supply as an external ps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-17 13:35:08 UTC
From: Bob G0KYF <bobstevensonREMOVETHIS@hotmail.com>
Message-ID: <4239878b$0$10938$cc9e4d1f@news-text.dial.pipex.com>
Source record: 19783

Hi,
I have been given an ic745 internal power supply.
I was wondering if i can use it as a stand alone external one.
it has the standard 6 way power connector with 2x positive and 2x negative outputs.
but it also has 2 other wires to the plug. (i presume these are a switch on sensor?)
If i apply mains to the unit there is no output so I will need some way of imitating the power on switch on the rig it is from.
Any help gratefully accepted. Bob.

1601. Re: IS THERE ANYBODY OUT THERE

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-17 14:01:02 UTC
From: Current User <not@thistime.org>
Message-ID: <L_mdncUHkvEDEKTfRVn-tA@giganews.com>
Source record: 19784
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.ssb,alt.radio.amateur,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"core_dump" <corenodumpspam0@mernocuryspamlink.net> wrote in
news:Xns9403CBB79A0DFcoredumpmercurylinkn@216.168.3.44:

> "K4-OLD-KING-ALLIGATOR" <BIG-AL@ -003894.5-LSB-75-METERS@@@BIG-AL@@@-
> 003894.5-LSB-75-METERS> wrote in news:vn84vkh742nn2b@corp.supernews.com:
>
>>
>>
>>
>
> just not if you can hear me...
>

Lid,,,,just nod if you can hear me.

1602. Re: Help Re Replacing my 811A's in my Amertron Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-17 14:13:20 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1111068800.113281.8810@g14g2000cwa.googlegroups.com>
Source record: 19785
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Some amps have neutralization caps that may have to be adjusted when you change tubes. I think the AL-811H uses a neutralization transformer and there is no neutralization adjustment, but look in the manual to be sure.

1603. Battery charger cable for Yaesu VX-2

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-17 15:27:37 UTC
From: Phil <pjock@xSpearNet.net>
Message-ID: <Xns961C6A691EB94pjockxxxSpearNetnet@216.196.97.142>
Source record: 19786

I have tried to find out if the optional 12 volt mobile charger
cable for the VX-2 contains circuitry or if it just supplies
voltage to charging circuitry in the radio. Does anyone know
or have a schematic?

While we're at it, howa bout the included 110 vac charger?

I would like to take it apart, but haven't the heart (yet...)

Thanks for any info,

phil

1604. Re: Battery charger cable for Yaesu VX-2

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-17 15:36:17 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <Tth_d.14797$Fy.6779@okepread04>
Source record: 19787

"Phil" <pjock@xSpearNet.net> wrote in message
news:Xns961C6A691EB94pjockxxxSpearNetnet@216.196.97.142...
>I have tried to find out if the optional 12 volt mobile charger
> cable for the VX-2 contains circuitry or if it just supplies
> voltage to charging circuitry in the radio. Does anyone know
> or have a schematic?
>
> While we're at it, howa bout the included 110 vac charger?
>
> I would like to take it apart, but haven't the heart (yet...)
>
> Thanks for any info,
>
> phil

Phil - I'm only about 98% sure but I think all the charging
circuits are in the radio and battery. I converted my VX-2R's
power cable by installing RCA connectors half way between
the wall wart and plug. I then bought a 4xAA dry cell case
and put an RCA connector on it. Now I can run 3w and
recharge the Li-Ion pack, all from a set of energizers.

BTW you might want to join our group - almost 1,200 users
all with VX-2's....

http://groups.yahoo.com/group/VX-2R

--
73's es gd dx de Ken KG WX
Grid EM17ip, Flying Pigs #1055,
List Owner, Yahoo! E-groups:
VX-2R & FT-857

1605. Low Power AM Broadcasting

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-17 16:20:54 UTC
From: WCRV@webtv.net
Message-ID: <10700-4239AE66-153@storefull-3317.bay.webtv.net>
Source record: 19790

The Low-Power AM station hobby has become more popular over the past 2 years.
In the U.S, it is legal to broadcast over the AM band 540kHz-1700kHz using a 3
meter antenna and a 100mW transmitter.
Until recently, building a small AM radio station was very complicated and very expensive, until now.
Using a SSTRAN AMT-3000 transmitter, which comes as a kit for under $100.00US, or a built version which comes assembled and tested for under $200.00 US, and a 3 meter, coil loaded and tunable antenna for around $225.00 US, anyone can get on the air right now!
I get questions about range: the system I am describing has had reports from 1/2 mile to over 4 miles! Range totally depends on these factors: location, scope of the land, conductivity, choice of frequency/adjacencies, and use of this antenna.
If the transmitter and antenna are installed correctly in a proper area, several miles are possible. Many people are interested in a good, solid local signal and this system does it for a fraction of the amount of money you will spend for a comparable system.
If you are interested in low power AM Broadcasting, I invite you to visit this site:
http://antenna18431.tripod.com/antenna.htm
In this site you will find information on the 3 meter antenna, pictures of it, information and pictures of the transmitter and a link to email questions, comments and inquiries to.
If you would like to be on the air, this is an excellent choice to do it well, and at a very affordable price!

1606. Re: Help Re Replacing my 811A's in my Amertron Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-17 16:23:15 UTC
From: Cmd Buzz Corey <me@that.moc>
Message-ID: <wOadndFMrMQPLaTfRVn-qQ@gbronline.com>
Source record: 19789
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

COLIN LAMB wrote:

> "I am planning to replace the four 811A's in my AL-811H amp. Is there
> anything special I need to do to accomplish this?? I have read about "burn
> in" but is there anything else?
>

There is no reasone to "burn in" tubes.

1607. Re: Battery charger cable for Yaesu VX-2

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-17 16:26:19 UTC
From: Phil <pjock@xSpearNet.net>
Message-ID: <Xns961C745D6F90CpjockxxxSpearNetnet@216.196.97.142>
Source record: 19788

Ken,

Thanks for some very good info. I was hoping that was the case.
This opens up the possiblity of making a 12 volt mobile charger
and using the solar panel for free re-charges too.

I'll pass on the Yahoo groups. Newsgroups are wide open and
full of great folks like yourself with lots of good info.

73,

phil

"Ken Bessler" wrote in news:

> Phil - I'm only about 98% sure but I think all the charging
> circuits are in the radio and battery. I converted my VX-2R's
> power cable by installing RCA connectors half way between
> the wall wart and plug. I then bought a 4xAA dry cell case
> and put an RCA connector on it. Now I can run 3w and
> recharge the Li-Ion pack, all from a set of energizers.
>
> BTW you might want to join our group - almost 1,200 users
> all with VX-2's....
>
> http://groups.yahoo.com/group/VX-2R

1608. Re: Help Re Replacing my 811A's in my Amertron Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-17 17:21:38 UTC
From: chris+news@suslowicz.org
Message-ID: <BE5F6D22966819F198@192.168.1.23>
Source record: 19791
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

In article <wOadndFMrMQPLaTfRVn-qQ@gbronline.com>,
Cmd Buzz Corey <me@that.moc> wrote:

>COLIN LAMB wrote:
>
>> "I am planning to replace the four 811A's in my AL-811H amp. Is there
>> anything special I need to do to accomplish this?? I have read about "burn
>> in" but is there anything else?
>>
>
>There is no reasone to "burn in" tubes.

Apart from mercury-vapour rectifiers and thyratrons, of course.

Chris.

--
All software sucks. Everybody is considered a jerk by somebody. The sun
rises, the sun sets, the Sun crashes, lusers are LARTed, BOFHs get drunk.
It is the way of things. -- sconley@summit.bor.ohio.gov (Steve Conley)

1609. :: :: :: :: *post 1013* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

1610. Re: using icom internal power supply as an external ps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-17 20:55:06 UTC
From: Steve <nospam@bit.bucket>
Message-ID: <d1cr41$r7g$1@grandcanyon.binc.net>
Source record: 19793

Bob,

If you hunt about the Internet, you may even be able to find a pdf service manual for this rig.

I agree you can probably use it for a general power supply. There's a caveat of two, however. 50% duty cycle, so says the service manual. Also, there may be an issue of minimum loading for any switching power supply; you may want to add say a resistor or 12 V light bulb for say a 1 Amp load, though there's nothing in the manual that mentions min load. A quick look of the rig specs didn't reveal a current draw of the IC745 on receive.

Bob G0KYF wrote:

> Hi,
> I have been given an ic745 internal power supply.
> I was wondering if i can use it as a stand alone external one.

According to the hard copy service manual I have for my IC745,

Input Voltage: 110/220 AC 50/60 Hz +/- 10%
Input Capacity: 550VA @ 20A
Max Load 20A: 10 mins ON/10 mins off

Fuse 10 A, 110 and 5 A for 220.

> it has the standard 6 way power connector with 2x positive and 2x negative
> outputs.
> but it also has 2 other wires to the plug. (i presume these are a switch on
> sensor?)

Yes, the schematic shows this going to a simple switch. Short pins 3 & 6 to turn on.

Pin out
1 4 13.8 Volts
2 5 GND
3 6 "AC 1 & AC 2"

> If i apply mains to the unit there is no output so I will need some way of
> imitating the power on switch on the rig it is from.
> Any help gratefully accepted. Bob.

The manual also mentions automatic 25 A current limit, turn off to reset.

Good Luck, Steve

1611. FS 28v Lambda power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-17 21:20:01 UTC
From: Robert Mozeleski <moz@ncx.com>
Message-ID: <GNKdncZAZZM7nKffRVn-sw@nni.com>
Source record: 19794
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

FS 28v Lambda power supplies. Brand new, bought at government auction. Lambda model LGS-EE-28D-OV-R-7121-2. Power out is 28V, 19.5
A, input is 48V. Maybe you got a use for these? $15 each plus ship.

1612. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 00:22:29 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <wKOdnd6MJJv_gqffRVn-1w@comcast.com>
Source record: 19795

Parts are on the way...

First IF = 45 MHz
Second IF = 10.7 MHz

Any point in going further to 455 KHz for a third IF or just stick
with the 10.7 -> (MC1350 plus IF transformer) scheme?

Bill

"RST Engineering" <jim@rstengineering.com> wrote in message
news:113hbobf752k919@corp.supernews.com...
> I'd probably jack the IF up to 45 MHz. (use TV parts; this is the TV IF
> frequency) or 70 MHz. (satellite IF frequency), and then downconvert to
> either 21.4 or 10.7...there are cheap crystal filters at both frequencies.
>
> Jim
>
>
> > In the meantime, any other suggested improvements or hints are
> > most appreciated (e.g. "up the IF from 10.7"?)...!
>
>

1613. Re: Help Re Replacing my 811A's in my Amertron Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 02:31:48 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <N2r_d.38677$5T6.283@bignews4.bellsouth.net>
Source record: 19796
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Chris Suslowicz wrote:
> In article <wOadndFMrMQPLaTfRVn-qQ@gbronline.com>,
> Cmd Buzz Corey <me@that.moc> wrote:
>
>
>>COLIN LAMB wrote:
>>
>>
>>>"I am planning to replace the four 811A's in my AL-811H amp. Is there
>>>anything special I need to do to accomplish this?? I have read about "burn
>>>in" but is there anything else?
>>>
>>
>>There is no reasone to "burn in" tubes.
>
>
> Apart from mercury-vapour rectifiers and thyratrons, of course.
>
> Chris.
>
In amps with multiple tubes in parallel it is a good idea to use
matched tubes if possible (you can get matched 811A's). Some amps
have bias adjustments for each tube so you can match idle current
on the tubes (don't think yours does though). IIRC the amertron
4 tube 811A amp DOES have a small neutralazition cap, the 3 tube
one does not. The manual should tell you how to adjust the
neutralization, however in most cases it only matters on 10 meters.

1614. Re: Thanks to all who responded

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 02:46:19 UTC
From: DLD <cindyd1@ptd.net>
Message-ID: <EtOcne9osrhq3affUSdV9g@ptd.net>
Source record: 19797
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Thanks to all of you who responded.

73, Doug W3IIY

Ken Scharf wrote:
> Chris Suslowicz wrote:
>
>> In article <wOadndFMrMQPLaTfRVn-qQ@gbronline.com>,
>> Cmd Buzz Corey <me@that.moc> wrote:
>>
>>
>>> COLIN LAMB wrote:
>>>
>>>
>>>> "I am planning to replace the four 811A's in my AL-811H amp. Is there
>>>> anything special I need to do to accomplish this?? I have read
>>>> about "burn
>>>> in" but is there anything else?
>>>>
>>>
>>> There is no reasone to "burn in" tubes.
>>
>>
>>
>> Apart from mercury-vapour rectifiers and thyratrons, of course.
>>
>> Chris.
>>
> In amps with multiple tubes in parallel it is a good idea to use
> matched tubes if possible (you can get matched 811A's). Some amps
> have bias adjustments for each tube so you can match idle current
> on the tubes (don't think yours does though). IIRC the amertron
> 4 tube 811A amp DOES have a small neutralazition cap, the 3 tube
> one does not. The manual should tell you how to adjust the
> neutralization, however in most cases it only matters on 10 meters.

1615. Re: Low Power AM Broadcasting

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 03:37:06 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <C1s_d.13485$cN6.1750@newsread1.news.pas.earthlink.net>
Source record: 19798

WCRV WCRV wrote:
> The Low-Power AM station hobby has become more popular over the past 2
> years.
> In the U.S, it is legal to broadcast over the AM band 540kHz-1700kHz
> using a 3
> meter antenna and a 100mW transmitter.
> Until recently, building a small AM radio station was very complicated
> and very expensive, until now.
> Using a SSTRAN AMT-3000 transmitter, which comes as a kit for under
> $100.00US, or a built version which comes assembled and tested for under
> $200.00 US, and a 3 meter, coil loaded and tunable antenna for around
> $225.00 US, anyone can get on the air right now!
> I get questions about range: the system I am describing has had reports
> from 1/2 mile to over 4 miles! Range totally depends on these factors:
> location, scope of the land, conductivity, choice of
> frequency/adjacencies, and use of this antenna.
> If the transmitter and antenna are installed correctly in a proper area,
> several miles are possible. Many people are interested in a good, solid
> local signal and this system does it for a fraction of the amount of
> money you will spend for a comparable system.
> If you are interested in low power AM Broadcasting, I invite you to
> visit this site:
> http://antenna18431.tripod.com/antenna.htm
> In this site you will find information on the 3 meter antenna, pictures
> of it, information and pictures of the transmitter and a link to email
> questions, comments and inquiries to.
> If you would like to be on the air, this is an excellent choice to do it
> well, and at a very affordable price!
>

The antenna mentioned is most likely illegal. If you have a 3 meter antenna, it must be connected to the transmitter without the benefit of a transmission line and ground lead. Don't take my word for it, ask the FCC. I did. Here is my question and their reply (note the 3 meters includes antenna, connecting lead (transmission line) and ground lead):

"Question:

Concerning the 3 meters maximum length for antenna, transmission, and ground, would a capacitance hat at the top of a vertical radiator be included in the 3 meter limit?

For clarification: Suppose I put a 3 meter vertical monopole on top of an existing structure which has a metal roof. The transmitter would be located at the base of the monopole, so it would require no transmission

line. Would I be allowed to install a 3 meter diameter (or more) top hat? The top hat would be shaped like a spoked wheel and would serve the purpose of increasing the current in the monopole through capacitive coupling to the metal roof ground.

Answer:

The intent of Section 15.219 is for a maximum 3 meter wire antenna.

The total length of the antenna plus ground lead plus connecting lead must not exceed 3 meters. The rule doesn't permit a 3 meter diameter "top hat" but should be applied to the combined length of each radial. If the combined length of each radial added to the length of the antenna vertical structure added to the length of the ground wire exceeds 3 meters, it would not be permitted."

John

1616. Re: NEEDED: 3pf 3KV ceramic cap for Kenwood TS-830S

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 04:03:12 UTC
From: Photoman <photomanxaa@hotmail.com>
Message-ID: <kOadndl-dsRhz6ffRVn-og@adelphia.com>
Source record: 19799

Tried them and that no longer carry them.
Thanks & 73,
Ken

"Larry Gagnon" <lagagnon@fakeuniserve.com> wrote in message
news:pan.2005.03.17.02.00.49.352189@fakeuniserve.com...
> On Wed, 16 Mar 2005 18:08:01 -0500, Photoman wrote:
>
>> A friend of mine is in need of a 3pf, 3kv cap for the feedback circuit in
>> his Kenwood TS-830S. Lots of suppliers list it, like Mouser, but no one
>> has
>> it in stock. Does anyone have one you give or sell to me??????
>
> Sorry no, but did you try www.rfparts.com ?
>
> Larry VE7EA

1617. Re: NEEDED: 3pf 3KV ceramic cap for Kenwood TS-830S

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 04:39:27 UTC
From: Photoman <photomanxaa@hotmail.com>
Message-ID: <7bidnY0vNPHhxqffRVn-qA@adelphia.com>
Source record: 19800

Actually that is the first thing I suggested but the owner doesn't want to
go that route unless he absolutely has to. I have heavy Teflon coated wire
that would work (the actual wire size is #16 I believe). We may have to go
that route if no cap is found. I believe the plate voltage on the 6136 tubes
is about 850 - 900 volts DC so probably 2000 volts AC (RF).
Thanks for your input.
73,
Ken
"Jim" <wdxp@cox.net> wrote in message
news:kq4j319b5dbrqpqbngnf0bd7p1rm8jm8hv@4ax.com...
> You can make your own, used to be called a "gimmick".
> Twist two pieces of insulated wire together for about an inch,
> just make sure insulation will handle the voltage.
>
> Jim
>
>
>
>
> On Wed, 16 Mar 2005 18:08:01 -0500, "Photoman"
> <photomanxaa@hotmail.com> wrote:
>
>>A friend of mine is in need of a 3pf, 3kv cap for the feedback circuit in
>>his Kenwood TS-830S. Lots of suppliers list it, like Mouser, but no one
>>has
>>it in stock. Does anyone have one you give or sell to me??????
>>
>>Thanks,
>>Ken
>>Reply to ken*@area-net.com
>>
>>remove the * to reply.
>

1618. Re: using icom internal power supply as an external ps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 05:53:02 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <423A6CBE.4090001@invalid.invalid>
Source record: 19801

Steve wrote:
> I agree you can probably use it for a general power supply.

I have done this. (OK, I think the supply came out of a IC-271H) If I recall properly the load was a TS-130 and it worked fine.

Unfortunately that was 20 years ago and I don't remember the wiring.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

1619. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 06:36:33 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <RFu_d.409363$w62.267913@bgtnsc05-news.ops.worldnet.att.net>
Source record: 19802

I would go directly from 45MHz to 455kHz.............this is typical in HF receivers. An NE602 mixer can be used for the 2nd mixer and a 44.545MHz crystal used with the on-board oscillator allows you to derive your 2nd I.F. Alternatively, you can use a TDA1572 as the 2nd mixer/I.F./ demodulator. This is also a good system and it will give you fairly good strong signal handling capability.

Pete

"Netgeek" <no_spam@comcast.net> wrote in message
news:wKOdnd6MJJv_gqffRVn-1w@comcast.com...
> Parts are on the way...
>
> First IF = 45 MHz
> Second IF = 10.7 MHz
>
> Any point in going further to 455 KHz for a third IF or just stick
> with the 10.7 -> (MC1350 plus IF transformer) scheme?
>
> Bill
>
> "RST Engineering" <jim@rstengineering.com> wrote in message
> news:113hbobf752k919@corp.supernews.com...
>> I'd probably jack the IF up to 45 MHz. (use TV parts; this is the TV IF
>> frequency) or 70 MHz. (satellite IF frequency), and then downconvert to
>> either 21.4 or 10.7...there are cheap crystal filters at both
>> frequencies.
>>
>> Jim
>>
>>
>> > In the meantime, any other suggested improvements or hints are
>> > most appreciated (e.g. "up the IF from 10.7"?)...!
>>
>>
>>
>
>

1620. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 06:37:57 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <9Hu_d.409374$w62.78175@bgtnsc05-news.ops.worldnet.att.net>
Source record: 19803

The Mini-Circuits SRA-2H comes to mind.....Level 17, which
requires 50mW of LO injection.

Pete

"Paul Keinanen" <keinanen@sci.fi> wrote in message
news:5rie31153v2i78jrvr6tbndaj4n71vc61v@4ax.com...
> On Tue, 15 Mar 2005 12:49:01 -0500, "Netgeek" <no_spam@comcast.net>
> wrote:
>
>> It's my understanding (and I
>>mean a fairly fuzzy understanding) that direct conversion has many
>>benefits but is limited to lower bands (unless you're the military with
>>a big budget)??? What are the trade-offs in doing a downconversion
>>followed by DDS-based conversion?
>
> My suggestion of using a DDS for direct conversion in the 10-20 MHz
> range is based on the assumption that DDS chips running with 50-60 MHz
> clock frequency should be available at a quite a reasonable price,
> compared to similar chips running at 400 - 500 MHz, which would be
> required for direct synthesis in the VHF band.
>
> However, translating the whole band down to HF requires a strong down
> converter, especially due to the nearby strong signal broadcast band.
> Some flimsy NE602 type converter will not survive very well in such
> environment, but a high current preamplifier followed by a diode ring
> mixer might be a better converter.
>
> Paul OH3LWR
>

1621. Darlington Transistors At RF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 06:45:11 UTC
From: dumpjunkmailhere@yahoo.com
Message-ID: <1111128311.529577.266060@g14g2000cwa.googlegroups.com>
Source record: 19804

Hi All,

Does anyone know if a Darlington transistor (IC of two transistors in Darlington congifuration) can be biased at class C for use in an output stage of a VHF transmitter? Darlingtons seem to have pretty high gain, so I supposed they could reduce the number of stages required to amplify an RF signal? Thanks in advance.

C.W.

1622. Re: Darlington Transistors At RF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 07:39:09 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <9b1l31t7itnp9p8vfme5o9hgc4jmfccsdu@4ax.com>
Source record: 19805

On 17 Mar 2005 22:45:11 -0800, dumpjunkmailhere@yahoo.com wrote:

>Does anyone know if a Darlington transistor (IC of two transistors in
>Darlington congifuration) can be biased at class C for use in an output
>stage of a VHF transmitter? Darlingtons seem to have pretty high gain,
>so I supposed they could reduce the number of stages required to
>amplify an RF signal? Thanks in advance.

You have to look at the fT parameter (which specifies the frequency at
which _current_ gain drops to unity), since a typical power darlington
is a very slow device.

Paul OH3LWR

1623. Great Articles From 1926-1928

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 07:56:52 UTC
From: Mike Monett <no@spam.com>
Message-ID: <423A89C4.3FAC@spam.com>
Source record: 19806

For Old Timers,

Great articles from Radio News, 1926-1928. Excellent pdf scans.

http://www.one-electron.com/Misc_Docs.html

Some Articles:

Chemical Condensers of Large Capacity - an article by Clyde J. Fitch in the August 1926 Radio News. How to build your own electrolytic capacitors. (394K pdf)

http://www.clarisonus.com/Archives/Components/ChemCond.pdf

A New Electron Tube - an article by Sylvan Harris in the July 1927 Radio News about GE's development of the "Shielded-Grid" tetrode - which evolved into the RF tetrode and pentode. (404K pdf)

http://www.clarisonus.com/Archives/TubeTheory/GE_tetrode.pdf

The Shielded-Grid Tube At Last Arrives - an article in the January 1928 Radio News about the first American implementation of the shielded-grid (i.e.screen grid) tetrode, the '22. (304K pdf)

http://www.clarisonus.com/Archives/TubeTheory/SG_Arrives.pdf

Tubes Within Tubes - an article by G.C.B. Rowe from the July 1926 Radio News on Dr. Siegmund Loewe's multi-section tubes, from Germany. These were truly the first integrated circuits, since not only triodes, but passive components were enclosed in the vacuum tube. (558K pdf)

http://www.clarisonus.com/Archives/TubeTheory/Loewe.pdf

Regards,

Mike Monett

1624. AM/FM Synthesized Tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 10:41:07 UTC
From: amstereo@meduci.com
Message-ID: <1111142467.491032.310250@o13g2000cwo.googlegroups.com>
Source record: 19807

Has anyone built an AM/FM tuner using PLL synthesizer and micro controller chips? There is some documentation using i2c bus, however I cannot find any microprocessor i2c chips that mate to the TSA6057 synthesizer. Thanks in advance.

1625. variable speed pot ground?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 13:23:46 UTC
From: "G. Doughty" <ki4bbl@cox.net>
Message-ID: <FDA_d.65107$7z6.57128@lakeread04>
Source record: 19808

Good Morning,

I am putting together a winkey keyer kit (I know it is not true homebrew, but I am just a lowly English teacher). Anyways, I have a variable pot with three poles and need to know which one is ground. How can I find that out with a multimeter?

Thanks and 73
G. Doughty
ki4bbl AT cox DOT net

1626. Re: variable speed pot ground?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 13:29:58 UTC
From: Wing Fong Wong <wing@st.edu.au>
Message-ID: <d1el4mibp1@enyo.uwa.edu.au>
Source record: 19809

G. Doughty <ki4bbl@cox.net> wrote:
> Good Morning,
>
> I am putting together a winkey keyer kit (I know it is not true homebrew,
> but I am just a lowly English teacher). Anyways, I have a variable pot with
> three poles and need to know which one is ground. How can I find that out
> with a multimeter?
>
> Thanks and 73
> G. Doughty
> ki4bbl AT cox DOT net
>
>

Do you mean you want to know which tag is attached to the wiper? If that is what you mean, just measure the resistance between any pair of terminals, the pair for which the resistance does not change regardless of position of the pot, neither pin will be the pin you want.

Its usually the centre one.

--

Wing Wong.

1627. Re: AM/FM Synthesized Tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 13:33:50 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <423ad8be$0$2766$cc9e4d1f@news-text.dial.pipex.com>
Source record: 19810

<amstereo@meduci.com> wrote in message
news:1111142467.491032.310250@o13g2000cwo.googlegroups.com...
> Has anyone built an AM/FM tuner using PLL synthesizer and micro
> controller chips? There is some documentation using i2c bus, however I
> cannot find any microprocessor i2c chips that mate to the TSA6057
> synthesizer. Thanks in advance.

You can implement I2C on any MCU, using software. Many have hardware I2C
include the MegaAVRs and the Philips LPC2000 ARM family.

Leon
--
Leon Heller, G1HSM
http://www.geocities.com/leon_heller

1628. Re: variable speed pot ground?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 13:38:03 UTC
From: "G. Doughty" <ki4bbl@cox.net>
Message-ID: <3RA_d.65108$7z6.28233@lakeread04>
Source record: 19811

Ok, it is the center one. I guess i needed to think outside the box as the schematic has it showing, from how I interpreted it, one of the ends. Great! Thanks for the quick response. Now I can install and play. Maybe you'll here me on 40.

Thanks
greg
ki4bbl AT cox DOT net

"Wing Fong Wong" <wing@st.edu.au> wrote in message news:d1el4mibp1@enyo.uwa.edu.au...
> G. Doughty <ki4bbl@cox.net> wrote:
>> Good Morning,
>>
>> I am putting together a winkey keyer kit (I know it is not true homebrew,
>> but I am just a lowly English teacher). Anyways, I have a variable pot
>> with
>> three poles and need to know which one is ground. How can I find that
>> out
>> with a multimeter?
>>
>> Thanks and 73
>> G. Doughty
>> ki4bbl AT cox DOT net
>>
>>
>
> Do you mean you want to know which tag is attached to the wiper? If that
> is what you mean, just measure the resistance between any pair of
> terminals, the pair for which the resistance does not change regardless of
> position of the pot, neither pin will be the pin you want.
>
> Its usually the centre one.
>
> --
>
> Wing Wong.

1629. Re: variable speed pot ground?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 14:01:41 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <423ADF44.20602@invalid.invalid>
Source record: 19812

G. Doughty wrote:
> Ok, it is the center one. I guess i needed to think outside the box as the
> schematic has it showing, from how I interpreted it, one of the ends.
> Great! Thanks for the quick response. Now I can install and play. Maybe
> you'll here me on 40.

Is what you're building the same thing as on
http://k1el.tripod.com/winkey.pdf ?

If so, it really doesn't matter! You use the center terminal (the wiper) and one end, it doesn't matter which end. The consequences of getting it "wrong" are that the control will work "backwards" - you'll turn the pot counter-clockwise to speed up your Morse, instead of clockwise. If that happens, you can fix it by using the other end terminal. You won't damage anything by getting it wrong.

==========

In general, for any other future construction projects you may get involved in... it is VERY unusual for the wiper of a pot to be connected to ground. It does happen - it would be acceptable to do so in this Winkey circuit and I have seen others - but it is VERY rare. In some circuits, grounding the wiper when you shouldn't could result in damage to the pot (and possibly other parts). And almost always, the circuit won't work, or at least won't work properly.

Getting the two ends mixed up is far less dangerous. The worst consequence is the same as it is with the Winkey: the control will work backwards and you can fix it by swapping the ends.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

1630. Re: variable speed pot ground?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 14:03:46 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <6dB_d.8614$GI6.1657@trnddc05>
Source record: 19813

"G. Doughty" <ki4bbl@cox.net> wrote in message
news:3RA_d.65108$7z6.28233@lakeread04...
> Ok, it is the center one. I guess i needed to think outside the box as
the
> schematic has it showing, from how I interpreted it, one of the ends.
> Great! Thanks for the quick response. Now I can install and play. Maybe
> you'll here me on 40.
>
> Thanks
> greg
> ki4bbl AT cox DOT net
>
>I am not sure the other poster understood your question- especially given
your response. None of the terminals are grounded- you do that when you
wire it into the circuit. If this is the speed control and you choose the
wrong end- it will function backwards- just reverse the 2 end connections.

Dale W4OP

1631. Re: Frequency Divider

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 14:40:09 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <dLB_d.411503$w62.368639@bgtnsc05-news.ops.worldnet.att.net>
Source record: 19814

Also, don't forget the 74AC74.....these are good up to 100MHz.

Pete

"J M Noeding" <la8ak@online.no> wrote in message
news:auue319q695l47q6akhdhcjtgn78f9t5k0@4ax.com...
> On Tue, 15 Mar 2005 18:45:33 +0100, "Fam J.Hoekstra"
> <fam-j.hoekstra@zonnet.nl> wrote:
>
>>WhAT ABOUT A HEF4060?
>>"Tim Shoppa" <shoppa@trailing-edge.com> schreef in bericht
>>news:1110571254.925945.92910@l41g2000cwc.googlegroups.com...
>>> > pump it into a flip flop, but I'm having an awful time using
>>> > 2n3904 transistors. The triggering seems to be a very
>>> > challenging design issue.
>>>
>>> You built the divider out of discrete transistors and steering diodes?
>>> Running this sort of divider at 7 MHz will be marginal... some "speedup
>>> caps" in parallel with the base drive resistors may help.
>>>
>>> > or other ideas for halving frequency?
>>>
>>> 74HC74.
>>>
>>> Tim.
>>>
>>
>
> you are asking difficult questions, not everybody over there know
> Philips devices, but they usually go twice as high as other standard
> devices, so it might work - provided you have it
>
> LA8AK
> ---
> J. M. Noeding, LA8AK, N-4623 Kristiansand
> http://home.online.no/~la8ak/c.htm

1632. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 15:41:41 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <d1esrl$b2g$1@theodyn.ncf.ca>
Source record: 19815

"Pete KE9OA" (p.gianako@worldnet.att.net) writes:
> I would go directly from 45MHz to 455kHz.............this is typical in HF
> receivers. An NE602 mixer can be used for the 2nd mixer and a 44.545MHz
> crystal used with the on-board oscillator allows you to derive your 2nd I.F.
> Alternatively, you can use a TDA1572 as the 2nd mixer/I.F./ demodulator.
> This is also a good system and it will give you fairly good strong signal
> handling capability.
>
> Pete
>
I'd hesitated to post since I wasn't sure of the sort of selectivity needed.

But yes, if the selectivity is available at 455KHz, there's no need to
have something in between that and 45MHz (or for that matter, if the
right selectivity can be had higher, gain is the only reason for going down
to 455KHz.

Old cellphones, the big and bulky kind, have IFs in the above 30MHz range
(the exact frequency has varied, but I think the majority of those that I've
stripped have had 45MHz IFs. And they tend to drop down to 455KHz after
that, meaning a scrap cellphone (the older the better because they
are cheaper and the parts are bigger) will generally provide a "roofing
filter" and the crystal to get down to 455KHz from there, and even the
455KHz filter if it doesn't have to be narrow.

Michael VE2BVW

> "Netgeek" <no_spam@comcast.net> wrote in message
> news:wKOdnd6MJJv_gqffRVn-1w@comcast.com...
>> Parts are on the way...
>>
>> First IF = 45 MHz
>> Second IF = 10.7 MHz
>>
>> Any point in going further to 455 KHz for a third IF or just stick
>> with the 10.7 -> (MC1350 plus IF transformer) scheme?
>>
>> Bill
>>
>> "RST Engineering" <jim@rstengineering.com> wrote in message
>> news:113hbobf752k919@corp.supernews.com...
>>> I'd probably jack the IF up to 45 MHz. (use TV parts; this is the TV IF
>>> frequency) or 70 MHz. (satellite IF frequency), and then downconvert to
>>> either 21.4 or 10.7...there are cheap crystal filters at both
>>> frequencies.

>>>
>>> Jim
>>>
>>>
>>> > In the meantime, any other suggested improvements or hints are
>>> > most appreciated (e.g. "up the IF from 10.7"?)...!
>>>
>>>
>>
>>
>
>

1633. Re: variable speed pot ground?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 16:20:46 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <423AFFDE.A1CEE666@rica.net>
Source record: 19816

"G. Doughty" wrote:
>
> Good Morning,
>
> I am putting together a winkey keyer kit (I know it is not true homebrew,
> but I am just a lowly English teacher). Anyways, I have a variable pot with
> three poles and need to know which one is ground. How can I find that out
> with a multimeter?

No terminal of a pot is grounded inside the pot. It is just a chunk
of resistance with a terminal on each end sliding contact in the
middle.

I think you need to connect the bottom terminal (when you are looking
at the end of the shaft and the terminals are to the left) to ground
and the middle one (the wiper) to the speed control input (S).
See page 13 of:
http://k1el.tripod.com/winkey.pdf

--
John Popelish

1634. Standard GX-3000 VHF Radios for APRS Use

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 16:28:19 UTC
From: Norm VE3CZI <ve3czi@arrl.net>
Message-ID: <ikD_d.11000$RM2.6310@read1.cgocable.net>
Source record: 19817
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Standard GX-3000 VHF APRS Radios. [with DTMF]
I have a quantity of Commercial Standard GX-3000 VHF Mobile Radios
(136-150Mhz) 25-30 Watts O/P These radios will work excellent as an APRS
Mobile OR Base Radio Station. Units are much cheaper to use for dedicated
APRS use rather than spending Large Dollars for a VHF Amateur XCVR and
dedicate it to APRS use. Programmed & Tested Operational on 144.390 Mhz.
You will have to make up the Interface Cable. These radios are capable of
64 Channels, Carrier Squelch Only and I can program them for other 2 Meter
Frequencies for a charge. Please ask should you have any questions.
Cost: $ 45 USD Plus Shipping
73...Norm VE3CZI
Email: ve3czi at rac dot ca [Do use "reply" button]
****
Have Surplus Service Manuals & Electronic
Parts/Equipment FOR SALE.
Visit: www.rodemi.com
****

1635. Re: variable speed pot ground?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 16:56:19 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <113m214q22aunf2@corp.supernews.com>
Source record: 19818

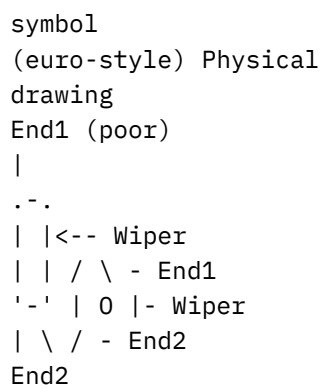
G. Doughty wrote:

> Good Morning,
>
> I am putting together a winkey keyer kit (I know it is not true homebrew,
> but I am just a lowly English teacher). Anyways, I have a variable pot with
> three poles and need to know which one is ground. How can I find that out
> with a multimeter?
>
> Thanks and 73
> G. Doughty
> ki4bbl AT cox DOT net
>
>

Ditto all the comments already made (except that you probably want to ground one of the ends rather than the wiper), plus: A potentiometer is nothing more than a strip of resistive material with terminals at each end and a movable contact attached to the knob somewhere in the middle. The movable contact is called the "wiper" because, well, it wipes.

If you ignore audio taper pots the resistance between any two points along the length of the strip is proportional to the distance between the points. So if you have a 2" long strip in a 20k-ohm pot, and you place the wiper 1/2 inch away from one end, you'll see 5k-ohms between the wiper and that end (and 15k-ohms between the wiper and the other end).

Potentiometers almost always come with three leads, and the leads are almost always arranged so that the middle lead is the wiper -- the only exception I know is with some precision multi-turn pots, but you can ignore those. The drawing below shows the correspondence between a schematic drawing of a pot (euro-style, kinda -- just take the box to be the usual squiggly line) and a drawing of a panel-mount pot.



created by Andyï¿½s ASCII-Circuit v1.24.140803 Beta www.tech-chat.de

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

1636. Re: Darlington Transistors At RF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 17:45:02 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113m4t1jdjklt20@corp.supernews.com>
Source record: 19819

A major problem with the speed is that a common three-terminal Darlington doesn't have any pulldown resistor or current sink to the Q1e-Q2b connection. That leaves no good way to remove charge from Q2b quickly when you want Q2 to turn off. If you can find one with an internal Q2b-Q2e resistor of pretty low value, or better yet have access to that junction so you can long-tail it down to a negative supply or even to ground, you'll have a much faster switching device. I still suspect you'll have trouble getting one to go fast enough for efficient class C operation at VHF.

Roy Lewallen, W7EL

Paul Keinanen wrote:
> On 17 Mar 2005 22:45:11 -0800, dumpjunkmailhere@yahoo.com wrote:
>
>
>>Does anyone know if a Darlington transistor (IC of two transistors in
>>Darlington congifuration) can be biased at class C for use in an output
>>stage of a VHF transmitter? Darlingtons seem to have pretty high gain,
>>so I supposed they could reduce the number of stages required to
>>amplify an RF signal? Thanks in advance.
>
>
> You have to look at the fT parameter (which specifies the frequency at
> which _current_ gain drops to unity), since a typical power darlington
> is a very slow device.
>
> Paul OH3LWR
>

1637. Re: Darlington Transistors At RF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 19:38:42 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <cebm319ojqs480j25k7am3j30b7dtdv0mc@4ax.com>
Source record: 19820

On Fri, 18 Mar 2005 09:45:02 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>A major problem with the speed is that a common three-terminal
>Darlington doesn't have any pulldown resistor or current sink to the
>Q1e-Q2b connection. That leaves no good way to remove charge from Q2b
>quickly when you want Q2 to turn off. If you can find one with an
>internal Q2b-Q2e resistor of pretty low value, or better yet have access
>to that junction so you can long-tail it down to a negative supply or
>even to ground, you'll have a much faster switching device. I still
>suspect you'll have trouble getting one to go fast enough for efficient
>class C operation at VHF.
>
>Roy Lewallen, W7EL
>

perhaps not so much for RF, but I wonder why you don't see NPN/PNP
combination for darlington transistors - with Vbe = 0.55-0.6V

Jan-Martin, LA8AK

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

1638. Re: Darlington Transistors At RF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 19:55:50 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <d1fbo6lfe1@theodyn.ncf.ca>
Source record: 19821

Roy Lewallen (w7el@eznec.com) writes:
> A major problem with the speed is that a common three-terminal
> Darlington doesn't have any pulldown resistor or current sink to the
> Q1e-Q2b connection. That leaves no good way to remove charge from Q2b
> quickly when you want Q2 to turn off. If you can find one with an
> internal Q2b-Q2e resistor of pretty low value, or better yet have access
> to that junction so you can long-tail it down to a negative supply or
> even to ground, you'll have a much faster switching device. I still
> suspect you'll have trouble getting one to go fast enough for efficient
> class C operation at VHF.
>
> Roy Lewallen, W7EL
>
I thought darlington transistors were just two transistors connected
that way inside the same case, ie not particularly different from
connecting two discrete transistors in the same configuration.

Hence, one could play with darlington transistors, but just
use two distinct transistors, so you have that junction.

Of course, there are other reaosn for having an amplifier chain, besides
overall gain. Those intermediate stages often help to filter the signal.

Michael VE2BVW

> Paul Keinanen wrote:
>> On 17 Mar 2005 22:45:11 -0800, dumpjunkmailhere@yahoo.com wrote:
>>
>>
>>>Does anyone know if a Darlington transistor (IC of two transistors in
>>>Darlington congifuration) can be biased at class C for use in an output
>>>stage of a VHF transmitter? Darlingtons seem to have pretty high gain,
>>>so I supposed they could reduce the number of stages required to
>>>amplify an RF signal? Thanks in advance.
>>
>>
>> You have to look at the fT parameter (which specifies the frequency at
>> which _current_ gain drops to unity), since a typical power darlington
>> is a very slow device.
>>
>> Paul OH3LWR
>>

1639. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 20:04:30 UTC
From: LenAnderson@ieee.org
Message-ID: <1111176270.711353.218830@g14g2000cwa.googlegroups.com>
Source record: 19822

From: "Pete KE9OA" on Fri, Mar 18 2005 6:36 am

>I would go directly from 45MHz to 455kHz.....this is typical
in HF
>receivers. An NE602 mixer can be used for the 2nd mixer and a
44.545MHz
>crystal used with the on-board oscillator allows you to derive your
2nd I.F.
>Alternatively, you can use a TDA1572 as the 2nd mixer/I.F./
demodulator.
>This is also a good system and it will give you fairly good strong
signal
>handling capability.
>
>Pete
>
>"Netgeek" <no_spam@comcast.net> wrote in message
>news:wKOdnd6MJJv_gqffRVn-1w@comcast.com...
>> Parts are on the way...
>>
>> First IF = 45 MHz
>> Second IF = 10.7 MHz
>>
>> Any point in going further to 455 KHz for a third IF or just stick
>> with the 10.7 -> (MC1350 plus IF transformer) scheme?
>>
>> Bill

As a suggestion (too late if parts are incoming), a
single conversion to a 21.4 MHz IF is quite suitable.
Using a monolithic quartz crystal filter (available
from DigiKey for about $15 a pair of two) between
the mixer and first IF could eliminate ALL tuned
circuits in the IF following the 1st IF amplifier.
Those are available in 12.5 KHz bandwidth which will
be fine for a VOR signal. [DigiKey has a link to
download specs for the ECS-made monolithics]

This is now common in mobile radios, both new and
retrofit of older ones.

If a single-conversion scheme with 21.4 MHz is done,
the LO can be 86.6 to 96.6 MHz with an image at
65.2 to 75.2 MHz. That is a low enough frequency
to allow a simple L-C "top coupled resonator" fixed

bandpass filter for the front end at 108 to 118 MHz (8.9 % bandwidth).

Doing double conversion with a first IF of 45 MHz is, by itself, no problem. However the 2nd IF image is a bit too close to the nominal bandwidth of any 45 MHz 1st IF tuning (it's only 0.91 MHz away). With the second's image (on either side depending on 2nd LO above or below 45 MHz), there's still a chance to pick up part of the FM BC band locally. To avoid that, the 2nd LO should be on the high side of 45. Second IF image would then fall into the low end of the 118 to 137 MHz comm band (also AM) and those transmitters are much lower powered ones than BC stations.

With a 10.7 MHz 2nd IF, its image would be 21.4 MHz away and rather easy to attenuate in the 45 MHz 1st IF. There's only a slight problem using stock 10.7 MHz IF components: Bandwidth of the whole 2nd IF might be around 160 KHz; less discrimination to nearby VORs and Localizers. A study of FAA sectional charts might be called for to check on potential interfering stations although those are assigned in regards geographic locations to minimize normal interference.

LenAnderson@ieee.org

1640. Re: Darlington Transistors At RF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 20:24:34 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_423b39a4@fidonet.org>
Source record: 19823

"Roy Lewallen" bravely wrote to "All" (18 Mar 05 09:45:02)
--- on the heady topic of "Re: Darlington Transistors At RF?"

Hmmm, what if the darlington is used in the bottom end of a cascode?
Use as the top end a high ft but low gain transistor. This way the
darlington collector voltage is stable and it relies more on the
common base fae for the gain limit, somewhat higher than ft, I think.
Darlingtons are only mostly good as emitter followers and DC switching
drivers anyways.

A*s*i*m*o*v

RL> From: Roy Lewallen <w7el@eznec.com>
RL> Xref: aeinews rec.radio.amateur.homebrew:8924

RL> A major problem with the speed is that a common three-terminal
RL> Darlington doesn't have any pulldown resistor or current sink to the
RL> Q1e-Q2b connection. That leaves no good way to remove charge from Q2b
RL> quickly when you want Q2 to turn off. If you can find one with an
RL> internal Q2b-Q2e resistor of pretty low value, or better yet have
RL> access to that junction so you can long-tail it down to a negative
RL> supply or even to ground, you'll have a much faster switching device.
RL> I still suspect you'll have trouble getting one to go fast enough for
RL> efficient class C operation at VHF.

RL> Roy Lewallen, W7EL

RL> Paul Keinanen wrote:
> On 17 Mar 2005 22:45:11 -0800, dumpjunkmailhere@yahoo.com wrote:
>
>
>>Does anyone know if a Darlington transistor (IC of two transistors in
>>Darlington congifuration) can be biased at class C for use in an output
>>stage of a VHF transmitter? Darlingtons seem to have pretty high gain,
>>so I supposed they could reduce the number of stages required to
>>amplify an RF signal? Thanks in advance.
>
>
> You have to look at the fT parameter (which specifies the frequency at
> which _current_ gain drops to unity), since a typical power darlington
> is a very slow device.
>
> Paul OH3LWR

... <- Grains Of Salt. Take As Needed With Above Message.

1641. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-18 22:54:55 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <3vmm31hibvnlea44j40hjm9e2to3ev4biu@4ax.com>
Source record: 19824
Body handling: HTML body converted to readable text

On Fri, 18 Mar 2005 06:36:33 GMT, "Pete KE9OA"
wrote:

>I would go directly from 45MHz to 455kHz.............this is typical in HF
>receivers. An NE602 mixer can be used for the 2nd mixer and a 44.545MHz
>crystal used with the on-board oscillator allows you to derive your 2nd I.F.
>Alternatively, you can use a TDA1572 as the 2nd mixer/I.F./ demodulator.
>This is also a good system and it will give you fairly good strong signal
>handling capability.
>
>Pete
>
it is almost like the gunnplexer RX units we made around 1978-80,
wonder if the pcb's still exists for such receivers?

JM

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

1642. Re: Darlington Transistors At RF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-19 00:45:47 UTC
From: Tom <noname@noprovider.nodomain>
Message-ID: <%CK_d.9315$mq2.5955@trnddc08>
Source record: 19825

The most significant problem with the standard Darlington connection is
the amplified Miller capacitance of the base-collector junctions. The
high gain of the darlington pair effectively multiplies this capacitance a
lot more resulting in poor frequency response (it won't go to VHF).
One approach is to tie the collector of the first transistor to an
AC-grounded
DC bias source, reducing this effect a lot.

This approach is described by Alan Grebene (founder of Exar) in his very
readable book "Bipolar and MOS Analog Integrated Circuit Design".

-- Tom

<dumpjunkmailhere@yahoo.com> wrote in message
news:1111128311.529577.266060@g14g2000cwa.googlegroups.com...
> Hi All,
>
> Does anyone know if a Darlington transistor (IC of two transistors in
> Darlington congifuration) can be biased at class C for use in an output
> stage of a VHF transmitter? Darlingtons seem to have pretty high gain,
> so I supposed they could reduce the number of stages required to
> amplify an RF signal? Thanks in advance.
>
> C.W.
>

1643. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-19 05:44:27 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <%_O_d.151085$Th1.148211@bgtnsc04-news.ops.worldnet.att.net>
Source record: 19826

I agree about the 21.4MHz I.F. in a single conversion scheme. If the required gain is achievable, this is a very good way to go. I remember one of the Rockwell-Collins ADF receivers that had this setup.
As far as a 45MHz 1st I.F..... these crystal filters seem to be designed with a 455kHz 2nd I.F. in mind because a 910kHz rejection spec is given. I have used that scheme over the years with a diode ring mixer as the 1st mixer. I follow the mixer with a series L, shunt C as the second leg of a diplexer that matches the 50 ohm output of the mixer to the crystal filter..... The first leg being is a parallel LC tuned circuit that is in series with a 50 ohm idler resistor. With a reactance of the LC elements of around 47 ohms, the selectivity at 6 db is approximately 15kHz. The (2 time 2nd I.F. image rejection) is about 60dB when using four poles at 45MHz. I haven't done any in-band spur calculations with this scheme for the aircraft band but I think that with high-side injection it would be ok. Of course, if a 25kHz tuning step is used I am not sure how it would affect the phase noise of the synthesizer if a Fractional N topology wasn't used. I an NE602 is used as the 2nd mixer and just the I.F./ demodulator sections of a TDA1572 were used, the only adjustment required would be a trimmer adjustment of the 2nd LO in order to have a symmetrical adjacent channel response.

Pete

<LenAnderson@ieee.org> wrote in message
news:1111176270.711353.218830@g14g2000cwa.googlegroups.com...
> From: "Pete KE9OA" on Fri, Mar 18 2005 6:36 am
>
>>I would go directly from 45MHz to 455kHz.....this is typical
> in HF
>>receivers. An NE602 mixer can be used for the 2nd mixer and a
> 44.545MHz
>>crystal used with the on-board oscillator allows you to derive your
> 2nd I.F.
>>Alternatively, you can use a TDA1572 as the 2nd mixer/I.F./
> demodulator.
>>This is also a good system and it will give you fairly good strong
> signal
>>handling capability.
>>
>>Pete
>>
>>"Netgeek" <no_spam@comcast.net> wrote in message
>>news:wKOdnd6MJJv_gqffRVn-1w@comcast.com...
>>> Parts are on the way...
>>>

>>> First IF = 45 MHz
>>> Second IF = 10.7 MHz
>>>
>>> Any point in going further to 455 KHz for a third IF or just stick
>>> with the 10.7 -> (MC1350 plus IF transformer) scheme?
>>>
>>> Bill
>
> As a suggestion (too late if parts are incoming), a
> single conversion to a 21.4 MHz IF is quite suitable.
> Using a monolithic quartz crystal filter (available
> from DigiKey for about $15 a pair of two) between
> the mixer and first IF could eliminate ALL tuned
> circuits in the IF following the 1st IF amplifier.
> Those are available in 12.5 KHz bandwidth which will
> be fine for a VOR signal. [DigiKey has a link to
> download specs for the ECS-made monolithics]
>
> This is now common in mobile radios, both new and
> retrofit of older ones.
>
> If a single-conversion scheme with 21.4 MHz is done,
> the LO can be 86.6 to 96.6 MHz with an image at
> 65.2 to 75.2 MHz. That is a low enough frequency
> to allow a simple L-C "top coupled resonator" fixed
> bandpass filter for the front end at 108 to 118 MHz
> (8.9 % bandwidth).
>
> Doing double conversion with a first IF of 45 MHz
> is, by itself, no problem. However the 2nd IF image
> is a bit too close to the nominal bandwidth of any
> 45 MHz 1st IF tuning (it's only 0.91 MHz away). With
> the second's image (on either side depending on 2nd
> LO above or below 45 MHz), there's still a chance to
> pick up part of the FM BC band locally. To avoid
> that, the 2nd LO should be on the high side of 45.
> Second IF image would then fall into the low end of
> the 118 to 137 MHz comm band (also AM) and those
> transmitters are much lower powered ones than BC
> stations.
>
> With a 10.7 MHz 2nd IF, its image would be 21.4 MHz
> away and rather easy to attenuate in the 45 MHz 1st
> IF. There's only a slight problem using stock
> 10.7 MHz IF components: Bandwidth of the whole 2nd
> IF might be around 160 KHz; less discrimination to
> nearby VORs and Localizers. A study of FAA sectional
> charts might be called for to check on potential
> interfering stations although those are assigned in
> regards geographic locations to minimize normal

> interference.
>
> LenAnderson@ieee.org
>

1644. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-19 16:36:17 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <113ol7u12klht0e@corp.supernews.com>
Source record: 19827
Body handling: HTML body converted to readable text

And how, pray tell, do you get rid of the image with reasonable Q components?

Jim

"Pete KE9OA" wrote in message news:RFu_d.409363$w62.267913@bgtnsc05-news.ops.worldnet.att.net...
>I would go directly from 45MHz to 455kHz.....

1645. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-19 17:38:49 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <8soo31tqfrcckf7hsnjkvvqkok8fv2nkdr@4ax.com>
Source record: 19828

On Sat, 19 Mar 2005 08:36:17 -0800, "RST Engineering"
<jim@rstengineering.com> wrote:

>And how, pray tell, do you get rid of the image with reasonable Q
>components?
>
like Hi-Q resistors or was it condensers...?

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/91n.htm

1646. Re: Lowe HF150 alignment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-19 18:05:40 UTC
From: arniek <hf-freak@arcor.de>
Message-ID: <d1hplmlcp05$1@news.t-online.com>
Source record: 19829

Hello Pete,

alignment instructions for the reference oscillator:

-With the TEST message displayed, press the MODE button. Connect a
frequency counter to TP2 (Local Osc).

-Adjust TC1 (on the control unit) for a reading of 45.00000 MHz +/- 20 Hz

alignment instructions for the heterodyne oscillator:

-With the TEST message displayed, connect a frequency counter to TP6 (Audio)

-Press the MODE button. Adjust TC2 for a reading of 3234 Hz +/- 10 Hz.

-Press the FAST button. Adjust VR1 for a reading 8 Hz above (3242 Hz)

-Repeat the procedure

My HF-150 (built around 1995) works very well after repeating that
alignment procedure a few times.

73
Arnie

1647. Need to build a simple mains power supply for linear amplifier (28V 30A)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-19 20:24:54 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <oa2p31dsd1vq70qrokvqfk0g39reu1gmp3@4ax.com>
Source record: 19830

The important is to limit the output voltage to 28V and have maximum
output voltage when input drop under ripple
One solution I can figure out is
http://www.noding.com/la8ak/12345/images/28vReg-4.gif

another more commonly found solution is
http://www.noding.com/la8ak/12345/images/28vReg-3.gif

the advantage of the first over the second is that the it needs single
supply voltage and the power fet can be mounted directly in chassis

73
Jan-Martin, LA8AK

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/91n.htm

1648. Ham Radio Magazine - FREE subscription

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-19 22:39:47 UTC
From: K9YA Telegraph <no_reply@yahoo.com>
Message-ID: <TS1%d.12097$DW.4657@newssvr17.news.prodigy.com>
Source record: 19831

Subscribe to the K9YA Telegraph e-Zine. It's hip! It's Wow! It's FREE!

The K9YA Telegraph is a general interest Ham Radio electronic magazine. It contains new-never before published articles, pictures and cartoons on topics of interest to all Amateur Radio operators. It's in full-color and delivered to
your computer monthly as a PDF file.

Download sample issues or subscribe at: http://www.k9ya.org.

Subscribe NOW to receive the April issue!

April 2005

The Cracker Barrel ByPhilip Cala-Lazar, K9PL
Secret Service for Me By Paul Hendershott, W9BBR
A Novel Rotary Rhombic Antenna By Dick Sylvan, W9CBT
My J-38 and Radio Magic By Rick Hiller, W5RH
Beat Me Daddy, Eight to the Bar By Rod Newkirk, VA3ZBB/W9BRD
Help Wanted

1649. Re: Ham Radio Magazine - FREE subscription

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-20 03:24:20 UTC
From: bruce johnson <vk3mn@hotmail.com>
Message-ID: <423cec94$1@news.alphalink.com.au>
Source record: 19832

how many meg is the pdf file ??
vk3mn

"K9YA Telegraph" <no_reply@yahoo.com> wrote in message
news:TS1%d.12097$DW.4657@newssvr17.news.prodigy.com...
> Subscribe to the K9YA Telegraph e-Zine. It's hip! It's Wow! It's FREE!
>
> The K9YA Telegraph is a general interest Ham Radio electronic magazine. It
> contains new-never before published articles, pictures and cartoons on
> topics of interest to all Amateur Radio operators. It's in full-color and
> delivered to
> your computer monthly as a PDF file.
>
> Download sample issues or subscribe at: http://www.k9ya.org.
>
> Subscribe NOW to receive the April issue!
>
> April 2005
>
> The Cracker Barrel ByPhilip Cala-Lazar, K9PL
> Secret Service for Me By Paul Hendershott, W9BBR
> A Novel Rotary Rhombic Antenna By Dick Sylvan, W9CBT
> My J-38 and Radio Magic By Rick Hiller, W5RH
> Beat Me Daddy, Eight to the Bar By Rod Newkirk, VA3ZBB/W9BRD
> Help Wanted
>
>

1650. Re: Ham Radio Magazine - FREE subscription

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-20 04:57:14 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <423D0299.CDEF3408@earthlink.net>
Source record: 19833

bruce johnson wrote:
>
> how many meg is the pdf file ??
> vk3mn
>

The July issue was the largest at 441 KB

--
?

Michael A. Terrell
Central Florida

1651. Re: Need to build a simple mains power supply for linear amplifier (28V 30A)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-20 19:25:38 UTC
From: hhc314@yahoo.com
Message-ID: <1111346738.532399.239290@f14g2000cwb.googlegroups.com>
Source record: 19834

I may be missing something, but neither one of the schematics shown in your link will work as you want.

For example, in link 2, you cannot get 70V out from a 24V AC source without some sort of voltage trippling or use of reactive components. Neither of these is present.

In link 1, you show a 24V regulater incorrectly wired and employed above its ratings.

Did you leave something out perhaps, like your input and output leads? Your post leaves me a little confused, but for me that's nothing new. :-)

Harry C.

1652. Re: Need to build a simple mains power supply for linear amplifier (28V 30A)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-20 20:20:25 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <ikmr31t2tp0osl2bvtsm2stna79vqoqcto@4ax.com>
Source record: 19835

On 20 Mar 2005 11:25:38 -0800, hhc314@yahoo.com wrote:

>I may be missing something, but neither one of the schematics shown in
>your link will work as you want.
>
>For example, in link 2, you cannot get 70V out from a 24V AC source
>without some sort of voltage trippling or use of reactive components.
>Neither of these is present.
Sorry, you are right, I wasn't really awake
>
>In link 1, you show a 24V regulater incorrectly wired and employed
>above its ratings.
It is really tested 30 years ago, and the construction is shown on
http://home.online.no/~la8ak/g1.htm , but it used 2N3055, not power
fet, it should be the same - in principle
>
>Did you leave something out perhaps, like your input and output leads?
>Your post leaves me a little confused, but for me that's nothing new.
>:-)

-JM

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/91n.htm

1653. Re: Need to build a simple mains power supply for linear amplifier (28V 30A)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-20 22:06:51 UTC
From: ps_dude <ps_dude@nospam.com>
Message-ID: <423DF3F8.AE14075B@nospam.com>
Source record: 19836

You will also have to get power transformer to drop
your mains and that will add to the cost.

You can try to locate surplus power supplies,
linear type by Lambda, lambda/coutant, Nemic Lambda,
also switching supplies very inexpensive used surplus.
Telco power supplies also would be attractive.

ps_dude

1654. Re: Need to build a simple mains power supply for linear amplifier (28V 30A)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-20 22:12:51 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <3atr31d4kmajaskfsssgjp9hq2lgob9k9t@4ax.com>
Source record: 19837

On Sun, 20 Mar 2005 22:06:51 GMT, ps_dude <ps_dude@nospam.com> wrote:

>You will also have to get power transformer to drop
>your mains and that will add to the cost.
>
>You can try to locate surplus power supplies,
>linear type by Lambda, lambda/coutant, Nemic Lambda,
>also switching supplies very inexpensive used surplus.
>Telco power supplies also would be attractive.
>
>ps_dude

only the freight is very expensive

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/91n.htm

1655. Re: Need to build a simple mains power supply for linear amplifier (28V 30A)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-20 22:15:14 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <1dtr31hoa3919l32boabeshba8o71q5jiv@4ax.com>
Source record: 19838

On Sun, 20 Mar 2005 22:06:51 GMT, ps_dude <ps_dude@nospam.com> wrote:

>You will also have to get power transformer to drop
>your mains and that will add to the cost.
>
>You can try to locate surplus power supplies,
>linear type by Lambda, lambda/coutant, Nemic Lambda,
>also switching supplies very inexpensive used surplus.
>Telco power supplies also would be attractive.
>
>ps_dude

only the freight is very expensive
had some requests from Australia for some TWT amplifiers, but when we
checked the price for postage you could just forget it very soon

---
J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/91n.htm

1656. Paddle keyer info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-21 02:00:54 UTC
From: Allan Matthews <allan.matthews@worldnet.att.net>
Message-ID: <akas31d0mb58avq9hjlfkhflhlknd3mera@4ax.com>
Source record: 19839

Anybody know where I can find construction plans for a keyer paddle?

1657. Re: Paddle keyer info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-21 02:06:33 UTC
From: dplatt@radagast.org
Message-ID: <113sb19heq72o19@corp.supernews.com>
Source record: 19840

In article <akas31d0mb58avq9hjlfkhflhlknd3mera@4ax.com>,
Allan Matthews <allan.matthews@worldnet.att.net> wrote:

>Anybody know where I can find construction plans for a keyer paddle?

Googling on "keyer paddle homebrew" or similar phrases should turn you
up numerous ideas.

About a minute of surfing turned up the following URLs:

http://www.geocities.com/n2uhc/paddle.html
http://www.njqrp.org/mbrproj/paddles.html
http://www.qsl.net/k5dh/paddles.html
http://kg8ih.cit.cwru.edu/w8edu/projects/franco-paddles.html

Google is your friend!

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1658. Re: Lowe HF150 alignment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-21 08:20:09 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <Zsv%d.428458$w62.226099@bgtnsc05-news.ops.worldnet.att.net>
Source record: 19841

Thank you very much! I went through this alignment procedure and everything is fine now. I needed to replace the 4569 divider chip on the display board before I could do the alignment. This chip had a thermal problem.....after 15 minutes of operation, the BFO injection frequency would shift about 3kHz. After replacing the chip and going through the alignment sequency, I have a good HF-150. Thanks again!

Pete

"arniek" <hf-freak@arcor.de> wrote in message news:d1hplmlcp05$1@news.t-online.com...
> Hello Pete,
>
> alignment instructions for the reference oscillator:
>
> -With the TEST message displayed, press the MODE button. Connect a
> frequency counter to TP2 (Local Osc).
>
> -Adjust TC1 (on the control unit) for a reading of 45.00000 MHz +/- 20 Hz
>
> alignment instructions for the heterodyne oscillator:
>
> -With the TEST message displayed, connect a frequency counter to TP6
> (Audio)
>
> -Press the MODE button. Adjust TC2 for a reading of 3234 Hz +/- 10 Hz.
>
> -Press the FAST button. Adjust VR1 for a reading 8 Hz above (3242 Hz)
>
> -Repeat the procedure
>
>
> My HF-150 (built around 1995) works very well after repeating that
> alignment procedure a few times.
>
> 73
> Arnie

1659. HP-5341A manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-21 13:25:38 UTC
From: francesco.messineo@gmail.com
Message-ID: <d9f2bc2.0503210525.4acf84d4@posting.google.com>
Source record: 19842
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Hello,
I got recently a (very) used HP-5341A frequency counter and it seems to have a problem with the high impedence input (which counts something even when shortcircuited or terminated to a dummy load), the other input appeat to be working good and also the internal 1 GHz source is beeing counted correctly. Does anyone have the user manual and/or (would be great) the service manual of this unit? Refunding the expense of course.

Thanks in advance

Francesco IS0FKQ

1660. FA:Hugh Shaft Couplers,Micas + others

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-21 14:14:58 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <CFA%d.429910$w62.186015@bgtnsc05-news.ops.worldnet.att.net>
Source record: 19843
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

More items added daily...check back for additional 'stuff':

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx, heytubeguy

1661. FA:SX-42 DIAL,MT COVER, Stand-offs + more

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-21 14:19:14 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <CJA%d.429930$w62.377979@bgtnsc05-news.ops.worldnet.att.net>
Source record: 19844
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

More items added daily...check back for additional 'stuff':

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx, heytubeguy

1662. Re: HP-5341A manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-21 15:59:49 UTC
From: Rick Karlquist N6RK <richard@karlquist.removethis.com>
Message-ID: <U_adnWPFSa7EcqPfRVn-vw@comcast.com>
Source record: 19845
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Possibly, the high impedance buffer amplifier is oscillating.
I was the project manager on the 5334B frequency counter,
which was derived from the 5334A. The 5334A used a
gold plated PC board. Gold plating requires that you first
nickel plate the copper. It turns out that the nickel is quite
lossy at RF, and the gold is less than a skin depth, so it
is transparent to the RF. For the 5334B, we initially used the
identical PC layout as the 5334A, except we went to the
then-new process called "soldermask over bare copper" (SMOBC).
AFAIK, the 5334B was the first HP intrument to use a
non gold plated PC board. Anyway, the front end oscillated
on the new boards, because the lossy nickel was no longer
damping out the oscillations. We had to insert a discrete resistor
at the input of the buffer amplifier to damp out a 100 MHz
resonance in a long trace.

I don't know for sure that the 5341 has the same basic front end,
but knowing how things went at the Santa Clara Division, it is
likely to be very similar. I never worked on the 5341 nor do I
have a manual.

Rick N6RK

"Francesco IZ5DWF" <francesco.messineo@gmail.com> wrote in message
news:d9f2bc2.0503210525.4acf84d4@posting.google.com...
> Hello,
> I got recently a (very) used HP-5341A frequency counter and it seems to
have
> a problem with the high impedence input (which counts something even when
>

1663. Re: FA:Hugh Shaft Couplers,Micas + others

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-21 16:42:26 UTC
From: Roger D Johnson <n1rj~@adelphia.net>
Message-ID: <423EF972.2070706@adelphia.net>
Source record: 19846
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Heytubeguy wrote:
> More items added daily...check back for additional 'stuff':
>
> http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy
>
> Tnx, heytubeguy
>
>
Why is it so many folks cannot spell HUGE?

Roger

--
Remove tilde (~) to reply

Remember the USS Liberty (AGTR-5)
http://ussliberty.org/

1664. Re: Lowe HF150 alignment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-21 17:56:55 UTC
From: arniek <hf-freak@arcor.de>
Message-ID: <d1n1taudh05$1@news.t-online.com>
Source record: 19847

Hi Pete,

if you should need any other information from the HF150 technical manual
just send me an email.

73,
Arnie

1665. VU meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-21 22:11:17 UTC
From: Paul <paul@m0eme.freeserve.co.uk>
Message-ID: <d1ngq6$4rp$1@news8.svr.pol.co.uk>
Source record: 19698

Ive made a VUmeter for noise measurements in my EME system using a 50uA moving coil meter. By using a sheet of paper with the calibration curve on I can read the dB measurement. I want to do away with this and put the numbers directly on the meter display does anyone know of any software that can be used to make a good job of this.

--
73's de Paul M0EME
www.qsl.net/m0eme
4 times FO19 432MHz
FT847
100W
Spectran
IO93GF

1666. Re: VU meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-21 22:54:15 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <rgI%d.92549$Ze3.49020@attbi_s51>
Source record: 19699

> Ive made a VUmeter for noise measurements in my EME system using a 50uA
> moving coil meter. By using a sheet of paper with the calibration curve on
I
> can read the dB measurement. I want to do away with this and put the
numbers
> directly on the meter display does anyone know of any software that can be
> used to make a good job of this.

Check WB6BLD's site

http://tonnesoftware.com/

W4ZCB

1667. Re: VU meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-21 23:29:39 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <DNI%d.32062$hA3.6549@trnddc09>
Source record: 19700

"Paul" <paul@m0eme.freeserve.co.uk> wrote in message
news:d1ngq6$4rp$1@news8.svr.pol.co.uk...
> Ive made a VUmeter for noise measurements in my EME system using a 50uA
> moving coil meter. By using a sheet of paper with the calibration curve on
I
> can read the dB measurement. I want to do away with this and put the
numbers
> directly on the meter display does anyone know of any software that can be
> used to make a good job of this.
>
> --
> 73's de Paul M0EME
> www.qsl.net/m0eme
> 4 times FO19 432MHz
> FT847
> 100W
> Spectran
> IO93GF
>
> Hi Paul,
I assume you are defeating the AGC and measuring raw audio out. That
technique usually suffers from variations in system gain and the inability
to integrate well enough to take out noise fluctuations.
The "industry standard" for measuring sun noise in EME is the General Radio
1238 IF amp/meter.
I can easily resolve 0.1dB of sun or moon noise at 1296 with this piece.
Long term comparisons were impossible with the VU method, and looking at
less than 1dB was a guestimate.
These meters are often seen on EBay for $100 USD or so.

Dale W4OP

1668. Re: HP-5341A manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-22 08:43:39 UTC
From: francesco.messineo@gmail.com
Message-ID: <d9f2bc2.0503220043.7e0f4646@posting.google.com>
Source record: 19702

"Rick Karlquist N6RK" <richard@karlquist.removethis.com> wrote in message
news:<U_adnWPFSa7EcqPfRVn-vw@comcast.com>...
> Possibly, the high impedance buffer amplifier is oscillating.
> I was the project manager on the 5334B frequency counter,
> which was derived from the 5334A. The 5334A used a
> gold plated PC board. Gold plating requires that you first
> nickel plate the copper. It turns out that the nickel is quite
> lossy at RF, and the gold is less than a skin depth, so it
> is transparent to the RF. For the 5334B, we initially used the
> identical PC layout as the 5334A, except we went to the
> then-new process called "soldermask over bare copper" (SMOBC).
> AFAIK, the 5334B was the first HP intrument to use a
> non gold plated PC board. Anyway, the front end oscillated
> on the new boards, because the lossy nickel was no longer
> damping out the oscillations. We had to insert a discrete resistor
> at the input of the buffer amplifier to damp out a 100 MHz
> resonance in a long trace.
>
> I don't know for sure that the 5341 has the same basic front end,
> but knowing how things went at the Santa Clara Division, it is
> likely to be very similar. I never worked on the 5341 nor do I
> have a manual.

The only thing I can see is that it has indeed gold plated PCB, the
80 MHz amplifier is a little board with a few components and probably
all the integrated circuit are custom, so I have few hopes to debug it
without the schematic.

I'll probably return the unit to the former owner.

Thanks

Francesco IS0FKQ

1669. Custom made 19" rack cabinets

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-22 08:53:08 UTC
From: "amstereo@meduci.com" <amstereo@meduci.com>
Message-ID: <1111481588.786787.41900@g14g2000cwa.googlegroups.com>
Source record: 19701

Can anyone recommend a good source for 19" EIA rack mounted aluminum enclosure for electronic project? Also, this company should be able to handle small quantity order, and pre-punch square and round openings on the front and rear sides, and silk screen the lettering.

Has anyone else put their creations in a professional enclosure and had the openings made by others? Thanks in advance.

1670. (",) Do You Want To Know For Sure You Are Going To Heaven?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-22 09:28:49 UTC
From: Ron038548@yahoo.com
Message-ID: <1111483729.257776.159430@z14g2000cwz.googlegroups.com>
Source record: 19706

http://www.want-to-be-sure.blogspot.com << Click On Link

1671. Re: Custom made 19" rack cabinets

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-22 13:24:37 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <u07041lpvsg4p0320okl9qohecdb82fbnm@4ax.com>
Source record: 19709

On 22 Mar 2005 00:53:08 -0800, "amstereo@meduci.com"
<amstereo@meduci.com> wrote:

>Can anyone recommend a good source for 19" EIA rack mounted aluminum
>enclosure for electronic project? Also, this company should be able to
>handle small quantity order, and pre-punch square and round openings on
>the front and rear sides, and silk screen the lettering.
>
>Has anyone else put their creations in a professional enclosure and had
>the openings made by others? Thanks in advance.

Considering the cost of shipping, someplace local to you would make
the most sense.

Check out the Thomas Register at a local library, or their online
version.

Happy trails,
Gary (net.yogi.bear)
--
At the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

1672. New TL783 (HV Reg) available

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-22 14:32:07 UTC
From: John Walton <jdwalton@comcast.net>
Message-ID: <Vt6dndmA3sx3t93fRVn-rA@comcast.com>
Source record: 19705

Well, my supply of TL783's has been wiped out, but I note that TI has introduced the TL783CKTER which has the same specs, somewhat different package. They are available at Digikey.

1673. Re: Need to build a simple mains power supply for linear amplifier (28V 30A)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-22 15:01:25 UTC
From: "ps)dude" <ps_dude@nospam.net>
Message-ID: <42403343.D5B3CFDF@nospam.net>
Source record: 19713

Hi,

I am not talking Linear but Switching power supplies.
(class B fcc type very low ripple and work very well)

Lambda has several lines of switching supplies, under 3 kilo !

http://www.lambdapower.com/products/ultra-flex-dc-series.htm

Lambda ultraflex, alpha or vega show up surplus
many times a week on auction ebay and trader lists.

These are expensive new but go for a lot less used or old stock,
newer models displaced this series.

I have a few I got for under $ 20 usd that were new in box.

pd_dude

J M Noeding wrote:

> On Sun, 20 Mar 2005 22:06:51 GMT, ps_dude <ps_dude@nospam.com> wrote:
>
> >You will also have to get power transformer to drop
> >your mains and that will add to the cost.
> >
> >You can try to locate surplus power supplies,
> >linear type by Lambda, lambda/coutant, Nemic Lambda,
> >also switching supplies very inexpensive used surplus.
> >Telco power supplies also would be attractive.
> >
> >ps_dude
>
> only the freight is very expensive
> had some requests from Australia for some TWT amplifiers, but when we
> checked the price for postage you could just forget it very soon
>
> ---
> J. M. Noeding, LA8AK, N-4623 Kristiansand
> http://home.online.no/~la8ak/91n.htm

1674. Re: Need to build a simple mains power supply for linear amplifier (28V 30A)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-22 16:39:04 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <bci041dvo9r0va0i5rsrpv2acbcbd461pf@4ax.com>
Source record: 19708

On Tue, 22 Mar 2005 15:01:25 GMT, "ps)dude" <ps_dude@nospam.net>
wrote:

>Hi,
>
>I am not talking Linear but Switching power supplies.
>(class B fcc type very low ripple and work very well)
>
>Lambda has several lines of switching supplies, under 3 kilo !
>
>http://www.lambdapower.com/products/ultra-flex-dc-series.htm
>
>Lambda ultraflex, alpha or vega show up surplus
>many times a week on auction ebay and trader lists.
>
>These are expensive new but go for a lot less used or old stock,
>newer models displaced this series.
>
>I have a few I got for under $ 20 usd that were new in box.
>
>pd_dude
>
OK,

I am promissed 3 new Eltek power supplies, variable between 0-60V,
30A, but still I want to experiment and improve the old power supplies
for definite purpose, no problem when one has all the components

-JM

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/91n.htm

1675. Re: Need to build a simple mains power supply for linear amplifier (28V 30A)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-22 19:02:07 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1111518127.710833.61310@z14g2000cwz.googlegroups.com>
Source record: 19707

Neither schematic shows the most expensive components: the transformer and filter caps.

If you have a 24VAC transformer and a full-wave rectifier you have something like 31 or 32VDC under full load. That's not a lot of headroom if you have brownouts etc to worry about.

It also seems that neither has any overcurrent/crowbar protection. If your pass transistor fails shorted and everything still works and nothing blows up... maybe you didn't need a regulator in the first place :-).

Tim.

1676. FA:NOS Tubes:5Y3,EL-34

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-22 23:12:18 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <mD10e.438443$w62.347760@bgtnsc05-news.ops.worldnet.att.net>
Source record: 19703
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Tubes: NOS USN 5Y3WTGB + EL-34 Russian + noninductive resistors+600K 175 W pwr resistors+ Jennings PI-Tank Calculator slide ruler.....see at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx Heytubeguy

1677. Re: Need to build a simple mains power supply for linear amplifier (28V 30A)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-23 00:35:11 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <a4e14195urjil7bpldh6jvi8bra1vkeg5q@4ax.com>
Source record: 19711

On 22 Mar 2005 11:02:07 -0800, "Tim Shoppa" <shoppa@trailing-edge.com>
wrote:

>Neither schematic shows the most expensive components: the transformer
>and filter caps.
>
>If you have a 24VAC transformer and a full-wave rectifier you have
>something like 31 or 32VDC under full load. That's not a lot of
>headroom if you have brownouts etc to worry about.
>
>It also seems that neither has any overcurrent/crowbar protection. If
>your pass transistor fails shorted and everything still works and
>nothing blows up... maybe you didn't need a regulator in the first
>place :-).
>
>Tim.

In nearly 40 years years I have dealt with semiconductors I have never
experienced that crowbar has been a need for the power supplies used
on this side, but what I can say about many constructions seen, I
would use them without crowbar because they are sensible to RF, and
often not well designed in other ways
I usually have current protection, but for simplicity it isn't shown
here, I also considered to use a simple thing as an old fuse since
shortcircuiting the output hasn't really occured more than a few times
here.

I intend to use toroid transformer, and believe the output voltage
varies somewhat more than for a standard E-core transformer

73
jan-martin, LA8AK

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/91n.htm

1678. Re: Darlington Transistors At RF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-23 00:54:18 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1111539258.034918.97150@g14g2000cwa.googlegroups.com>
Source record: 19712

Jan-Martin wrote, "perhaps not so much for RF, but I wonder why you don't see NPN/PNP combination for darlington transistors - with Vbe = 0.55-0.6V"

Actually, I think if you look at schematics of transistorized audio amplifiers, you'll find examples of about every practical combination of two and three transistors, used to build complimentary output stages. If I understand correctly what you are suggesting, I'm quite sure I've seen that configuration. In the 1960's and into the '70's, there were a lot of games played to try to pair up NPN power transistors with PNP drivers to get PNP-equivalents and NPN-equivalents that were as nearly symmetrical as possible while giving high current gain, since PNP power transistors weren't up to performing as well as the NPNs in that era.

Cheers,
Tom

1679. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-23 01:27:04 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <G6SdnVdIOo57WN3fRVn-gQ@comcast.com>
Source record: 19710

As a follow-up - I bought and assembled the really simple kit sold
by Ramsey - and described in detail here:

www.sentex.ca/~mec1995/aviarx/avrxkitc.html

I wasn't expecting much - but was really surprised! It works really well
and has provided a platform that I can hack to death without feeling
bad about destroying it if it comes to that...

I'm about 8 miles from Washington National (DCA) with alot of "stuff"
in between. With a lousy 21" wire, I have no problems picking up both
Potomac Departure and Potomac Approach (with the first I heard being
Air Force One coming in to Andrews AFB).

The only modifications I've made are to increase the supply to 12V (from
9V - per Jim Weir's comments) and to replace the worthless 10k varactor
tuning pot with a 3-turn widget salvaged from some old Tektronix gear.

The thing works great!

Now I'm looking for suggestions on how to "improve" it. My list includes:

Replace NE 602 with SA612A mixer and add "real" tuning via National PLL
and Minicircuits VCO.

Replace 10.7 Mhz. ceramic filter with 4-pole Xtal-based filter.

Replace MC1350 with MC1349 (per Len Anderson) and rework AGC.

Add serious LP audio filter to output of AM detector diode.

Throw away or rework "squelch" circuit - as it is makes lots of noise and
is annoying (loud pops when switching in and out)...

Get a decent (e.g. dipole 1/2 wave antenna).

It seems to me that after attempting to improve the RF section the biggest
gains are to be had in tweaking the audio stages - so that's what I'm
focusing on. Just for fun - alot of filtering, noise gate, compression,
limiting, etc. seem to be areas where I can really play with the thing and
improve the performance. I've been looking at both Analog Devices
and THAT components as a step short of going to DSP. I think some
real improvements can be made. The basic signal is there (certainly at
levels which are "good enough") even with such a simple receiver. I'd
like to see what can actually be done (keeping in mind that this is a
"learning exercise"..)....

Any suggestions appreciated! (And, yes, there are plans to tweak the
IF per previous suggestions!)...

Thanks,
Bill

<LenAnderson@ieee.org> wrote in message
news:1111176270.711353.218830@g14g2000cwa.googlegroups.com...
> From: "Pete KE9OA" on Fri, Mar 18 2005 6:36 am
>
> >I would go directly from 45MHz to 455kHz.............this is typical
> in HF
> >receivers. An NE602 mixer can be used for the 2nd mixer and a
> 44.545MHz
> >crystal used with the on-board oscillator allows you to derive your
> 2nd I.F.
> >Alternatively, you can use a TDA1572 as the 2nd mixer/I.F./
> demodulator.
> >This is also a good system and it will give you fairly good strong
> signal
> >handling capability.
> >
> >Pete
> >
> >"Netgeek" <no_spam@comcast.net> wrote in message
> >news:wKOdnd6MJJv_gqffRVn-1w@comcast.com...
> >> Parts are on the way...
> >>
> >> First IF = 45 MHz
> >> Second IF = 10.7 MHz
> >>
> >> Any point in going further to 455 KHz for a third IF or just stick
> >> with the 10.7 -> (MC1350 plus IF transformer) scheme?
> >>
> >> Bill
>
> As a suggestion (too late if parts are incoming), a
> single conversion to a 21.4 MHz IF is quite suitable.
> Using a monolithic quartz crystal filter (available
> from DigiKey for about $15 a pair of two) between
> the mixer and first IF could eliminate ALL tuned
> circuits in the IF following the 1st IF amplifier.
> Those are available in 12.5 KHz bandwidth which will
> be fine for a VOR signal. [DigiKey has a link to
> download specs for the ECS-made monolithics]
>
> This is now common in mobile radios, both new and
> retrofit of older ones.
>
> If a single-conversion scheme with 21.4 MHz is done,
> the LO can be 86.6 to 96.6 MHz with an image at
> 65.2 to 75.2 MHz. That is a low enough frequency
> to allow a simple L-C "top coupled resonator" fixed
> bandpass filter for the front end at 108 to 118 MHz

> (8.9 % bandwidth).
>
> Doing double conversion with a first IF of 45 MHz
> is, by itself, no problem. However the 2nd IF image
> is a bit too close to the nominal bandwidth of any
> 45 MHz 1st IF tuning (it's only 0.91 MHz away). With
> the second's image (on either side depending on 2nd
> LO above or below 45 MHz), there's still a chance to
> pick up part of the FM BC band locally. To avoid
> that, the 2nd LO should be on the high side of 45.
> Second IF image would then fall into the low end of
> the 118 to 137 MHz comm band (also AM) and those
> transmitters are much lower powered ones than BC
> stations.
>
> With a 10.7 MHz 2nd IF, its image would be 21.4 MHz
> away and rather easy to attenuate in the 45 MHz 1st
> IF. There's only a slight problem using stock
> 10.7 MHz IF components: Bandwidth of the whole 2nd
> IF might be around 160 KHz; less discrimination to
> nearby VORs and Localizers. A study of FAA sectional
> charts might be called for to check on potential
> interfering stations although those are assigned in
> regards geographic locations to minimize normal
> interference.
>
> LenAnderson@ieee.org
>

1680. Re: Custom made 19" rack cabinets

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-23 02:48:29 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <ddednUC9FepjRd3fRVn-vw@comcast.com>
Source record: 19704

<amstereo@meduci.com> wrote in message
news:1111481588.786787.41900@g14g2000cwa.googlegroups.com...
> Can anyone recommend a good source for 19" EIA rack mounted aluminum
> enclosure for electronic project? Also, this company should be able to
> handle small quantity order, and pre-punch square and round openings on
> the front and rear sides, and silk screen the lettering.
>
> Has anyone else put their creations in a professional enclosure and had
> the openings made by others? Thanks in advance.
>

Jim Garland, W8ZR used Buckeye Shapeform in the Miami, Ohio area for his
last project (silk screening and printing)
http://www.miami.muohio.edu/president/personal/w8zr/multicontroller/index.htm.

LMB Enclosures (California) does custom work - but I do not know what their
minimum order is.

There was an enclosure firm in the Ithaca, NY area that did this type of
work.

gb

1681. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-23 06:39:53 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <Za80e.440360$w62.397500@bgtnsc05-news.ops.worldnet.att.net>
Source record: 19715

I can comment on the filter change.....the 10.7MHz ceramic filters
that are being used right now have an IN/OUT Z of 330 ohms.....a
crystal filter will have an IN/OUT Z of 3000 to 6000 ohms. It will work, but
you will need to match the impedances. If the crystal filter is not properly
matched, you will experience a deep nose in the response in the center of
the passband, and your insertion loss could rise sharply. If you are
interested, e-mail me directly and I can send you an Excel spreadsheet that
will calculate the values needed for a series L, shunt C type of matching
network.

Pete

"Netgeek" <no_spam@comcast.net> wrote in message
news:G6SdnVdIOo57WN3fRVn-gQ@comcast.com...
> As a follow-up - I bought and assembled the really simple kit sold
> by Ramsey - and described in detail here:
>
> www.sentex.ca/~mec1995/aviarx/avrxkitc.html
>
> I wasn't expecting much - but was really surprised! It works really well
> and has provided a platform that I can hack to death without feeling
> bad about destroying it if it comes to that...
>
> I'm about 8 miles from Washington National (DCA) with alot of "stuff"
> in between. With a lousy 21" wire, I have no problems picking up both
> Potomac Departure and Potomac Approach (with the first I heard being
> Air Force One coming in to Andrews AFB).
>
> The only modifications I've made are to increase the supply to 12V (from
> 9V - per Jim Weir's comments) and to replace the worthless 10k varactor
> tuning pot with a 3-turn widget salvaged from some old Tektronix gear.
>
> The thing works great!
>
> Now I'm looking for suggestions on how to "improve" it. My list includes:
>
> Replace NE 602 with SA612A mixer and add "real" tuning via National PLL
> and Minicircuits VCO.
>
> Replace 10.7 Mhz. ceramic filter with 4-pole Xtal-based filter.
>
> Replace MC1350 with MC1349 (per Len Anderson) and rework AGC.
>
> Add serious LP audio filter to output of AM detector diode.
>

> Throw away or rework "squelch" circuit - as it is makes lots of noise and
> is annoying (loud pops when switching in and out)...
>
> Get a decent (e.g. dipole 1/2 wave antenna).
>
> It seems to me that after attempting to improve the RF section the biggest
> gains are to be had in tweaking the audio stages - so that's what I'm
> focusing on. Just for fun - alot of filtering, noise gate, compression,
> limiting, etc. seem to be areas where I can really play with the thing and
> improve the performance. I've been looking at both Analog Devices
> and THAT components as a step short of going to DSP. I think some
> real improvements can be made. The basic signal is there (certainly at
> levels which are "good enough") even with such a simple receiver. I'd
> like to see what can actually be done (keeping in mind that this is a
> "learning exercise"..)....
>
> Any suggestions appreciated! (And, yes, there are plans to tweak the
> IF per previous suggestions!)...
>
> Thanks,
> Bill
>
> <LenAnderson@ieee.org> wrote in message
> news:1111176270.711353.218830@g14g2000cwa.googlegroups.com...
>> From: "Pete KE9OA" on Fri, Mar 18 2005 6:36 am
>>
>> >I would go directly from 45MHz to 455kHz.............this is typical
>> in HF
>> >receivers. An NE602 mixer can be used for the 2nd mixer and a
>> 44.545MHz
>> >crystal used with the on-board oscillator allows you to derive your
>> 2nd I.F.
>> >Alternatively, you can use a TDA1572 as the 2nd mixer/I.F./
>> demodulator.
>> >This is also a good system and it will give you fairly good strong
>> signal
>> >handling capability.
>> >
>> >Pete
>> >
>> >"Netgeek" <no_spam@comcast.net> wrote in message
>> >news:wKOdnd6MJJv_gqffRVn-1w@comcast.com...
>> >> Parts are on the way...
>> >>
>> >> First IF = 45 MHz
>> >> Second IF = 10.7 MHz
>> >>
>> >> Any point in going further to 455 KHz for a third IF or just stick
>> >> with the 10.7 -> (MC1350 plus IF transformer) scheme?
>> >>

>> >> Bill
>>
>> As a suggestion (too late if parts are incoming), a
>> single conversion to a 21.4 MHz IF is quite suitable.
>> Using a monolithic quartz crystal filter (available
>> from DigiKey for about $15 a pair of two) between
>> the mixer and first IF could eliminate ALL tuned
>> circuits in the IF following the 1st IF amplifier.
>> Those are available in 12.5 KHz bandwidth which will
>> be fine for a VOR signal. [DigiKey has a link to
>> download specs for the ECS-made monolithics]
>>
>> This is now common in mobile radios, both new and
>> retrofit of older ones.
>>
>> If a single-conversion scheme with 21.4 MHz is done,
>> the LO can be 86.6 to 96.6 MHz with an image at
>> 65.2 to 75.2 MHz. That is a low enough frequency
>> to allow a simple L-C "top coupled resonator" fixed
>> bandpass filter for the front end at 108 to 118 MHz
>> (8.9 % bandwidth).
>>
>> Doing double conversion with a first IF of 45 MHz
>> is, by itself, no problem. However the 2nd IF image
>> is a bit too close to the nominal bandwidth of any
>> 45 MHz 1st IF tuning (it's only 0.91 MHz away). With
>> the second's image (on either side depending on 2nd
>> LO above or below 45 MHz), there's still a chance to
>> pick up part of the FM BC band locally. To avoid
>> that, the 2nd LO should be on the high side of 45.
>> Second IF image would then fall into the low end of
>> the 118 to 137 MHz comm band (also AM) and those
>> transmitters are much lower powered ones than BC
>> stations.
>>
>> With a 10.7 MHz 2nd IF, its image would be 21.4 MHz
>> away and rather easy to attenuate in the 45 MHz 1st
>> IF. There's only a slight problem using stock
>> 10.7 MHz IF components: Bandwidth of the whole 2nd
>> IF might be around 160 KHz; less discrimination to
>> nearby VORs and Localizers. A study of FAA sectional
>> charts might be called for to check on potential
>> interfering stations although those are assigned in
>> regards geographic locations to minimize normal
>> interference.
>>
>> LenAnderson@ieee.org
>>
>
>

1682. Re: Lowe HF150 alignment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-23 06:42:25 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <ld80e.440371$w62.286244@bgtnsc05-news.ops.worldnet.att.net>
Source record: 19714

Thanks Arnie.....a fellow in England sent me a scanned PDF
of the manual. You know, I've also got an AOR7030, but the HF150 does seem
to have a much better low end response remeniscent of the old Philco console
radios.
Thanks again!

Pete

"arniek" <hf-freak@arcor.de> wrote in message
news:d1n1taudh05$1@news.t-online.com...
> Hi Pete,
>
> if you should need any other information from the HF150 technical manual
> just send me an email.
>
> 73,
> Arnie

1683. Re: Darlington Transistors At RF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-23 07:01:23 UTC
From: dumpjunkmailhere@yahoo.com
Message-ID: <1111561283.890471.90560@z14g2000cwz.googlegroups.com>
Source record: 19716

There are a few darlington transistors with an fT ratings of 20-200 MHz. IIRC, they are 2N6576, 2N6577 and 2N6578, all NPN devices with Pd's of 120 watts. I'm not sure if 20-200 is a misprint. Looks like one could get a lot of output with very little drive! Is anyone familiar with the 2N657x series? Are they suitable for VHF?

1684. (",) Do You Want To Know For Sure You Are Going To Heaven?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-23 10:39:36 UTC
From: Ron038652@yahoo.com
Message-ID: <1111574376.289748.5970@g14g2000cwa.googlegroups.com>
Source record: 19717

http://www.want-to-be-sure.blogspot.com << Click On Link

1685. Re: VHF Aviation Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-23 11:35:00 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <F9qdnQyqwe35ydzfRVn-3g@comcast.com>
Source record: 19718

I guess it would have been handy if I'd posted the *correct* link
to the kit and schematic...8-) The kit was from Ramsey and it is
identical to the design and schematic posted here:

www.uoguelph.ca/~antoon/circ/aviarx/aviarx.html

As you can see it's surprisingly simple (and surprising how well
it actually works).

Thanks again for all suggestions!
Bill

"Netgeek" wrote in message

> As a follow-up - I bought and assembled the really simple kit sold
> by Ramsey - and described in detail here:
>
> www.sentex.ca/~mec1995/aviarx/avrxkitc.html

1686. Re: Need to build a simple mains power supply for linear amplifier (28V 30A)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-23 16:35:02 UTC
From: PS_Dude <psdude@nospam.com>
Message-ID: <42419AB6.AA1C8FC@nospam.com>
Source record: 19719

Hi JM,

OK, good, your original post did not mention you have
all the necessary parts to build the unit(s).

regards,
ps_dude

J M wrote:

>
> I am promissed 3 new Eltek power supplies, variable between 0-60V,
> 30A, but still I want to experiment and improve the old power supplies
> for definite purpose, no problem when one has all the components
>
>
>

1687. Re: Need to build a simple mains power supply for linear amplifier (28V 30A)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-23 17:51:31 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1111600291.589319.271390@o13g2000cwo.googlegroups.com>
Source record: 19720

> I have never experienced that
> crowbar has been a need for the power supplies

It's in large part an economic decision - why protect something if it doesn't have much value?

In many cases not having a crowbar means not really needing regulation.

Is your desire for regulation mainly to get rid of hum?

> I intend to use toroid transformer,
> and believe the output voltage
> varies somewhat more than for
> a standard E-core transformer

I've had good luck buying medium duty (several hundred VA rated) toroid transformers on E-bay and rewinding them for my own uses. You'll need something like 1000 VA, and I think these exist but haven't paid much attention.

It's generally easier for me to add/replace windings to toroid transformers than to unshellac a E-core transformer and rewind. Some toroids have shellac type coatings but many of the big ones are just kinda plastic-wrapped (not exactly heat shrink because heat shrink doesn't come in toroidal forms!), which makes things really easy.

Tim.

1688. ISO Pal 20L8 Chips and Burner

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-23 19:07:02 UTC
From: Bud <wisewisperer@direcway.com>
Message-ID: <1111604822.804543.189840@z14g2000cwz.googlegroups.com>
Source record: 19721
Cross-posted to: rec.radio.amateur.swap,rec.radio.amateur.homebrew

I am in search of a few Pal 20L8ACNS chips or their replacement, as well as a programmer or schematic to build one. I have to duplicate a chip for one of my projects and would appreciate any advice of an equivalant if an original cannot be found. Gladly pay any reasonable costs. Thanks & 73's Don Smith KB6GQA

1689. Homebrew RX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-23 22:08:37 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <FNl0e.16399$b_6.6287@trnddc01>
Source record: 19722

I had posted this elsewhere, and it has created some interesting feedback.
Based on Wes W7ZOI's Preogressive RX from the late 1980's. A wonderfully
balanced design to which I added some bells and whistles I like in a
receiver.
These are some shots of my almost finished 1980's theme HF receiver.
All stainless hardware, teflon wiring. Rock stable VFO, homebrew xtal
filters (5/2/5/0.5), selectable and defeatable AGC, notch filter, tone
control, QSK input,built in front end BP filters for each band, preselector,
AM/USB/LSB/CW.
Enjoy:
http://www.parelectronics.com/pics/W7ZOI11%20copy.jpg

http://www.parelectronics.com/pics/w7zoi13jpg.jpg

http://www.parelectronics.com/pics/w7zoi14.jpg

http://www.parelectronics.com/pics/w7zoi15.jpg

Dale W4OP
for PAR Electronics, Inc.

1690. Re: Homebrew RX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-23 23:50:33 UTC
From: Floyd Sense <fsense@copper.net>
Message-ID: <42420123_1@newsfeed.slurp.net>
Source record: 19723

VERY nice work, Dale. Makes me want to build a receiver again!

73, Floyd - K8AC

"Dale Parfitt" <par@parelectronics.com> wrote in message
news:FNl0e.16399$b_6.6287@trnddc01...
>I had posted this elsewhere, and it has created some interesting feedback.
> Based on Wes W7ZOI's Preogressive RX from the late 1980's. A wonderfully
> balanced design to which I added some bells and whistles I like in a
> receiver.
> These are some shots of my almost finished 1980's theme HF receiver.
> All stainless hardware, teflon wiring. Rock stable VFO, homebrew xtal
> filters (5/2/5/0.5), selectable and defeatable AGC, notch filter, tone
> control, QSK input,built in front end BP filters for each band,
> preselector,
> AM/USB/LSB/CW.
> Enjoy:
> http://www.parelectronics.com/pics/W7ZOI11%20copy.jpg
>
> http://www.parelectronics.com/pics/w7zoi13jpg.jpg
>
> http://www.parelectronics.com/pics/w7zoi14.jpg
>
> http://www.parelectronics.com/pics/w7zoi15.jpg
>
> Dale W4OP
> for PAR Electronics, Inc.
>
>

1691. Re: Homebrew RX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-24 01:27:29 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <9aKdnRovBJEZit_fRVn-rA@comcast.com>
Source record: 19724

"Dale Parfitt" <par@parelectronics.com> wrote in message
news:FNl0e.16399$b_6.6287@trnddc01...
>I had posted this elsewhere, and it has created some interesting feedback.
> Based on Wes W7ZOI's Progressive RX from the late 1980's. A wonderfully
> balanced design to which I added some bells and whistles I like in a
> receiver.
> These are some shots of my almost finished 1980's theme HF receiver.
> All stainless hardware, teflon wiring. Rock stable VFO, homebrew xtal
> filters (5/2/5/0.5), selectable and defeatable AGC, notch filter, tone
> control, QSK input,built in front end BP filters for each band,
> preselector,
> AM/USB/LSB/CW.
> Enjoy:
> http://www.parelectronics.com/pics/W7ZOI11%20copy.jpg
>
> http://www.parelectronics.com/pics/w7zoi13jpg.jpg
>
> http://www.parelectronics.com/pics/w7zoi14.jpg
>
> http://www.parelectronics.com/pics/w7zoi15.jpg
>
> Dale W4OP
> for PAR Electronics, Inc.
>
Dale -

Very nice. Looks like you built the RX .. that I am still designing since
1980 and reading Wes' articles. :-)

I see you used a 9 MHz IF.
Any particular reason that you used separate (LO) oscillators for each band
(rather than a single oscillator with switchable crystals) ?

The cabinet look a bit like some LMB enclosures.

Greg
w9gb

1692. Re: Homebrew RX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-24 01:41:55 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <DVo0e.23334$oa6.22105@trnddc07>
Source record: 19725

"gb" <onw9mapsgb@no.arrl.spam.net> wrote in message
news:9aKdnRovBJEZit_fRVn-rA@comcast.com...
> "Dale Parfitt" <par@parelectronics.com> wrote in message
> news:FNl0e.16399$b_6.6287@trnddc01...
> >I had posted this elsewhere, and it has created some interesting
feedback.
> > Based on Wes W7ZOI's Progressive RX from the late 1980's. A wonderfully
> > balanced design to which I added some bells and whistles I like in a
> > receiver.
> > These are some shots of my almost finished 1980's theme HF receiver.
> > All stainless hardware, teflon wiring. Rock stable VFO, homebrew xtal
> > filters (5/2/5/0.5), selectable and defeatable AGC, notch filter, tone
> > control, QSK input,built in front end BP filters for each band,
> > preselector,
> > AM/USB/LSB/CW.
> > Enjoy:
> > http://www.parelectronics.com/pics/W7ZOI11%20copy.jpg
> >
> > http://www.parelectronics.com/pics/w7zoi13jpg.jpg
> >
> > http://www.parelectronics.com/pics/w7zoi14.jpg
> >
> > http://www.parelectronics.com/pics/w7zoi15.jpg
> >
> > Dale W4OP
> > for PAR Electronics, Inc.
> >
> Dale -
>
> Very nice. Looks like you built the RX .. that I am still designing since
> 1980 and reading Wes' articles. :-)
>
> I see you used a 9 MHz IF.
> Any particular reason that you used separate (LO) oscillators for each
band
> (rather than a single oscillator with switchable crystals) ?
>
> The cabinet look a bit like some LMB enclosures.
>
> Greg
> w9gb
>
Hi Greg,
I did not deviate a lot from Wes's original PR design- and that used a 9 MHz

IF. I also had a bunch of xtals for the filters- so just stuck with it. It also allowed the 49M LO to double as the 160M L.O.
F.A.R. circuits had the L.O. boards already made up, so I went with that. No reason I suppose, if one had an osc. that would paly well over the entire range w/ good spectral purity that a single L.O. and PIN diodes could not be used for switching. Would have saved on some SMA connex!
The side rails and cabinet, and matching speaker cabinet (not shown) are from a junker SB-303 I found on E Bay (have another for the mating TX once I recover). All the rest- front panel, subchassis, rear panel awere done in my machine shop.
I know of the LMB you are talking about - nice stuff, but hard to come by in larger sizes these days I suppose.
They were steel I thnk, whereas the Heath stuff is aluminum which I find a lot easier to machine.
Dale W4OP
>

1693. 7077 Ceramic UHF tube

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-24 01:46:41 UTC
From: John <johnpwr@verizon.net>
Message-ID: <1111628801.666079.239070@z14g2000cwz.googlegroups.com>
Source record: 19726

WTB 7077 Ceramic UHF tubes.

State Condition

Price

Cost for shipping

John A. zip 02461

johnpwr@verizon.net

Thanks,

//john

1694. Re: Homebrew RX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-24 02:51:31 UTC
From: Mike Silva <snarflemike@yahoo.com>
Message-ID: <1111632691.964974.198470@g14g2000cwa.googlegroups.com>
Source record: 19727

Very nice indeed! What's the story behind the dial?

73,
Mike, KK6GM

1695. Re: Homebrew RX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-24 03:07:30 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <S9q0e.9554$191.2092@trnddc02>
Source record: 19728

"Mike Silva" <snarflemike@yahoo.com> wrote in message
news:1111632691.964974.198470@g14g2000cwa.googlegroups.com...
> Very nice indeed! What's the story behind the dial?
>
> 73,
> Mike, KK6GM
>
Hi Mike,
The dial was the original inspiration for the receiver- it is an Eddystone
898 slide rule dial. 88:1 reduction, flywheel weighted and backlash free
silky smooth.

Dale W4OP

1696. Homebrew RX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-24 05:44:47 UTC
From: meara.london@virgin.net
Message-ID: <22f6e3ee.0503232144.3c8464de@posting.google.com>
Source record: 19729

Dale: Inspirational. Very FB OM. I looked at all the pictures and found good ideal in all of them. Thanks for posting this.

Others have commented on the ugliness deficit in your project. Of course,
we're jealous, but I have to say that I've also found inspiration in the
much uglier circuit pictures that show up in SSDRA and (more recently), in Experimental Methods. I was reassured that the circuits in those books sometimes looked even uglier than some of mine. (And that's saying something).

So hey, maybe next time could you ugly it up a bit before taking the pictures?
;-)

73

Bill M0HBR N2CQR CU2JL
http://planeta.clix.pt/n2cqr

1697. (",) Do You Want To Know For Sure You Are Going To Heaven?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-24 12:43:11 UTC
From: Ron038653@yahoo.com
Message-ID: <1111668191.366873.264530@z14g2000cwz.googlegroups.com>
Source record: 19730

http://www.want-to-be-sure.blogspot.com << Click On Link

1698. Re: Homebrew RX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-24 13:31:13 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <Biz0e.50880$hA3.35490@trnddc09>
Source record: 19731

"Bill N2CQR MOHBR" <meara.london@virgin.net> wrote in message
news:22f6e3ee.0503232144.3c8464de@posting.google.com...
> Dale: Inspirational. Very FB OM. I looked at all the pictures and
> found good ideal in all of them. Thanks for posting this.
>
> Others have commented on the ugliness deficit in your project. Of
> course,
> we're jealous, but I have to say that I've also found inspiration in
> the
> much uglier circuit pictures that show up in SSDRA and (more
> recently), in Experimental Methods. I was reassured that the circuits
> in those books sometimes looked even uglier than some of mine. (And
> that's saying something).
>
> So hey, maybe next time could you ugly it up a bit before taking the
> pictures?
> ;-)
>
> 73
>
> Bill M0HBR N2CQR CU2JL
> http://planeta.clix.pt/n2cqr

Hi Bill,
Hey, I tried; I took the pix before cable lacing!
When I sent Wes some of the early pictures, he did comment on the "lack of ugliness". You guys are getting hard to please.
BTW, one of the thoughts that steered me along the way was to have a solid state Drake 2B with a few more bells. One thing I lack, but could be added is that wonderful Drake PBT. That is one advantage of the modular approach-experimentation down the road.

Dale W4OP

1699. Re: Homebrew RX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-24 13:50:47 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <XAz0e.2201$c76.2025@newssvr11.news.prodigy.com>
Source record: 19732

Dale

Very, very, very, nice job, thanks for showing your work..
I like the room inside to work on it..
The workmanship is commercial grade, what is your profession?
Did yiu say you've laced it, if so how about a pix?
The only thing that I see that I would do if I were building it is I would
swap the tone and volume as I like the volume right next to the tuning knob.
Where does one get an eddystone dial these days and how much?

--

73
Hank WD5JFR
"Dale Parfitt" <par@parelectronics.com> wrote in message
news:FNl0e.16399$b_6.6287@trnddc01...
>I had posted this elsewhere, and it has created some interesting feedback.
> Based on Wes W7ZOI's Preogressive RX from the late 1980's. A wonderfully
> balanced design to which I added some bells and whistles I like in a
> receiver.
> These are some shots of my almost finished 1980's theme HF receiver.
> All stainless hardware, teflon wiring. Rock stable VFO, homebrew xtal
> filters (5/2/5/0.5), selectable and defeatable AGC, notch filter, tone
> control, QSK input,built in front end BP filters for each band,
> preselector,
> AM/USB/LSB/CW.
> Enjoy:
> http://www.parelectronics.com/pics/W7ZOI11%20copy.jpg
>
> http://www.parelectronics.com/pics/w7zoi13jpg.jpg
>
> http://www.parelectronics.com/pics/w7zoi14.jpg
>
> http://www.parelectronics.com/pics/w7zoi15.jpg
>
> Dale W4OP
> for PAR Electronics, Inc.
>
>

1700. Re: Homebrew RX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-24 17:37:36 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <AVC0e.51113$hA3.20720@trnddc09>
Source record: 19733

"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
news:XAz0e.2201$c76.2025@newssvr11.news.prodigy.com...
> Dale
>
> Very, very, very, nice job, thanks for showing your work..
> I like the room inside to work on it..
> The workmanship is commercial grade, what is your profession?
> Did yiu say you've laced it, if so how about a pix?
> The only thing that I see that I would do if I were building it is I would
> swap the tone and volume as I like the volume right next to the tuning
knob.
> Where does one get an eddystone dial these days and how much?
>
> --
>
> 73
> Hank WD5JFR
Hi Hank,

There are a few things I would do differently too- unfortunately, that front
panel has too many hours in it (for me at least) to change. I learn on each
one.
I found the Eddystone on EBay and looking for another for the matching TX.
My professon is EE, but have a full machine shop and just enough knowledge
to use the mill and lathe.
Dale

1701. Source for Radio Hankbook by William Orr

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-24 17:42:31 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <Z4GdnWFusojeZt_fRVn-jg@comcast.com>
Source record: 19734

Does anyone happen to have a copy of William Orr's "Radio Handbook" from 1997 that they'd be willing to part with (i.e., sell)? It's out of print, and so far the only book seller I've found that actually has a copy wants $95, which is a little too rich for my blood.

It's probably still under copyright protection, but otherwise I'd volunteer to scan the thing and turn it into a PDF if I could borrow someone's copy.

---Joel Kolstad

1702. Re: Homebrew RX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-24 17:48:48 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <d1uui0$9g5$1@theodyn.ncf.ca>
Source record: 19735

"gb" (onw9mapsgb@no.arrl.spam.net) writes:

> I see you used a 9 MHz IF.
> Any particular reason that you used separate (LO) oscillators for each band
> (rather than a single oscillator with switchable crystals) ?
>
Surely because it works out to be simpler.

People often make the mistake that extra circuitry is bad because it complicates things, but the reality is often that extra circuitry simplifies things.

Back in the days of tubes, their bulk and filament current (or slow startup if you switch the filament) meant that one did give thought before adding another tube. It probably was simpler to switch crystals than switch oscillators, and compared to the cost of tubes and sockets, the switch was relatively cheap.

Once transistors came along, their size, low current and instant on meant the game changed. If adding another transistor in an IF stage meant that all the stages were running at a lower level, better to do. It added little to the cost, and pretty much nothing to the current drain.

If you switch crystals, you limit layout. You need that switch near the crystals (and in some cases may need two poles per position), or you need to use relays (I've seen it done in mods to tube equipment) or diode switches. Those diodes can often cause some problems, depending on choice and useage. Switching crystal oscillators means none of this applies, and the cost of the transistor and passive components is nothing compared to the cost of the crystal.

This is a theme of some of Hayward's work. Various times, he's described transceivers, and not only is he using separate IF strips for receive and transmit, but he's got a separate IF filter for each function. His reasoning is that it makes the chain cleaner by not having the switching. Given the cost of commercial filters, I'm not sure that's the best choice, but certainly there is a tradeoff. If adding a few dollars for an extra RF stage rather than switching tuned circuits requires a cheaper switch, or makes it easier to do the switching, it may be worth spending those few dollars rather than fuss too much.

Jerry Vogt (I"ve spelled that wrong) who seemed to be connected with Hamtronics (at least, he wrote about their stuff for Ham Radio magazine) pointed out in an article about preamps that a manufacturer needs to cut costs. They skimp on parts because any single part saved is

multiplied by the number of units built. But a hobbyist building a single unit doesn't have that multiplier. If they toss in an extra bypass capacitor here, or build each stage into a metal box for shielding, the cost is right there. They don't have to worry about 10,000 more capacitors, or whatever.

Michael VE2BVW

1703. Re: Source for Radio Hankbook by William Orr

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-24 19:08:28 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <d1v37c$c24$1@theodyn.ncf.ca>
Source record: 19736

"Joel Kolstad" (JKolstad71HatesSpam@Yahoo.Com) writes:
> Does anyone happen to have a copy of William Orr's "Radio Handbook" from
> 1997 that they'd be willing to part with (i.e., sell)? It's out of print,
> and so far the only book seller I've found that actually has a copy wants
> $95, which is a little too rich for my blood.
>

There was a 1997 one? I thought the last one was Edition 23, which
came out in 1987. Certainly when I saw it advertised after
that, it was still showing the 23rd edition. And it's not as
good as the ones previous to it. I'm not sure if it took a dip,
or if it's just that there was little different that interested me
from the previous few editions.

Lindsay Publications used to have a 1936 edition as a reprint, but
that's out of print. Though of course back then it was under the helm
of Frank Jones.

Michael VE2BVW

1704. Re: Source for Radio Hankbook by William Orr

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-24 19:16:51 UTC
From: cl <clfurent@Yahoo.Com>
Message-ID: <WmE0e.56349$NC6.54408@newsread1.mlpsca01.us.to.verio.net>
Source record: 19737

"Michael Black" <et472@FreeNet.Carleton.CA> wrote in message
news:d1v37c$c24$1@theodyn.ncf.ca...
>
> "Joel Kolstad" (JKolstad71HatesSpam@Yahoo.Com) writes:
>> Does anyone happen to have a copy of William Orr's "Radio Handbook" from
>> 1997 that they'd be willing to part with (i.e., sell)? It's out of
>> print,
>> and so far the only book seller I've found that actually has a copy wants
>> $95, which is a little too rich for my blood.
>>
>
> There was a 1997 one? I thought the last one was Edition 23, which
> came out in 1987. Certainly when I saw it advertised after
> that, it was still showing the 23rd edition. And it's not as
> good as the ones previous to it. I'm not sure if it took a dip,
> or if it's just that there was little different that interested me
> from the previous few editions.
>
> Lindsay Publications used to have a 1936 edition as a reprint, but
> that's out of print. Though of course back then it was under the helm
> of Frank Jones.
>
> Michael VE2BVW

I "think" it was Howard W. Sams (can't recall for sure) who was having a "clearance" sale on those books a few years back. I got one for about $20 or so. Nice book. I could swear from all I've read, the 23rd was to have been the last. Maybe they snuck another one in.

Try Amazon.com to see if they have it - if you've not already tried there. Maybe even the store called "Half Price Books" if there is one in your area. Barnes and Noble or Waldon's may have it, but they're not that cheap. OR too, you could go to the Howard W. Sams Web Site to see if perhaps they have any left.

I just checked, mine is the 22nd edition. Oh well!

cl

1705. Re: Homebrew RX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-24 19:20:53 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1111692053.632490.313340@f14g2000cwb.googlegroups.com>
Source record: 19738

Cool stuff. Way cool.

Just trying to sort out the bandswitching from the pictures:

Antenna input is switched to one of six bandpass+optional RF amp boards. It looks like the antenna switching is by the black relays in the back?

Eight bands, six band boards, a couple of the bands must be close enough together that they utilize a common board? Or maybe the IF *is* one of the bands...

There appears to be a preselector knob on the front, how does this go into the bandpass/RF amp boards.

The output from the RF band boards is then brought to some sort of combiner board that I cannot make out anything but a bunch of SMA jacks on. Is there switching there too, or (because of power switching to the RF boards) is this just a simple combiner?

And that Eddystone dial is to die for. Oh, man.

Tim.

1706. Re: Source for Radio Hankbook by William Orr

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-24 19:53:37 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <8k6641pm0nrauan2k95g34ratfvlqrvdji@4ax.com>
Source record: 19739

On 24 Mar 2005 19:08:28 GMT, et472@FreeNet.Carleton.CA (Michael Black)
wrote:

>
>"Joel Kolstad" (JKolstad71HatesSpam@Yahoo.Com) writes:
>> Does anyone happen to have a copy of William Orr's "Radio Handbook" from
>> 1997 that they'd be willing to part with (i.e., sell)? It's out of print,
>> and so far the only book seller I've found that actually has a copy wants
>> $95, which is a little too rich for my blood.
>>
>
>There was a 1997 one? I thought the last one was Edition 23, which
>came out in 1987. Certainly when I saw it advertised after
>that, it was still showing the 23rd edition. And it's not as
>good as the ones previous to it. I'm not sure if it took a dip,
>or if it's just that there was little different that interested me
>from the previous few editions.
>
>Lindsay Publications used to have a 1936 edition as a reprint, but
>that's out of print. Though of course back then it was under the helm
>of Frank Jones.

There's a 22nd edition on ebay at the moment.

http://cgi.ebay.ca/ws/eBayISAPI.dll?ViewItem&category=15050&item=5761444586&rd=1&ssPageNam
e=WD4V

1707. Re: Source for Radio Hankbook by William Orr

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-24 20:58:10 UTC
From: Frank Goenninger DG1SBG <frank_goenninger@t-online.de>
Message-ID: <m2y8ccpxr1.fsf@pcsde001.de.goenninger.com>
Source record: 19740

et472@FreeNet.Carleton.CA (Michael Black) writes:

> "Joel Kolstad" (JKolstad71HatesSpam@Yahoo.Com) writes:
>> Does anyone happen to have a copy of William Orr's "Radio Handbook" from
>> 1997 that they'd be willing to part with (i.e., sell)? It's out of print,
>> and so far the only book seller I've found that actually has a copy wants
>> $95, which is a little too rich for my blood.
>>
>
> There was a 1997 one? I thought the last one was Edition 23, which
> came out in 1987. Certainly when I saw it advertised after
> that, it was still showing the 23rd edition. And it's not as
> good as the ones previous to it. I'm not sure if it took a dip,
> or if it's just that there was little different that interested me
> from the previous few editions.

Actually, there is a 1997 reprint from the 23rd edition originating from 1987.
The reprint was done by Butterworth-Heinemann.

The impressum has the following in it:

"The publisher of this book offers special discounts on bulk orders
of this book. For information, please contact:
Manager of Special Sales
Butterworth-Heinemann
225 Wildwood Avenue
Woburn, MA 01801-2041

Tel: 617-928-2500
Fax: 617-928-2620"

Good luck!

73, Frank, DG1SBG

1708. Re: Source for Radio Hankbook by William Orr

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-24 21:32:35 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <d1vbljgml1@theodyn.ncf.ca>
Source record: 19741

Frank Goenninger DG1SBG (frank_goenninger@t-online.de) writes:
> et472@FreeNet.Carleton.CA (Michael Black) writes:
>
>> "Joel Kolstad" (JKolstad71HatesSpam@Yahoo.Com) writes:
>>> Does anyone happen to have a copy of William Orr's "Radio Handbook" from
>>> 1997 that they'd be willing to part with (i.e., sell)? It's out of print,
>>> and so far the only book seller I've found that actually has a copy wants
>>> $95, which is a little too rich for my blood.
>>>
>>
>> There was a 1997 one? I thought the last one was Edition 23, which
>> came out in 1987. Certainly when I saw it advertised after
>> that, it was still showing the 23rd edition. And it's not as
>> good as the ones previous to it. I'm not sure if it took a dip,
>> or if it's just that there was little different that interested me
>> from the previous few editions.
>
> Actually, there is a 1997 reprint from the 23rd edition originating from 1987.
> The reprint was done by Butterworth-Heinemann.
>
There were usually multiple printings of each edition. It only came out
every few years, while the ARRL with an edition once year just prints a new
edition rather than run a second printing.

My 23rd edition is a 3rd printing, from 1989.

Michael VE2BVW

1709. Re: Source for Radio Hankbook by William Orr

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-24 22:05:59 UTC
From: W6JCW Bob <w6jcw@arrl.net>
Message-ID: <Xns96238F6F4904CW6JCWarrlnet@64.164.98.29>
Source record: 19742

et472@FreeNet.Carleton.CA (Michael Black) wrote in
news:d1vbljgml1@theodyn.ncf.ca:

>
> Frank Goenninger DG1SBG (frank_goenninger@t-online.de) writes:
>> et472@FreeNet.Carleton.CA (Michael Black) writes:
>>
>>> "Joel Kolstad" (JKolstad71HatesSpam@Yahoo.Com) writes:
>>>> Does anyone happen to have a copy of William Orr's "Radio Handbook"
>>>> from 1997 that they'd be willing to part with (i.e., sell)? It's
>>>> out of print, and so far the only book seller I've found that
>>>> actually has a copy wants $95, which is a little too rich for my
>>>> blood.
>>>>
>>>
>>> There was a 1997 one? I thought the last one was Edition 23, which
>>> came out in 1987. Certainly when I saw it advertised after
>>> that, it was still showing the 23rd edition. And it's not as
>>> good as the ones previous to it. I'm not sure if it took a dip,
>>> or if it's just that there was little different that interested me
>>> from the previous few editions.
>>
>> Actually, there is a 1997 reprint from the 23rd edition originating
>> from 1987. The reprint was done by Butterworth-Heinemann.
>>
> There were usually multiple printings of each edition. It only came
> out every few years, while the ARRL with an edition once year just
> prints a new edition rather than run a second printing.
>
> My 23rd edition is a 3rd printing, from 1989.
>
> Michael VE2BVW
>
>
>

Mine is a 1997 reprint..I bought it new on Amazon.com a couple years ago.

1710. Re: Homebrew RX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-25 01:33:04 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <kTJ0e.13517$wL6.12030@trnddc03>
Source record: 19743

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
news:1111692053.632490.313340@f14g2000cwb.googlegroups.com...
> Cool stuff. Way cool.
>
> Just trying to sort out the bandswitching from the pictures:
>
> Antenna input is switched to one of six bandpass+optional RF amp
> boards. It looks like the antenna switching is by the black relays in
> the back?
>
> Eight bands, six band boards, a couple of the bands must be close
> enough together that they utilize a common board? Or maybe the IF *is*
> one of the bands...
>
> There appears to be a preselector knob on the front, how does this go
> into the bandpass/RF amp boards.
>
> The output from the RF band boards is then brought to some sort of
> combiner board that I cannot make out anything but a bunch of SMA jacks
> on. Is there switching there too, or (because of power switching to
> the RF boards) is this just a simple combiner?
>
> And that Eddystone dial is to die for. Oh, man.
>
> Tim.
> Hi Tim,
An excellent job of sleuthing- I never could have done that.The RX is
essentially an 80M RX with xtal controlled converters for the other bands.
You are correct, the rear board switches the antenna to one of 6 front end
BP+LP filters- 10M 28-28.5 and 28.5-29 share a filter and 80M is bypassed
through this section directly into the preselector (which works on 3.5-4MHz
only). The board along the power supply side switches the filter outputs
into the 1st mixer. A relay on the output of the 1st mixer selects either
its output (3.5- 4MHz) or the 80M signal directly from the antenna. This
signal then goes to the preselector- which is a very sharp tunable BP.
The relay board on top of the chassis toward the rear selects the
appropriate L.O. and routes B+ through the coax to the L.O. 160M and 49M
share the same L.O. but different input filters.

Again, brilliant work on your part.

Dale W4OP

1711. Re: Homebrew RX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-25 03:15:15 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11470i4o6t9f301@corp.supernews.com>
Source record: 19744

That's very well said!

The "optimum" design is, as you say, very much a matter of the particular situation. In my career doing circuit design, I've worked for a company where products were custom or nearly custom -- a production run of 10 was a big deal. In that situation, if I could save half an hour of design time by using a $20 part instead of a $5 part, it was a very good trade. I've also designed a product for a mass near-consumer market. There, a week of extra work spent in getting a few pennies out of the production cost was worthwhile. We all have to remember that:

1. There's no one best way for everybody, every project, or every market or situation.
2. What's best for the mass manufacturers, or for that matter another homebrewer, isn't necessarily the best for us.
3. The best way to do a design is constantly changing, as both techology and our own situations (e.g., the amount of time and money we have) keep changing.

Design is a creative process, and there's a lot of art as well as skill in it. Finding a better way to do something requires both, and knowing the appropriate time to declare it "good enough" requires art, skill, and discipline too.

Roy Lewallen, W7EL

Michael Black wrote:

> "gb" (onw9mapsgb@no.arrl.spam.net) writes:
>
>
>
>>I see you used a 9 MHz IF.
>>Any particular reason that you used separate (LO) oscillators for each band
>>(rather than a single oscillator with switchable crystals) ?
>>
>
> Surely because it works out to be simpler.
>
> People often make the mistake that extra circuitry is bad because it
> complicates things, but the reality is often that extra circuitry simplifies
> things.
>
> Back in the days of tubes, their bulk and filament current (or slow
> startup if you switch the filament) meant that one did give thought
> before adding another tube. It probably was simpler to switch crystals

> than switch oscillators, and compared to the cost of tubes and sockets,
> the switch was relatively cheap.
>
> Once transistors came along, their size, low current and instant on
> meant the game changed. If adding another transistor in an IF stage
> meant that all the stages were running at a lower level, better to
> do. It added little to the cost, and pretty much nothing to the current
> drain.
>
> If you switch crystals, you limit layout. You need that switch near
> the crystals (and in some cases may need two poles per position), or
> you need to use relays (I've seen it done in mods to tube equipment)
> or diode switches. Those diodes can often cause some problems, depending
> on choice and useage. Switching crystal oscillators means none of this
> applies, and the cost of the transistor and passive components is
> nothing compared to the cost of the crystal.
>
> This is a theme of some of Hayward's work. Various times, he's described
> transceivers, and not only is he using separate IF strips for receive
> and transmit, but he's got a separate IF filter for each function. His
> reasoning is that it makes the chain cleaner by not having the switching.
> Given the cost of commercial filters, I'm not sure that's the best choice,
> but certainly there is a tradeoff. If adding a few dollars for an extra
> RF stage rather than switching tuned circuits requires a cheaper switch,
> or makes it easier to do the switching, it may be worth spending those
> few dollars rather than fuss too much.
>
> Jerry Vogt (I"ve spelled that wrong) who seemed to be connected
> with Hamtronics (at least, he wrote about their stuff for Ham Radio magazine)
> pointed out in an article about preamps that a manufacturer needs to
> cut costs. They skimp on parts because any single part saved is
> multiplied by the number of units built. But a hobbyist building a single
> unit doesn't have that multiplier. If they toss in an extra bypass
> capacitor here, or build each stage into a metal box for shielding,
> the cost is right there. They don't have to worry about 10,000 more
> capacitors, or whatever.
>
> Michael VE2BVW
>

1712. Re: Source for Radio Hankbook by William Orr

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-25 04:23:38 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1cad3227300984449896fc@localhost>
Source record: 19745

In article <Z4GdnWFusojeZt_fRVn-jg@comcast.com>,
JKolstad71HatesSpam@Yahoo.Com says...

> Does anyone happen to have a copy of William Orr's "Radio Handbook" from
> 1997 that they'd be willing to part with (i.e., sell)? It's out of print,
> and so far the only book seller I've found that actually has a copy wants
> $95, which is a little too rich for my blood.
>
> It's probably still under copyright protection, but otherwise I'd volunteer
> to scan the thing and turn it into a PDF if I could borrow someone's copy.

A search at this link:

http://dogbert.abebooks.com/servlet/SearchResults?an=Orr&y=10&tn=Radio+Handbook&x=14

...turns up a number of hits. www.abebooks.com is a good search
site for other stuff as well.

Happy hunting.

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped
with surreal ports?"

1713. Re: How do I design an automatic antenna tuner?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-25 04:30:16 UTC
From: WA3LTJ <arm@gnode.ignorethis.org>
Message-ID: <stM0e.10352$Ax.4673@trnddc04>
Source record: 19746

WA3LTJ wrote:

> I recently built a 100W HF amplifier by modifying existing designs.
> Now I'd like to build an automatic antenna tuner. Where can I find
> some good articles / web sites on theory, practical design, and tuning
> algorithms for the switching circuit. Has anyone published all the
> details including source code.

Thanks for all the suggestions. I found the QST article on the switched automatic tuner at LDG sold (AT-11). The source code was not published and I think the ARRL has a new policy requiring source code (in most cases). The article does hint at the algorithm. It was written in assembler on a Motorola 'HC11.

I am interested in building a similar design and playing with the tuning algorithms. I need a suggestion for a microprocessor/microcontroller. I am most experienced with the Motorola 'HC08, PIC, and Rabbit Semi 2000 series. I think I would rather code in C. So here are the basic specs for the processor:
1) low cost C compiler/IDE
2) at least 28 available general I/O bits
3) built in 8 or 10 bit A/D (2 channels are enough)
4) low cost development board or easily constructed one.
5) 16 bit or larger counter

What is the easiest way to have the tuner measure the frequency? Should I just put a pre-scaler in front of a digital port and sum pulses over time?

What do you think of this idea? Have the tuner control the transmitter. Use the combination to completely characterize the antenna across each band of interest. Then select the tuning "instantly" based on a large frequency-based lookup table. With enough table space, you could create a table for each antenna and each band. This assumes that none of the programmed antennas changes much over time.

Andy WA3LTJ

barm@bgnode.borg (remove the b's for address)

1714. Circuit Simulators

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-25 14:08:57 UTC
From: David J Windisch <davidjw@cinci.rr.com>
Message-ID: <ZXU0e.12101$rL3.10395@fe2.columbus.rr.com>
Source record: 19747

Hi, all concerned:

Belated thanks to past suggestions, due to which I've been studying and
using trial downloads of the following:

1. tina.com

2. beigebag.com

3. 5spice.com

4. cirsim http://www.bells-hill.freeserve.co.uk/

5. circuitmaker

6. electronics workbench

7. pspice orcad.com

Prices range from $20 to $2.3E3.

Anyone out there have any of the above for sale?

TIA &

73, Dave, N3HE
Cincinnati OH

1715. Re: Circuit Simulators

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-25 14:55:20 UTC
From: Larry Gagnon <lagagnon@fakeuniserve.com>
Message-ID: <pan.2005.03.25.14.55.16.63232@fakeuniserve.com>
Source record: 19648

On Fri, 25 Mar 2005 14:08:57 +0000, David J Windisch wrote:

> Hi, all concerned:
>
> Belated thanks to past suggestions, due to which I've been studying and
> using trial downloads of the following:
>
> 1. tina.com
>
> 2. beigebag.com
>
> 3. 5spice.com
>
> 4. cirsim http://www.bells-hill.freeserve.co.uk/
>
> 5. circuitmaker
>
> 6. electronics workbench
>
> 7. pspice orcad.com
>
> Prices range from $20 to $2.3E3.
>
> Anyone out there have any of the above for sale?
>
> TIA &
>
> 73, Dave, N3HE
> Cincinnati OH

Dave : I would recommend SuperSpice. A trial version limiting you to 20
components is free. You would classify as a student for the full version
of $70. http://www.anasoft.co.uk Larry VE7EA

--
****
to reply via email remove "fake"
Microsoft will soon release their newest product: a vacuum cleaner.
It will be their only product which doesn't suck.

1716. (",) Do You Want To Know For Sure You Are Going To Heaven?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-25 15:24:22 UTC
From: Ron038655@yahoo.com
Message-ID: <1111764262.689604.191600@f14g2000cwb.googlegroups.com>
Source record: 19649

http://www.want-to-be-sure.blogspot.com << Click On Link

1717. Re: part 15 data modules?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-25 15:54:39 UTC
From: Phil <pjock@xSpearNet.net>
Message-ID: <Xns96246EFF27DB1pjockxxxSpearNetnet@216.196.97.142>
Source record: 19650

This site may be of interest:

www.maxstream.net

phil

Albert <> wrote:

> I need a low power data module that operates on vhf or uhf for short
> range data transfer (less than 300 feet). I know there is a company
> that makes the inexpensive transmit and receiver modules (that are
> already type accepted). But, can't remember the name of the company.

1718. Re: Circuit Simulators

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-25 16:32:39 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <4tmdnTr37JnEodnfRVn-jw@comcast.com>
Source record: 19651

Check out Linear Technology's LTSpice as well... it's free and arguably has one of the largest feature sets available for the price.

1719. Re: How do I design an automatic antenna tuner?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-25 18:23:07 UTC
From: Bruce in Alaska <bruceg@btpost.net>
Message-ID: <bruceg-55D921.09230725032005@netnews.worldnet.att.net>
Source record: 19652

In article <stM0e.10352$Ax.4673@trnddc04>,
"WA3LTJ" <arm@gnode.ignorethis.org> wrote:

> What is the easiest way to have the tuner measure the frequency? Should
> I just put a pre-scaler in front of a digital port and sum pulses over
> time?
>
> What do you think of this idea? Have the tuner control the
> transmitter. Use the combination to completely characterize the antenna
> across each band of interest. Then select the tuning "instantly" based
> on a large frequency-based lookup table. With enough table space, you
> could create a table for each antenna and each band. This assumes that
> none of the programmed antennas changes much over time.
>
> Andy WA3LTJ
>
> barm@bgnode.borg (remove the b's for address)

Most of the autotuners use a Lookup table for "Instant Tuning" once
a Frequency has been tuned previously. This causes a lot less wear on
the Cap Contact Points.
1. Measure Freq by looking at period.
2. Lookup tuning canstants in table. If no data jump to tuning routine.
3. Set tuning constants and measure Reflected Power and Phase.
If above Set Level jump to tuning routine. If below, end/shutdown.

Run tuning routine at less than 5 watt level, will also save contacts.
All you need is enough power to allow the period to be measured and for
the Phase and forward and reflected power levels to be sampled.

Bruce in alaska a autotuner betatester from way, way, back........
--
add a <2> before @

1720. Re: Circuit Simulators

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-25 18:41:45 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1111776105.659345.158780@z14g2000cwz.googlegroups.com>
Source record: 19653

Though tangential to your request, I'd point out that there are some simulators that are good for specific problems. RFSim99, for example, is a wonderfully simple and useful little program for looking at linear RF circuits. It includes a Butterworth and Chebychev filter design tool, attenuator design, L/pi/T match tool, inductor, capacitor, transmission line, splitter, and coupler tools, and an L/C/f/X calculator, in addition to the circuit simulation/two-port network analysis in the main window.

Cheers,
Tom

1721. test

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-25 20:36:31 UTC
From: Joe Hargis <joehargis@worldnet.att.net>
Message-ID: <jD_0e.8117$cg1.6522@bgtnsc04-news.ops.worldnet.att.net>
Source record: 19654

[No readable article body recovered]

1722. FA:807,813,VT-4-C,45,46 +Mullard +MO..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-25 20:59:41 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <1Z_0e.8175$cg1.6147@bgtnsc04-news.ops.worldnet.att.net>
Source record: 19655
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

See these tubes and other items at the address below. More tubes, parts, radios coming soon:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Check back often or place this address in your 'favorites', tnx Heytubeguy

1723. Re: part 15 data modules?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-26 02:18:24 UTC
From: Steve <nospam@bit.bucket>
Message-ID: <d22h0h$k2e$1@grandcanyon.binc.net>
Source record: 19656

Albert <> wrote:

Is "Linx" the name you are looking for?

Available at Digikey.

http://www.digikey.com/scripts/DkSearch/dksus.dll?Criteria?Ref=179280&Site=US&Cat=31523817

I've used these with good results.

TXM-433-LC $6.9
RXM-433-LC-S $13.79

Thanks, Steve

> Thanks Phil,
>
>
> I looked, and they are big, bulky and top of the line. I was hoping
> for smaller and much cheaper low data rate modules tho.
>
> I seem to remember the ones I saw before...they had simple saw ceramic
> resonators and ran at 433 mhz and promissed 300 feet minimum range. It
> was a single chip with a few components and was an AM transmitter. The
> receiver was simarilly small and simple.
>
> Got any more suggestions?
>
> Thanks,
>
>
> A
>
>
> On Fri, 25 Mar 2005 09:54:39 -0600, Phil <pjock@xSpearNet.net> wrote:
>
>>This site may be of interest:
>>
>> www.maxstream.net
>>

1724. Re: part 15 data modules?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-26 03:05:19 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <4244d170$0$2771$cc9e4d1f@news-text.dial.pipex.com>
Source record: 19657

<Albert> wrote in message news:ova841hjenm5kg16t1089dift81nu44it7@4ax.com...
>I need a low power data module that operates on vhf or uhf for short
> range data transfer (less than 300 feet). I know there is a company
> that makes the inexpensive transmit and receiver modules (that are
> already type accepted). But, can't remember the name of the company.
>
> Google is useless, too many hits that aren't what I need.
>
> Any help appreciated.

Try Radiometrix. They are approved for use in Europe and the USA.

Leon

1725. Re: part 15 data modules?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-26 03:55:48 UTC
From: mcalhoun@ksu.edu
Message-ID: <d22mg4$lvs@unix2.cc.ksu.edu>
Source record: 19658

>I seem to remember the ones I saw before...they had simple saw ceramic
>resonators and ran at 433 mhz and promissed 300 feet minimum range. It
>was a single chip with a few components and was an AM transmitter. The
>receiver was simarilly small and simple.

Didn't QST publish an article within the last few months about very-
low-power fox-hunt transmitters using the module you are describing.

--Myron, W0PBV.
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

1726. New Program RJELOOP4

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-26 06:26:16 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d22va8$1tb$1@titan.btinternet.com>
Source record: 19659

This program predicts approximate performance of general purpose, multiband, horizontal loop antennas of given perimeter of loop. It is not intended for precision predictions of operating data.

A loop is a continuous wire without loading coil or capacitor. It can be of any shape provided the area enclosed by the loop is not less than 2/3rds of that of a circle of the same perimeter, ie., it is not too irregular.

It is the sort of antenna which is forced on the amateur by the shape of his back garden and the pre-determined location of trees, poles, buildings or anything else from which an antenna wire can be suspended.

Analysis includes a high or low impedance feedline, a choke balun and an L-tuner. The antenna is most efficient when the perimeter is a whole number of wavelengths. It is least efficient when the perimeter is an odd-number of 1/2-wavelengths. But operation is not limited to being at, or near to, resonant frequencies.

Download in a few seconds program RJELOOP4 from website below and run immediately.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

1727. Re: New Program RJELOOP4

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-26 09:00:04 UTC
From: mike@corn2.freeserve.co.uk
Message-ID: <4245245a.395648468@news.freeserve.net>
Source record: 19660

On Sat, 26 Mar 2005 06:26:16 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>This program predicts approximate performance of general purpose,
Thanks once again Reg. Keep up the good work.
atb Mike W

1728. New group

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-26 21:17:58 UTC
From: Mama Bear <MamaBear@NoSpam.noo>
Message-ID: <Xns9625917A03EFFMama@216.196.97.142>
Source record: 19661
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.antenna

http://groups.yahoo.com/group/Short_Wave-and-Amateur_Radio/

--
- Mama Bear

1729. Re: Homebrew RX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-26 23:22:14 UTC
From: Ted Bruce <kilocycles**@**yahoo.com>
Message-ID: <mirb41lavpj9ll76o6scpp20hqi57q1va2@4ax.com>
Source record: 19662

Dale, that receiver is among the best homebrew rigs that I have seen
in 45 years! Incredible job!

Ted KX4OM

On Wed, 23 Mar 2005 22:08:37 GMT, "Dale Parfitt"
<par@parelectronics.com> wrote:

>I had posted this elsewhere, and it has created some interesting feedback.
>Based on Wes W7ZOI's Preogressive RX from the late 1980's. A wonderfully
>balanced design to which I added some bells and whistles I like in a
>receiver.
>These are some shots of my almost finished 1980's theme HF receiver.
>All stainless hardware, teflon wiring. Rock stable VFO, homebrew xtal
>filters (5/2/5/0.5), selectable and defeatable AGC, notch filter, tone
>control, QSK input,built in front end BP filters for each band, preselector,
>AM/USB/LSB/CW.
>Enjoy:
> http://www.parelectronics.com/pics/W7ZOI11%20copy.jpg
>
> http://www.parelectronics.com/pics/w7zoi13jpg.jpg
>
> http://www.parelectronics.com/pics/w7zoi14.jpg
>
> http://www.parelectronics.com/pics/w7zoi15.jpg
>
>Dale W4OP
>for PAR Electronics, Inc.
>

1730. The Greatest News Ever!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-27 04:39:19 UTC
From: Ron_Grossi_038@yahoo.com
Message-ID: <1111898359.827190.242120@z14g2000cwz.googlegroups.com>
Source record: 19663

http://www.jcil.blogspot.com << The Greatest News Ever!

1731. Re: part 15 data modules?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-27 06:58:29 UTC
From: Wim Lewis <wiml@hhhh.org>
Message-ID: <d25lil$b2i$1@underhill.hhhh.org>
Source record: 19664

In article <ova841hjenm5kg16t1089dift81nu44it7@4ax.com>, Albert <> wrote:
>I need a low power data module that operates on vhf or uhf for short
>range data transfer (less than 300 feet). I know there is a company
>that makes the inexpensive transmit and receiver modules (that are
>already type accepted). But, can't remember the name of the company.

There are a handful of such companies. A little while ago I needed
an rx/tx pair and went with some modules from OKW (www.okwelectronics.com,
natch).

--
Wim Lewis <wiml@hhhh.org>, Seattle, WA, USA. PGP keyID 27F772C1

1732. Midland to Headset

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-27 15:08:26 UTC
From: LC <Nuc_em2000@hotmail.com>
Message-ID: <1111936106.137883.306020@z14g2000cwz.googlegroups.com>
Source record: 19665

I am trying to incorporate a mobile CB Midland 13-857 to my motorcyle,
I need to know how to add a circuit to the input (mic) so I can use a
head set. I can hear and currently use the hand mic when riding...
(the head set came from a computer with two jacks, one for speaker and
one for mic).... can it be done? Can anyone help?
Nuc_em2000@hotmail.com
thanks Ken

1733. Re: New group

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-27 22:10:51 UTC
From: David Stinson <arc5@ix.netcom.com>
Message-ID: <LbG1e.24558$191.20548@trnddc02>
Source record: 19666
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.antenna

Not another....sigh

Mama Bear wrote:

> http://groups.yahoo.com/group/Short_Wave-and-Amateur_Radio/
>
>
>

1734. Homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-28 07:06:47 UTC
From: meara.london@virgin.net
Message-ID: <22f6e3ee.0503272306.7ecdadad@posting.google.com>
Source record: 19667

I really enjoyed the message thread sparked by the pictures of
Dale's very FB HB RX. We need more of that kind of discussion...

Here is what I've been working on in London:

40 meter DSB phone HB: UK hams recently got a doubling of their 40
meter
freq allocation and can now go up to 7.2 Mhz. I built a simple 40
meter DSB
transmitter. Solid state. VFO. Built it on a wooden cutting board
(almost
a real breadboard. Puts out about 2 watts. I run it into a heavily
modified
Ramsey kit linear. Then to a HB balanced tuner, TV lead up to the
inverted
U dipole. Works fine. Lots of fun. I use it with my Drake 2B, but
plan on
pressing into service my HB "Mate for the Mighty Midget" RX (see web
site)
(I have a 455 kc filter that I'll install eventually -- right now it
is very broad).

17 SSB phone:
I have a HB 17 meter SSB TX (see my web site). I' also use it with the
2B, but changing bands is a pain. So I'm building a dedicated RX for
17.
I have a Doug DeMaw "Barbados" reciever (someone else put the
components on
a "Circuit Boards Specialists" board. It has a 5Mhz ladder filter that
I've
broadened for pnone. I tried running the VFO at around 13 Mhz with
varactor
tuning, but it was unstable, so I'm going VXO. With 2 rocks in the 23
Mhz
range I shoud cover the phone portion of 17.

More later... Any comments or suggestions? How about following
Dale's lead and posting updates on projects?

73

Bill N2CQR M0HBR CU2JL
http://planeta.clix.pt/n2cqr

1735. The Greatest News Ever!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-28 08:58:27 UTC
From: Ron_Grossi_038@yahoo.com
Message-ID: <1112000307.669600.296330@o13g2000cwo.googlegroups.com>
Source record: 19668

http://www.jcil.blogspot.com << The Greatest News Ever!

1736. Re: Midland to Headset

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-28 09:18:58 UTC
From: Bruce Fletcher <r1card1an@bt1nternet.c0m>
Message-ID: <d28i62$9tb$3@hercules.btinternet.com>
Source record: 19669

LC wrote:
> I am trying to incorporate a mobile CB Midland 13-857 to my motorcyle,
> I need to know how to add a circuit to the input (mic) so I can use a
> head set. I can hear and currently use the hand mic when riding...
> (the head set came from a computer with two jacks, one for speaker and
> one for mic).... can it be done? Can anyone help?

Using a hand microphone whilst riding a motorcycle? Not a recommended
practice!
--
Bruce Fletcher
Stronsay, Orkney UK
<www.stronsay.co.uk/claremont>

1737. Re: Homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-28 12:23:26 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <2HS1e.1208$Vx1.663@attbi_s01>
Source record: 19670

The group may find the picture and very brief discussion of my homebrew gear on QRZ.COM interesting.

Bill W0IYH

"Bill N2CQR MOHBR" <meara.london@virgin.net> wrote in message news:22f6e3ee.0503272306.7ecdadad@posting.google.com...
>I really enjoyed the message thread sparked by the pictures of
> Dale's very FB HB RX. We need more of that kind of discussion...

1738. Re: Homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-28 21:19:44 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <Qx_1e.34384$oa6.2111@trnddc07>
Source record: 19671

"Bill N2CQR MOHBR" <meara.london@virgin.net> wrote in message
news:22f6e3ee.0503272306.7ecdadad@posting.google.com...
> I really enjoyed the message thread sparked by the pictures of
> Dale's very FB HB RX. We need more of that kind of discussion...
>
> Here is what I've been working on in London:
>
> Hi Bill,
I have trouble keeping up with where in the world you are, but visit your site regularly to see what you are up to.
I would encourage others to brew their own xtal filters. uP xtals are cheap enough today that you can buy a pile and match up what you need. W7ZOI's articles on crystal filters takes the mystery out.
Probably the most difficult part is characterizing individual crystals so you can plug in the numbers. I use an HP network analyzer, but Wes also shows a test jig for doing this. Alternatively, N2PK's VNA will do an excellent job. In the end, you can make better filters than you can buy- and for a heck of a lot less $$.
N2PK recently sent me 2 WAV files- one recorded with the 1000MP stock 250 Hz filter; the other with a homebrew 250 Hz filter- it took no imagination to discern which one was cleaner.
Now, I'll go have a look at Bill W0IYH's site.

Dale W4OP

1739. Re: vlf transmit antenna question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-29 00:27:13 UTC
From: Bob Liesenfeld <wb0poq@visi.com>
Message-ID: <4248A0E1.83BE853A@visi.com>
Source record: 19672

Albert wrote:

> Hi all,
>
> I found the transmitter schematic on the FCC website.

If you could post the web site URL so we could look at the schematic, it would help to answer the question. Also, what is the intended use?

Thanks

Bob

1740. Re: Midland to Headset

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-29 05:00:10 UTC
From: LC <Nuc_em2000@hotmail.com>
Message-ID: <1112072410.949442.38120@o13g2000cwo.googlegroups.com>
Source record: 19673

Thank you Bruce....so hence the request for service on wiring the
handmic into my helment... thanks for reading... got any ideas on how
to do this?
LC
Bruce Fletcher wrote:
> LC wrote:
> > I am trying to incorporate a mobile CB Midland 13-857 to my
motorcyle,
> > I need to know how to add a circuit to the input (mic) so I can use
a
> > head set. I can hear and currently use the hand mic when riding...
> > (the head set came from a computer with two jacks, one for speaker
and
> > one for mic).... can it be done? Can anyone help?
>
> Using a hand microphone whilst riding a motorcycle? Not a
recommended
> practice!
> --
> Bruce Fletcher
> Stronsay, Orkney UK
> <www.stronsay.co.uk/claremont>

1741. Re: Homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-29 05:39:59 UTC
From: meara.london@virgin.net
Message-ID: <22f6e3ee.0503282139.14069553@posting.google.com>
Source record: 19674

Bill: Very FB! I especially liked the Velvet Vernier in there amidst the
digitial readouts. In my 17 meter SSB TX I used an old Simpson meter that
I had found in a radio club junk box back in 1974.

Thanks for sharing those inspirational pictures.

73 Bill N2CQR M0HBR CU2JL
http://planeta.clix.pt/n2cqr

"William E. Sabin" <w.sabin@mchsi.com> wrote in message
news:<2HS1e.1208$Vx1.663@attbi_s01>...
> The group may find the picture and very brief discussion of my homebrew gear
> on QRZ.COM interesting.
>
> Bill W0IYH
>
>
> "Bill N2CQR MOHBR" <meara.london@virgin.net> wrote in message
> news:22f6e3ee.0503272306.7ecdadad@posting.google.com...
> >I really enjoyed the message thread sparked by the pictures of
> > Dale's very FB HB RX. We need more of that kind of discussion...

1742. Re: Homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-29 06:03:57 UTC
From: meara.london@virgin.net
Message-ID: <22f6e3ee.0503282203.5d2b12db@posting.google.com>
Source record: 19675

Dale: I was faced with doing the complex analysis of the individual
crystal
parameters when I was building my first superhet (W1FB's "Barebones"
aka
"Barbados" RX). I just skipped all of the analysis and used the same
capacitor
values that Doug had used in his version. I'm sure my filter's
passband wasn't nearly as pretty as it could have been, but it
definitely produced the
desired "single signal effect." I was happy.

As I mentioned in the earlier post, I have an 80/40 meter tube type RX
(Mate
for the Mighty Midget"). It has a 455 kHz IF. This makes homebrew
filter making difficult! I tried, but crystals were hard to come by
in that freq
range. In the end, I threw in the towel and just used a 455 Khz IF
can
in lieu of the filter. Great for listening to AM! But now I want to
narrow
it down a bit, so I'm thinking about yanking out the IF can and
replacing
it with a commercial 455 kc filter from the junkbox. I need to figure
out
how to handle the impedance matching issues (input and output).

73 Bill M0HBR N2CQR CU2JL
http://planeta.clix.pt/n2cqr

"Dale Parfitt" <par@parelectronics.com> wrote in message
news:<Qx_1e.34384$oa6.2111@trnddc07>...
> "Bill N2CQR MOHBR" <meara.london@virgin.net> wrote in message
> news:22f6e3ee.0503272306.7ecdadad@posting.google.com...
> > I really enjoyed the message thread sparked by the pictures of
> > Dale's very FB HB RX. We need more of that kind of discussion...
> >
> > Here is what I've been working on in London:
> >
> > Hi Bill,
> I have trouble keeping up with where in the world you are, but visit your
> site regularly to see what you are up to.
> I would encourage others to brew their own xtal filters. uP xtals are cheap
> enough today that you can buy a pile and match up what you need. W7ZOI's
> articles on crystal filters takes the mystery out.
> Probably the most difficult part is characterizing individual crystals so

> you can plug in the numbers. I use an HP network analyzer, but Wes also
> shows a test jig for doing this. Alternatively, N2PK's VNA will do an
> excellent job. In the end, you can make better filters than you can buy- and
> for a heck of a lot less $$.
> N2PK recently sent me 2 WAV files- one recorded with the 1000MP stock 250 Hz
> filter; the other with a homebrew 250 Hz filter- it took no imagination to
> discern which one was cleaner.
> Now, I'll go have a look at Bill W0IYH's site.
>
> Dale W4OP

1743. Re: Midland to Headset

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-29 08:46:21 UTC
From: Bruce Fletcher <r1card1an@bt1nternet.c0m>
Message-ID: <d2b4ks$n3u$1@sparta.btinternet.com>
Source record: 19676

LC wrote:
> Thank you Bruce....so hence the request for service on wiring the
> handmic into my helment... thanks for reading... got any ideas on how
> to do this?

> Bruce Fletcher wrote:
>>Using a hand microphone whilst riding a motorcycle? Not a
>> recommended practice!

At the risk of being a spoil-sport I wouldn't even contemplate using the rig whilst driving - just as I wouldn't use a mobile phone whilst driving. Riding a motorcycle or driving a car needs your full attention. <g>
--
Bruce Fletcher
Stronsay, Orkney UK
<www.stronsay.co.uk/claremont>

1744. Re: vlf transmit antenna question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-29 12:03:53 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <dcmdnYuV89en2dTfRVn-rQ@bright.net>
Source record: 19677

Of course, modifying it will void its Part 15 certification (and I
assume it is Part 15 approved) and open you up to the wrath of the FCC...

Scott

Albert wrote:
> Hi all,
>
> I have a wireless fence, which operates at 17 kilohertz. It is used to
> create a wireless fence to keep our dog confined to area close to the
> transmitter and works in conjunction with a shock collar (the receiver
> is carried by the dog).
>
> We haven't used it yet, but the literature suggests the range is
> around 90 feet.
>
> I found the transmitter schematic on the FCC website. The transmitter
> is nothing more than generic audio amplifier chips fed with 17
> kilohertz signals from what appears to be a PIC or ASIC device. The
> antennas are large (8-9 inch) air wound coils that have MANY turns on
> them.
>
> I'd like to increase the range without spending much money-so I want
> something quick and dirty:>:
>
> If I disconnect one of the built in antennas, can I hook up the
> transmitter to an external antenna consisting of many turns of wire
> mounted in the basement (say a 5 or 10 foot diameter loop)?? Would
> this give the transmitter more range, or would the range be the same
> as the smaller loops that are built in?
>
> Thanks,
>
> A
>
>

1745. Re: Homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-29 13:32:41 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <ZNc2e.833$kT5.59@attbi_s21>
Source record: 19680

Thanks Bill. The Velvet Vernier dial is not only a very good and beautiful dial, it is excellent nostalgia for an era that has just about disappeared.

Bill W0IYH

"Bill N2CQR MOHBR" <meara.london@virgin.net> wrote in message news:22f6e3ee.0503282139.14069553@posting.google.com...
> Bill: Very FB! I especially liked the Velvet Vernier in there amidst the
> digitial readouts. In my 17 meter SSB TX I used an old Simpson meter that
> I had found in a radio club junk box back in 1974.
>
> Thanks for sharing those inspirational pictures.
>
> 73 Bill N2CQR M0HBR CU2JL
> http://planeta.clix.pt/n2cqr
>
>
>
> "William E. Sabin" <w.sabin@mchsi.com> wrote in message
> news:<2HS1e.1208$Vx1.663@attbi_s01>...
>> The group may find the picture and very brief discussion of my homebrew
>> gear
>> on QRZ.COM interesting.
>>
>> Bill W0IYH

1746. Digital Amateur TV

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-29 18:16:06 UTC
From: "J.F. FOURCADIER" <no_spam@wanadoo.fr>
Message-ID: <42499b66$0$1217$8fcfb975@news.wanadoo.fr>
Source record: 19678

Hello !

The poor man's Digital ATV transmitter:

Build this simple and cheap 70 MHz exciter and start to transmit Digital Television !

http://perso.wanadoo.fr/jf.fourcadier/television/exciter/exciter_e.htm

Jean-Franï¿½ois FOURCADIER, F4DAY

website : http://perso.wanadoo.fr/jf.fourcadier/

1747. CQ Mag 1/96 article - W1FB amplifier design - copy needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-29 21:20:27 UTC
From: wb0gaz <wb0gaz@hotmail.com>
Message-ID: <1112131227.578765.80760@f14g2000cwb.googlegroups.com>
Source record: 19679

Anyone willing to copy/scan article from CQ mag. Jan 1996 by W1FB? It
is on Page 60.

Very tks,

73 Dave WB0GAZ wb0gaz@hotmail.com

1748. New group

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-30 02:06:27 UTC
From: Voice of freedom <VoiceFreedom@freedom.naa>
Message-ID: <Xns9628C25E5393BVoiceFreedomfreedomn@216.196.97.142>
Source record: 19681
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.shortwave

No spam, no nonsense:
http://groups.yahoo.com/group/Short_Wave-and-Amateur_Radio

--
A Voice Of Freedom in the
United States of America

1749. Rcvr pre-amp for Six meters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-30 02:10:35 UTC
From: Dan/W4NTI <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <vUn2e.8517$z.6137@newsread2.news.atl.earthlink.net>
Source record: 19682

Anyone have any links to a simple, such as a JFET, or MOSFET six meter pre-amp circuit? I have a TS-600 that needs some rx help. I know back about 25 years I had a real simple JFET for a pre-amp on a Yaesu FT-620B.

Dan/W4NTI

1750. Re: Homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-30 03:13:53 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <RPo2e.34165$mq2.1815@trnddc08>
Source record: 19683

"Bill N2CQR MOHBR" <meara.london@virgin.net> wrote in message
news:22f6e3ee.0503282203.5d2b12db@posting.google.com...
> Dale: I was faced with doing the complex analysis of the individual
> crystal
> parameters when I was building my first superhet (W1FB's "Barebones"
> aka
> "Barbados" RX). I just skipped all of the analysis and used the same
> capacitor
> values that Doug had used in his version. I'm sure my filter's
> passband wasn't nearly as pretty as it could have been, but it
> definitely produced the
> desired "single signal effect." I was happy.
>
> As I mentioned in the earlier post, I have an 80/40 meter tube type RX
> (Mate
> for the Mighty Midget"). It has a 455 kHz IF. This makes homebrew
> filter making difficult! I tried, but crystals were hard to come by
> in that freq
> range. In the end, I threw in the towel and just used a 455 Khz IF
> can
> in lieu of the filter. Great for listening to AM! But now I want to
> narrow
> it down a bit, so I'm thinking about yanking out the IF can and
> replacing
> it with a commercial 455 kc filter from the junkbox. I need to figure
> out
> how to handle the impedance matching issues (input and output).
>
> 73 Bill M0HBR N2CQR CU2JL
>
Hi Bill,

I too built the Barbados RX- don't know what happened to it though.
Have you thought of using a Murata ceramic filter in your tube RX?
They make a 4KHz unit for under $3. Not CW selectivity, but I'll bet it will
be an improvment over what you have. Typcial Zin and Zout is around 1K.
Although I have never tried it, I wonder about the possibility of brewing
your own ceramic filter from some of Murata's 455KHz ceramic resonators.
Although not the Q of a quartz crystal, it may be worthwhile. I have some
here and think I'll put one on the network analyzer and see what
characteristics I get.

Dale W4OP

1751. Re: Homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-30 06:44:45 UTC
From: meara.london@virgin.net
Message-ID: <22f6e3ee.0503292244.1b9a1481@posting.google.com>
Source record: 19684

Dale: Wow, another Barbados RX builder. That was my first successful
superhet project. I now have the one I built (still on 20), and this
morning
I got another one (the one built by someone else on a factory-made
board)going on 17 with a VXO. I have a THIRD partially built Barbados
RX board. If this
keeps up, I'll soon have a BBRX museum.

As for the tube RX, I have a Toyo Communications CM filter. Markings
look good:
"445 -- 2.4 -- C" Now I have to figure out how to work this into the
existing
RX circuitry. Time to look through some mid-'60s handbooks and QSTs.

73 Bill M0HBR CU2JL N2CQR
http://planeta.clix.pt/n2cqr

> Hi Bill,
>
> I too built the Barbados RX- don't know what happened to it though.
> Have you thought of using a Murata ceramic filter in your tube RX?
> They make a 4KHz unit for under $3. Not CW selectivity, but I'll bet it will
> be an improvment over what you have. Typcial Zin and Zout is around 1K.
> Although I have never tried it, I wonder about the possibility of brewing
> your own ceramic filter from some of Murata's 455KHz ceramic resonators.
> Although not the Q of a quartz crystal, it may be worthwhile. I have some
> here and think I'll put one on the network analyzer and see what
> characteristics I get.
>
> Dale W4OP

1752. Re: Homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-30 11:34:33 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <d9w2e.24011$cg1.11134@bgtnsc04-news.ops.worldnet.att.net>
Source record: 19685

The Murata filters range between 1.5k and 2k.

Pete

"Bill N2CQR MOHBR" <meara.london@virgin.net> wrote in message
news:22f6e3ee.0503292244.1b9a1481@posting.google.com...
> Dale: Wow, another Barbados RX builder. That was my first successful
> superhet project. I now have the one I built (still on 20), and this
> morning
> I got another one (the one built by someone else on a factory-made
> board)going on 17 with a VXO. I have a THIRD partially built Barbados
> RX board. If this
> keeps up, I'll soon have a BBRX museum.
>
> As for the tube RX, I have a Toyo Communications CM filter. Markings
> look good:
> "445 -- 2.4 -- C" Now I have to figure out how to work this into the
> existing
> RX circuitry. Time to look through some mid-'60s handbooks and QSTs.
>
> 73 Bill M0HBR CU2JL N2CQR
> http://planeta.clix.pt/n2cqr
>
>
>
>
>
>> Hi Bill,
>>
>> I too built the Barbados RX- don't know what happened to it though.
>> Have you thought of using a Murata ceramic filter in your tube RX?
>> They make a 4KHz unit for under $3. Not CW selectivity, but I'll bet it
>> will
>> be an improvment over what you have. Typcial Zin and Zout is around 1K.
>> Although I have never tried it, I wonder about the possibility of brewing
>> your own ceramic filter from some of Murata's 455KHz ceramic resonators.
>> Although not the Q of a quartz crystal, it may be worthwhile. I have some
>> here and think I'll put one on the network analyzer and see what
>> characteristics I get.
>>
>> Dale W4OP

1753. Re: Homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-30 12:16:00 UTC
From: Floyd Sense <fsense@copper.net>
Message-ID: <424a98d6$1_3@newsfeed.slurp.net>
Source record: 19686

Dale - regarding homebrew crystal filters - I wonder if you or any others here have looked at Elecraft's crystal filter implementation in the K2? It's built with discrete crystals and the bandwidth is variable over a large range. Haven't seen that design exploited elsewhere, but don't know why. It sure works well.

K8AC

1754. Re: Homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-30 15:04:28 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <0ez2e.30158$191.23924@trnddc02>
Source record: 19687

"Bill N2CQR MOHBR" <meara.london@virgin.net> wrote in message
news:22f6e3ee.0503292244.1b9a1481@posting.google.com...
> Dale: Wow, another Barbados RX builder. That was my first successful
> superhet project. I now have the one I built (still on 20), and this
> morning
> I got another one (the one built by someone else on a factory-made
> board)going on 17 with a VXO. I have a THIRD partially built Barbados
> RX board. If this
> keeps up, I'll soon have a BBRX museum.
>Hi Bill,
Did I sell you mine years ago? I seem to recall using a temp stabilized
varicap in a shielded enclosure for main tuning. It was done on a factory
board. Or was that a 6M xverter I sold?

Dale

1755. Re: Homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-30 15:38:59 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <lohl419cgu7hh2u6hlk5fpermvf14bf305@4ax.com>
Source record: 19688

>> Although I have never tried it, I wonder about the possibility of brewing
>> your own ceramic filter from some of Murata's 455KHz ceramic resonators.
>> Although not the Q of a quartz crystal, it may be worthwhile. I have some

I've done this with ceramic filters in tube circuits. You definatly
need to match the impedence to the tubes wich is high both for plate
and grid. What I did for that was to use a transistor IF can, filter,
IF can wired so the high impedence side was to the grids and plates.
Worked very well in a tube RX like the mighty midget.

For transistors the matching for those filters is IF can to get the
high collector impedence down to 1k range then the filter into the
base of the transistor. FETs get treated like tubes.

Allison
KB1GMX

1756. Tower Information (Still Liiking)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-30 15:58:15 UTC
From: Win <w0lz@winlyn.us>
Message-ID: <r2jl41d2occ1bpqhd6gadqoebuolhb9kl5@4ax.com>
Source record: 19689

I recently purchased an old crank-up motor driven 60 foot tower that I would hope someone could id for me. The motor belt drives a gearbox, which turns the cable pulley. It has a approximately 1 foot by 18 inch control box which has two high current relays and two glass contained relays. The glass-contained relays are in old 8 pin tube sockets.

The tower, itself, is in good shape. I would like to re-build the control circuits and out the tower in service. Any information anyone can give me on this tower will be greatly appreciated. See at www.winlyn.us/tower.jpg.

Win, w0lz
W0lz@winlyn.us

1757. Re: Tower Information (Still Liiking)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-30 16:48:23 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <424AD855.6D79204F@earthlink.net>
Source record: 19690

Win wrote:
>
> I recently purchased an old crank-up motor driven 60 foot tower that I
> would hope someone could id for me. The motor belt drives a gearbox,
> which turns the cable pulley. It has a approximately 1 foot by 18
> inch control box which has two high current relays and two glass
> contained relays. The glass-contained relays are in old 8 pin tube
> sockets.
>
> The tower, itself, is in good shape. I would like to re-build the
> control circuits and out the tower in service. Any information anyone
> can give me on this tower will be greatly appreciated. See at
> www.winlyn.us/tower.jpg.
>
> Win, w0lz
> W0lz@winlyn.us

Glass relay? Are you talking about Apmerite time delay relays?

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

1758. FS: EIMAC 3CX15,000H3

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-30 18:29:41 UTC
From: The Tube Man <thetubeman@earthlink.net>
Message-ID: <peC2e.8887$z.5689@newsread2.news.atl.earthlink.net>
Source record: 19691

Ebay Item #5764152617--for details

1759. Re: Rcvr pre-amp for Six meters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-30 23:18:49 UTC
From: nx7u@arrl.net
Message-ID: <424b33cc.981883@news.west.cox.net>
Source record: 19692

n6ca has a webpage with simple VHF preamps using U310.

On Wed, 30 Mar 2005 02:10:35 GMT, "Dan/W4NTI"
<w4nti@mindNOSPAMATALLspring.com> wrote:

>Anyone have any links to a simple, such as a JFET, or MOSFET six meter
>pre-amp circuit? I have a TS-600 that needs some rx help. I know back
>about 25 years I had a real simple JFET for a pre-amp on a Yaesu FT-620B.
>
>Dan/W4NTI
>
>

1760. Re: Digital Amateur TV

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-31 04:26:50 UTC
From: bruce johnson <vk3mn@hotmail.com>
Message-ID: <424b7bab@news.alphalink.com.au>
Source record: 19693

the URL does not work

"J.F. FOURCADIER" <no_spam@wanadoo.fr> wrote in message
news:42499b66$0$1217$8fcfb975@news.wanadoo.fr...
> Hello !
>
> The poor man's Digital ATV transmitter:
>
> Build this simple and cheap 70 MHz exciter and start to transmit Digital
> Television !
>
> http://perso.wanadoo.fr/jf.fourcadier/television/exciter/exciter_e.htm
>
>
>
>
> Jean-Fran&#65533;ois FOURCADIER, F4DAY
>
> website : http://perso.wanadoo.fr/jf.fourcadier/
>
> -------

1761. Re: Digital Amateur TV

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-31 05:48:03 UTC
From: "J.F. FOURCADIER" <no_spam@wanadoo.fr>
Message-ID: <424b8f11$0$19316$8fcfb975@news.wanadoo.fr>
Source record: 19694

It does !

http://perso.wanadoo.fr/jf.fourcadier/television/exciter/exciter_e.htm

Jean-Franï¿½ois FOURCADIER, F4DAY

website : http://perso.wanadoo.fr/jf.fourcadier/

----

bruce johnson a ï¿½crit :
> the URL does not work
>
>
>
> "J.F. FOURCADIER" <no_spam@wanadoo.fr> wrote in message
> news:42499b66$0$1217$8fcfb975@news.wanadoo.fr...
>
>>Hello !
>>
>>The poor man's Digital ATV transmitter:
>>
>>Build this simple and cheap 70 MHz exciter and start to transmit Digital
>>Television !
>>
>>http://perso.wanadoo.fr/jf.fourcadier/television/exciter/exciter_e.htm
>>
>>
>>
>>
>>Jean-Franï¿½ois FOURCADIER, F4DAY
>>
>>website : http://perso.wanadoo.fr/jf.fourcadier/
>>
>>-------
>
>
>

1762. Re: Homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-31 06:33:57 UTC
From: meara.london@virgin.net
Message-ID: <22f6e3ee.0503302233.5ed40e7c@posting.google.com>
Source record: 19695

Dale: Wow, small world! Yea I think that is the one I'm working on. I think
you also had a DC-DC converter to bring the voltage to the varicaps up.
Very nice enclosure for the oscillator. I now have it percolating nicely
as a VXO around 23 Mhz (for the 17 meter band). Bill

"Dale Parfitt" <par@parelectronics.com> wrote in message
news:<0ez2e.30158$191.23924@trnddc02>...
> "Bill N2CQR MOHBR" <meara.london@virgin.net> wrote in message
> news:22f6e3ee.0503292244.1b9a1481@posting.google.com...
> > Dale: Wow, another Barbados RX builder. That was my first successful
> > superhet project. I now have the one I built (still on 20), and this
> > morning
> > I got another one (the one built by someone else on a factory-made
> > board)going on 17 with a VXO. I have a THIRD partially built Barbados
> > RX board. If this
> > keeps up, I'll soon have a BBRX museum.
> >Hi Bill,
> Did I sell you mine years ago? I seem to recall using a temp stabilized
> varicap in a shielded enclosure for main tuning. It was done on a factory
> board. Or was that a 6M xverter I sold?
>
> Dale

1763. Re: vlf transmitter, part II

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-31 08:33:20 UTC
From: Wim Ton <wimton@blueyonder.co.uk>
Message-ID: <kBO2e.4616$C12.3401@fe1.news.blueyonder.co.uk>
Source record: 19696

> problems. BUT, I'm at a loss to explain the output spectrum.
>
> Around 18 Khz, there is a peak. Exactly 15 Hz below and above the peak
> is a smaller set of peaks, presumably these are the sidebands that the
> receiver recovers. BUT, there is a peak every 60 Hz that slowly gets
> weaker as the spectrum moves away from the (center) largest peak. Each
> one of these smaller peaks has upper and lower sidebands as well.
> There are many of these peaks, not just a few.

This may be caused a lack of smoothing of the supply voltage (assuming you are in the US). Lots of peaks suggests FM modulation.

Wim

1764. Re: Digital Amateur TV

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-31 09:11:48 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <424BBED3.6050409@invalid.invalid>
Source record: 19697

bruce johnson wrote:
> the URL does not work

It works for me...

>>http://perso.wanadoo.fr/jf.fourcadier/television/exciter/exciter_e.htm

--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

1765. 20 watt amp for 30 meters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-31 12:35:24 UTC
From: m005kennedy <m005kennedy@netzero.net>
Message-ID: <1112272524.700775.180840@l41g2000cwc.googlegroups.com>
Source record: 19598

I want to build a 20 watt out/ five watt in amp to use with my 30 meter qrp rig. I have some irf510 I could use. Could someone point me to a schematic on the net? I'm not up to the point of designing anything, so the plans would have to be complete. I would like it to run off 12 volts.

Mike
KB1IUI

1766. Re: Homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-31 14:47:09 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <N3U2e.27548$Ax.24489@trnddc04>
Source record: 19599

"Bill N2CQR MOHBR" <meara.london@virgin.net> wrote in message
news:22f6e3ee.0503302233.5ed40e7c@posting.google.com...
> Dale: Wow, small world! Yea I think that is the one I'm working on. I
think
> you also had a DC-DC converter to bring the voltage to the varicaps up.
> Very nice enclosure for the oscillator. I now have it percolating nicely
> as a VXO around 23 Mhz (for the 17 meter band). Bill
>
That's it Bill! Amazing. Hopefully I placed the Dc-DC converter inside that
shielded enclosure. Glad it has a good home.
I believe that board was from A&A Engineering- seem to recall they supplied
for QST back then. That design was a very robust RX. Doug (?) had sent me
the companion TX article before release- but I never got around to building
it.
How many countries has that RX travelled to now?
Dale W4OP
Dale

1767. FS: RF Connectors & Microwave Components

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-31 14:55:23 UTC
From: Murray Pasternack <w6krc@arrl.net>
Message-ID: <9bU2e.62959$le4.34177@fed1read04>
Source record: 19600
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.components

Please email w6krc@arrl.net for a detailed list of connectors, adapters,
coax
switches, isolators, & klystons.

1768. SWR meter, inline, non-resistive, led

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-31 16:27:19 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2h8da$d5u$1@domitilla.aioe.org>
Source record: 19601

I am looking to construct a SWR meter which can be left in line and consumes negligible power (just to light a led or two and associated, minimal, losses of transmitter power.)

I had seen such a schematic years ago. Drawing a mental picture, from what I can remember, a wire ran down the center of a tube on a couple of insulating spacers (washers) in a concentric configuration.

A small hole in each end of the tubing allowed an insulated pickup turn to be run adjacent to the wire in the tube--exiting the holes in the sides of the tubing, this picked up sufficient reflected power to drive the led(s) and give an indication of SWR (led(s) dim or out at 1:1, or near.

Anyone got that schematic/construction details or, one of a similar unit to construct?

This unit was inserted in the coax line to the antenna.

Warmest regards,
thanks in advance
--
Hay, if'n ya'll cun't konstructivly partecipete in this har disscusion, haw aboot speel-checkin it fer me?

1769. Re: Tower Information (Still Liiking)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-31 17:26:24 UTC
From: Win <w0lz@winlyn.us>
Message-ID: <sico4111e4iu3t3laoadvk1jpvnjjiuiak@4ax.com>
Source record: 19602

On Wed, 30 Mar 2005 16:48:23 GMT, "Michael A. Terrell"
<mike.terrell@earthlink.net> wrote:

>Win wrote:
>>
>> I recently purchased an old crank-up motor driven 60 foot tower that I
>> would hope someone could id for me. The motor belt drives a gearbox,
>> which turns the cable pulley. It has a approximately 1 foot by 18
>> inch control box which has two high current relays and two glass
>> contained relays. The glass-contained relays are in old 8 pin tube
>> sockets.
>>
>> The tower, itself, is in good shape. I would like to re-build the
>> control circuits and out the tower in service. Any information anyone
>> can give me on this tower will be greatly appreciated. See at
>> www.winlyn.us/tower.jpg.
>>
>> Win, w0lz
>> W0lz@winlyn.us
>
>
> Glass relay? Are you talking about Apmerite time delay relays?
Yes, Michael. I think I am talking about time delay relays.

Win

1770. Re: Digital Amateur TV

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-03-31 23:54:30 UTC
From: Phil <pjock@xSpearNet.net>
Message-ID: <Xns962AC0586424DpjockxxxSpearNetnet@216.196.97.142>
Source record: 19603

If you use a HOSTS file for local caching (sp?) of IP info
(like I do) refresh it because the server has changed IP's.
The URL didn't work for me either until I realized that.

phil

"bruce johnson" <vk3mn@hotmail.com> wrote in
news:424b7bab@news.alphalink.com.au:

> the URL does not work
>

1771. Re: Tower Information (Still Liiking)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-01 00:15:32 UTC
From: Bill Janssen <billj9@ieee.org>
Message-ID: <Eo03e.2540$hg.75@news01.roc.ny>
Source record: 19604

Win wrote:

>On Wed, 30 Mar 2005 16:48:23 GMT, "Michael A. Terrell"
><mike.terrell@earthlink.net> wrote:
>
>
>
>>Win wrote:
>>
>>
>>>I recently purchased an old crank-up motor driven 60 foot tower that I
>>>would hope someone could id for me. The motor belt drives a gearbox,
>>>which turns the cable pulley. It has a approximately 1 foot by 18
>>>inch control box which has two high current relays and two glass
>>>contained relays. The glass-contained relays are in old 8 pin tube
>>>sockets.
>>>
>>>The tower, itself, is in good shape. I would like to re-build the
>>>control circuits and out the tower in service. Any information anyone
>>>can give me on this tower will be greatly appreciated. See at
>>>www.winlyn.us/tower.jpg.
>>>
>>>Win, w0lz
>>>W0lz@winlyn.us
>>>
>>>
>> Glass relay? Are you talking about Apmerite time delay relays?
>>
>>
>Yes, Michael. I think I am talking about time delay relays.
>
>Win
>
>
I think he is referring to clear plastic cased relays.

Bill K7NOM

1772. Re: Homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-01 00:44:47 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <3Q03e.27300$wL6.1639@trnddc03>
Source record: 19605

"Floyd Sense" <fsense@copper.net> wrote in message
news:424a98d6$1_3@newsfeed.slurp.net...
>
> Dale - regarding homebrew crystal filters - I wonder if you or any others
> here have looked at Elecraft's crystal filter implementation in the K2?
> It's built with discrete crystals and the bandwidth is variable over a
large
> range. Haven't seen that design exploited elsewhere, but don't know why.
> It sure works well.
>
> K8AC
>
> That filter topology was, I think, first used by Ten Tec in their Scout.
From a purist standpoint there can be problems:
1. Asymmetrical skirts
2. Changing IN/OUT Z with BW
3. Shifting center freq as the BW is narrowed (> capacity loading)
4. I am guessing here, but I would think the group delay would suffer at one
end or the other
5. Passband ripple can become excessive as BW is increased.

I looked at this approach, along with a method described in QEX last year
for dealing with the center freq shift, but came to the conclusion that I
could design a much better filter if I optimized each BW- even though it
took 3 filters.

One aspect of filters that has long been either ignored or overlooked (
even though W7ZOI details it in EMRFD) is group delay. A friend (N2PK)
recently sent me 2 WAV files of a Yaesu 1000 stock 250Hz filter and his
homebrew 250 Hz filter. The difference was remarkable- his filter was much
cleaner and crisper sounding, no ringing. Great care was taken with group
delay in his design.

Dale W4OP

1773. Mosley NOS, TA-53M

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-01 02:20:42 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <_d23e.29506$cg1.18089@bgtnsc04-news.ops.worldnet.att.net>
Source record: 19606
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Have a mint NOS Mosley multi-band antenna STILL IN UN-OPENED CARTON*, TA-53M** (See Mosley site for all specs); lists for ~$803 + shipping + tax. Sale for $503 = $300 + tax total savings. * Note: hardware box did not survive the 'delivery service'though all the hardware items are still sealed in the large, clear, plastic 'sack' and the 12 coils are in great shape. I will rebox for shipment. Antenna box, ~6x6x7ft 3", is stamped at 41 lbs- though I have not checked this weight. You pay exact shipping via UPS or FedEx--no 'Handling' or 'extra packing' fees! I will have 2 digital pics by mid-day on 04-01-05 (not an April joke). You can pay via Pay Pal if you wish.
**4 element, 5 band, 600W-RTTY, 1.5kw-CW, 2.5KW-SSB; 14ft 2" OD boom.

Will try here before going to Ebay. Tnx heytubeguy, Joe

1774. enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-01 03:34:51 UTC
From: Angela & Gary <gmbelcas@charter.net>
Message-ID: <gmbelcas-0B2414.19345131032005@comcast.dca.giganews.com>
Source record: 19607

Any one have a source for new or used metal enclosures. I'm trying to resurrect an old Johnson Matchbox and the original enclosure measured 10" x 10" x 7". Ideas?? Thanks in advance.

Gary

1775. Re: Midland to Headset

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-01 03:42:21 UTC
From: WA3LTJ <arm@gnode.ignorethis.org>
Message-ID: <xq33e.59797$hA3.10582@trnddc09>
Source record: 19608

LC wrote:

> I am trying to incorporate a mobile CB Midland 13-857 to my
> motorcyle, I need to know how to add a circuit to the input (mic) so
> I can use a head set. I can hear and currently use the hand mic when
> riding... (the head set came from a computer with two jacks, one for
> speaker and one for mic).... can it be done? Can anyone help?
> Nuc_em2000@hotmail.com
> thanks Ken

It can be done.

You need do:
1) match the pin wiring
2) match the microphone impedances (although this may not be important)
3) match the gain of the microphones with an attenuator or amplifier.
4) supply power to the computer microphone if it is an electret type.

You will need to get the microphone connector wiring from the manual or from opening the microphone. If your computer microphone is electret, it will need 3 to 12 volts of DC to operate the element. I don't know if CB manfacturers put a voltage like this on the microphone connector.

Anyway, it is not straightforward, but it can be done. I did it for my Midland 2 meter rig. I embeded a speaker and tiny electret mic in the foam of my helmet.

Andy

1776. Re: 20 watt amp for 30 meters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-01 03:49:47 UTC
From: WA3LTJ <arm@gnode.ignorethis.org>
Message-ID: <vx33e.27332$wL6.6305@trnddc03>
Source record: 19609

Build an HF Packer using only the 30 meter LPF.

1777. Re: Steel & Aluminum enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-01 04:39:34 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <EI2dnakmVpERTdHfRVn-ow@comcast.com>
Source record: 19610

"Angela & Gary" <gmbelcas@charter.net> wrote in message
news:gmbelcas-0B2414.19345131032005@comcast.dca.giganews.com...
>
> Any one have a source for new or used metal enclosures. I'm trying to
> resurrect an old Johnson Matchbox and the original enclosure measured
> 10" x 10" x 7". Ideas?? Thanks in advance.
>
> Gary

Hammond Manufacturing has a large selection of metal and aluminum
enclosures.
Check the follow series (1401; 1431; 1441; 1434; 1444 and 1451 chassis
covers)
http://www.hammondmfg.com/dwg11.htm
http://www.hammondmfg.com/dwg20.htm
http://www.hammondmfg.com/dwg21.htm
http://www.hammondmfg.com/dwg22.htm

LMB Heeger has the "CO" series which very close to Collins "S" line and
Heathkit "SB" series in construction.
http://www.lmbheeger.com/products.asp?catid=16

Omni chassis is popular
http://www.lmbheeger.com/products.asp?catid=10

w9gb

1778. Re: Tower Information (Still Liiking)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-01 05:02:45 UTC
From: Lynn Coffelt <coffelt2@comcast.net>
Message-ID: <MoGdndH_r8VgSNHfRVn-2g@comcast.com>
Source record: 19611

"Bill Janssen" <billj9@ieee.org> wrote in message news:Eo03e.2540$hg.75@news01.roc.ny...
Win wrote:
On Wed, 30 Mar 2005 16:48:23 GMT, "Michael A. Terrell"
<mike.terrell@earthlink.net> wrote:

Win wrote:
I recently purchased an old crank-up motor driven 60 foot tower that I
would hope someone could id for me. The motor belt drives a gearbox,
which turns the cable pulley. It has a approximately 1 foot by 18
inch control box which has two high current relays and two glass
contained relays. The glass-contained relays are in old 8 pin tube
sockets.

The tower, itself, is in good shape. I would like to re-build the
control circuits and out the tower in service. Any information anyone
can give me on this tower will be greatly appreciated. See at
www.winlyn.us/tower.jpg.

Win, w0lz
W0lz@winlyn.us
Glass relay? Are you talking about Apmerite time delay relays?
Yes, Michael. I think I am talking about time delay relays.

Win
I think he is referring to clear plastic cased relays.

Bill K7NOM

Then those would most likely be P&B KARP series relays. Clear plastic cover, octal base
plug base, DPDT, in a variety of coil voltages.
Lynn, W7LTQ

Then those would most likely be P&B KARP series relays. Clear plastic cover, octal base
plug base, DPDT, in a variety of coil voltages.
Lynn, W7LTQ
"Bill Janssen" <billj9@ieee.org> wrote in message news:Eo03e.2540$hg.75@news01.roc.ny...
Win wrote:
On Wed, 30 Mar 2005 16:48:23 GMT, "Michael A. Terrell"
<mike.terrell@earthlink.net> wrote:

Win wrote:
I recently purchased an old crank-up motor driven 60 foot tower that I
would hope someone could id for me. The motor belt drives a gearbox,
which turns the cable pulley. It has a approximately 1 foot by 18
inch control box which has two high current relays and two glass
contained relays. The glass-contained relays are in old 8 pin tube
sockets.

The tower, itself, is in good shape. I would like to re-build the control circuits and out the tower in service. Any information anyone can give me on this tower will be greatly appreciated. See at www.winlyn.us/tower.jpg.

Win, w0lz
W0lz@winlyn.us
Glass relay? Are you talking about Apmerite time delay relays?
Yes, Michael. I think I am talking about time delay relays.

Win
I think he is referring to clear plastic cased relays.

Bill K7NOM

1779. Re: Midland to Headset

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-01 11:57:08 UTC
From: LC <Nuc_em2000@hotmail.com>
Message-ID: <1112356628.108966.44640@l41g2000cwc.googlegroups.com>
Source record: 19612

Andy, thank you , thank you...now I have to back to the books to
understand what you told me to do.... ;-) LOL thanks again.

WA3LTJ wrote:
> LC wrote:
>
> > I am trying to incorporate a mobile CB Midland 13-857 to my
> > motorcyle, I need to know how to add a circuit to the input (mic)
so
> > I can use a head set. I can hear and currently use the hand mic
when
> > riding... (the head set came from a computer with two jacks, one
for
> > speaker and one for mic).... can it be done? Can anyone help?
> > Nuc_em2000@hotmail.com
> > thanks Ken
>
> It can be done.
>
> You need do:
> 1) match the pin wiring
> 2) match the microphone impedances (although this may not be
important)
> 3) match the gain of the microphones with an attenuator or amplifier.
> 4) supply power to the computer microphone if it is an electret type.
>
>
> You will need to get the microphone connector wiring from the manual
or
> from opening the microphone. If your computer microphone is electret,
> it will need 3 to 12 volts of DC to operate the element. I don't know
> if CB manfacturers put a voltage like this on the microphone
connector.
>
> Anyway, it is not straightforward, but it can be done. I did it for
my
> Midland 2 meter rig. I embeded a speaker and tiny electret mic in the
> foam of my helmet.
>
> Andy

1780. Anybody have a spare NEMA 4 type box?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-01 12:14:08 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <ib-dnRdK-KCDptDfRVn-gA@bright.net>
Source record: 19613

I'm looking for a NEMA type 4 box or equivalent. New one are a bit pricey. It must be weather proof. Small holes OK, since I could weld pathes on to keep it watertight. It will be for my 432 beacon and will be mounted up on a tower (up to 200 feet above ground). Prefer metal. Size needed would be about 12" X 12" X 6" or so...

Thanks,

Scott
N0EDV

1781. Re: Anybody have a spare NEMA 4 type box?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-01 17:36:42 UTC
From: cl <clfurentN@Syahoo.com>
Message-ID: <dFf3e.59059$NC6.33727@newsread1.mlpsca01.us.to.verio.net>
Source record: 19614

I have one, but..... could be pricey to ship. I have to run, but e-mail me
for details.

cl

"Scott" <acepilot@bloomer.net> wrote in message
news:ib-dnRdK-KCDptDfRVn-gA@bright.net...
> I'm looking for a NEMA type 4 box or equivalent. New one are a bit
> pricey. It must be weather proof. Small holes OK, since I could weld
> pathes on to keep it watertight. It will be for my 432 beacon and will be
> mounted up on a tower (up to 200 feet above ground). Prefer metal. Size
> needed would be about 12" X 12" X 6" or so...
>
> Thanks,
>
> Scott
> N0EDV

1782. Re: Anybody have a spare NEMA 4 type box?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-01 18:24:42 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <114r4fbgpqeu4a5@corp.supernews.com>
Source record: 19615

Would you consider an ammo box? They're readily available at surplus stores.

Roy Lewallen, W7EL

Scott wrote:
> I'm looking for a NEMA type 4 box or equivalent. New one are a bit
> pricey. It must be weather proof. Small holes OK, since I could weld
> pathes on to keep it watertight. It will be for my 432 beacon and will
> be mounted up on a tower (up to 200 feet above ground). Prefer metal.
> Size needed would be about 12" X 12" X 6" or so...
>
> Thanks,
>
> Scott
> N0EDV

1783. Re: Rcvr pre-amp for Six meters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-01 18:48:42 UTC
From: Roger Leone <raleoneTAKEOUT@sbcglobal.net>
Message-ID: <elg3e.6379$V62.6108@newssvr14.news.prodigy.com>
Source record: 19616

Here is one: http://www.qrp.pops.net/preamp.htm

73,

Roger K6XQ

1784. Re: Anybody have a spare NEMA 4 type box?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-01 19:17:48 UTC
From: NEMA_DUDE <nema@nospam.com>
Message-ID: <424D9E59.DD1F2EBC@nospam.com>
Source record: 19617

hi scott,

home depot and most electrical supply houses have PVC
outdoor weathertight boxes, under $ 30 work just fine.
These are rated for outside use grey pvc.

nema dude

Scott wrote:

> I'm looking for a NEMA type 4 box or equivalent. New one are a bit
> pricey. It must be weather proof.
> Size needed would be about 12" X 12" X 6" or so...
>
> Thanks,
>
> Scott
> N0EDV

1785. FA:Manuals/Catalogs:Millen,Gonset,Eldico,Wilson +MO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-01 19:46:35 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <vyh3e.32001$cg1.10954@bgtnsc04-news.ops.worldnet.att.net>
Source record: 19618
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

See these manuals and catalogs at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking, more items coming soon......heytubeguy

1786. Re: Anybody have a spare NEMA 4 type box?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-01 21:05:31 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <424DB79B.1070400@bloomer.net>
Source record: 19619

Are they watertight? If so, I think I could make it all fit inside
(except for the 1' X 3' solar panel ;)

Scott
N0EDV

Roy Lewallen wrote:

> Would you consider an ammo box? They're readily available at surplus
> stores.
>
> Roy Lewallen, W7EL
>
> Scott wrote:
>
>> I'm looking for a NEMA type 4 box or equivalent. New one are a bit
>> pricey. It must be weather proof. Small holes OK, since I could weld
>> pathes on to keep it watertight. It will be for my 432 beacon and
>> will be mounted up on a tower (up to 200 feet above ground). Prefer
>> metal. Size needed would be about 12" X 12" X 6" or so...
>>
>> Thanks,
>>
>> Scott
>> N0EDV

1787. Re: Anybody have a spare NEMA 4 type box?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-01 21:06:29 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <x7adnWayVNZ_KtDfRVn-gA@bright.net>
Source record: 19620

Hey, good call! I'll check them out! Plastic would be OK! Just need
something to keep water OUT!

Scott
N0EDV

NEMA_DUDE wrote:

> hi scott,
>
> home depot and most electrical supply houses have PVC
> outdoor weathertight boxes, under $ 30 work just fine.
> These are rated for outside use grey pvc.
>
> nema dude
>
> Scott wrote:
>
>
>>I'm looking for a NEMA type 4 box or equivalent. New one are a bit
>>pricey. It must be weather proof.
>>Size needed would be about 12" X 12" X 6" or so...
>>
>>Thanks,
>>
>>Scott
>>N0EDV
>
>

1788. Re: Anybody have a spare NEMA 4 type box?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-01 21:22:14 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <114res76f58r56@corp.supernews.com>
Source record: 19621

Yes, they have a heavy rubber seal under the lid, and the lid is held down tightly. They're made of heavy gauge steel, which might be better (it's shielded) or worse (it's probably heavier) for your application than the plastic box others have recommended. They come in at least a couple of sizes and are relatively inexpensive. Think I paid $15 or $20 for some fair sized ones a while back. Considering their objective of keeping ammo free from corrosion and excessive moisture in virtually any environment, they seem to be a viable choice for an outside enclosure. You might want to seal it up when exposed to dry air and possibly enclose a dessicant, also, to reduce condensation problems. Some of the plastic boxes have a one-way valve to let air out but not in, which might be an advantage.

I don't have any real experience with keeping a weathertight box outside for an extended period, though. It would be good to get some opinions and advice from people who do.

Roy Lewallen, W7EL

Scott wrote:
> Are they watertight? If so, I think I could make it all fit inside
> (except for the 1' X 3' solar panel ;)
>
> Scott
> N0EDV
>
>
> Roy Lewallen wrote:
>
>> Would you consider an ammo box? They're readily available at surplus
>> stores.

1789. Re: 20 watt amp for 30 meters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-01 21:43:41 UTC
From: John Harper AE5X <john@ae5x.com>
Message-ID: <jgj3e.13143$f24.10172@fe12.lga>
Source record: 19622

http://www.hfprojects.com/modules.php?name=Content&pa=showpage&pid=1

--

John Harper AE5X
Portable QRP: http://www.ae5x.com

"m005kennedy" <m005kennedy@netzero.net> wrote in message
news:1112272524.700775.180840@l41g2000cwc.googlegroups.com...
>I want to build a 20 watt out/ five watt in amp to use with my 30 meter
> qrp rig. I have some irf510 I could use. Could someone point me to a
> schematic on the net? I'm not up to the point of designing anything, so
> the plans would have to be complete. I would like it to run off 12
> volts.
>
> Mike
> KB1IUI
>

1790. Re: Homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-01 22:19:47 UTC
From: Floyd Sense <fsense@copper.net>
Message-ID: <424dc959_2@newsfeed.slurp.net>
Source record: 19623

It would be interesting to know what was different about his filter. Do you know?

K8AC

"Dale Parfitt" <par@parelectronics.com> wrote in message news:3Q03e.27300
<<snip>>
>
> One aspect of filters that has long been either ignored or overlooked (
> even though W7ZOI details it in EMRFD) is group delay. A friend (N2PK)
> recently sent me 2 WAV files of a Yaesu 1000 stock 250Hz filter and his
> homebrew 250 Hz filter. The difference was remarkable- his filter was much
> cleaner and crisper sounding, no ringing. Great care was taken with group
> delay in his design.
>
> Dale W4OP
>
>

1791. Re: Rcvr pre-amp for Six meters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-01 22:33:06 UTC
From: Dan/W4NTI <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <C_j3e.12751$S46.3857@newsread3.news.atl.earthlink.net>
Source record: 19624

Thanks Roger

Dan/W4NTI

"Roger Leone" <raleoneTAKEOUT@sbcglobal.net> wrote in message
news:eIg3e.6379$V62.6108@newssvr14.news.prodigy.com...
> Here is one: http://www.qrp.pops.net/preamp.htm
>
> 73,
>
> Roger K6XQ
>
>

1792. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-02 00:35:37 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <tNl3e.11456$zl.2619@newssvr13.news.prodigy.com>
Source record: 19625
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Hello Albert,

> I need a Temic U4224B chip, which is used for reception of DCF and
> WWVB time signals at vlf.
>
> Are these available without going to Europe?

I am not sure you can get them at all. It might have been obsoleted by now.

Regards, Joerg

http://www.analogconsultants.com

1793. Re: Tower Information (Still Liiking)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-02 05:41:55 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <424E31F3.8020007@nettally.com>
Source record: 19626

Win;
The tower resembles a US Tower with the retracting cable which was used on some but not all models. I would assume the glass relays are in fact time delay relays used as part of a remote control circuit. I beleive this is the case because the US Tower controller without the remote control option can be fooled into failing to reverse direction if the up/down toggle is reversed while the motor is still moving. So if remote control were used there would need to be a delay when switching direction.

As a part of your refurbishment you should replace each of the cables and inspect/ replace the pulleys. The pulleys have bearings which can fail and cause the cable to bind leading to failure.

Do keep in mind that the tower is a pretty dangerous piece of machinery even if you are simply working with it laid out on the ground as the sections can trap your hands if they move while you are working on it. Once you get it erected, there is a lot of force on the cables and steel and so becomes even more dangerous to work with.

You should study the assembly of the tower sections and cable arrangement carefully and create drawings and label each part and cable before disassembly. Feel free to e-mail me as I have refurbed one in the past and it worked out pretty well.

Win wrote:

>I recently purchased an old crank-up motor driven 60 foot tower that I
>would hope someone could id for me. The motor belt drives a gearbox,
>which turns the cable pulley. It has a approximately 1 foot by 18
>inch control box which has two high current relays and two glass
>contained relays. The glass-contained relays are in old 8 pin tube
>sockets.
>
>The tower, itself, is in good shape. I would like to re-build the
>control circuits and out the tower in service. Any information anyone
>can give me on this tower will be greatly appreciated. See at
>www.winlyn.us/tower.jpg.
>
>Win, w0lz
>W0lz@winlyn.us
>
>
>

--
Joe Leikhim K4SAT

"The RFI-EMI-GUY"

The Lost Deep Thoughts By: Jack Handey
Before a mad scientist goes mad, there's probably a time when he's only partially mad. And this is the time when he's going to throw his best parties.

1794. Re: Homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-02 06:57:44 UTC
From: Bill Meara <meara.london@virgin.net>
Message-ID: <424EB381.2A37@virgin.net>
Source record: 19627

Dale Parfitt wrote:
>
> "Bill N2CQR MOHBR" <meara.london@virgin.net> wrote in message
> news:22f6e3ee.0503302233.5ed40e7c@posting.google.com...
> > Dale: Wow, small world! Yea I think that is the one I'm working on. I
> think
> > you also had a DC-DC converter to bring the voltage to the varicaps up.
> > Very nice enclosure for the oscillator. I now have it percolating nicely
> > as a VXO around 23 Mhz (for the 17 meter band). Bill
> >
> That's it Bill! Amazing. Hopefully I placed the Dc-DC converter inside that
> shielded enclosure. Glad it has a good home.
> I believe that board was from A&A Engineering- seem to recall they supplied
> for QST back then. That design was a very robust RX. Doug (?) had sent me
> the companion TX article before release- but I never got around to building
> it.
> How many countries has that RX travelled to now?
> Dale W4OP
> Dale

Dale: I can't remember when it was that I bought it from you. So,
depending on the date, it could have spent time in the Dominican
Republic, Northern Virginia, the Azores Islands of Portugal, and the UK.

BTW, I always admired the neat construction of that RX. The hookup wire
used was very nice. Do you remember what kind of wire you were using.
I'd like to get some of that. Makes a big difference in the appearance
of the final product.

73 Bill N2CQR CU2JL M0HBR
http://planeta.clix.pt/n2cqr

1795. Re: Steel & Aluminum enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-02 15:55:52 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <5bz3e.10563$UW6.7421@bignews5.bellsouth.net>
Source record: 19628

gb wrote:
> "Angela & Gary" <gmbelcas@charter.net> wrote in message
> news:gmbelcas-0B2414.19345131032005@comcast.dca.giganews.com...
>
>>Any one have a source for new or used metal enclosures. I'm trying to
>>resurrect an old Johnson Matchbox and the original enclosure measured
>>10" x 10" x 7". Ideas?? Thanks in advance.
>>
>>Gary
>
>
> Hammond Manufacturing has a large selection of metal and aluminum
> enclosures.
> Check the follow series (1401; 1431; 1441; 1434; 1444 and 1451 chassis
> covers)
> http://www.hammondmfg.com/dwg11.htm
> http://www.hammondmfg.com/dwg20.htm
> http://www.hammondmfg.com/dwg21.htm
> http://www.hammondmfg.com/dwg22.htm
>
> LMB Heeger has the "CO" series which very close to Collins "S" line and
> Heathkit "SB" series in construction.
> http://www.lmbheeger.com/products.asp?catid=16
>
> Omni chassis is popular
> http://www.lmbheeger.com/products.asp?catid=10
>
> w9gb
>
>
Wow, the price on that CO-7 cabinet has gone up quite a bit
since I bought one in the 70's for a SSTV monitor. (Think
I paid about $20 then.)

1796. Re: Tower Information (Still Liiking)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-02 16:00:00 UTC
From: Win <w0lz@winlyn.us>
Message-ID: <4bgt41tc4cg5rilg5t4eefdu3u0k48vdt7@4ax.com>
Source record: 19629

I would like to thank everyone who posted and sent me mail. The response was great and provided most of what I need. It is nice to know that such information is shared so willingly by all.

Again, thank you all.

Win, w0lz

1797. Re: Anybody have a spare NEMA 4 type box?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-02 17:06:25 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1cb870eadc8b7f9989701@localhost>
Source record: 19630

In article <ib-dnRdK-KCDptDfRVn-gA@bright.net>, acepilot@bloomer.net says...

> I'm looking for a NEMA type 4 box or equivalent. New one are a bit
> pricey. It must be weather proof. Small holes OK, since I could weld
> pathes on to keep it watertight. It will be for my 432 beacon and will
> be mounted up on a tower (up to 200 feet above ground). Prefer metal.
> Size needed would be about 12" X 12" X 6" or so...

Pricey? Not the smaller ones. I've got a pair of 12x12x6's in my van that ran about $30 or so.

No, they're not metal... They're a sort of plastic-fiberglass composite. However, installing a copper 'Faraday cage' internally would be a simple matter of cutting and bolting in some copper sheets. They do, however, meet the full NEMA-4X specifications for water resistance and other environmental nastiness.

If you decide to pursue such, Platt Electric Supply (nationwide chain) has them.

Happy hunting.

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped with surreal ports?"

1798. Re: Anybody have a spare NEMA 4 type box?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-02 17:49:37 UTC
From: cl <clfurentN@Syahoo.com>
Message-ID: <hXA3e.59750$NC6.30643@newsread1.mlpsca01.us.to.verio.net>
Source record: 19631

"Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null> wrote in message
news:MPG.1cb870eadc8b7f9989701@localhost...
> In article <ib-dnRdK-KCDptDfRVn-gA@bright.net>, acepilot@bloomer.net
> says...
>
>> I'm looking for a NEMA type 4 box or equivalent. New one are a bit
>> pricey. It must be weather proof. Small holes OK, since I could weld
>> pathes on to keep it watertight. It will be for my 432 beacon and will
>> be mounted up on a tower (up to 200 feet above ground). Prefer metal.
>> Size needed would be about 12" X 12" X 6" or so...
>
> Pricey? Not the smaller ones. I've got a pair of 12x12x6's in my
> van that ran about $30 or so.
>
> No, they're not metal... They're a sort of plastic-fiberglass
> composite. However, installing a copper 'Faraday cage' internally would
> be a simple matter of cutting and bolting in some copper sheets. They
> do, however, meet the full NEMA-4X specifications for water resistance
> and other environmental nastiness.
>
> If you decide to pursue such, Platt Electric Supply (nationwide
> chain) has them.
>
> Happy hunting.
>
>
> --
> Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
> (Known to some as Bruce Lane, ARS KC7GR,
> kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
> "If Salvador Dali had owned a computer, would it have been equipped
> with surreal ports?"

"I" am not up on the "NEMA" specs as I don't do a lot of that sort of
thing... I wish we were closer, as I have a heavy metal gauge outdoor -
weatherproof box about the size I've been seeing mentioned..... I am selling
it for $50 not counting shipping. It has some weight to it, so not sure what
it would cost to ship.

cl

1799. Re: SWR meter, inline, non-resistive, led

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-02 18:05:40 UTC
From: andreas magun <achmagun@bluewin.ch>
Message-ID: <424eec41$1_1@news.bluewin.ch>
Source record: 19633

Have a look at http://www.qsl.net/iw3hev/ where a simple
non resistive broadband coupler (used in an antenna analyzer)
is described.

Andreas

John Smith wrote:
> I am looking to construct a SWR meter which can be left in line and consumes
> negligible power (just to light a led or two and associated, minimal, losses
> of transmitter power.)
>
> I had seen such a schematic years ago. Drawing a mental picture, from what
> I can remember, a wire ran down the center of a tube on a couple of
> insulating spacers (washers) in a concentric configuration.
>
> A small hole in each end of the tubing allowed an insulated pickup turn to
> be run adjacent to the wire in the tube--exiting the holes in the sides of
> the tubing, this picked up sufficient reflected power to drive the led(s)
> and give an indication of SWR (led(s) dim or out at 1:1, or near.
>
> Anyone got that schematic/construction details or, one of a similar unit to
> construct?
>
> This unit was inserted in the coax line to the antenna.
>
>
> Warmest regards,
> thanks in advance

1800. Re: Darlington Transistors At RF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-02 18:09:58 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <%7B3e.20067$f%4.13304@bignews1.bellsouth.net>
Source record: 19632

K7ITM wrote:
> Jan-Martin wrote, "perhaps not so much for RF, but I wonder why you
> don't see NPN/PNP combination for darlington transistors - with Vbe =
> 0.55-0.6V"
>
> Actually, I think if you look at schematics of transistorized audio
> amplifiers, you'll find examples of about every practical combination
> of two and three transistors, used to build complimentary output
> stages. If I understand correctly what you are suggesting, I'm quite
> sure I've seen that configuration. In the 1960's and into the '70's,
> there were a lot of games played to try to pair up NPN power
> transistors with PNP drivers to get PNP-equivalents and NPN-equivalents
> that were as nearly symmetrical as possible while giving high current
> gain, since PNP power transistors weren't up to performing as well as
> the NPNs in that era.
>
> Cheers,
> Tom
>
You can cascade NPN-PNP transistors by connecting the collector of
on transistor to the base of another (of different polarity). I recall
a circuit that used two pnp and one npn transistors in a three way
cascade, the final transistor was a PNP power type (all Ge).
It used 2n107, 2n170, and 2n301 transistors as a simple audio
amplifier for a phonograph.

1801. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-02 18:57:46 UTC
From: mzenier@eskimo.com
Message-ID: <d2pa14vni1@eskinews.eskimo.com>
Source record: 19642
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

In article <tNl3e.11456$zl.2619@newssvr13.news.prodigy.com>,
Joerg <notthisjoergsch@removethispacbell.net> wrote:
>Hello Albert,
>
>> I need a Temic U4224B chip, which is used for reception of DCF and
>> WWVB time signals at vlf.
>>
>> Are these available without going to Europe?
>
>I am not sure you can get them at all. It might have been obsoleted by now.

In any case, Temic was bought out by Atmel.

Mark Zenier mzenier@eskimo.com Washington State resident

1802. Re: Darlington Transistors At RF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-02 19:15:04 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <bkrt41dj5ts5sg7nhcl32hanl934v89i84@4ax.com>
Source record: 19634

On Sat, 02 Apr 2005 13:09:58 -0500, Ken Scharf
<wa2mzeNOTTHIS@bellsouth.net> wrote:

>K7ITM wrote:
>> Jan-Martin wrote, "perhaps not so much for RF, but I wonder why you
>> don't see NPN/PNP combination for darlington transistors - with Vbe =
>> 0.55-0.6V"
>>
>> Actually, I think if you look at schematics of transistorized audio
>> amplifiers, you'll find examples of about every practical combination
>> of two and three transistors, used to build complimentary output
>> stages. If I understand correctly what you are suggesting, I'm quite
>> sure I've seen that configuration. In the 1960's and into the '70's,
>> there were a lot of games played to try to pair up NPN power
>> transistors with PNP drivers to get PNP-equivalents and NPN-equivalents
>> that were as nearly symmetrical as possible while giving high current
>> gain, since PNP power transistors weren't up to performing as well as
>> the NPNs in that era.
>>
>> Cheers,
>> Tom
>>
>You can cascade NPN-PNP transistors by connecting the collector of
>on transistor to the base of another (of different polarity). I recall
>a circuit that used two pnp and one npn transistors in a three way
>cascade, the final transistor was a PNP power type (all Ge).
>It used 2n107, 2n170, and 2n301 transistors as a simple audio
>amplifier for a phonograph.

I suggested this configuration in my poster a fortnight ago, apart
from that I wouldn't use a germanium power transistor, or better
wouldn't use germanium transistors at all

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/91n.htm

1803. Re: Anybody have a spare NEMA 4 type box?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-02 19:37:39 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <47GdnYcKMuYSadPfRVn-vA@bright.net>
Source record: 19635

Composite would be fine. Mouser has them in , I think, 8 X 10 X 4 which would work, but they're somewhere around 60 dollars. I'm a cheap b@st@rd. $30 is about max I want to go for a beacon box...I'll scout around some more....thanks for the tip.

Scott
N0EDV

Dr. Anton T. Squeegee wrote:

> In article <ib-dnRdK-KCDptDfRVn-gA@bright.net>, acepilot@bloomer.net
> says...
>
>
>>I'm looking for a NEMA type 4 box or equivalent. New one are a bit
>>pricey. It must be weather proof. Small holes OK, since I could weld
>>pathes on to keep it watertight. It will be for my 432 beacon and will
>>be mounted up on a tower (up to 200 feet above ground). Prefer metal.
>>Size needed would be about 12" X 12" X 6" or so...
>
>
> Pricey? Not the smaller ones. I've got a pair of 12x12x6's in my
> van that ran about $30 or so.
>
> No, they're not metal... They're a sort of plastic-fiberglass
> composite. However, installing a copper 'Faraday cage' internally would
> be a simple matter of cutting and bolting in some copper sheets. They
> do, however, meet the full NEMA-4X specifications for water resistance
> and other environmental nastiness.
>
> If you decide to pursue such, Platt Electric Supply (nationwide
> chain) has them.
>
> Happy hunting.
>
>

1804. Re: Steel & Aluminum enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-02 22:24:37 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <FYSdnbBqRt06htLfRVn-2Q@comcast.com>
Source record: 19636

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
news:5bz3e.10563$UW6.7421@bignews5.bellsouth.net...
> gb wrote:
>> "Angela & Gary" <gmbelcas@charter.net> wrote in message
>> news:gmbelcas-0B2414.19345131032005@comcast.dca.giganews.com...
>>
>>>Any one have a source for new or used metal enclosures. I'm trying to
>>>resurrect an old Johnson Matchbox and the original enclosure measured
>>>10" x 10" x 7". Ideas?? Thanks in advance.
>>>
>>>Gary
>>
[snip]

>> LMB Heeger has the "CO" series which very close to Collins "S" line and
>> Heathkit "SB" series in construction.
>> http://www.lmbheeger.com/products.asp?catid=16
>>
>> Omni chassis is popular
>> http://www.lmbheeger.com/products.asp?catid=10
>>
>> w9gb
> Wow, the price on that CO-7 cabinet has gone up quite a bit
> since I bought one in the 70's for a SSTV monitor. (Think
> I paid about $20 then.)

Gary and Ken -

Actually, IF you desire an LMB / Heath SB-series / Collins S-line look

My best suggestion is to find the junker SB-400 /SB-300 and S line junker
chassis on eBay, such as this item number: 5764132119
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=4671&item=5764132119&rd=1&ssPageNam
e=WDVW

It's a great starting point and you can use the cutouts OR fill the cutouts
with aluminum or steel sheets
available from K&S Engineering (local hobby store) or your local hardware
stores (Ace; Lowe's; Home Depot)

Greg
w9gb

1805. Re: Darlington Transistors At RF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-02 22:31:35 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <1_E3e.11538$UW6.1290@bignews5.bellsouth.net>
Source record: 19637

J M Noeding wrote:
> On Sat, 02 Apr 2005 13:09:58 -0500, Ken Scharf
> <wa2mzeNOTTHIS@bellsouth.net> wrote:
>
>
>>K7ITM wrote:
>>
>>>Jan-Martin wrote, "perhaps not so much for RF, but I wonder why you
>>>don't see NPN/PNP combination for darlington transistors - with Vbe =
>>>0.55-0.6V"
>>>
>>>Actually, I think if you look at schematics of transistorized audio
>>>amplifiers, you'll find examples of about every practical combination
>>>of two and three transistors, used to build complimentary output
>>>stages. If I understand correctly what you are suggesting, I'm quite
>>>sure I've seen that configuration. In the 1960's and into the '70's,
>>>there were a lot of games played to try to pair up NPN power
>>>transistors with PNP drivers to get PNP-equivalents and NPN-equivalents
>>>that were as nearly symmetrical as possible while giving high current
>>>gain, since PNP power transistors weren't up to performing as well as
>>>the NPNs in that era.
>>>
>>>Cheers,
>>>Tom
>>>
>>
>>You can cascade NPN-PNP transistors by connecting the collector of
>>on transistor to the base of another (of different polarity). I recall
>>a circuit that used two pnp and one npn transistors in a three way
>>cascade, the final transistor was a PNP power type (all Ge).
>>It used 2n107, 2n170, and 2n301 transistors as a simple audio
>>amplifier for a phonograph.
>
>
> I suggested this configuration in my poster a fortnight ago, apart
> from that I wouldn't use a germanium power transistor, or better
> wouldn't use germanium transistors at all
Well not today, but in 1965?
Look at the part numbers I gave! Ancient History!

1806. TTM Corp Japan

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-03 01:45:20 UTC
From: David Carrick <k8mam@wideopenwest.com>
Message-ID: <lkiu41lb3mprbc2tf3sncrh1p351566e4r@4ax.com>
Source record: 19638

Looking for information on TTM Electronics Corp Japan.
Particularly Model 303 Oscilloscope.
Any suggestions?
Thanks.

1807. Re: Anybody have a spare NEMA 4 type box?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-03 01:48:31 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <424F4B2C.22802904@earthlink.net>
Source record: 19639

Scott wrote:
>
> Composite would be fine. Mouser has them in , I think, 8 X 10 X 4 which
> would work, but they're somewhere around 60 dollars. I'm a cheap
> b@st@rd. $30 is about max I want to go for a beacon box...I'll scout
> around some more....thanks for the tip.
>
> Scott
> N0EDV
>
> Dr. Anton T. Squeegee wrote:
>
> > In article <ib-dnRdK-KCDptDfRVn-gA@bright.net>, acepilot@bloomer.net
> > says...
> > >
> > >
> > >>I'm looking for a NEMA type 4 box or equivalent. New one are a bit
> > >>pricey. It must be weather proof. Small holes OK, since I could weld
> > >>pathes on to keep it watertight. It will be for my 432 beacon and will
> > >>be mounted up on a tower (up to 200 feet above ground). Prefer metal.
> > >>Size needed would be about 12" X 12" X 6" or so...
> > >
> > >
> > > Pricey? Not the smaller ones. I've got a pair of 12x12x6's in my
> > > van that ran about $30 or so.
> > >
> > > No, they're not metal... They're a sort of plastic-fiberglass
> > > composite. However, installing a copper 'Faraday cage' internally would
> > > be a simple matter of cutting and bolting in some copper sheets. They
> > > do, however, meet the full NEMA-4X specifications for water resistance
> > > and other environmental nastiness.
> > >
> > > If you decide to pursue such, Platt Electric Supply (nationwide
> > > chain) has them.
> > >
> > > Happy hunting.
> > >
> > >

Have you got a decent scrapyard or recycling center? The local
scrapyard has a bunch of used NEMA boxes but the shipping would be high
from here. I've seen stainless and painted steel in several sizes. The
only small metal NEMA box I have right now is⋆" ⋆ 10" and 4" deep The
next one is a lot larger than what you are looking for.

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

1808. Re: Darlington Transistors At RF?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-03 11:11:06 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <iijv415d42vmlabudsus5p4g4fkv63jbo4@4ax.com>
Source record: 19640

On Sat, 02 Apr 2005 17:31:35 -0500, Ken Scharf
<wa2mzeNOTTHIS@bellsouth.net> wrote:

>J M Noeding wrote:
>> On Sat, 02 Apr 2005 13:09:58 -0500, Ken Scharf
>> <wa2mzeNOTTHIS@bellsouth.net> wrote:
>>
>>
>>>K7ITM wrote:
>>>
>>>>Jan-Martin wrote, "perhaps not so much for RF, but I wonder why you
>>>>don't see NPN/PNP combination for darlington transistors - with Vbe =
>>>>0.55-0.6V"
>>>>
>>>>Actually, I think if you look at schematics of transistorized audio
>>>>amplifiers, you'll find examples of about every practical combination
>>>>of two and three transistors, used to build complimentary output
>>>>stages. If I understand correctly what you are suggesting, I'm quite
>>>>sure I've seen that configuration. In the 1960's and into the '70's,
>>>>there were a lot of games played to try to pair up NPN power
>>>>transistors with PNP drivers to get PNP-equivalents and NPN-equivalents
>>>>that were as nearly symmetrical as possible while giving high current
>>>>gain, since PNP power transistors weren't up to performing as well as
>>>>the NPNs in that era.
>>>>
>>>>Cheers,
>>>>Tom
>>>>
>>>
>>>You can cascade NPN-PNP transistors by connecting the collector of
>>>on transistor to the base of another (of different polarity). I recall
>>>a circuit that used two pnp and one npn transistors in a three way
>>>cascade, the final transistor was a PNP power type (all Ge).
>>>It used 2n107, 2n170, and 2n301 transistors as a simple audio
>>>amplifier for a phonograph.
>>
>>
>> I suggested this configuration in my poster a fortnight ago, apart
>> from that I wouldn't use a germanium power transistor, or better
>> wouldn't use germanium transistors at all
>Well not today, but in 1965?
>Look at the part numbers I gave! Ancient History!

I believed the discussion was really about RF transistor application,
but talking about those toxic transistors, is there any known cases

where persons have deceased after opening a power transistor?

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/91n.htm

1809. FA:1 day left:Bill Orr Articles, VOA Maps...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-03 17:40:20 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <8UV3e.510751$w62.154953@bgtnsc05-news.ops.worldnet.att.net>
Source record: 19641
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

See at address below + other manuals, items coming as well:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx heytubeguy

1810. Pattern a circuit board with a computer printer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-03 20:25:22 UTC
From: "Bruce W.1" <no@email.com>
Message-ID: <SiY3e.20495$yK3.230@newssvr31.news.prodigy.com>
Source record: 19643

I've been told there is a way to make a circuit board with a computer printer, i.e. make the traces on the back side. Can anyone tell me about this?

Thanks for your help.

Bruce AF8F

1811. Re: Pattern a circuit board with a computer printer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-03 20:30:35 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <BiY3e.16470$UW6.13142@bignews5.bellsouth.net>
Source record: 19644

Bruce W.1 wrote:
> I've been told there is a way to make a circuit board with a computer
> printer, i.e. make the traces on the back side. Can anyone tell me
> about this?
>
> Thanks for your help.
>
> Bruce AF8F
Do you mean the 'press and peel' resist film?
You print your pc layout on the film using a laser
printer or copy machine and then iron the film on
to the pc board. The toner becomes the resist, and
you then etch the board in the usual manor.
You can buy the stuff from www.techniks.com

1812. Re: Pattern a circuit board with a computer printer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-03 21:02:05 UTC
From: dplatt@radagast.org
Message-ID: <1150medq0ki985b@corp.supernews.com>
Source record: 19645

In article <SiY3e.20495$yK3.230@newssvr31.news.prodigy.com>,
Bruce W.1 <no@email.com> wrote:

>I've been told there is a way to make a circuit board with a computer
>printer, i.e. make the traces on the back side. Can anyone tell me
>about this?

There are several.

One way is to laser-print the resist pattern onto a transparency (or laser-print into paper and photocopy onto a transparency) and then use the resulting transparency as a photographic mask, exposing a piece of photosensitized PCB material to UV light through the mask. The exposed photo-resist is then developed (chemically in many cases) and the unexposed portion is washed away (or vice versa - depends on the type of resist) and the board is etched.

Another way is to laser-print the resist pattern (mirrored left-for-right) on a specialized sort of coated paper. The PC board material is cleaned thoroughly, the printed paper is placed on the board toner-side-down and carefully ironed onto the board - the resist melts and sticks to the clean copper. The board is soaked in water, and the coating on the paper releases the toner/resist and the paper washes off of the board. The board is then etched. There are commercial papers made for this purpose, I've heard of people using some glossy-surfaced inkjet papers, and some folks even make their own by brushing a liquid gelatin solution onto smooth paper.

It's also possible to use a flatbed plotter, with a special pen, to draw resist patterns directly on PC board material.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1813. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-03 21:10:48 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <sZY3e.14959$zl.5021@newssvr13.news.prodigy.com>
Source record: 19646
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Hello Mark,

> In any case, Temic was bought out by Atmel.

I believe Atmel called this chip T4224 but when looking for it on their
web site it ain't there.

Regards, Joerg

http://www.analogconsultants.com

1814. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-03 21:19:05 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1112563145.723948.98110@f14g2000cwb.googlegroups.com>
Source record: 19647
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

The "usual" way of getting a WWVB receiver chip is to buy a cheap WWVB clock and rip out the chip and antenna. Some have external chips/antenna connected via cable already.

A web page showing how to do this with a commonly available Sony WWVB clock is at:

http://www.leapsecond.com/pages/sony-wwvb/

Tim.

1815. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-03 21:32:28 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <MhZ3e.1082$qD2.599@newssvr14.news.prodigy.com>
Source record: 19548
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Hello Tim,

> The "usual" way of getting a WWVB receiver chip is to buy a cheap WWVB
> clock and rip out the chip and antenna. Some have external
> chips/antenna connected via cable already.

Agree. Many like the Sony even contain two crystals. These alone can
cost more than a whole clock.

But if it's a matter of pride you can build your own even without any
special chips. When I was a kid I built a receiver for DCF in Europe. No
crystals, only a few transistors and 741 opamps. It worked great, except
that I didn't have a PC or anything to decode the signal with. It was
just the detected pulses but these came through nice and clear. With
today's opamps you wouldn't even need any transistors to do it. A decent
quad can be had for 50c while I paid a whopping $3 for a single
re-labeled 741 of rather dubious quality level.

Regards, Joerg

http://www.analogconsultants.com

1816. Re: Pattern a circuit board with a computer printer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-04 00:21:28 UTC
From: "Bruce W.1" <no@email.com>
Message-ID: <cM%3e.14749$ZB6.2692@newssvr19.news.prodigy.com>
Source record: 19549

Ken Scharf wrote:
>
> Do you mean the 'press and peel' resist film?
> You print your pc layout on the film using a laser
> printer or copy machine and then iron the film on
> to the pc board. The toner becomes the resist, and
> you then etch the board in the usual manor.
> You can buy the stuff from www.techniks.com
==========

I think this is the stuff. Let me get this straight. It's actually the toner from your laser printer which transfers to the copper on the board. The toner is the resist. Is that correct?

Thanks

1817. Re: Pattern a circuit board with a computer printer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-04 00:29:55 UTC
From: "Bruce W.1" <no@email.com>
Message-ID: <7U%3e.14752$ZB6.13897@newssvr19.news.prodigy.com>
Source record: 19550

Dave Platt wrote:
There are several.
>
> One way is to laser-print the resist pattern onto a transparency (or
> laser-print into paper and photocopy onto a transparency) and then use
> the resulting transparency as a photographic mask, exposing a piece of
> photosensitized PCB material to UV light through the mask. The
> exposed photo-resist is then developed (chemically in many cases) and
> the unexposed portion is washed away (or vice versa - depends on the
> type of resist) and the board is etched.
>
> Another way is to laser-print the resist pattern (mirrored
> left-for-right) on a specialized sort of coated paper. The PC board
> material is cleaned thoroughly, the printed paper is placed on the
> board toner-side-down and carefully ironed onto the board - the resist
> melts and sticks to the clean copper. The board is soaked in water,
> and the coating on the paper releases the toner/resist and the paper
> washes off of the board. The board is then etched. There are
> commercial papers made for this purpose, I've heard of people using
> some glossy-surfaced inkjet papers, and some folks even make their own
> by brushing a liquid gelatin solution onto smooth paper.
>
> It's also possible to use a flatbed plotter, with a special pen, to
> draw resist patterns directly on PC board material.
>
==========

I'm familiar with the photosensitized PCB material and UV light method.
But this is hardly an at-home kind of thing. I think I was looking
for the second method you mentioned.

1818. Re: Pattern a circuit board with a computer printer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-04 00:44:35 UTC
From: Lou <lburkel@core.com>
Message-ID: <42508DF3.C028F5CD@core.com>
Source record: 19551

"Bruce W.1" wrote:
>
> I've been told there is a way to make a circuit board with a computer
> printer, i.e. make the traces on the back side. Can anyone tell me
> about this?
>
> Thanks for your help.
>
> Bruce AF8F
Here is a link to a page where the system is described.
Lou AA9ZW
http://www.fullnet.com/u/tomg/gooteepc.htm

1819. Re: Pattern a circuit board with a computer printer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-04 06:52:17 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <4250e421$0$289$cc9e4d1f@news-text.dial.pipex.com>
Source record: 19552

"Bruce W.1" <no@email.com> wrote in message
news:cM%3e.14749$ZB6.2692@newssvr19.news.prodigy.com...
> Ken Scharf wrote:
>>
>> Do you mean the 'press and peel' resist film?
>> You print your pc layout on the film using a laser
>> printer or copy machine and then iron the film on
>> to the pc board. The toner becomes the resist, and
>> you then etch the board in the usual manor.
>> You can buy the stuff from www.techniks.com
> ==
>
> I think this is the stuff. Let me get this straight. It's actually the
> toner from your laser printer which transfers to the copper on the board.
> The toner is the resist. Is that correct?

Yes. A useful group where techniques for making PCBs are discussed is:

http://groups.yahoo.com/group/Homebrew_PCBs/

Leon

1820. Re: Pattern a circuit board with a computer printer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-04 06:54:30 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <4250e4a7$0$302$cc9e4d1f@news-text.dial.pipex.com>
Source record: 19553

"Bruce W.1" <no@email.com> wrote in message
news:7U%3e.14752$ZB6.13897@newssvr19.news.prodigy.com...
> Dave Platt wrote:
> There are several.
>>
>> One way is to laser-print the resist pattern onto a transparency (or
>> laser-print into paper and photocopy onto a transparency) and then use
>> the resulting transparency as a photographic mask, exposing a piece of
>> photosensitized PCB material to UV light through the mask. The
>> exposed photo-resist is then developed (chemically in many cases) and
>> the unexposed portion is washed away (or vice versa - depends on the
>> type of resist) and the board is etched.
>>
>> Another way is to laser-print the resist pattern (mirrored
>> left-for-right) on a specialized sort of coated paper. The PC board
>> material is cleaned thoroughly, the printed paper is placed on the
>> board toner-side-down and carefully ironed onto the board - the resist
>> melts and sticks to the clean copper. The board is soaked in water,
>> and the coating on the paper releases the toner/resist and the paper
>> washes off of the board. The board is then etched. There are
>> commercial papers made for this purpose, I've heard of people using
>> some glossy-surfaced inkjet papers, and some folks even make their own
>> by brushing a liquid gelatin solution onto smooth paper.
>>
>> It's also possible to use a flatbed plotter, with a special pen, to
>> draw resist patterns directly on PC board material.
>>
> ================================
>
> I'm familiar with the photosensitized PCB material and UV light method.
> But this is hardly an at-home kind of thing. I think I was looking for
> the second method you mentioned.

I make my PCBs at home using that method. It works much better than toner
transfer for me, and doesn't take much longer.

Leon

1821. Re: Homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-04 09:46:14 UTC
From: Ted Bruce <kilocycles**@**yahoo.com>
Message-ID: <b03251lma5gg5gkg5e9s9ss9lhe57421vl@4ax.com>
Source record: 19554

On Mon, 28 Mar 2005 21:19:44 GMT, "Dale Parfitt"
<par@parelectronics.com> wrote:

>
>"Bill N2CQR MOHBR" <meara.london@virgin.net> wrote in message
>news:22f6e3ee.0503272306.7ecdadad@posting.google.com...
>> I really enjoyed the message thread sparked by the pictures of
>> Dale's very FB HB RX. We need more of that kind of discussion...
>>
>> Here is what I've been working on in London:
>>
>> Hi Bill,
>I have trouble keeping up with where in the world you are, but visit your
>site regularly to see what you are up to.
>I would encourage others to brew their own xtal filters. uP xtals are cheap
>enough today that you can buy a pile and match up what you need. W7ZOI's
>articles on crystal filters takes the mystery out.
>Probably the most difficult part is characterizing individual crystals so
>you can plug in the numbers. I use an HP network analyzer, but Wes also
>shows a test jig for doing this. Alternatively, N2PK's VNA will do an
>excellent job. In the end, you can make better filters than you can buy- and
>for a heck of a lot less $$.
>N2PK recently sent me 2 WAV files- one recorded with the 1000MP stock 250 Hz
>filter; the other with a homebrew 250 Hz filter- it took no imagination to
>discern which one was cleaner.
>Now, I'll go have a look at Bill W0IYH's site.
>
>Dale W4OP
>
Dale & Bill,
Jim, K8IQY has the Precision VXO and Crystal test rig that uses the
PVXO as a driver for the candidate IF filter crystal under test. I'm
currently building both of those.

73,
Ted KX4OM

1822. Re: Homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-04 09:54:58 UTC
From: Ted Bruce <kilocycles**@**yahoo.com>
Message-ID: <sj3251pa5hramle7rphof617bdp3qthc1p@4ax.com>
Source record: 19555

On Mon, 28 Mar 2005 21:19:44 GMT, "Dale Parfitt"
<par@parelectronics.com> wrote:

>
>"Bill N2CQR MOHBR" <meara.london@virgin.net> wrote in message
>news:22f6e3ee.0503272306.7ecdadad@posting.google.com...
>> I really enjoyed the message thread sparked by the pictures of
>> Dale's very FB HB RX. We need more of that kind of discussion...
>>
>> Here is what I've been working on in London:
>>
>> Hi Bill,
>I have trouble keeping up with where in the world you are, but visit your
>site regularly to see what you are up to.
>I would encourage others to brew their own xtal filters. uP xtals are cheap
>enough today that you can buy a pile and match up what you need. W7ZOI's
>articles on crystal filters takes the mystery out.
>Probably the most difficult part is characterizing individual crystals so
>you can plug in the numbers. I use an HP network analyzer, but Wes also
>shows a test jig for doing this. Alternatively, N2PK's VNA will do an
>excellent job. In the end, you can make better filters than you can buy- and
>for a heck of a lot less $$.
>N2PK recently sent me 2 WAV files- one recorded with the 1000MP stock 250 Hz
>filter; the other with a homebrew 250 Hz filter- it took no imagination to
>discern which one was cleaner.
>Now, I'll go have a look at Bill W0IYH's site.
>
>Dale W4OP
>
Dale, I checked in late on this thread; what is Bill Sabin's site URL?
I've been Googleing to beat the band, but it doesn't turn up.

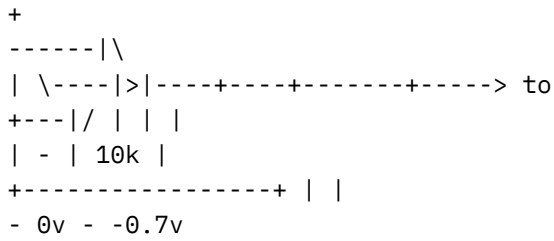
Ted KX4OM

1823. Advanced VHF Wattmeter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-04 13:16:12 UTC
From: Stewart Bryant <stbryant@cisco.com>
Message-ID: <1112620397.901444@sj-nntpcache-5>
Source record: 19556

I am thinking of building the "Advanced VHF Wattmeter" by
Bob Kopski K3NHI published in QEX May/June 2002, and was
wondering if anyone who subscribes to the NG understands
the function of IC2a.

This is a voltage follower with a diode in the feedback
path, which as I recall is a precision rectifier. It is
then followed by a biasing circuit, which seems to fight
against the low impedance output of IC2a, which again
I don't understand the need for.



IC2a is interposed between the output of the AD8307 log amp
and the input of the DVM.

The AD8307 is runs between ground and +5v, and so
will only produce an output of between 0 (-80dbm) and 2.5v
(+20dbm). I don't therefore see the purpose of the stage
of the biasing arrangement.

Surely all that was needed was to take the output of the
AD8307 into the potential divider to set mv/dbm and
the to set the bias on the -ve side of the DVM to get
the 0dbm offset.

Any ideas?

Thanks

Stewart G3YSX

1824. Spectrum Comm. SCT-110 Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-04 13:21:44 UTC
From: Andrew Mitz <arm@nih.gov>
Message-ID: <lbb4e.23$fZ5.130@mencken.net.nih.gov>
Source record: 19557

Need to fix our repeater. Does anyone have a schematic for the Spectrum
Communications SCT-110 (circa 1986). Thanks!
Andy WA3LTJ

barm@bgnode.borg (remove b's)

1825. Re: Advanced VHF Wattmeter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-04 13:24:16 UTC
From: Stewart Bryant <stbryant@cisco.com>
Message-ID: <42514000.2020608@cisco.com>
Source record: 19558

The circuit should be

```
+
------|\
| \----|>|----+----+-------+-----> to DVM
+---|/ | | |
| - | 10k 3k3
+-----------------+ | |
- 0v - -0.7v
```

Sorry for the error

Stewart G3YSX

Stewart Bryant wrote:

> I am thinking of building the "Advanced VHF Wattmeter" by
> Bob Kopski K3NHI published in QEX May/June 2002, and was
> wondering if anyone who subscribes to the NG understands
> the function of IC2a.
>
> This is a voltage follower with a diode in the feedback
> path, which as I recall is a precision rectifier. It is
> then followed by a biasing circuit, which seems to fight
> against the low impedance output of IC2a, which again
> I don't understand the need for.
>
> +
> ------|\
> | \----|>|----+----+-------+-----> to DVM
> +---|/ | | |
> | - | 10k |
> +-----------------+ | |
> - 0v - -0.7v
>
> IC2a is interposed between the output of the AD8307 log amp
> and the input of the DVM.
>
> The AD8307 is runs between ground and +5v, and so
> will only produce an output of between 0 (-80dbm) and 2.5v
> (+20dbm). I don't therefore see the purpose of the stage
> of the biasing arrangement.
>
> Surely all that was needed was to take the output of the
> AD8307 into the potential divider to set mv/dbm and

> the to set the bias on the -ve side of the DVM to get
> the 0dbm offset.
>
> Any ideas?
>
> Thanks
>
> Stewart G3YSX
>
>

1826. Re: Pattern a circuit board with a computer printer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-04 13:46:44 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_4251371f@fidonet.org>
Source record: 19564

"Bruce W.1" bravely wrote to "All" (04 Apr 05 00:29:55)
--- on the heady topic of "Re: Pattern a circuit board with a computer printer?"

BW> From: "Bruce W.1" <no@email.com>
BW> Xref: aeinews rec.radio.amateur.homebrew:9114

BW> Dave Platt wrote:
BW> There are several.
>
> One way is to laser-print the resist pattern onto a transparency (or
> laser-print into paper and photocopy onto a transparency) and then use
> the resulting transparency as a photographic mask, exposing a piece of
> photosensitized PCB material to UV light through the mask. The
> exposed photo-resist is then developed (chemically in many cases) and
> the unexposed portion is washed away (or vice versa - depends on the
> type of resist) and the board is etched.
>
> Another way is to laser-print the resist pattern (mirrored
> left-for-right) on a specialized sort of coated paper. The PC board
> material is cleaned thoroughly, the printed paper is placed on the
> board toner-side-down and carefully ironed onto the board - the resist
> melts and sticks to the clean copper. The board is soaked in water,
> and the coating on the paper releases the toner/resist and the paper
> washes off of the board. The board is then etched. There are
> commercial papers made for this purpose, I've heard of people using
> some glossy-surfaced inkjet papers, and some folks even make their own
> by brushing a liquid gelatin solution onto smooth paper.
>
> It's also possible to use a flatbed plotter, with a special pen, to
> draw resist patterns directly on PC board material.
>
BW> ================================

BW> I'm familiar with the photosensitized PCB material and UV light
BW> method. But this is hardly an at-home kind of thing. I think I was
BW> looking for the second method you mentioned.

Sure, it is doable at home. One method similar to the above
transparency is to simply print the pattern on thin tracing paper and
then oiling it. The oil makes the paper transparent and allows
exposure.

The most difficult but important thing in PCB making is to get an
accurate exposure time for the sensitized PCB. The way to determine
this is either with a calibrated UV source, or to expose a test strip.
Use a thin 1/4 " strip of PCB and cover it with a cardboard sheet,

slide the sheet back exposing 1/4" at a time. Use 1 minute increments. The last segment uncovered will be 1 minute and the 1st will have the longest exposure. Then develop the strip and note which was the best exposure time.

I've even made exposures in the Sun. Just one problem I noticed with this method is that the Sun moves and tends to undercut the traces, so in the case of a transparency the toner side must go against the PCB surface as otherwise the small gap allows the Sun's changing angle to leak under. This doesn't happen so much with a fixed UV lamp. It helps to do this at Noon so that the Sun's angle changes less and reduces exposure time. It takes about 10 to 12 minutes in the midday Sun and it takes about 2 to 3 minutes with a sunlamp, clothes drier UV lamp, etc... It's a learning experience, good luck!

A*s*i*m*o*v

... Powdered water -- just add ... hmmm ...

1827. Last rites declaration of Ioannes Paulus PP. II (Karol Wojtyla)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-04 15:25:55 UTC
From: "Ioannes Paulus PP. II" <john_paul_ii@vatican.va>
Message-ID: <bb232a9f.3814fb78@news.vatican.va>
Source record: 19559
Cross-posted to: alt.fan.lion-king.nala,rec.travel.air,rec.radio.amateur.homebrew,alt.fan.utb.wild-bill

"The unforgiveable sins this earth must confront and overcome are
Nationalism, capitalism, and hoarding. The idea of every nation
should be forgot, price should be struck from the commons, and
princes should be seen for the devils they are. The sins include
our church, secret societies, and other religions which make of
the spirit of God a divide."

Last rites declaration of Ioannes Paulus PP. II (Karol Wojtyla)
2nd April 2005

--
Three degrees of latitude
reverse all jurisprudence; a meridian decides the truth. Fundamental laws
change after a few years of possession; right has its epochs; the entry of
Saturn into the Lion marks to us the origin of such and such a crime. A
strange justice that is bounded by a river! Truth on this side of the
Pyrenees, error on the other side.

Men admit that justice does not consist in these customs, but that it
resides in natural laws, common to every country. They would certainly
maintain it obstinately, if reckless chance which has distributed human laws
had encountered even one which was universal; but the farce is that the
caprice of men has so many vagaries that there is no such law.

Theft, incest, infanticide, parricide, have all had a place among virtuous
actions. Can anything be more ridiculous than that a man should have the
right to kill me because he lives on the other side of the water, and
because his ruler has a quarrel with mine, though I have none with him?

Doubtless there are natural laws; but good reason once corrupted has
corrupted all. Nihil amplius nostrum est; quod nostrum dicimus, artis est.40
Ex senatus--consultis et plebiscitis crimina exercentur.[41] Ut olim vitiis,
sic nunc legibus laboramus.[42]

The result of this confusion is that one affirms the essence of justice to
be the authority of the legislator; another, the interest of the sovereign;
another, present custom, and this is the most sure. Nothing, according to
reason alone, is just itself;

1828. Help please choosing transmitter/reciever pair

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-04 17:20:56 UTC
From: Eric R Snow <etpm@whidbey.com>
Message-ID: <hpt2511f3iiqk8f7vrk7hcojakkio99nqn@4ax.com>
Source record: 19560

Greetings Group,
This question may be better placed on the radio group and I'll post there too. And so here it is. The question: I am looking for a a transmitter/reciever pair to use for transmitting data 20 feet. The reason for the radio interest is to avoid cables. I've been to the Maxim and Linx websites. It seems like the Linx devices won't work because I think I need to transmit two data streams. The data would be coming from a chinese digital scale. The pinout for the scale is at this link:
http://shumatech.com/support/chinese_scales.htm
The solution to the transmitter reciever combo must be low cost, low power consumption, and small size. The antenna needs to be flat and enclosed in the transmitter case. Please, if anyone has any suggestions, or can tell me what to look for, I'd really appreciate it.
Thanks,
Eric R Snow

1829. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-04 17:40:06 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <WZe4e.1358$qD2.694@newssvr14.news.prodigy.com>
Source record: 19561
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Hello Albert,

> I was attracted to the Temic wwvb/dcf77 receiver chips because they
> draw 30 microamps...so, a receiver that draws 4 microamps is indeed
> low power and is very promising.

AFAIK many "atomic clocks" listen to WWVB briefly and then turn off the receiver again. With a very low on/off duty cycle the power consumption of the receiver wouldn't matter so much.

Regards, Joerg

http://www.analogconsultants.com

1830. FS Teflon 22 AWG

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-04 20:57:15 UTC
From: James Skalski <jskalski@yahoo.com>
Message-ID: <4251AA5D.3090301@yahoo.com>
Source record: 19562
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

I have some packs of 22 AWG Teflon insulated, silver plated, stranded wire. It is in packs of five 50 foot rolls (250' per pack). Should be able to get five different colors per pack. Sorry no choices of colors. No other gauges available at this time. This wire is rated 200degrees C and 600V. great for both tube and solid state equipment. It won't melt or shrink or stink when you solder it :))

The deal is for Three Packs (3 x 250ft or 750feet total.

Total cost is $25 including shipping. This is for lower 48 States.

Email to reserve. I have to package it. Shipping within 48 hours. 2-3 day shipping time typical.

qrz.com address OK. paypal available.

73,

Jim n2go

1831. Re: Pattern a circuit board with a computer printer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-04 22:27:06 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <u7j4e.21907$vK6.7862@bignews3.bellsouth.net>
Source record: 19563

Bruce W.1 wrote:
> Ken Scharf wrote:
>
>>
>> Do you mean the 'press and peel' resist film?
>> You print your pc layout on the film using a laser
>> printer or copy machine and then iron the film on
>> to the pc board. The toner becomes the resist, and
>> you then etch the board in the usual manor.
>> You can buy the stuff from www.techniks.com
>
> ==
>
> I think this is the stuff. Let me get this straight. It's actually the
> toner from your laser printer which transfers to the copper on the
> board. The toner is the resist. Is that correct?
>
> Thanks
Actually techniks makes two types. The press-n-peel wet uses only
the toner as resist. The press-n-peel blue adds an additional
layer of blue 'stuff' that is released by the heat of the fuser
wherever the toner gets deposited. I think the blue stuff is
better for pc boards, but the wet stuff makes a great way to
label panels! They cost the same!

1832. Re: Homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-04 23:13:35 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <cNednXqw1dS8V8zfRVn-3w@comcast.com>
Source record: 19565

"Ted Bruce" <kilocycles**@**yahoo.com> wrote in message
news:b03251lma5gg5gkg5e9s9ss9lhe57421vl@4ax.com...
> On Mon, 28 Mar 2005 21:19:44 GMT, "Dale Parfitt"
> <par@parelectronics.com> wrote:
>
>>
>>"Bill N2CQR MOHBR" <meara.london@virgin.net> wrote in message
>>news:22f6e3ee.0503272306.7ecdadad@posting.google.com...
>>> I really enjoyed the message thread sparked by the pictures of
>>> Dale's very FB HB RX. We need more of that kind of discussion...
>>>
>>> Here is what I've been working on in London:
>>>
>>> Hi Bill,
>>I have trouble keeping up with where in the world you are, but visit your
>>site regularly to see what you are up to.
>>I would encourage others to brew their own xtal filters. uP xtals are
>>cheap
>>enough today that you can buy a pile and match up what you need. W7ZOI's
>>articles on crystal filters takes the mystery out.
>>Probably the most difficult part is characterizing individual crystals so
>>you can plug in the numbers. I use an HP network analyzer, but Wes also
>>shows a test jig for doing this. Alternatively, N2PK's VNA will do an
>>excellent job. In the end, you can make better filters than you can buy-
>>and
>>for a heck of a lot less $$.
>>N2PK recently sent me 2 WAV files- one recorded with the 1000MP stock 250
>>Hz
>>filter; the other with a homebrew 250 Hz filter- it took no imagination to
>>discern which one was cleaner.
>>Now, I'll go have a look at Bill W0IYH's site.
>>
>>Dale W4OP
>>
> Dale & Bill,
> Jim, K8IQY has the Precision VXO and Crystal test rig that uses the
> PVXO as a driver for the candidate IF filter crystal under test. I'm
> currently building both of those.
> Ted KX4OM

K8IQY web page for this test rig
http://www.k8iqy.com/testequipment/pvxo/pvxopage.htm

w9gb

1833. Microwave Oven Transformers Specifications.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-04 23:32:36 UTC
From: Dan/W4NTI <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <o8k4e.3924$44.2452@newsread1.news.atl.earthlink.net>
Source record: 19566

Does anyone know what kind of AC voltage a Microwave oven transformer would put out? Are they center taped or just a single coil?

I need a replacement for my homebrew 3-500z single tube amp. I only used it for low power AM and I don't need "maximum voltage".

Dan/W4NTI

1834. Re: Microwave Oven Transformers Specifications.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 00:44:52 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4251DF7A.1DEC75E0@earthlink.net>
Source record: 19567

Dan/W4NTI wrote:
>
> Does anyone know what kind of AC voltage a Microwave oven transformer would
> put out? Are they center taped or just a single coil?
>
> I need a replacement for my homebrew 3-500z single tube amp. I only used it
> for low power AM and I don't need "maximum voltage".
>
> Dan/W4NTI

They are a single winding on the secondary and not designed for
continuous use. You would have to switch the primary to prevent
overheating when you aren't transmitting.

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

1835. Re: Microwave Oven Transformers Specifications.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 01:21:01 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2sp5vjgk1@domitilla.aioe.org>
Source record: 19568

I have gleaned 1.5KW commercial microwaves for their transformers (they had timers which maxed out at 1 hour!), removed the secondary and replaced it with heavy copper wire to make 13.8 V high amp supplies for mobile linears converted to shack use.
The ones I have come across--where I bothered to measure the voltage of the secondary, were 3000+ V, as I remember 3300-3500 V.
Two matched transformers should be able to serve as a center tapped transformer without much re-engineering.
In amplifier use, a transformers 50% duty cycle specs should be sufficient--I wouldn't be surprised if they could serve well in amps (and it never hurts to make sure the xfmr benefits from a fans output.)
The only red flag which pops up in my mind is if there would be sufficient isolation of the primary from the secondary at low freq. rf., if not, something there could probably even be worked out (and, my worry may be false to begin with.)
In extreme cases, a heat sink could be fitted to the exposed section of the top and sides of the core (heat conductive epoxy would work.)
And, hey, if I guy gets long winded and smokes a xfmr, a trip to the dump for a replacement is cheap!
Take care, those transformers can pack a lethal wallop!

Regards,
John
--
I would like to point out, I do appreciate the "Been there--done that!" posts. Indeed, now your observations, comments and discourse should be filled with wisdom--I am listening!!!
"Dan/W4NTI" <w4nti@mindNOSPAMATALLspring.com> wrote in message news:o8k4e.3924$44.2452@newsread1.news.atl.earthlink.net...
> Does anyone know what kind of AC voltage a Microwave oven transformer
> would put out? Are they center taped or just a single coil?
>
> I need a replacement for my homebrew 3-500z single tube amp. I only used
> it for low power AM and I don't need "maximum voltage".
>
> Dan/W4NTI
>
>

1836. Re: Microwave Oven Transformers Specifications.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 02:08:43 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4251F326.75BCF6C8@earthlink.net>
Source record: 19569

John Smith wrote:
>
> I have gleaned 1.5KW commercial microwaves for their transformers (they had
> timers which maxed out at 1 hour!), removed the secondary and replaced it
> with heavy copper wire to make 13.8 V high amp supplies for mobile linears
> converted to shack use.
> The ones I have come across--where I bothered to measure the voltage of the
> secondary, were 3000+ V, as I remember 3300-3500 V.
> Two matched transformers should be able to serve as a center tapped
> transformer without much re-engineering.
> In amplifier use, a transformers 50% duty cycle specs should be
> sufficient--I wouldn't be surprised if they could serve well in amps (and it
> never hurts to make sure the xfmr benefits from a fans output.)
> The only red flag which pops up in my mind is if there would be sufficient
> isolation of the primary from the secondary at low freq. rf., if not,
> something there could probably even be worked out (and, my worry may be
> false to begin with.)
> In extreme cases, a heat sink could be fitted to the exposed section of the
> top and sides of the core (heat conductive epoxy would work.)
> And, hey, if I guy gets long winded and smokes a xfmr, a trip to the dump
> for a replacement is cheap!
> Take care, those transformers can pack a lethal wallop!
>
> Regards,
> John

The welded cores can cause problems. This has been discussed on the
various sci.electronics.* groups a number of times

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

1837. Re: Anybody have a spare NEMA 4 type box?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 02:58:06 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <HuKdnYBkWb0iY8zfRVn-1Q@comcast.com>
Source record: 19570

"Scott" <acepilot@bloomer.net> wrote in message
news:ib-dnRdK-KCDptDfRVn-gA@bright.net...
> I'm looking for a NEMA type 4 box or equivalent. New one are a bit
> pricey. It must be weather proof. Small holes OK, since I could weld
> pathes on to keep it watertight. It will be for my 432 beacon and will be
> mounted up on a tower (up to 200 feet above ground). Prefer metal. Size
> needed would be about 12" X 12" X 6" or so...
>
> Thanks,
>
> Scott
> N0EDV

Scott -

IF 6 x 6 x 3-1/2 would work .. these 4 are NICE !
eBay Item number: 7505307103
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=4660&item=7505307103&rd=1
w9gb

1838. Crystal radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 02:59:50 UTC
From: KA6PNL <medeco_99@yahoo.com>
Message-ID: <Gan4e.16615$zl.5647@newssvr13.news.prodigy.com>
Source record: 19571

Hi I have a friend that son wants to build a crystal radio. I seam to remember that we grew our own crystal back in the early 60 any help?? Also where can I find a 1n34 quick have 2 weeks for his science fair.

ka6pnl

Ed
NAS Lemoore

1839. Re: Crystal radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 03:54:42 UTC
From: Bob Liesenfeld <wb0poq@visi.com>
Message-ID: <42520C02.93AB40B9@visi.com>
Source record: 19572

KA6PNL wrote:

> Hi I have a friend that son wants to build a crystal radio. I seam to
> remember that we grew our own crystal back in the early 60 any help?? Also
> where can I find a 1n34 quick have 2 weeks for his science fair.

Hi Ed,
I have an 1N34 (or perhaps it is an 1N60) that I will ship you if you post me your address. As far as growing one, I don't know about that, but would like to hear if anyone posts you that info.

72

Bob WB0POQ

1840. Re: Spectrum Comm. SCT-110 Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 04:46:03 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <V-ednWAz6IaQhc_fRVn-gA@comcast.com>
Source record: 19573

"Andrew Mitz" <arm@nih.gov> wrote in message
news:Ibb4e.23$fZ5.130@mencken.net.nih.gov...
> Need to fix our repeater. Does anyone have a schematic for the Spectrum
> Communications SCT-110 (circa 1986). Thanks!
> Andy WA3LTJ
>
> barm@bgnode.borg (remove b's)

Any particular reason you have not contacted Spectrum Communications?

Spectrum Communications Corp. Phone: (610) 631-1710
1055 W. Germantown Pike Fax: (610) 631-5017
Norristown, PA 19403 Email: sales@spectrumcoms.com

Please Call, FAX, E-Mail or Write our Factory Sales Dept. for more details
and information, to place an order,
or to have detailed Data Sheets sent to you.
SCT-110 VHF Transmitter
http://www.spectrumcoms.com/SCT110Nm.gif

Frequency Range:

50-54 and 66-88 MHz - 3 or 30 Watt units.
136-174, 220-240, 270-285 MHz - 10 or 30 Watt units.
136-174 MHz - 75 Watt. 220-240MHz - 60W units.

1841. Re: Microwave Oven Transformers Specifications.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 05:03:21 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2t66q$86v$1@domitilla.aioe.org>
Source record: 19574

I have missed that. What are the problems?
Even the power supplies I have made which power 1500+ liners have held up fine. I do notice they seem to run a bit warmer than their expensive counterparts.
I am convinced without arguement that their efficiency is lower than a more conventional xfmr--one reason--microwaves are usually only in operation for short periods of time.
However, all I can see which might be happening is my electric bill is a few cents higher...

Regards,
John

--
I would like to point out, I do appreciate the "Been there--done that!" posts. Indeed, now your observations, comments and discourse should be filled with wisdom--I am listening!!!
"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message news:4251F326.75BCF6C8@earthlink.net...
> John Smith wrote:
>>
>> I have gleaned 1.5KW commercial microwaves for their transformers (they
>> had
>> timers which maxed out at 1 hour!), removed the secondary and replaced it
>> with heavy copper wire to make 13.8 V high amp supplies for mobile
>> linears
>> converted to shack use.
>> The ones I have come across--where I bothered to measure the voltage of
>> the
>> secondary, were 3000+ V, as I remember 3300-3500 V.
>> Two matched transformers should be able to serve as a center tapped
>> transformer without much re-engineering.
>> In amplifier use, a transformers 50% duty cycle specs should be
>> sufficient--I wouldn't be surprised if they could serve well in amps (and
>> it
>> never hurts to make sure the xfmr benefits from a fans output.)
>> The only red flag which pops up in my mind is if there would be
>> sufficient
>> isolation of the primary from the secondary at low freq. rf., if not,
>> something there could probably even be worked out (and, my worry may be
>> false to begin with.)
>> In extreme cases, a heat sink could be fitted to the exposed section of
>> the
>> top and sides of the core (heat conductive epoxy would work.)
>> And, hey, if I guy gets long winded and smokes a xfmr, a trip to the dump

>> for a replacement is cheap!
>> Take care, those transformers can pack a lethal wallop!
>>
>> Regards,
>> John
>
>
> The welded cores can cause problems. This has been discussed on the
> various sci.electronics.* groups a number of times
>
> --
> Former professional electron wrangler.
>
> Michael A. Terrell
> Central Florida

1842. Re: Microwave Oven Transformers Specifications.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 06:08:23 UTC
From: Ted Bruce <kilocycles**@**yahoo.com>
Message-ID: <gma451hr2ptja7ufqjienftb4lqfrqju54@4ax.com>
Source record: 19575

On Mon, 4 Apr 2005 22:03:21 -0700, "John Smith"
<assemblywizard@gmail.com> wrote:

>I have missed that. What are the problems?
>Even the power supplies I have made which power 1500+ liners have held up
>fine. I do notice they seem to run a bit warmer than their expensive
>counterparts.
>I am convinced without arguement that their efficiency is lower than a more
>conventional xfmr--one reason--microwaves are usually only in operation for
>short periods of time.
>However, all I can see which might be happening is my electric bill is a few
>cents higher...
>
>Regards,
>John
I couldn't get the laminations apart because of the welds. I would go
down to the garage and chisel away at them every couple of day, but I
finally gave up. My intended use was a hi current 13.8 V supply

Te KX4OM

1843. Re: Crystal radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 06:16:36 UTC
From: Ted Bruce <kilocycles**@**yahoo.com>
Message-ID: <8ra451dn8jf67ppnoihv14eonhjovbb1m5@4ax.com>
Source record: 19576

On Tue, 05 Apr 2005 02:59:50 GMT, "KA6PNL" <medeco_99@yahoo.com>
wrote:

>Hi I have a friend that son wants to build a crystal radio. I seam to
>remember that we grew our own crystal back in the early 60 any help?? Also
>where can I find a 1n34 quick have 2 weeks for his science fair.
>
>
>ka6pnl
>
>Ed
>NAS Lemoore
>
I don't know about growing a crystal, but the most popular choice is
Galena. Iron pyrite and some other minerals also will work. Heck, an
old Gillete "Blue Blade" or other thin double edged blade will work to
some extent, ala the WWI foxhole radios.

One of the nurseries here in Atlanta sells minerals for decorative
purposes. You can order a Galena crystal already mounted, as well.

Acouple of web sites to check out are
The Crystal Set Society <http://www.midnightscience.com/>

Crystal Radio Resources <http://www.thebest.net/wuggy/>

Ted KX4OM

1844. Re: Microwave Oven Transformers Specifications.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 07:23:02 UTC
From: Ian White G3SEK <G3SEK@ifwtech.co.uk>
Message-ID: <bDZGHWzjUCFAy3@ifwtech.co.uk>
Source record: 19577

Michael A. Terrell wrote:
>
>
> The welded cores can cause problems. This has been discussed on the
>various sci.electronics.* groups a number of times
>
The key phrase to search for is "magnetic shunt". Typically the magnetic shunt consists of two extra blocks of laminations between the primary and secondary bobbins. This has been added to give the transformer a current-limiting characteristic, which is necessary to power a magnetron - but is exactly the opposite of what you need for normal vacuum tubes.

In many oven transformers, the magnetic shunt blocks can be driven out with a large punch, to leave a more normal-looking transformer.

The not-so-good news is that you're still left with a transformer that has a very high secondary voltage and rather high secondary resistance, which will give poor voltage regulation in typical amateur use. Also one end of the secondary winding is usually grounded to the core. Even if you can get to the grounded end to disconnect it, the insulation close to the core is not designed for typical full-wave bridge applications.

Some people have had limited success with a pair of identical transformers connected as a "centre-tapped" winding... but remember that in two separate transformers the core magnetization by the DC components will not cancel.

It all seems like a lot of effort for rather poor results.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1845. Re: Crystal radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 07:39:42 UTC
From: Alone <gattamelata2@katamail.com>
Message-ID: <1112686782.390202.50030@o13g2000cwo.googlegroups.com>
Source record: 19578

Here you can find some nice materials:

http://www.scitoys.com/scitoys/scitoys/radio/radio.html#crystal

cheers

1846. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 12:31:04 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1112704264.257272.133060@g14g2000cwa.googlegroups.com>
Source record: 19579
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

> two crystals. These alone can cost more
> than a whole clock.

Of the longwave radio frequencies used for time standards, 40kHz (JJY, Japan), 77.5kHz (DCF, Germany) and 60 kHz (WWVB and MSF) crystals are off-the-shelf items in the Digikey catalog at less than a dollar each. I'm guessing their easy availability is because they are commonly used in real receivers.

I've always noted with some curiosity that 77.503kHz, 60.002kHz, and 60.005kHz are off-the-shelf crystals too... used in a direct conversion receiver for DCF/WWV to 3Hz, 2Hz, and 5Hz carrier-detect frequencies maybe?

Tim.

1847. TV-tuner radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 15:19:22 UTC
From: Dirk <df.ganzinga@chello.nl>
Message-ID: <_%x4e.39093$Sc7.16115@amsnews05.chello.com>
Source record: 19580

Hi guys, just joined this group and a bit at risk re-starting a finished threads. I am curious to know if there any radio designs known here for an analog JVC tv-tuner, pinouts UB, TV, VHB, AGC, VLB AFC, MB and IF, which I have at hand. The board on which the tuner is mounted also has a AN5111 and a SAW-filter, even a testpin Audio. Goal is to make a 2m radio, the quick and easy way. It looks like everything is on the board already?! Found a Swedish website, but there didgital tuners are used.
Regards,
Dirk

1848. Re: Crystal radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 16:26:07 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <1155f0vtp2e9206@corp.supernews.com>
Source record: 19581

KA6PNL wrote:

> Hi I have a friend that son wants to build a crystal radio. I seam to
> remember that we grew our own crystal back in the early 60 any help?? Also
> where can I find a 1n34 quick have 2 weeks for his science fair.
>
>
A silicon diode will work, it won't be as sensitive but you can get one
at the local Radio Shack (they carry germanium diodes off and on, so
they may have some).

If you're using germanium diodes get some spares -- I've found them very
susceptible to lightning strikes, at least in the circuit that my son
and I built.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

1849. Re: Microwave Oven Transformers Specifications.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 17:04:56 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2ugfq$lo2$1@domitilla.aioe.org>
Source record: 19582

Yes, I see.
I never attempted to get the laminations apart. Using a hacksaw blade, I
cut the secondary turns and drove them out of the core with a punch.
Next, I used teflon tape around the core for insulation, and wound the heavy
thermaleze insulated wire though the windows in the core to complete my low
voltage winding.

Regards,
John
--
I would like to point out, I do appreciate the "Been there--done that!"
posts. Indeed, now your observations, comments and discourse should be
filled with wisdom--I am listening!!!
"Ted Bruce" <kilocycles**@**yahoo.com> wrote in message
news:gma451hr2ptja7ufqjienftb4lqfrqju54@4ax.com...
> On Mon, 4 Apr 2005 22:03:21 -0700, "John Smith"
> <assemblywizard@gmail.com> wrote:
>
>>I have missed that. What are the problems?
>>Even the power supplies I have made which power 1500+ liners have held up
>>fine. I do notice they seem to run a bit warmer than their expensive
>>counterparts.
>>I am convinced without arguement that their efficiency is lower than a
>>more
>>conventional xfmr--one reason--microwaves are usually only in operation
>>for
>>short periods of time.
>>However, all I can see which might be happening is my electric bill is a
>>few
>>cents higher...
>>
>>Regards,
>>John
> I couldn't get the laminations apart because of the welds. I would go
> down to the garage and chisel away at them every couple of day, but I
> finally gave up. My intended use was a hi current 13.8 V supply
>
> Te KX4OM

1850. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 17:44:27 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <Uvidnd1ucOa4U8_fRVn-oA@comcast.com>
Source record: 19583
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
news:1112704264.257272.133060@g14g2000cwa.googlegroups.com...
> Of the longwave radio frequencies used for time standards, 40kHz (JJY,
> Japan), 77.5kHz (DCF, Germany) and 60 kHz (WWVB and MSF) crystals are
> off-the-shelf items in the Digikey catalog at less than a dollar each.

Really...! Hmm... perhaps time to re-visit the "WWVB receiver using op-amps and a small microcontroller" ida? One of the regular contributors to Circuit Cellar Ink tried it a while back (4 years?), but wasn't successful. A successful project would be worth a write-up in some hobbyist magazine (of what's left... Nuts & Volts seems to be about it in the US...)

Anyone know which time service folks in Oz or the Kiwis use?

---Joel Kolstad

1851. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 17:51:52 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4252D032.4C24380E@earthlink.net>
Source record: 19584
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Joel Kolstad wrote:
>
> Really...! Hmm... perhaps time to re-visit the "WWVB receiver using op-amps
> and a small microcontroller" ida? One of the regular contributors to
> Circuit Cellar Ink tried it a while back (4 years?), but wasn't successful.
> A successful project would be worth a write-up in some hobbyist magazine (of
> what's left... Nuts & Volts seems to be about it in the US...)
>
> ---Joel Kolstad

Take a look at Jim Thompson's early design. He's an IC designer who
hangs out on the sci.electronics.* newsgroups.
http://www.analog-innovations.com/SED/WWVB-Schematic+Data.pdf

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

1852. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 18:57:38 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <f5adndFhF-eiQs_fRVn-qg@comcast.com>
Source record: 19585
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
news:4252D032.4C24380E@earthlink.net...
> Take a look at Jim Thompson's early design. He's an IC designer who
> hangs out on the sci.electronics.* newsgroups.

Yes, I've seen Jim's design before; it's quite impressive for 1974! For a
contemporary design, the idea is that you could get by with far fewer parts
(if not fewer transistors -- they're just buried in the ICs!).

---Joel

1853. Re: Microwave Oven Transformers Specifications.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 19:03:42 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d2uneegrn1@hercules.btinternet.com>
Source record: 19586

Ian, welcome back!

I trust your move has been successful.

Reg.

1854. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 19:04:21 UTC
From: Jim Thompson <thegreatone@example.com>
Message-ID: <v6o5519rmhpkn0t6sjhc58rrth23gths2b@4ax.com>
Source record: 19587
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Tue, 5 Apr 2005 11:57:38 -0700, "Joel Kolstad"
<JKolstad71HatesSpam@Yahoo.Com> wrote:

>"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
>news:4252D032.4C24380E@earthlink.net...
>> Take a look at Jim Thompson's early design. He's an IC designer who
>> hangs out on the sci.electronics.* newsgroups.
>
>Yes, I've seen Jim's design before; it's quite impressive for 1974! For a
>contemporary design, the idea is that you could get by with far fewer parts
>(if not fewer transistors -- they're just buried in the ICs!).
>
>---Joel
>

Particularly considering it was done BC (Before CAD :)

Maybe I should try it again, using off-the-shelf components ??

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

1855. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 19:52:59 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4252EC95.A9A1D5B1@earthlink.net>
Source record: 19588
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Jim Thompson wrote:
>
> On Tue, 5 Apr 2005 11:57:38 -0700, "Joel Kolstad"
> <JKolstad71HatesSpam@Yahoo.Com> wrote:
>
> >"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
> >news:4252D032.4C24380E@earthlink.net...
> >> Take a look at Jim Thompson's early design. He's an IC designer who
> >> hangs out on the sci.electronics.* newsgroups.
> >
> >Yes, I've seen Jim's design before; it's quite impressive for 1974! For a
> >contemporary design, the idea is that you could get by with far fewer parts
> >(if not fewer transistors -- they're just buried in the ICs!).
> >
> >---Joel
> >
>
> Particularly considering it was done BC (Before CAD :)
>
> Maybe I should try it again, using off-the-shelf components ??
>
> ...Jim Thompson

A "Before and after"?

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

1856. Re: Crystal radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 20:04:13 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <jMydncUqn5pRc8_fRVn-1w@comcast.com>
Source record: 19589

Speaking of diodes...

Is there any reason you can't use the so-called "zero Vf" microwave Schottky diodes for a crystal radio for the AM broadcast band? Is it just expense that keeps people (in a hobbyist capacity) from using them?

1857. Re: Microwave Oven Transformers Specifications.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 21:51:49 UTC
From: Ian White G3SEK <G3SEK@ifwtech.co.uk>
Message-ID: <LbLdP1b1hwUCFACB@ifwtech.co.uk>
Source record: 19590

Reg Edwards wrote:
>Ian, welcome back!
>
>I trust your move has been successful.

Well, not quite, not yet. Still in the process of selling up down south, and doing what work we can on the new place in Scotland.

My silence of the past several weeks has concealed a mad scramble to finish all the outstanding jobs, before being sent to W6 for another three weeks solid work.

Thank goodness for jet-lag, and an excuse to take it easy for a few days.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1858. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 21:56:31 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <jQD4e.1856$qD2.440@newssvr14.news.prodigy.com>
Source record: 19591
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Hello Jim,

> Particularly considering it was done BC (Before CAD :)
>
> Maybe I should try it again, using off-the-shelf components ??

To be fair you'd have to do it with components that were available at reasonable prices in that era. My 2nd DCF receiver was built with several AF126 germanium transistors. On the first one I cheated by using opamps and somehow that didn't feel right back then.

Except for the fact that one receiver drove a Nixie display I never built one with tubes. Now wouldn't that be something?

Regards, Joerg

http://www.analogconsultants.com

1859. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-05 22:00:19 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <TTD4e.1857$qD2.1215@newssvr14.news.prodigy.com>
Source record: 19592
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Hello Tim,

> Of the longwave radio frequencies used for time standards, 40kHz (JJY,
> Japan), 77.5kHz (DCF, Germany) and 60 kHz (WWVB and MSF) crystals are
> off-the-shelf items in the Digikey catalog at less than a dollar each.
> I'm guessing their easy availability is because they are commonly used
> in real receivers.

Yes, but if these crystals are the only thing you'd have to buy right
now that would easily become $10 with S&H. Or about half of what an
atomic clock is at the discounters and there the price includes a huge
display along with the receiver parts.

> I've always noted with some curiosity that 77.503kHz, 60.002kHz, and
> 60.005kHz are off-the-shelf crystals too... used in a direct conversion
> receiver for DCF/WWV to 3Hz, 2Hz, and 5Hz carrier-detect frequencies
> maybe?

Strange. Maybe another resonance mode?

Regards, Joerg

http://www.analogconsultants.com

1860. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-06 01:01:13 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <425334D1.433D3E40@earthlink.net>
Source record: 19593
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Joerg wrote:
>
> > I've always noted with some curiosity that 77.503kHz, 60.002kHz, and
> > 60.005kHz are off-the-shelf crystals too... used in a direct conversion
> > receiver for DCF/WWV to 3Hz, 2Hz, and 5Hz carrier-detect frequencies
> > maybe?
>
> Strange. Maybe another resonance mode?
>
> Regards, Joerg

Maybe use them with the 60.000 KHz crystals to build a very narrow
crystal filter?

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

1861. Re: Crystal radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-06 01:45:34 UTC
From: mcalhoun@ksu.edu
Message-ID: <d2vevu$jhj@unix1.cc.ksu.edu>
Source record: 19594

When I was in high school (many MANY years ago), a classmate of mine
"grew" his own crystal by melting (IIRC) lead and sulfur together.
It was an ugly-looking mess, but it worked.
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

1862. FA:TUBES:71A, G-45,80, 5R4,5U4,6550+STUFF

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-06 13:04:34 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <B7R4e.527953$w62.141440@bgtnsc05-news.ops.worldnet.att.net>
Source record: 19595
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.,radio.amateur.equipment

Majestic G-45, 71A's, JAN 5R4, & 5U4, 6550 : more stuff as well coming:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

check back often****will be changing ISP soon***, 73 heytubeguy.

1863. FA:Manuals: Gonset, BC-610 (TM).Wilson...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-06 13:12:36 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <8fR4e.47898$cg1.45906@bgtnsc04-news.ops.worldnet.att.net>
Source record: 19596
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rce.radio.amateur.eqipment

Military TM manual for BC-610, +Wilson antenna, +Gonset mobiles, + Millen original GD, +Elidco, at :

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

more items coming:***changing ISP soon too***: tnx for looking ,73, heytubeguy

1864. Re: Homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-06 14:10:07 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <35S4e.154$ox3.2@trnddc03>
Source record: 19597

> >
> Dale, I checked in late on this thread; what is Bill Sabin's site URL?
> I've been Googleing to beat the band, but it doesn't turn up.
>
> Ted KX4OM
Hi Ted,
Plug Bill's call, N2CQR into QRZ.COM His URL is there.
Dale

1865. Can Touchlamps damage or effect speakers?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-06 17:36:25 UTC
From: Mike Sampieri <xkmorgan6xx4@hotmail.com>
Message-ID: <42541e19$1_5@127.0.0.1>
Source record: 19499
Cross-posted to: rec.audio.tech,sci.electronics.repair,rec.radio.amateur.homebrew,sci.electronics.basics

Hello. I have a small "touch lamp" - you touch it anywhere, it turns on, off, or dim. I know that it emits some minor RFI which can effect nearby radios.

The table is small, so the touchlamp is right next to one of my mini-system speakers. (speaker = 100watts max, "medium" size). The lamp metal is about 4 inches from the main speaker cone magnet.

Is this safe? Can this damage the speaker, or wreak havoc with the speaker magnet? Can it effect the speaker when it's "on"? Or will a touch-lamp's circuitry have no effect on a speaker?

Thank you for any advice...

-Make

--
---
*If you want to email me directly, simply remove all instances of the letter "x" from my email address.

1866. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-06 17:43:14 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <ScV4e.10344$FN4.5335@newssvr21.news.prodigy.com>
Source record: 19498
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Hello Michael,

> Maybe use them with the 60.000 KHz crystals to build a very narrow
> crystal filter?

Maybe but most WWVB receivers are more crude. They aren't concerned about shape factors and stuff, all they want is enough selectivity to make sure the things sync at night even if in California or Arizona. So there is usally one crystal as a filter, or two in series for the better ones.

Regards, Joerg

http://www.analogconsultants.com

1867. Lowe HF-225 wbt LCD

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-06 18:25:30 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <uQV4e.2331$gF5.0@newssvr30.news.prodigy.com>
Source record: 19500
Cross-posted to: rec.radio.shortwave,rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.repair

I need the 6 digit dispaly that Lowe uses in their HF receiver HF-225 Part No. 021-1261 6 digit x 12.5 mm LCD, 50 pins, or a cross to a US available part number. Or if anyone has a non-working HF-225 they like to sell I'm interested.
tnx

--

73
Hank WD5JFR

--

73
Hank WD5JFR

1868. Re: Microwave Oven Transformers Specifications.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-06 21:05:16 UTC
From: Patrick <tk5ep@free.fr>
Message-ID: <42544f09$0$15912$636a15ce@news.free.fr>
Source record: 19501

There was an article in QEX written by WI5W about this subject.
I once found this article on the internet, but could'nt find the page
again. Here the info abt the article :

Randy Henderson, WI5W,"Build a High-Voltage Power Supply at Low Cost"
QEX, Jan/Feb 1998 Pg. 47-51.

Hope this helps !?

73, greetings from Corsica. TK5EP

http://tk5ep.free.fr

Dan/W4NTI a ï¿½crit :
> Does anyone know what kind of AC voltage a Microwave oven transformer would
> put out? Are they center taped or just a single coil?
>
> I need a replacement for my homebrew 3-500z single tube amp. I only used it
> for low power AM and I don't need "maximum voltage".
>
> Dan/W4NTI
>
>

1869. Re: Microwave Oven Transformers Specifications.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-06 21:47:35 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <iul851l7uand0a9p6ujif8bihepkoedubq@4ax.com>
Source record: 19502

On Tue, 5 Apr 2005 08:23:02 +0100, Ian White G3SEK
<G3SEK@ifwtech.co.uk> wrote:

>Michael A. Terrell wrote:
>>
>>
>> The welded cores can cause problems. This has been discussed on the
>>various sci.electronics.* groups a number of times
>>
>The key phrase to search for is "magnetic shunt". Typically the magnetic
>shunt consists of two extra blocks of laminations between the primary
>and secondary bobbins. This has been added to give the transformer a
>current-limiting characteristic, which is necessary to power a magnetron
>- but is exactly the opposite of what you need for normal vacuum tubes.
>
>In many oven transformers, the magnetic shunt blocks can be driven out
>with a large punch, to leave a more normal-looking transformer.
>
>The not-so-good news is that you're still left with a transformer that
>has a very high secondary voltage and rather high secondary resistance,
>which will give poor voltage regulation in typical amateur use. Also one
>end of the secondary winding is usually grounded to the core. Even if
>you can get to the grounded end to disconnect it, the insulation close
>to the core is not designed for typical full-wave bridge applications.
>
>Some people have had limited success with a pair of identical
>transformers connected as a "centre-tapped" winding... but remember that
>in two separate transformers the core magnetization by the DC components
>will not cancel.
>
>It all seems like a lot of effort for rather poor results.

The worst problem is idle current, 1.2-1.5A on 240VAC, so you should
use the extra space and add 100turns for the primary, and reduce the
idle current to 0.3A. This will also reduce the output voltage below
2kV DC. Many cores are standard E120 types and it isn't worth the
trouble of trying to use the original rubbish

I've planned to bring some information on
http://home.online.no/~la8ak/d4.htm , but haven't translated it into
English yet

73
LA8AK

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/91n.htm

1870. Re: Crystal radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-06 23:11:55 UTC
From: sdeyoreo@hotmail.com
Message-ID: <p4r851hni7dhjd8mfn8563ne9hb5ufhnoq@4ax.com>
Source record: 19503

We dropped molten solder in a pile of sulpher in a bottle cap.
On 5 Apr 2005 20:45:34 -0500, mcalhoun@ksu.edu wrote:

>When I was in high school (many MANY years ago), a classmate of mine
>"grew" his own crystal by melting (IIRC) lead and sulfur together.
>It was an ugly-looking mess, but it worked.

1871. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-06 23:58:24 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.04.06.23.58.23.521028@example.net>
Source record: 19504
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Tue, 05 Apr 2005 21:56:31 +0000, Joerg wrote:

> Hello Jim,
>
>> Particularly considering it was done BC (Before CAD :)
>>
>> Maybe I should try it again, using off-the-shelf components ??
>
> To be fair you'd have to do it with components that were available at
> reasonable prices in that era. My 2nd DCF receiver was built with several
> AF126 germanium transistors. On the first one I cheated by using opamps
> and somehow that didn't feel right back then.
>
> Except for the fact that one receiver drove a Nixie display I never built
> one with tubes. Now wouldn't that be something?

Yabbut, it'd be a little cumbersome for a wall clock. ;-)

Cheers!
Rich

1872. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-07 00:05:29 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1112832329.552925.126790@g14g2000cwa.googlegroups.com>
Source record: 19505
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

> Or about half of what an atomic clock is at the discounters
> and there the price includes a huge
> display along with the receiver parts.

Oh, I'm all for cannibalizing the commercial clocks, what with their pretuned ferrite loops, 60kHz receiver and demodulator, as a cost-and-time-effective method. But if someone did want to roll their own...

I have custom ordered tuning-fork style crystals down to 12kHz, and they were way more than the mass-produced $1 jobbies! I think $30-$50 each in onesies. $1 is really cheap in comparison.

Tim.

1873. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-07 00:20:33 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <I1%4e.117$RQ7.63@newssvr14.news.prodigy.com>
Source record: 19506
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Hello Rich,

>>Except for the fact that one receiver drove a Nixie display I never built
>>one with tubes. Now wouldn't that be something?
>
> Yabbut, it'd be a little cumbersome for a wall clock. ;-)

In the shape of a mantle clock it would work. Open chassis, of course,
so the discerning visitor can admire. With nixies it would look really cool.

Regards, Joerg

http://www.analogconsultants.com

1874. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-07 00:27:47 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <78%4e.10436$FN4.2633@newssvr21.news.prodigy.com>
Source record: 19507
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Hello Tim,

> Oh, I'm all for cannibalizing the commercial clocks, what with their
> pretuned ferrite loops, 60kHz receiver and demodulator, as a
> cost-and-time-effective method. But if someone did want to roll their
> own...

In that case I'd probably try to do it with a PLL stabilized
Q-multiplier instead of a crystal filter. Should work just fine at
60kHz. Or a conversion scheme that puts the IF in the low kHz range
where it can be done with active or switched capacitor filters. Still
have to stabilize the oscillator though. Just as a proof of concept...

> I have custom ordered tuning-fork style crystals down to 12kHz, and
> they were way more than the mass-produced $1 jobbies! I think $30-$50
> each in onesies. $1 is really cheap in comparison.

True, $1 is cheap. Custom crystals are less and less popular. Some of
the companies I used way back when are no longer there or aren't doing
it anymore unless you buy thousands.

Regards, Joerg

http://www.analogconsultants.com

1875. Re: Crystal radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-07 01:35:16 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_425480a8@fidonet.org>
Source record: 19508

"Tim Wescott" bravely wrote to "All" (05 Apr 05 09:26:07)
--- on the heady topic of "Re: Crystal radio"

TW> From: Tim Wescott <tim@wescottnospamdesign.com>
TW> Xref: aeinews rec.radio.amateur.homebrew:9149

TW> KA6PNL wrote:

> Hi I have a friend that son wants to build a crystal radio. I seam to
> remember that we grew our own crystal back in the early 60 any help?? Also
> where can I find a 1n34 quick have 2 weeks for his science fair.
>
>
TW> A silicon diode will work, it won't be as sensitive but you can get
TW> one at the local Radio Shack (they carry germanium diodes off and on,
TW> so they may have some).

TW> If you're using germanium diodes get some spares -- I've found them
TW> very susceptible to lightning strikes, at least in the circuit that my
TW> son and I built.

Why bother? Get a solar cell and power a radio with it. There is
more than 900watts/metre^2 free energy right outside the window.
(mumbling something about "idiots"...)

A*s*i*m*o*v

... Hey everbody, I am crushing your head! Crushing it! Crushing it!

1876. Re: Crystal radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-07 12:50:01 UTC
From: Al <no.spam@wanted.com>
Message-ID: <no.spam-2F646C.08500207042005@news.verizon.net>
Source record: 19509

In article <p4r851hni7dhjd8mfn8563ne9hb5ufhnoq@4ax.com>,
sdeyoreo@hotmail.com wrote:

> We dropped molten solder in a pile of sulpher in a bottle cap.
> On 5 Apr 2005 20:45:34 -0500, mcalhoun@ksu.edu wrote:
>
> >When I was in high school (many MANY years ago), a classmate of mine
> >"grew" his own crystal by melting (IIRC) lead and sulfur together.
> >It was an ugly-looking mess, but it worked.
>

You were making "galena" which is PbS, Lead Sulfide. I used one for my first crystal radio in the 50's. Had to find a sensitive spot. You might be able to find some in a hobby shop (If you can find one.) that deals with minerals.

You might also try a "blue blade" razor blade. The GIs used them in WWII for making foxhole radios. The bluing produced a chemical (unknown to me) that rectified the signal.

Al

1877. Re: Crystal radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-07 14:43:57 UTC
From: Bill M <dontspamoleexray@coqui.net>
Message-ID: <115ahpf41rcvc3f@corp.supernews.com>
Source record: 19510

Asimov wrote:

>
> TW> If you're using germanium diodes get some spares -- I've found them
> TW> very susceptible to lightning strikes, at least in the circuit that my
> TW> son and I built.
>
>
> Why bother? Get a solar cell and power a radio with it. There is
> more than 900watts/metre^2 free energy right outside the window.
> (mumbling something about "idiots"...)
>
> A*s*i*m*o*v
>
> ... Hey everbody, I am crushing your head! Crushing it! Crushing it!

How does using a solar cell prevent a detector diode from getting zapped?

73,
An idiot

1878. Re: Spectrum Comm. SCT-110 Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-07 15:27:23 UTC
From: Andrew Mitz <arm@nih.gov>
Message-ID: <vjc5e.51$fZ5.183@mencken.net.nih.gov>
Source record: 19511

gb wrote:

> "Andrew Mitz" <arm@nih.gov> wrote in message
> news:Ibb4e.23$fZ5.130@mencken.net.nih.gov...
> > Need to fix our repeater. Does anyone have a schematic for the
> > Spectrum Communications SCT-110 (circa 1986). Thanks!
> > Andy WA3LTJ
> >
> > barm@bgnode.borg (remove b's)
>
I did not try, but one of our other memebers did. This was his report:

I've sent two emails to Spectrum (no reply) and called on a weekday
(left a message on an answering machine, no response).

They seem to be on a permanent vacation, e.g., going out of business.

-- Andy

> Any particular reason you have not contacted Spectrum Communications?
>
> Spectrum Communications Corp. Phone: (610) 631-1710
> 1055 W. Germantown Pike Fax: (610) 631-5017
> Norristown, PA 19403 Email: sales@spectrumcoms.com
>
>
> Please Call, FAX, E-Mail or Write our Factory Sales Dept. for more
> details and information, to place an order,
> or to have detailed Data Sheets sent to you.
> SCT-110 VHF Transmitter
> http://www.spectrumcoms.com/SCT110Nm.gif
>
> Frequency Range:
>
> 50-54 and 66-88 MHz - 3 or 30 Watt units.
> 136-174, 220-240, 270-285 MHz - 10 or 30 Watt units.
> 136-174 MHz - 75 Watt. 220-240MHz - 60W units.

1879. Re: Crystal radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-07 16:53:57 UTC
From: clvrmnky <clvrmnky-uunet@coldmail.com.invalid>
Message-ID: <FAd5e.936$5u4.3450@nnrp1.uunet.ca>
Source record: 19512

On 07/04/2005 8:50 AM, Al wrote:
> In article <p4r851hni7dhjd8mfn8563ne9hb5ufhnoq@4ax.com>,
> sdeyoreo@hotmail.com wrote:
>
>
>>We dropped molten solder in a pile of sulpher in a bottle cap.
>>On 5 Apr 2005 20:45:34 -0500, mcalhoun@ksu.edu wrote:
>>
>>
>>>When I was in high school (many MANY years ago), a classmate of mine
>>>"grew" his own crystal by melting (IIRC) lead and sulfur together.
>>>It was an ugly-looking mess, but it worked.
>>
>
> You were making "galena" which is PbS, Lead Sulfide. I used one for my
> first crystal radio in the 50's. Had to find a sensitive spot. You might
> be able to find some in a hobby shop (If you can find one.) that deals
> with minerals.
>
> You might also try a "blue blade" razor blade. The GIs used them in WWII
> for making foxhole radios. The bluing produced a chemical (unknown to
> me) that rectified the signal.
>
For this purpose, almost any anodized metal should suffice. The "Blue
Blades" were, AFAIK, simply anodized and polished high-carbon steel.
The aonodized surface would be covered with fine steel-oxide crystals.
I wonder if anodized aluminium would work? I'm theorizing here that we
want some sort of crystal to interact with a base conductor.

This kind of thing is still done for some special "blue" hack- and
reciprocating saw blades. I think there are even circular saw blades
that are anodized in a similar way. These would be expensive and hard
to come by. I'm sure people will pay to get them rebuilt rather than
toss them out, and I have no idea how an average tinkerer might easily
cut pieces of a think saw blade up!

However, if you can find a hacksaw blade treated in the same manner,
this give supplies for a number of experiments.

1880. Re: Crystal radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-07 19:21:08 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <jMOdnS9Xy-1xGsjfRVn-2w@comcast.com>
Source record: 19513

"Asimov" <Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote in message
news:MSGID_1=3a167=2f133.0_425480a8@fidonet.org...
> Why bother? Get a solar cell and power a radio with it. There is
> more than 900watts/metre^2 free energy right outside the window.
> (mumbling something about "idiots"...)

Yeah, too bad it tends to be go away at night! :-) (And if you were just
going to store it anyway, why not start with batteries in the first place?)

1881. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-07 21:38:52 UTC
From: Ian Stirling <root@mauve.demon.co.uk>
Message-ID: <4255a86c$0$94508$ed2619ec@ptn-nntp-reader01.plus.net>
Source record: 19514
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

In sci.electronics.design Albert <> wrote:
> Does anyone know how to measure or determine the wire size. I have
> tons of motors, solenoids, and similar items. I need some #24 wire and
> some #30 for a coil, but have to be sure regarding the wire diameter
> as it's a critical ap and the author of the article says 'don't
> substitute'.

Micrometer.
Vernier caliper may also work.
Either under $30US.

1882. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-07 21:41:05 UTC
From: dplatt@radagast.org
Message-ID: <115ba7h4jis5k32@corp.supernews.com>
Source record: 19515
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

>Does anyone know how to measure or determine the wire size. I have
>tons of motors, solenoids, and similar items. I need some #24 wire and
>some #30 for a coil, but have to be sure regarding the wire diameter
>as it's a critical ap and the author of the article says 'don't
>substitute'.

A cautionary note - if it's that critical, then re-using wire which
has alread been wound might not be the best idea. You'd be starting
with wire which had already been bent/flexed, and if you aren't
careful this might put some kinks or irregularities in the winding of
your new coil which might affect its impedance or Q.

>I know I can weigh it, provided it's not on a spool or motor winding
>already.
>
>My local electrical shop has a wire gauge, but it stops at 18 gauge.
>
>A microscope might work, but ones that have calibrated distance
>measuring on the eyepiece are expensive.

You might be able to do it with a vernier caliper.

24 gauge has a diameter of .511 mm or .0020"

30 gauge has a diameter of .255 mm or .001"

Every 3 gauge numbers corresponds to a 2:1 ratio in wire area (amount
of copper). Every 6 gauge numbers corresponds to a 2:1 ratio in wire
diameter.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1883. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-07 22:04:34 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <a1bb515u8cgb98b0vbmbfnrqi8f8s46kqd@4ax.com>
Source record: 19516
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Thu, 07 Apr 2005 17:29:15 -0400, Albert <> wrote:

>Does anyone know how to measure or determine the wire size. I have
>tons of motors, solenoids, and similar items. I need some #24 wire and
>some #30 for a coil, but have to be sure regarding the wire diameter
>as it's a critical ap and the author of the article says 'don't
>substitute'.
>
>I know I can weigh it, provided it's not on a spool or motor winding
>already.
>
>My local electrical shop has a wire gauge, but it stops at 18 gauge.
>
>A microscope might work, but ones that have calibrated distance
>measuring on the eyepiece are expensive.
>
>Perhaps a milliohm meter might be able to measure the difference in
>resistance of a foot of it or so, but that's hardly a standard item
>either.
>
>Any suggestions?
>
Two quick options:

Many kinds of wire have information printed on the insulation.

There are many tables which give the diameter, so machinists verniers
or a mike would do.

Or you could collect a set of samples of known wires and compare. Note
that solid and stranded are a little bit different.

Recycling solid wire from other coils might leave kinks or weak areas
where it was bent before. Insulation integrity matters, too.
Happy trails,
Gary (net.yogi.bear)
--
At the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

1884. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-07 22:15:37 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <dii5e.7576$gF5.6039@newssvr30.news.prodigy.com>
Source record: 19517
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Get a nice piece of smooth round rod and tightly wind a little over a lineal inch of wire closely spaced as possible. Count the turns in one inch and divide the number of turns into one inch and you'll have a very good measurement without any cost.

73
Hank WD5JFR

<Albert> wrote in message news:0s8b5190savvispr1ga5he5hih23dgm41k@4ax.com...
> Does anyone know how to measure or determine the wire size. I have
> tons of motors, solenoids, and similar items. I need some #24 wire and
> some #30 for a coil, but have to be sure regarding the wire diameter
> as it's a critical ap and the author of the article says 'don't
> substitute'.
>
> I know I can weigh it, provided it's not on a spool or motor winding
> already.
>
> My local electrical shop has a wire gauge, but it stops at 18 gauge.
>
> A microscope might work, but ones that have calibrated distance
> measuring on the eyepiece are expensive.
>
> Perhaps a milliohm meter might be able to measure the difference in
> resistance of a foot of it or so, but that's hardly a standard item
> either.
>
> Any suggestions?
>
> Thanks,
>
> A

1885. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-07 22:40:15 UTC
From: Pooh Bear <rabbitsfriendsandrelations@hotmail.com>
Message-ID: <4255B6CF.1013E8F7@hotmail.com>
Source record: 19518
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Albert wrote:

> Does anyone know how to measure or determine the wire size.

If I need to check, I use a vernier caliper to determine the diameter of the strands (2*r)and then calculate the total cross-sectional area as (pi*r^2) * number of strands.

This gives a result in mm^2. Which is the standard measure in most of the world.

To do the same you'll need a chart to convert from cross-sectional area to AWG. Google will find you one.

Graham

1886. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-07 22:49:06 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <r3eb51d0lnkkv79orj6beru2ai33su1net@4ax.com>
Source record: 19519
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Thu, 07 Apr 2005 21:41:05 -0000, the renowned dplatt@radagast.org
(Dave Platt) wrote:

>>Does anyone know how to measure or determine the wire size. I have
>>tons of motors, solenoids, and similar items. I need some #24 wire and
>>some #30 for a coil, but have to be sure regarding the wire diameter
>>as it's a critical ap and the author of the article says 'don't
>>substitute'.
>
>A cautionary note - if it's that critical, then re-using wire which
>has alread been wound might not be the best idea. You'd be starting
>with wire which had already been bent/flexed, and if you aren't
>careful this might put some kinks or irregularities in the winding of
>your new coil which might affect its impedance or Q.
>
>>I know I can weigh it, provided it's not on a spool or motor winding
>>already.
>>
>>My local electrical shop has a wire gauge, but it stops at 18 gauge.
>>
>>A microscope might work, but ones that have calibrated distance
>>measuring on the eyepiece are expensive.
>
>You might be able to do it with a vernier caliper.
>
>24 gauge has a diameter of .511 mm or .0020"
>
>30 gauge has a diameter of .255 mm or .001"

Ooops, you're low by a factor of 10:1 in the inch calculations. Just
as well, since a caliper is hardly repeatable to 1 thou, let alone
measuring a diameter of that size with any accuracy.

>Every 3 gauge numbers corresponds to a 2:1 ratio in wire area (amount
>of copper). Every 6 gauge numbers corresponds to a 2:1 ratio in wire
>diameter.

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

1887. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-07 22:51:30 UTC
From: dplatt@radagast.org
Message-ID: <115bebi8eq44tba@corp.supernews.com>
Source record: 19520
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

In article <r3eb51d0lnkkv79orj6beru2ai33su1net@4ax.com>,
Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat> wrote:

>>You might be able to do it with a vernier caliper.
>>
>>24 gauge has a diameter of .511 mm or .0020"
>>
>>30 gauge has a diameter of .255 mm or .001"
>
>Ooops, you're low by a factor of 10:1 in the inch calculations. Just
>as well, since a caliper is hardly repeatable to 1 thou, let alone
>measuring a diameter of that size with any accuracy.

Yup, I added a zero in there. 24 gauge is 20 mils (.02"), 30 gauge is
half that.

Works out to 50 or 100 turns per inch, close-wound, and the suggestion
to use that method was probably the best and cheapest I've heard.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1888. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-07 23:06:20 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d34edc$p8h$1@titan.btinternet.com>
Source record: 19523
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Which gauge are you using?

British Standard wire gauge (SWG) ?
American wire gauge (AWG) ?
Birmingham wire gauge (BWG) ?

They're all different.

1889. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-07 23:21:40 UTC
From: Bill Janssen <billj9@ieee.org>
Message-ID: <8gj5e.3105$hg.1601@news01.roc.ny>
Source record: 19521
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

Ian Stirling wrote:

>In sci.electronics.design Albert <> wrote:
>
>
>>Does anyone know how to measure or determine the wire size. I have
>>tons of motors, solenoids, and similar items. I need some #24 wire and
>>some #30 for a coil, but have to be sure regarding the wire diameter
>>as it's a critical ap and the author of the article says 'don't
>>substitute'.
>>
>>
>
>Micrometer.
>Vernier caliper may also work.
>Either under $30US.
>
>
And don't forget to remove any insulation before measuring the wire.

Bill K7NOM

1890. Re: Crystal radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 03:52:10 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_4255f2ba@fidonet.org>
Source record: 19526

"Bill M" bravely wrote to "All" (07 Apr 05 10:43:57)
--- on the heady topic of "Re: Crystal radio"

BM> From: Bill M <dontspamoleexray@coqui.net>
BM> Xref: aeinews rec.radio.amateur.homebrew:9179

> TW> If you're using germanium diodes get some spares -- I've found them
> TW> very susceptible to lightning strikes, at least in the circuit that my
> TW> son and I built.
>
>
> Why bother? Get a solar cell and power a radio with it. There is
> more than 900watts/metre^2 free energy right outside the window.

BM> How does using a solar cell prevent a detector diode from getting
BM> zapped?

By mounting the detector diode under the solar cell of course! That
wasn't my point however. What I really meant to get at is that high
impedance headphones (25K ohms) are hard to find these days as are
germanium anything. The better alternative is perhaps the Schottky
small signal diodes and a crystal earphone (which are also rare). On
the other hand if one powers a small transistor radio from a solar
cell charging a battery then it results in something practical.
Perhaps it isn't as educational as winding your own coil on a
cardboard tube of Quaker Oats and finding a Galena out in the
old quarry but there is nothing wrong with not re-inventing the wheel.
Do we really need to re-invent it to learn how to be a car mechanic?
We would have to be idiots if that was the case.

A*s*i*m*o*v

... We're young, rich, and full of sugar, what do we do?

1891. wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 03:53:32 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_4255f2bb@fidonet.org>
Source record: 19525

"Albert" bravely wrote to "All" (07 Apr 05 17:29:15)
--- on the heady topic of "wire size question"

Al> From: Albert <>
Al> Xref: aeinews sci.electronics.design:8716
Al> sci.electronics.components:12978 rec.radio.amateur.homebrew:9183

Al> Does anyone know how to measure or determine the wire size. I have
Al> tons of motors, solenoids, and similar items. I need some #24 wire and
Al> some #30 for a coil, but have to be sure regarding the wire diameter
Al> as it's a critical ap and the author of the article says 'don't
Al> substitute'.
[,,,]
Al> Perhaps a milliohm meter might be able to measure the difference in
Al> resistance of a foot of it or so, but that's hardly a standard item
Al> either.

A practical answer: measure the resistance of a known length of wire.
You don't need a milli-ohmmeter to do this. Simply inject an accurate
current into a known length of wire, let's say for example 1 ampere.
Then use a dmm on the 200mv range to measure the voltage drop. This
gives a direct reading of milliohms x feet. Multiply this value up to
a range of 1,000 ft and look it up on a standard wire table and read
the gauge column. That's it! No fussing with diameters or micrometers,
microscopes or conductivity. One note of caution: if the wire glows,
the current is too large!

A*s*i*m*o*v

... ... Clavicula .. Rectus abdominus .. Corpus sterni .. Piramidalis

1892. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 07:24:36 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <C+r0XqH0GjVCFwoD@jmwa.demon.co.uk>
Source record: 19522
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

I read in sci.electronics.design that Albert <?@?.?.invalid> wrote (in <0s8b5190savvispr1ga5he5hih23dgm41k@4ax.com>) about 'wire size question', on Thu, 7 Apr 2005:

>Does anyone know how to measure or determine the wire size.

Use a micrometer or a vernier slide gauge to measure the diameter. Assuming that your wire is enamelled, 24 AWG is 0.022 inch (maybe +/- 0.002) diameter and 30 AWG is 0.011 inch diameter.
--
Regards, John Woodgate, OOO - Own Opinions Only.
There are two sides to every question, except
'What is a Moebius strip?'
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1893. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 10:32:17 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <ft6DDeRx2IVCFwKT@jmwa.demon.co.uk>
Source record: 19524
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

I read in sci.electronics.design that Reg Edwards
<g4fgq.regp@ZZZbtinternet.com> wrote (in
<d34edc$p8h$1@titan.btinternet.com>) about 'wire size question', on Thu,
7 Apr 2005:
>Which gauge are you using?
>
>British Standard wire gauge (SWG) ? American wire gauge (AWG) ?
>Birmingham wire gauge (BWG) ?

Malt vinegar gauge - brown and sharp. (;-)
--
Regards, John Woodgate, OOO - Own Opinions Only.
There are two sides to every question, except
'What is a Moebius strip?'
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1894. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 12:14:03 UTC
From: Ian Stirling <root@mauve.demon.co.uk>
Message-ID: <4256758a$0$63440$ed2e19e4@ptn-nntp-reader04.plus.net>
Source record: 19527
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

In sci.electronics.design Ross Herbert <rherber1SPAMEX@bigpond.net.au> wrote:
> On Thu, 07 Apr 2005 23:21:40 GMT, Bill Janssen <billj9@ieee.org>
> wrote:
>
>>Ian Stirling wrote:
>>
>>>In sci.electronics.design Albert <> wrote:
>>>
>>>
>>>>Does anyone know how to measure or determine the wire size. I have
>>>>tons of motors, solenoids, and similar items. I need some #24 wire and
>>>>some #30 for a coil, but have to be sure regarding the wire diameter
>>>>as it's a critical ap and the author of the article says 'don't
>>>>substitute'.

>>>Micrometer.
>>>Vernier caliper may also work.
>>>Either under $30US.

>>And don't forget to remove any insulation before measuring the wire.

> Correct Bill. However DO NOT scrape the insulation from the wire since
> this can alter the physical diameter of the wire. It is best to dip a
> portion of the wire in fast acting paint stripper and wipe the
> softened insulation off with a rag.

Blowtorch to heat to dull red heat, and then wipe insulation off.

1895. Re: Source for Radio Hankbook by William Orr

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 13:12:33 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <5rv5e.6354$Uc7.2930@newsfe2-win.ntli.net>
Source record: 19530

> > Does anyone happen to have a copy of William Orr's "Radio Handbook" from
> > 1997 that they'd be willing to part with (i.e., sell)? It's out of
print,
> > and so far the only book seller I've found that actually has a copy
wants
> > $95, which is a little too rich for my blood.
> >
>
> There was a 1997 one? I thought the last one was Edition 23, which
> came out in 1987. Certainly when I saw it advertised after
> that, it was still showing the 23rd edition. And it's not as
> good as the ones previous to it. I'm not sure if it took a dip,
> or if it's just that there was little different that interested me
> from the previous few editions.
==========
Recently I bought the 19th edition ,second printing (1975) for equiv $ 5.-
from an Ham clearing his shack . It is a treasure from the 'good' old days.

Frank GM0CSZ / KN6WH

1896. Re: SWR meter, inline, non-resistive, led

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 13:12:35 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <7rv5e.6355$Uc7.300@newsfe2-win.ntli.net>
Source record: 19529

> I had seen such a schematic years ago. Drawing a mental picture, from
what
> I can remember, a wire ran down the center of a tube on a couple of
> insulating spacers (washers) in a concentric configuration.
>
> A small hole in each end of the tubing allowed an insulated pickup turn to
> be run adjacent to the wire in the tube--exiting the holes in the sides of
> the tubing, this picked up sufficient reflected power to drive the led(s)
> and give an indication of SWR (led(s) dim or out at 1:1, or near.
>
> Anyone got that schematic/construction details or, one of a similar unit
to
> construct?
==========
As an alternative to the above you might consider a piece of 'air-spaced'
coax (10 mm OD) as used for sat TV ,say 100 mm long ,connecting the centre
conductor to the sensor's in- & output connectors, earthing 1 side of screen
only.
By inserting a (possibly teflon) insulated wire through one of the 'air
gaps' you create a suitable pick-off for forward/reflected power (SWR)
measurement. The 75 Ohms impedance of the short piece of coax is of no
concern in a 50 Ohms environment.

Frank GM0CSZ / KN6WH

1897. Re: enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 13:12:36 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <8rv5e.6356$Uc7.542@newsfe2-win.ntli.net>
Source record: 19531

> Any one have a source for new or used metal enclosures. I'm trying to
> resurrect an old Johnson Matchbox and the original enclosure measured
> 10" x 10" x 7". Ideas?? Thanks in advance.
==========
A suitable enclosure could be made from double sided printed circuit board material , available from the surplus trade or at Hamfests.
The 'lid' supposedly of identical size as bottom could be fitted by means of screws having their nuts soldered into 4 upper inside corners. For the above enclosure you would need 2 pieces 10"x10" and 4 pcs 7"x10" .
PCB material can be easily trimmed to size and subsequently soldered. The final enclosure could be polished and subsequently varnished if appearance remains important.

Frank GM0CSZ / KN6WH

1898. Re: Anybody have a spare NEMA 4 type box?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 13:12:37 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <9rv5e.6357$Uc7.5881@newsfe2-win.ntli.net>
Source record: 19528

> I don't have any real experience with keeping a weathertight box outside
> for an extended period, though. It would be good to get some opinions
> and advice from people who do.
==========
Some time ago I was given an enclosure for an outdoor surveillance TV camera which had a suitable heater (50 Watts resistor) switched by a bi-metallic temperature switch. A homebrew solution would be an opamp circuit with 2 diode type temperature sensors,measuring in-and outside temperature ,maintaining an inside temperature approx 2degr C higher than the outside temp.
This would be adequate to prevent condensation .
Seems a bit overdone at a first glance ,but would ensure protection of valuable RF equipment.

Perhaps someone involved with Mobile Phone Cell Systems outdoor equipment would care to comment.

Frank GM0CSZ / KN6WH

1899. Re: MK484 single chip AM radio question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 13:12:38 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <arv5e.6358$Uc7.343@newsfe2-win.ntli.net>
Source record: 19532
Cross-posted to:
sci.electronics.repair,sci.electronics.repair,sci.electronics.repair,rec.radio.amateur.homebrew,alt.binaries.schematics.electronic

<Albert> wrote in message news:1mn251h6aip5lcirupgoooumiaeh90krnr@4ax.com...
> I hope to use the MK484 single chip AM radio at 20 kilohertz for a
> very low power receiver. The spec sheet says it only goes down to 150
> kilohertz however.
>
>
> Has anyone used the MK484 chip below 150 kilohertz?
==========
Have you considered a mixer arrangement with a xtal osc.

Frank GM0CSZ / KN6WH

1900. Re: MK484 single chip AM radio question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 14:02:30 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <W9w5e.3376$9i7.1657@trnddc04>
Source record: 19533
Cross-posted to:
sci.electronics.repair,sci.electronics.repair,sci.electronics.repair,rec.radio.amateur.homebrew,alt.binaries.schematics.electronic

<Albert> wrote in message news:1mn251h6aip5lcirupgoooumiaeh90krnr@4ax.com...
> I hope to use the MK484 single chip AM radio at 20 kilohertz for a
> very low power receiver. The spec sheet says it only goes down to 150
> kilohertz however.
>
>
> Has anyone used the MK484 chip below 150 kilohertz?
>
>
> I know it works well at lowfer frequencies...it runs circles around my
> ICOM receiver! But, I'm not sure about the minimum usable frequency.
>
>
> I have the spec sheet for it (and it's more modern variant, the
> MLF501), if anyone wants a copy, please speak up.
>
>
> Any comments appreciated.
>
Hi Albert,
What is the upper freq limit on this chip? I am always looking for a good AM
dtector. 9MHz is current interest.

Thanks,
BTW, if you are the same fellow asking about wire gauge- a
micrometer/calipers is by far the more accurate method. The gauges just do
not work well for small diameters. And, you'll find lots of other uses for
the calipers.

73,
Dale

1901. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 14:06:38 UTC
From: Genome <ilike_spam@yahoo.co.uk>
Message-ID: <Odw5e.15756$pA6.10492@newsfe1-win.ntli.net>
Source record: 19534
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

<Albert> wrote in message news:0s8b5190savvispr1ga5he5hih23dgm41k@4ax.com...
> Does anyone know how to measure or determine the wire size. I have
> tons of motors, solenoids, and similar items. I need some #24 wire and
> some #30 for a coil, but have to be sure regarding the wire diameter
> as it's a critical ap and the author of the article says 'don't
> substitute'.
>
> Any suggestions?
>
> Thanks,
>
> A

Well.... ignoring other things..... perhaps you'd like to explain why it's
so critical or give a link to the article.

DNA

1902. Re: MK484 single chip AM radio question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 14:09:14 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <0VEJthAKCpVCFwN$@jmwa.demon.co.uk>
Source record: 19535
Cross-posted to: sci.electronics.repair,rec.radio.amateur.homebrew,alt.binaries.schematics.electronic

I read in alt.binaries.schematics.electronic that Albert <?@?.?.invalid>
wrote (in <1mn251h6aip5lcirupgoooumiaeh90krnr@4ax.com>) about 'MK484
single chip AM radio question', on Mon, 4 Apr 2005:

>I hope to use the MK484 single chip AM radio at 20 kilohertz for a very
>low power receiver. The spec sheet says it only goes down to 150
>kilohertz however.

Is there any reason to suppose it contains a coupling capacitor or
something that would limit the low-frequency response? It seems rather
unlikely. But the definitive test invokes a little-used technique in
these days of calculations and simulations. It's known as 'trying it'.
(;-)

It isn't as if testing at 20 kHz is rocket science, after all.
--
Regards, John Woodgate, OOO - Own Opinions Only.
There are two sides to every question, except
'What is a Moebius strip?'
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1903. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 14:28:08 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <Z1YCISD4TpVCFwq$@jmwa.demon.co.uk>
Source record: 19536
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

I read in sci.electronics.design that Ian Stirling
<root@mauve.demon.co.uk> wrote (in
<4256758a$0$63440$ed2e19e4@ptn-nntp-reader04.plus.net>) about 'wire size
question', on Fri, 8 Apr 2005:

>Blowtorch to heat to dull red heat, and then wipe insulation off.

I'd like to see you do that with 30 gauge wire. For an encore, you could
do it with 46 gauge. (;-)
--
Regards, John Woodgate, OOO - Own Opinions Only.
There are two sides to every question, except
'What is a Moebius strip?'
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1904. Great New DX-394 Mods & Website (DX-398/ATS-909/FRG-7 coming)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 15:00:33 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <l0x5e.10156$6k4.985151@news20.bellglobal.com>
Source record: 19538
Cross-posted to:
alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.scanner,rec.radio.shortwave

Checkout http://www.monitor.co.uk/ . I just discovered it, appears to be very new. Well organized, clean, clear photos, graphics, descriptions of why and how-to for modifications to the Radio Shack/Tandy DX-394 General Coverage Communications Receiver. Also has PDFs of manuals and schematic.

Along with the 850 plus member user group at http://groups.yahoo.com/group/RADIOSHACKDX394/ and the collection of mods at http://www.mods.dk/view.php?ModelId=573, this new site helps make the DX-394 the most thoroughly hacked, researched and documented radio in the world.

Tom

1905. Re: MK484 single chip AM radio question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 15:06:13 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <a7idndBatMl7AMvfRVn-sg@rcn.net>
Source record: 19537
Cross-posted to: sci.electronics.repair,rec.radio.amateur.homebrew,alt.binaries.schematics.electronic

John Woodgate wrote:
> I read in alt.binaries.schematics.electronic that Albert <?@?.?.invalid>
> wrote (in <1mn251h6aip5lcirupgoooumiaeh90krnr@4ax.com>) about 'MK484
> single chip AM radio question', on Mon, 4 Apr 2005:
>
>> I hope to use the MK484 single chip AM radio at 20 kilohertz for a
>> very low power receiver. The spec sheet says it only goes down to 150
>> kilohertz however.
>
>
> Is there any reason to suppose it contains a coupling capacitor or
> something that would limit the low-frequency response? It seems rather
> unlikely. But the definitive test invokes a little-used technique in
> these days of calculations and simulations. It's known as 'trying it'. (;-)
>
> It isn't as if testing at 20 kHz is rocket science, after all.

Since this is a superhet chip (IIRC), the problem is more likely one of LO
bleed through into the IF. The LO frequency would have to be on the
high side of the receive frequency, so in this case, with a 455Khz IF,
the LO would be at 475Khz. The LO signal bleeding through the IF filter
would probably be as strong, or stronger than the 20KHz signal you were
intending on receiving.

-Chuck

1906. Re: Great New DX-394 Mods & Website (DX-398/ATS-909/FRG-7 coming)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 15:49:36 UTC
From: roger <rogers.mail@ntlworld.com>
Message-ID: <kKx5e.16481$kr.11752@newsfe1-gui.ntli.net>
Source record: 19539
Cross-posted to:
alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.scanner,rec.radio.shortwave

And also the biggest load of junk on the market
Sw

"Tom Holden" <holden_family@sympatico.ca> wrote in message
news:l0x5e.10156$6k4.985151@news20.bellglobal.com...
> Checkout http://www.monitor.co.uk/ . I just discovered it, appears to be
> very new. Well organized, clean, clear photos, graphics, descriptions of
> why and how-to for modifications to the Radio Shack/Tandy DX-394 General
> Coverage Communications Receiver. Also has PDFs of manuals and schematic.
>
> Along with the 850 plus member user group at
> http://groups.yahoo.com/group/RADIOSHACKDX394/ and the collection of mods
> at http://www.mods.dk/view.php?ModelId=573, this new site helps make the
> DX-394 the most thoroughly hacked, researched and documented radio in the
> world.
>
> Tom
>

1907. Re: MK484 single chip AM radio question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 15:59:42 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <pUde97LupqVCFweg@jmwa.demon.co.uk>
Source record: 19540
Cross-posted to: sci.electronics.repair,rec.radio.amateur.homebrew,alt.binaries.schematics.electronic

I read in alt.binaries.schematics.electronic that Chuck Harris
<cf-NO-SPAM-harris@erols.com> wrote (in
<a7idndBatMl7AMvfRVn-sg@rcn.net>) about 'MK484 single chip AM radio
question', on Fri, 8 Apr 2005:
>Since this is a superhet chip (IIRC),

No, it's a TRF.
--
Regards, John Woodgate, OOO - Own Opinions Only.
There are two sides to every question, except
'What is a Moebius strip?'
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1908. Re: Great New DX-394 Mods & Website (DX-398/ATS-909/FRG-7 coming)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 16:29:44 UTC
From: Mike Lee <swift240@yahoo.co.uk>
Message-ID: <Yjy5e.42133$C12.14653@fe1.news.blueyonder.co.uk>
Source record: 19541
Cross-posted to:
alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.scanner,rec.radio.shortwave

roger wrote:
> And also the biggest load of junk on the market
> Sw
>
>
> "Tom Holden" <holden_family@sympatico.ca> wrote in message
> news:l0x5e.10156$6k4.985151@news20.bellglobal.com...
>
>>Checkout http://www.monitor.co.uk/ . I just discovered it, appears to be
>>very new. Well organized, clean, clear photos, graphics, descriptions of
>>why and how-to for modifications to the Radio Shack/Tandy DX-394 General
>>Coverage Communications Receiver. Also has PDFs of manuals and schematic.
>>
>>Along with the 850 plus member user group at
>>http://groups.yahoo.com/group/RADIOSHACKDX394/ and the collection of mods
>>at http://www.mods.dk/view.php?ModelId=573, this new site helps make the
>>DX-394 the most thoroughly hacked, researched and documented radio in the
>>world.
>>
>>Tom
>>
>
>
>
I find the site pretty good myself.

Mike.

--
http://uk.geocities.com/swift240/mikes_page_1.html

1909. Re: MK484 single chip AM radio question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 16:46:09 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <7o9d51p5va3jei54h77a1ie9qip6tvs0p1@4ax.com>
Source record: 19542
Cross-posted to:
sci.electronics.repair,sci.electronics.repair,sci.electronics.repair,rec.radio.amateur.homebrew,alt.binaries.schematics.electronic

On Mon, 04 Apr 2005 11:53:59 -0400, Albert <> wrote:

>I hope to use the MK484 single chip AM radio at 20 kilohertz for a
>very low power receiver. The spec sheet says it only goes down to 150
>kilohertz however.

At some (very) low frequencies the 1/f noise will make the stated
noise figure invalid :-).

Some microwave bipolar transistors will have a quite bad noise
performance at HF (and some even VHF) frequencies due to the 1/f
noise, but since the maximum frequency for that AM radio is not very
high, I very much doubt this would be an issue at 20 kHz.

After all, the environment noise is quite high at these frequencies,
so unless the antenna is very lossy, the receiver noise figure is of
very little interest anyway.

Paul OH3LWR

1910. Re: MK484 single chip AM radio question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 17:19:11 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <d36eef$51p$1@theodyn.ncf.ca>
Source record: 19543

"Dale Parfitt" (par@parelectronics.com) writes:
> <Albert> wrote in message news:1mn251h6aip5lcirupgoooumiaeh90krnr@4ax.com...
>> I hope to use the MK484 single chip AM radio at 20 kilohertz for a
>> very low power receiver. The spec sheet says it only goes down to 150
>> kilohertz however.
>>
>>
>> Has anyone used the MK484 chip below 150 kilohertz?
>>
>>
>> I know it works well at lowfer frequencies...it runs circles around my
>> ICOM receiver! But, I'm not sure about the minimum usable frequency.
>>
>>
>> I have the spec sheet for it (and it's more modern variant, the
>> MLF501), if anyone wants a copy, please speak up.
>>
>>
>> Any comments appreciated.
>>
> Hi Albert,
> What is the upper freq limit on this chip? I am always looking for a good AM
> dtector. 9MHz is current interest.
>
The articles I've seen for it (and it's basically the old ZN414), the top
of the AM broadcast band or a bit higher.

But it's meant for simple receivers. You have a single tuned circuit
at the front, and then "selectivity" comes from good AGC action. It
may run out because the selectivity is unsuitable at higher frequencies,
and not because the IC can't handle them.

Michael VE2BVW

1911. Re: MK484 single chip AM radio question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 17:29:06 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <l6udnal9Z9b-IsvfRVn-uQ@rcn.net>
Source record: 19544
Cross-posted to: sci.electronics.repair,rec.radio.amateur.homebrew,alt.binaries.schematics.electronic

John Woodgate wrote:
> I read in alt.binaries.schematics.electronic that Chuck Harris
> <cf-NO-SPAM-harris@erols.com> wrote (in
> <a7idndBatMl7AMvfRVn-sg@rcn.net>) about 'MK484 single chip AM radio
> question', on Fri, 8 Apr 2005:
>
>> Since this is a superhet chip (IIRC),
>
>
> No, it's a TRF.

Ahhh! Well, that changes everything. I took a look for the spec sheet, and found the sheet for the ZN414Z, which is apparently almost identical to the MK484. There are two things that I think would limit operation at lower frequencies:

1) the gain appears to be purposefully rolled off at about 40KHz. That is to say, it approaches zero at that frequency.

2) the detected audio stage has bandwidth out to 20KHz.

Imagine what would happen if you had a signal with a 20KHz carrier frequency. The carrier frequency would pass right through the detector and into the audio channel. The AGC, which appears to be audio derived, would get seriously upset, and if the 20KHz signal was modulated, you create some very interesting hetrodynes.

That being the case, it appears that the manufacturer tried to keep the operating frequency far enough away from the audio passband that a simple filter would suffice to prevent interferrence.

It probably won't work well at all as a 20KHz receiver.

-Chuck

1912. Re: Great New DX-394 Mods & Website (DX-398/ATS-909/FRG-7 coming)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 17:53:06 UTC
From: PowerHouse Communications <PowerHouse@PrivateBox.Net>
Message-ID: <0yz5e.14$Bh1.1@fe06.lga>
Source record: 19545
Cross-posted to:
alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.scanner,rec.radio.shortwave

I'm quite positive he was talking about the radio, not the site...

"Mike Lee" <swift240@yahoo.co.uk> wrote in message
news:Yjy5e.42133$C12.14653@fe1.news.blueyonder.co.uk...
> I find the site pretty good myself.
>
> Mike.
>
> --
> http://uk.geocities.com/swift240/mikes_page_1.html
>
> roger wrote:
> > And also the biggest load of junk on the market
> > Sw
> >
> >
> > "Tom Holden" <holden_family@sympatico.ca> wrote in message
> > news:l0x5e.10156$6k4.985151@news20.bellglobal.com...
> >
> > >>Checkout http://www.monitor.co.uk/ . I just discovered it, appears to be
> > >>very new. Well organized, clean, clear photos, graphics, descriptions of
> > >>why and how-to for modifications to the Radio Shack/Tandy DX-394 General
> > >>Coverage Communications Receiver. Also has PDFs of manuals and
schematic.
> > >>
> > >>Along with the 850 plus member user group at
> > >>http://groups.yahoo.com/group/RADIOSHACKDX394/ and the collection of
mods
> > >>at http://www.mods.dk/view.php?ModelId=573, this new site helps make the
> > >>DX-394 the most thoroughly hacked, researched and documented radio in
the
> > >>world.
> > >>
> > >>Tom
> > >>
> > >
> > >
> > >

1913. Re: Source for Radio Hankbook by William Orr

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 18:04:03 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <YMudnV0E-JfJWsvfRVn-3A@comcast.com>
Source record: 19546

It turns out that Prime Parts (http://www.primeparts.net/Books/books.shtml)
still has some copies if anyone else is looking for the 1997 (last) edition.

---Joel

1914. Re: MK484 single chip AM radio question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 18:20:11 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <2EgZpUSbtsVCFw9o@jmwa.demon.co.uk>
Source record: 19547
Cross-posted to: sci.electronics.repair,rec.radio.amateur.homebrew,alt.binaries.schematics.electronic

I read in alt.binaries.schematics.electronic that Chuck Harris
<cf-NO-SPAM-harris@erols.com> wrote (in
<l6udnal9Z9b-IsvfRVn-uQ@rcn.net>) about 'MK484 single chip AM radio
question', on Fri, 8 Apr 2005:

>Ahhh! Well, that changes everything. I took a look for the spec
>sheet, and found the sheet for the ZN414Z, which is apparently almost
>identical to the MK484. There are two things that I think would limit
>operation at lower frequencies:
>
>1) the gain appears to be purposefully rolled off at about 40KHz. That
>is to say, it approaches zero at that frequency.

Yes, having found a 'data sheet' (handwritten), I see it has four
coupling capacitors between the stages. Not good news.
>
>2) the detected audio stage has bandwidth out to 20KHz.

That may be controllable, but it's beside the point of there is no
useful gain at 20 kHz. In that case, a 741 would be usable, but a 709
would be better (small signals). (;-)
--
Regards, John Woodgate, OOO - Own Opinions Only.
There are two sides to every question, except
'What is a Moebius strip?'
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1915. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 18:40:20 UTC
From: LenAnderson@ieee.org
Message-ID: <1112985620.147867.306410@g14g2000cwa.googlegroups.com>
Source record: 19448
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

From: "Henry Kolesnik" on Thurs,Apr 7 2005 10:15 pm

>Get a nice piece of smooth round rod and tightly wind a little over a
lineal
>inch of wire closely spaced as possible. Count the turns in one inch
and
>divide the number of turns into one inch and you'll have a very good
>measurement without any cost.
>
>73
>Hank WD5JFR
>
><Albert> wrote in message
news:0s8b5190savvispr1ga5he5hih23dgm41k@4ax.com...
>> Does anyone know how to measure or determine the wire size. I have
>> tons of motors, solenoids, and similar items. I need some #24 wire
and
>> some #30 for a coil, but have to be sure regarding the wire diameter
>> as it's a critical ap and the author of the article says 'don't
>> substitute'.
>>
>> I know I can weigh it, provided it's not on a spool or motor winding
>> already.
>>
>> My local electrical shop has a wire gauge, but it stops at 18 gauge.
>>
>> A microscope might work, but ones that have calibrated distance
>> measuring on the eyepiece are expensive.
>>
>> Perhaps a milliohm meter might be able to measure the difference in
>> resistance of a foot of it or so, but that's hardly a standard item
>> either.
>>
>> Any suggestions?

A non-destructive measurement is best. Along about
1946 my middle school (we called it "junior high" back
then) electric shop instructor demonstrated how to use
a mechanical caliper and how NOT to squeeze too hard in
doing so. Soft-drawn copper common to wire is fairly
easy to squash when using a caliper. Using one requires
a VERY light touch on the wire, just enough to be able
to pull it slightly through the caliper jaws. Even so,
pulling on soft-drawn copper wire is going to distort it

slightly so the measurement is going to be on the small side. Snipping off ten or twenty short lengths, then measuring the total width and dividing by the number of lengths will be a bit better in accuracy.

A pocket optical comparator is handy for this and other uses, especially when trying to get a measurement on something already mounted with epoxy, varnish, etc. as in windings of electric motors. While the "100-foot resistance test" is a practical idea with a roll of wire, it is hard to do when the wire comes from a motor or transformer giving its all to the project.

As a practical matter, the wire size in small (such as HF range) coils won't matter much on either the inductance or Q tolerance. For example, Dropping from 30 AWG to 32 AWG isn't going to be a disaster in cylindrical ("solenoidal") or toroidal forms. The change in inductance will be aligned-out on trimming in the circuit itself. Q is going to change much more depending on the material of the coil former and the presence of nearby conductive objects such as shields.

If a Twenty is too much for a pound or so of new wire stock, then nobody can afford a Q Meter or inductance meter to do an accurate measurement. Get with some friends/acquaintences and share the cost of new stock.

Just some practical thoughts after doing a bit of winding in my time...

LenAnderson@ieee.org

1916. Re: Great New DX-394 Mods & Website (DX-398/ATS-909/FRG-7 coming)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 19:11:25 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <xHA5e.10558$6k4.1031303@news20.bellglobal.com>
Source record: 19450
Cross-posted to:
alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.scanner,rec.radio.shortwave

"roger" <rogers.mail@ntlworld.com> wrote in message
news:kKx5e.16481$kr.11752@newsfe1-gui.ntli.net...
> And also the biggest load of junk on the market
> Sw

Not according to reputable reviewers:

1. Radio Netherlands Receiver Test Laboratory Review of the DX-394
by Jonathan Marks & Tom Sundstrom - 4 out of 5 star "Value Rating"
http://www.rnw.nl/realradio/dx394.html

2. QST Magazine review of DX-394A et al from 1997
PDF file of review of DX-394 and Drake SW1 sub-$300 receivers and Yaesu
FT-920 MF/HF/6 Meter Transceiver
http://hamradio.online.ru/ftp/pr9710.pdf

3. Kurzwellenempf&#65533;nger Realistic DX 394
http://www.dr-boesch.ch/radio/realistic-dx394-test3.htm (German)
http://tools.search.yahoo.com/language/translation/translatedPage.php?tt=url&text=http%3a//www.dr-boesch.ch/radio/realistic-dx394-test3.htm&lp=de_en&.intl=us
(English machine translation - it's a hoot to read!)

4. eHam.net Reviews - Radio Shack DX-394
Collection of reviews by owners under Receivers: General Coverage. Average
3.8 out of 5.
http://www.eham.net/reviews/detail/2108

5. DXing.com Modern Shortwave Receiver Survey
DX-394 is below the DX-302 on the same page. Rating was increased from 1H to
3H about Jan 28/2004.
http://www.dxing.com/rx/dx302.htm

6. Passport to World Band Radio Review
1997 review from PWBR concludes: "Overall, the Radio Shack/Realistic DX-394
is a decent receiver for relatively little money. But it's no barn burner. "
http://groups.yahoo.com/group/RADIOSHACKDX394/files/Reviews/

One person's junk is another's treasure.

Tom

>
> "Tom Holden" <holden_family@sympatico.ca> wrote in message
> news:l0x5e.10156$6k4.985151@news20.bellglobal.com...
>> Checkout http://www.monitor.co.uk/ . I just discovered it, appears to be

>> very new. Well organized, clean, clear photos, graphics, descriptions of
>> why and how-to for modifications to the Radio Shack/Tandy DX-394 General
>> Coverage Communications Receiver. Also has PDFs of manuals and schematic.
>>
>> Along with the 850 plus member user group at
>> http://groups.yahoo.com/group/RADIOSHACKDX394/ and the collection of mods
>> at http://www.mods.dk/view.php?ModelId=573, this new site helps make the
>> DX-394 the most thoroughly hacked, researched and documented radio in the
>> world.
>>
>> Tom
>>
>
>

1917. The Season for needing Surge Protectors and Interference Filters is upon us.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 19:19:50 UTC
From: American Technical Resources <knolla@american-technical-resources.com>
Message-ID: <1112987990.944545.162210@o13g2000cwo.googlegroups.com>
Source record: 19449

The season for needing Surge Protectors and Interference Filters is upon us, purchase them before you need them, for peace of mind, protection and savings. We carry a wide array of surge protectors for all voltage requirements and signal interference conditions. Suggest to your friends and customers that "Surge protection doesn't cost......It Pays." Be prepared for your requirements and that of your customers. We can produce OEM quantities and look forward to your inquiries at www.American-Technical-Resources.com

Remember that Telephone and cable lines can also conduct high voltage -- for full protection, you should also guard against surges from your telephone or cable lines. Any lines carrying signals into your home can also carry a power surge, due to lightning or a number of other factors. If your computer is connected to the phone lines via a modem, you should get a surge protector that has a phone-line input jack. If you have a coaxial cable line hooked up to expensive equipment, consider a cable surge protector. Surges on these lines can do just as much damage as surges over power lines.

"DO your best to secure ground, this is always the foundation of good surge protection"

Allen Knoll

Technology Applications Engineer

American Technical Resources

8 Stark Road

Worcester, Massachusetts 01602

www.american-technical-resources.com

1918. Re: Great New DX-394 Mods & Website (DX-398/ATS-909/FRG-7 coming)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 19:30:07 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <3ZA5e.10568$6k4.1032769@news20.bellglobal.com>
Source record: 19453
Cross-posted to:
alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.scanner,rec.radio.shortwave

"Tom Holden" <holden_family@sympatico.ca> wrote in message
news:xHA5e.10558$6k4.1031303@news20.bellglobal.com...
> 5. DXing.com Modern Shortwave Receiver Survey
> DX-394 is below the DX-302 on the same page. Rating was increased from 1H
> to 3H about Jan 28/2004.
> http://www.dxing.com/rx/dx302.htm

Correction: the rating was increased about Jan 28/2005, not 2004, correcting an obvious mistake. This longstanding, unsubstantiated 1H rating on DXing.com probably adversely affected the opinions of some uninformed individuals.

Tom

1919. Re: Great New DX-394 Mods & Website (DX-398/ATS-909/FRG-7 coming)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 19:34:40 UTC
From: roger <rogers.mail@ntlworld.com>
Message-ID: <k1B5e.16524$kr.15250@newsfe1-gui.ntli.net>
Source record: 19451
Cross-posted to:
alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.scanner,rec.radio.shortwave

I have owned one in the past, it had one with the K-Filters in and it was
still the biggest load of rubbish I ever had the misfortune to own.
They are nothing more than a childs toy. Get yourself a decent receiver for
gods sake, even those cheap Tecsun things blow the dx394 away on EVERYTHING,
Man they are a joke.!
SW

"Tom Holden" <holden_family@sympatico.ca> wrote in message
news:xHA5e.10558$6k4.1031303@news20.bellglobal.com...
> "roger" <rogers.mail@ntlworld.com> wrote in message
> news:kKx5e.16481$kr.11752@newsfe1-gui.ntli.net...
>> And also the biggest load of junk on the market
>> Sw
>
>
> Not according to reputable reviewers:
>
> 1. Radio Netherlands Receiver Test Laboratory Review of the DX-394
> by Jonathan Marks & Tom Sundstrom - 4 out of 5 star "Value Rating"
> http://www.rnw.nl/realradio/dx394.html
>
> 2. QST Magazine review of DX-394A et al from 1997
> PDF file of review of DX-394 and Drake SW1 sub-$300 receivers and Yaesu
> FT-920 MF/HF/6 Meter Transceiver
> http://hamradio.online.ru/ftp/pr9710.pdf
>
> 3. Kurzwellenempf&#65533;nger Realistic DX 394
> http://www.dr-boesch.ch/radio/realistic-dx394-test3.htm (German)
> http://tools.search.yahoo.com/language/translation/translatedPage.php?tt=url&text=http%3a//www.dr-boesch.ch/radio/realistic-dx394-test3.htm&lp=de_en&.intl=us
> (English machine translation - it's a hoot to read!)
>
> 4. eHam.net Reviews - Radio Shack DX-394
> Collection of reviews by owners under Receivers: General Coverage. Average
> 3.8 out of 5.
> http://www.eham.net/reviews/detail/2108
>
> 5. DXing.com Modern Shortwave Receiver Survey
> DX-394 is below the DX-302 on the same page. Rating was increased from 1H
> to 3H about Jan 28/2004.
> http://www.dxing.com/rx/dx302.htm
>

> 6. Passport to World Band Radio Review
> 1997 review from PWBR concludes: "Overall, the Radio Shack/Realistic
> DX-394 is a decent receiver for relatively little money. But it's no barn
> burner. "
> http://groups.yahoo.com/group/RADIOSHACKDX394/files/Reviews/
>
> One person's junk is another's treasure.
>
> Tom
>
>>
>> "Tom Holden" <holden_family@sympatico.ca> wrote in message
>> news:l0x5e.10156$6k4.985151@news20.bellglobal.com...
>>> Checkout http://www.monitor.co.uk/ . I just discovered it, appears to be
>>> very new. Well organized, clean, clear photos, graphics, descriptions of
>>> why and how-to for modifications to the Radio Shack/Tandy DX-394 General
>>> Coverage Communications Receiver. Also has PDFs of manuals and
>>> schematic.
>>>
>>> Along with the 850 plus member user group at
>>> http://groups.yahoo.com/group/RADIOSHACKDX394/ and the collection of
>>> mods at http://www.mods.dk/view.php?ModelId=573, this new site helps
>>> make the DX-394 the most thoroughly hacked, researched and documented
>>> radio in the world.
>>>
>>> Tom
>>>
>>
>>
>
>

1920. Re: Great New DX-394 Mods & Website (DX-398/ATS-909/FRG-7 coming)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 19:38:46 UTC
From: fcathell@msn.com
Message-ID: <1112989126.867796.235480@o13g2000cwo.googlegroups.com>
Source record: 19452
Cross-posted to:
alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.scanner,rec.radio.shortwave

Well done site! Damn, some of these mods look familiar!

Frank

Tom Holden wrote:
> "roger" <rogers.mail@ntlworld.com> wrote in message
> news:kKx5e.16481$kr.11752@newsfe1-gui.ntli.net...
> > And also the biggest load of junk on the market
> > Sw
>
>
> Not according to reputable reviewers:
>
> 1. Radio Netherlands Receiver Test Laboratory Review of the DX-394
> by Jonathan Marks & Tom Sundstrom - 4 out of 5 star "Value Rating"
> http://www.rnw.nl/realradio/dx394.html
>
> 2. QST Magazine review of DX-394A et al from 1997
> PDF file of review of DX-394 and Drake SW1 sub-$300 receivers and
Yaesu
> FT-920 MF/HF/6 Meter Transceiver
> http://hamradio.online.ru/ftp/pr9710.pdf
>
> 3. Kurzwellenempfänger Realistic DX 394
> http://www.dr-boesch.ch/radio/realistic-dx394-test3.htm (German)
>
http://tools.search.yahoo.com/language/translation/translatedPage.php?tt=url&text=http%3a/
/www.dr-boesch.ch/radio/realistic-dx394-test3.htm&lp=de_en&.intl=us

> (English machine translation - it's a hoot to read!)
>
> 4. eHam.net Reviews - Radio Shack DX-394
> Collection of reviews by owners under Receivers: General Coverage.
Average
> 3.8 out of 5.
> http://www.eham.net/reviews/detail/2108
>
> 5. DXing.com Modern Shortwave Receiver Survey
> DX-394 is below the DX-302 on the same page. Rating was increased
from 1H to
> 3H about Jan 28/2004.
> http://www.dxing.com/rx/dx302.htm
>

> 6. Passport to World Band Radio Review
> 1997 review from PWBR concludes: "Overall, the Radio Shack/Realistic
DX-394
> is a decent receiver for relatively little money. But it's no barn
burner. "
> http://groups.yahoo.com/group/RADIOSHACKDX394/files/Reviews/
>
> One person's junk is another's treasure.
>
> Tom
>
> >
> > "Tom Holden" <holden_family@sympatico.ca> wrote in message
> > news:l0x5e.10156$6k4.985151@news20.bellglobal.com...
> >> Checkout http://www.monitor.co.uk/ . I just discovered it, appears
to be
> >> very new. Well organized, clean, clear photos, graphics,
descriptions of
> >> why and how-to for modifications to the Radio Shack/Tandy DX-394
General
> >> Coverage Communications Receiver. Also has PDFs of manuals and
schematic.
> >>
> >> Along with the 850 plus member user group at
> >> http://groups.yahoo.com/group/RADIOSHACKDX394/ and the collection
of mods
> >> at http://www.mods.dk/view.php?ModelId=573, this new site helps
make the
> >> DX-394 the most thoroughly hacked, researched and documented radio
in the
> >> world.
> >>
> >> Tom
> >>
> >
> >

1921. Re: Great New DX-394 Mods & Website (DX-398/ATS-909/FRG-7 coming)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 19:47:24 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <gdB5e.10579$6k4.1034250@news20.bellglobal.com>
Source record: 19455
Cross-posted to:
alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.scanner,rec.radio.shortwave

They sure do, Frank! I sent the webmaster a message complimenting him on his work with the comment that the one thing missing was credit to the inventors of the mods, "from the pioneering Frank Cathell to whoever had developed these new ones I had never seen before". I have no idea who is behind the site and whether it's motivated by anything other than enthusiasm to share what he/she has done. It's first class, all the way.

73, Tom

<fcathell@msn.com> wrote in message
news:1112989126.867796.235480@o13g2000cwo.googlegroups.com...
Well done site! Damn, some of these mods look familiar!

Frank

1922. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 20:00:02 UTC
From: Ian Stirling <root@mauve.demon.co.uk>
Message-ID: <4256e2c2$0$42305$ed2619ec@ptn-nntp-reader02.plus.net>
Source record: 19456
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

In sci.electronics.design John Woodgate <jmw@jmwa.demon.contraspam.yuk> wrote:
> I read in sci.electronics.design that Ian Stirling
> <root@mauve.demon.co.uk> wrote (in
> <4256758a$0$63440$ed2e19e4@ptn-nntp-reader04.plus.net>) about 'wire size
> question', on Fri, 8 Apr 2005:
>
>>Blowtorch to heat to dull red heat, and then wipe insulation off.
>
> I'd like to see you do that with 30 gauge wire. For an encore, you could
> do it with 46 gauge. (;-)

Actually, I do it regularly with .15mm wire (I don't know the guage)
Of course, you have to be able to set the blowtorch so that it's producing
a yellow flame that's not too hot, a lighter works well.

1923. Re: Great New DX-394 Mods & Website (DX-398/ATS-909/FRG-7 coming)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 20:00:07 UTC
From: roger <rogers.mail@ntlworld.com>
Message-ID: <bpB5e.16528$kr.5151@newsfe1-gui.ntli.net>
Source record: 19454
Cross-posted to:
alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.scanner,rec.radio.shortwave

A rating of 3 is still crap!

"Tom Holden" <holden_family@sympatico.ca> wrote in message
news:3ZA5e.10568$6k4.1032769@news20.bellglobal.com...
>
> "Tom Holden" <holden_family@sympatico.ca> wrote in message
> news:xHA5e.10558$6k4.1031303@news20.bellglobal.com...
>> 5. DXing.com Modern Shortwave Receiver Survey
>> DX-394 is below the DX-302 on the same page. Rating was increased from 1H
>> to 3H about Jan 28/2004.
>> http://www.dxing.com/rx/dx302.htm
>
> Correction: the rating was increased about Jan 28/2005, not 2004,
> correcting an obvious mistake. This longstanding, unsubstantiated 1H
> rating on DXing.com probably adversely affected the opinions of some
> uninformed individuals.
>
> Tom
>

1924. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 20:10:24 UTC
From: Jim Thompson <thegreatone@example.com>
Message-ID: <37pd51p6081auatb8pvo7cd31fihbo4kme@4ax.com>
Source record: 19457
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On 08 Apr 2005 20:00:02 GMT, Ian Stirling <root@mauve.demon.co.uk>
wrote:

>In sci.electronics.design John Woodgate <jmw@jmwa.demon.contraspam.yuk> wrote:
>> I read in sci.electronics.design that Ian Stirling
>> <root@mauve.demon.co.uk> wrote (in
>> <4256758a$0$63440$ed2e19e4@ptn-nntp-reader04.plus.net>) about 'wire size
>> question', on Fri, 8 Apr 2005:
>>
>>>Blowtorch to heat to dull red heat, and then wipe insulation off.
>>
>> I'd like to see you do that with 30 gauge wire. For an encore, you could
>> do it with 46 gauge. (;-)
>
>Actually, I do it regularly with .15mm wire (I don't know the guage)
>Of course, you have to be able to set the blowtorch so that it's producing
>a yellow flame that's not too hot, a lighter works well.

IIRC there's something called Formvar that will self-strip upon
application of a tinned iron.

There's also the chemical stripping agents.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

1925. The Season for needing Surge Protectors and Interference Filters is upon us.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 20:20:55 UTC
From: American Technical Resources <knolla@american-technical-resources.com>
Message-ID: <1112991655.726119.74730@o13g2000cwo.googlegroups.com>
Source record: 19458

The season for needing Surge Protectors and Interference Filters is upon us, purchase them before you need them, for peace of mind, protection and savings. We carry a wide array of surge protectors for all voltage requirements and signal interference conditions. Suggest to your friends and customers that "Surge protection doesn't cost......It Pays." Be prepared for your requirements and that of your customers.

Remember that Telephone and cable lines can also conduct high voltage -- for full protection, you should also guard against surges from your telephone or cable lines. Any lines carrying signals into your home can also carry a power surge, due to lightning or a number of other factors. If your computer is connected to the phone lines via a modem, you should get a surge protector that has a phone-line input jack. If you have a coaxial cable line hooked up to expensive equipment, consider a cable surge protector. Surges on these lines can do just as much damage as surges over power lines.

"DO your best to secure ground, this is always the foundation of good surge protection"

Allen Knoll

Technology Applications Engineer

American Technical Resources

8 Stark Road

Worcester, Massachusetts 01602

www.american-technical-resources.com

1926. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 20:45:44 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <V3Yhl6V41uVCFwbR@jmwa.demon.co.uk>
Source record: 19461
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

I read in sci.electronics.design that Ian Stirling
<root@mauve.demon.co.uk> wrote (in
<4256e2c2$0$42305$ed2619ec@ptn-nntp-reader02.plus.net>) about 'wire size
question', on Fri, 8 Apr 2005:
>In sci.electronics.design John Woodgate <jmw@jmwa.demon.contraspam.yuk> wrote:
>> I read in sci.electronics.design that Ian Stirling
>> <root@mauve.demon.co.uk> wrote (in
>> <4256758a$0$63440$ed2e19e4@ptn-nntp-reader04.plus.net>) about 'wire size
>> question', on Fri, 8 Apr 2005:
>>
>>>Blowtorch to heat to dull red heat, and then wipe insulation off.
>>
>> I'd like to see you do that with 30 gauge wire. For an encore, you could
>> do it with 46 gauge. (;-)
>
>Actually, I do it regularly with .15mm wire (I don't know the guage)
>Of course, you have to be able to set the blowtorch so that it's producing
>a yellow flame that's not too hot, a lighter works well.

Oh, that's cheating. (;-) When you write 'blowtorch', you should mean
'blowtorch', 1000 C plus.

The almost cool flame of an alcohol burner is good, especially as it has
a large part of its volume that is chemically reducing.
--
Regards, John Woodgate, OOO - Own Opinions Only.
There are two sides to every question, except
'What is a Moebius strip?'
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1927. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 20:49:40 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <h3fsVbWk5uVCFwd5@jmwa.demon.co.uk>
Source record: 19460
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

I read in sci.electronics.design that Jim Thompson
<thegreatone@example.com> wrote (in
<37pd51p6081auatb8pvo7cd31fihbo4kme@4ax.com>) about 'wire size
question', on Fri, 8 Apr 2005:

>IIRC there's something called Formvar that will self-strip upon
>application of a tinned iron.

Once upon a time, there was 'flux-enamelled' magnet wire, which was
really easy to solder, but the coating was fragile. Then there was
'solderable', which required an iron temperature substantially higher
than for normal soldering. But that gave off toluene diisocyanate, which
is poisonous if you breathe it for 20 years, so you had to use it under
extraction, and that made it fall out of favour.
--
Regards, John Woodgate, OOO - Own Opinions Only.
There are two sides to every question, except
'What is a Moebius strip?'
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1928. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 20:50:13 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <ehrd515olpjp3ug89m8lr9u3nfm9k4p4ll@4ax.com>
Source record: 19459
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Fri, 08 Apr 2005 13:10:24 -0700, Jim Thompson
<thegreatone@example.com> wrote:

>IIRC there's something called Formvar that will self-strip upon
>application of a tinned iron.

And, in the process, tin the wire, changing its diameter...

--
John Fields
Professional Circuit Designer

1929. FA:MO' Tubes: 812A,12AX7,5Y3(USN).+ STUFF

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 21:15:31 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <TvC5e.542304$w62.201889@bgtnsc05-news.ops.worldnet.att.net>
Source record: 19462
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

See at address below:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

tnx for stopping for a look, 73 Heytubeguy

1930. Re: Great New DX-394 Mods & Website (DX-398/ATS-909/FRG-7 coming)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 21:27:24 UTC
From: roger <rogers.mail@ntlworld.com>
Message-ID: <0HC5e.16551$kr.7249@newsfe1-gui.ntli.net>
Source record: 19463
Cross-posted to:
alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.scanner,rec.radio.shortwave

Hey, Tom! I'm only having a laugh, they are OK, I got one myself. nice to
see you not rise to the bait. :-))
regards
SW

"Tom Holden" <holden_family@sympatico.ca> wrote in message
news:3ZA5e.10568$6k4.1032769@news20.bellglobal.com...
>
> "Tom Holden" <holden_family@sympatico.ca> wrote in message
> news:xHA5e.10558$6k4.1031303@news20.bellglobal.com...
>> 5. DXing.com Modern Shortwave Receiver Survey
>> DX-394 is below the DX-302 on the same page. Rating was increased from 1H
>> to 3H about Jan 28/2004.
>> http://www.dxing.com/rx/dx302.htm
>
> Correction: the rating was increased about Jan 28/2005, not 2004,
> correcting an obvious mistake. This longstanding, unsubstantiated 1H
> rating on DXing.com probably adversely affected the opinions of some
> uninformed individuals.
>
> Tom
>

1931. Re: Great New DX-394 Mods & Website (DX-398/ATS-909/FRG-7 coming)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 21:36:16 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <kPC5e.12031$6k4.1044480@news20.bellglobal.com>
Source record: 19464
Cross-posted to:
alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.scanner,rec.radio.shortwave

"roger" <rogers.mail@ntlworld.com> wrote in message
news:bpB5e.16528$kr.5151@newsfe1-gui.ntli.net...
>A rating of 3 is still crap!

Not according to DXing.com who gave it 3: " A rating of 1 to 5 stars for the
model as a value on the used market.
HHHHH Excellent HHHH Very Good HHH Good HH Fair H Poor. "

That Panasonic RF-4900 you sold for €85.90 is rated by the same folks at 2
(HH) - that's closer to crap, but still 'Fair'. On Mar 30, you posted that
you wanted to swap it for a DX-394
http://groups.google.ca/groups?q=rogers.mail%40ntlworld.com&start=10&hl=en&lr=&selm=hZz2e.826%24wQ2.632%40newsfe5-gui.ntli.net&rnum=12 .
Sounds like an upgrade from a 'Fair' to a 'Good' value radio and
inconsistent with your expressed opinion.

The Kenwood R-2000 you were selling off in 2003 is rated at 4 (HHHH) by
DXing.com. That's 1H more than the DX-394 and it sells for 2-3 times the
price on the used market. Just a little less crappy, was it? ;-)

73, Tom

1932. Re: Great New DX-394 Mods & Website (DX-398/ATS-909/FRG-7 coming)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 21:48:25 UTC
From: roger <rogers.mail@ntlworld.com>
Message-ID: <J_C5e.16555$kr.9410@newsfe1-gui.ntli.net>
Source record: 19465
Cross-posted to:
alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.scanner,rec.radio.shortwave

Seems like you did rise to the bait then Tom
Just shows what a sad b*****d you really are, doesn't it. :-))
SW

"Tom Holden" <holden_family@sympatico.ca> wrote in message
news:kPC5e.12031$6k4.1044480@news20.bellglobal.com...
> "roger" <rogers.mail@ntlworld.com> wrote in message
> news:bpB5e.16528$kr.5151@newsfe1-gui.ntli.net...
>>A rating of 3 is still crap!
>
> Not according to DXing.com who gave it 3: " A rating of 1 to 5 stars for
> the model as a value on the used market.
> HHHHH Excellent HHHH Very Good HHH Good HH Fair H Poor. "
>
> That Panasonic RF-4900 you sold for £85.90 is rated by the same folks at 2
> (HH) - that's closer to crap, but still 'Fair'. On Mar 30, you posted that
> you wanted to swap it for a DX-394
> http://groups.google.ca/groups?q=rogers.mail%40ntlworld.com&start=10&hl=en&lr=&selm=hZz2e.826%24wQ2.632
%40newsfe5-gui.ntli.net&rnum=12 .
> Sounds like an upgrade from a 'Fair' to a 'Good' value radio and
> inconsistent with your expressed opinion.
>
> The Kenwood R-2000 you were selling off in 2003 is rated at 4 (HHHH) by
> DXing.com. That's 1H more than the DX-394 and it sells for 2-3 times the
> price on the used market. Just a little less crappy, was it? ;-)
>
> 73, Tom
>
>
>

1933. Re: The Season for needing Surge Protectors and Interference Filters is upon us.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-08 21:55:54 UTC
From: mikea@mikea.ath.cx
Message-ID: <d36ula$4l8$1@puck.litech.org>
Source record: 19466

American Technical Resources <knolla@american-technical-resources.com> wrote:
> The season for needing Surge Protectors and Interference Filters is upon
> us, purchase them before you need them, for peace of mind, protection
> and savings. We carry a wide array of surge protectors for all voltage
> requirements and signal interference conditions. Suggest to your friends
> and customers that "Surge protection doesn't cost......It Pays." Be
> prepared for your requirements and that of your customers.

[snip]

> Allen Knoll
> Technology Applications Engineer
> American Technical Resources
> 8 Stark Road
> Worcester, Massachusetts 01602
> www.american-technical-resources.com

And remember the Boulder Pledge, too: not to buy anything that is
advertised by spam.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

1934. Re: Great New DX-394 Mods & Website (DX-398/ATS-909/FRG-7 coming)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 00:52:34 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <115e9qpd78a7o08@corp.supernews.com>
Source record: 19467
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio

Never run into this problem before, I have a nicad charger that Ive used
for years and it charges AAA, AA, C, D, and 9 volt. Great little box.
Now I just received a pack of Ni-MH AA size and need to know if my nicad
charger will be ok to charge them? Will I do damage to the NiMHs?

Butch KF5DE

Tom Holden wrote:

> "Tom Holden" <holden_family@sympatico.ca> wrote in message
> news:xHA5e.10558$6k4.1031303@news20.bellglobal.com...
>
>>5. DXing.com Modern Shortwave Receiver Survey
>>DX-394 is below the DX-302 on the same page. Rating was increased from 1H
>>to 3H about Jan 28/2004.
>>http://www.dxing.com/rx/dx302.htm
>
>
> Correction: the rating was increased about Jan 28/2005, not 2004, correcting
> an obvious mistake. This longstanding, unsubstantiated 1H rating on
> DXing.com probably adversely affected the opinions of some uninformed
> individuals.
>
> Tom
>
>

1935. Re: MK484 single chip AM radio question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 01:38:46 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <115ecjmfj5pb7cd@corp.supernews.com>
Source record: 19468
Cross-posted to: sci.electronics.repair,rec.radio.amateur.homebrew,alt.binaries.schematics.electronic

"Chuck Harris" <cf-NO-SPAM-harris@erols.com> wrote in message
news:a7idndBatMl7AMvfRVn-sg@rcn.net...
> John Woodgate wrote:
> > I read in alt.binaries.schematics.electronic that Albert
<?@?.?.invalid>
> > wrote (in <1mn251h6aip5lcirupgoooumiaeh90krnr@4ax.com>) about 'MK484
> > single chip AM radio question', on Mon, 4 Apr 2005:
> >
> >> I hope to use the MK484 single chip AM radio at 20 kilohertz for a
> >> very low power receiver. The spec sheet says it only goes down to
150
> >> kilohertz however.
> >
> >
> > Is there any reason to suppose it contains a coupling capacitor or
> > something that would limit the low-frequency response? It seems
rather
> > unlikely. But the definitive test invokes a little-used technique in
> > these days of calculations and simulations. It's known as 'trying
it'. (;-)
> >
> > It isn't as if testing at 20 kHz is rocket science, after all.
>
> Since this is a superhet chip (IIRC), the problem is more likely one
of LO
> bleed through into the IF. The LO frequency would have to be on the
> high side of the receive frequency, so in this case, with a 455Khz IF,
> the LO would be at 475Khz. The LO signal bleeding through the IF
filter
> would probably be as strong, or stronger than the 20KHz signal you
were
> intending on receiving.

Two reasons for using an IF amp are to amplify a fixed freq even as the
receiver is tunes, and to amplify a lower freq so that the bandwidth is
narrower. But since neither of these is necessary, it makes less sense
to upconvert to 455kHz, or to use 455kHz as the IF.

So it seems more logical to reduce the IF amps to the receiving freq, by
padding the IF tuned circuit caps. There is one barrier though: you
can't pad a 455kHz ceramic filter.

> -Chuck

1936. WTB: SMALL TRANSFORMER

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 02:04:44 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <0LG5e.543457$w62.392614@bgtnsc05-news.ops.worldnet.att.net>
Source record: 19469
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Looking for a small transformer rated at 125-130 output @ 40-100 ma and
6.3v as well. Need for small project. Used ok if good. tnx heytubeguy

1937. Re: Great New DX-394 Mods & Website (DX-398/ATS-909/FRG-7 coming)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 02:39:59 UTC
From: dplatt@radagast.org
Message-ID: <115eg3vnasfv96b@corp.supernews.com>
Source record: 19470
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio

In article <115e9qpd78a7o08@corp.supernews.com>,
Butch <lynyrd@cableone.net> wrote:

>Never run into this problem before, I have a nicad charger that Ive used
>for years and it charges AAA, AA, C, D, and 9 volt. Great little box.
>Now I just received a pack of Ni-MH AA size and need to know if my nicad
>charger will be ok to charge them? Will I do damage to the NiMHs?

As I understand it: NiMH batteries do "prefer" a somewhat different
charging regime than NiCd batteries - they're less tolerant of being
overcharged.

A NiCd "smart" charger will usually charge the batteries with a
constant current, and monitor the voltage across the battery. When
the batteries hit full charge, they begin to heat up, and the voltage
across them decreases somewhat. The charger will detect the voltage
drop (a "negative delta V") and shut off the charge. Fast chargers
usually include a temperature sensor, as well, and a failsafe timer.

NiMH batteries can be charged with a similar regime, but it's
apparently not a good idea to wait until the delta-V goes negative...
by that point the NiMH battery has heated up quite a bit, and that's
not good for its lifetime. A NiMH smart charger will cut off the
charge current when the voltage across the battery stops rising ("zero
delta V"), before the battery heats up very much.

NiCd batteries can be trickle-charged at a low rate, and I believe
I've read that this is not a good approach to use for NiMH batteries
(or, if you do it, the trickle current must be a good deal lower).

See if you can find the data sheet for the Maxim MAX712 and MAX713
charge controller chips - they have a lot of the details.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1938. Re: Crystal radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 04:21:25 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <115em20js358re1@corp.supernews.com>
Source record: 19471

Asimov wrote:
> "Tim Wescott" bravely wrote to "All" (05 Apr 05 09:26:07)
> --- on the heady topic of "Re: Crystal radio"
>
> TW> From: Tim Wescott <tim@wescottnospamdesign.com>
> TW> Xref: aeinews rec.radio.amateur.homebrew:9149
>
> TW> KA6PNL wrote:
>
> > Hi I have a friend that son wants to build a crystal radio. I seam to
> > remember that we grew our own crystal back in the early 60 any help?? Also
> > where can I find a 1n34 quick have 2 weeks for his science fair.
> >
> >
> TW> A silicon diode will work, it won't be as sensitive but you can get
> TW> one at the local Radio Shack (they carry germanium diodes off and on,
> TW> so they may have some).
>
> TW> If you're using germanium diodes get some spares -- I've found them
> TW> very susceptible to lightning strikes, at least in the circuit that my
> TW> son and I built.
>
>
> Why bother? Get a solar cell and power a radio with it. There is
> more than 900watts/metre^2 free energy right outside the window.
> (mumbling something about "idiots"...)
>
'cause crystal radios are more fun, and when your 10-year-old puts one
together he or she can understand each and every part in it (those
charge regulator IC's are kinda hard to grok when you're not firm on how
a diode works).

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

1939. Re: Crystal radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 04:35:11 UTC
From: Bill M <dontspamoleexray@coqui.net>
Message-ID: <115emrvk1anv291@corp.supernews.com>
Source record: 19472

Tim Wescott wrote:

> charge regulator IC's are kinda hard to grok when you're not firm on how
> a diode works).
>

Help out an oldster. What the heck does "grok" mean?

-Bill

1940. Re: Crystal radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 05:30:29 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <kqpe51dfr48760peroi9r0vdvtuilc3ehg@4ax.com>
Source record: 19473

On Sat, 09 Apr 2005 00:35:11 -0400, Bill M
<dontspamoleexray@coqui.net> wrote:

>Tim Wescott wrote:
>
>> charge regulator IC's are kinda hard to grok when you're not firm on how
>> a diode works).
>>
>
>Help out an oldster. What the heck does "grok" mean?
>
>-Bill

A word from Robert Heinlein's 1961 novel "Stranger in a Strange Land".
Rough meaning is to understand thoroughly and profoundly.

"As one character from Heinlein's novel says:

'Grok' means to understand so thoroughly that the observer becomes
a part of the observed - to merge, blend, intermarry, lose identity in
group experience. It means almost everything that we mean by religion,
philosophy, and science - and it means as little to us (because we are
from Earth) as color means to a blind man. "

From:
<http://whatis.techtarget.com/definition/0,,sid9_gci212216,00.html>

Happy trails,
Gary (net.yogi.bear)
--
At the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

1941. Re: Crystal radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 05:40:19 UTC
From: Bill M <dontspamoleexray@coqui.net>
Message-ID: <115eqm32oabkve8@corp.supernews.com>
Source record: 19474

Gary S. wrote:

> On Sat, 09 Apr 2005 00:35:11 -0400, Bill M
> <dontspamoleexray@coqui.net> wrote:
>
>
>>Tim Wescott wrote:
>>
>>
>>>charge regulator IC's are kinda hard to grok when you're not firm on how
>>>a diode works).
>>>
>>
>>Help out an oldster. What the heck does "grok" mean?
>>
>>-Bill
>
>
> A word from Robert Heinlein's 1961 novel "Stranger in a Strange Land".
> Rough meaning is to understand thoroughly and profoundly.
>
> "As one character from Heinlein's novel says:
>
> 'Grok' means to understand so thoroughly that the observer becomes
> a part of the observed - to merge, blend, intermarry, lose identity in
> group experience. It means almost everything that we mean by religion,
> philosophy, and science - and it means as little to us (because we are
> from Earth) as color means to a blind man. "
>
> From:
> <http://whatis.techtarget.com/definition/0,,sid9_gci212216,00.html>
>
> Happy trails,
> Gary (net.yogi.bear)

Well THAT explains it!

Thanks,

-Bill M

1942. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 11:31:08 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <115ffag8eqo8p28@corp.supernews.com>
Source record: 19475
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

<Albert> wrote in message
news:0s8b5190savvispr1ga5he5hih23dgm41k@4ax.com...
> Does anyone know how to measure or determine the wire size. I have
> tons of motors, solenoids, and similar items. I need some #24 wire and
> some #30 for a coil, but have to be sure regarding the wire diameter
> as it's a critical ap and the author of the article says 'don't
> substitute'.
>
> I know I can weigh it, provided it's not on a spool or motor winding
> already.
>
> My local electrical shop has a wire gauge, but it stops at 18 gauge.
>
> A microscope might work, but ones that have calibrated distance
> measuring on the eyepiece are expensive.
>
> Perhaps a milliohm meter might be able to measure the difference in
> resistance of a foot of it or so, but that's hardly a standard item
> either.
>
> Any suggestions?

I use either a dial calipers or a micrometer. But then the insulation
can make it sizeably larger than the value given in the wire tables.
The wire tables have a column which gives 'ohms per 1000 ft' which is
just another way of saying milliohms per foot. So if you measure ten
feet of 30 AWG it should measure 1.04 ohms. My cheap meter test leads
are something like .4 ohms, so it's really difficult to get any accuracy
at that low a resistance. I have a Leeds Northrup wheatstone bridge,
and it's not very good either at that low a resistance. So I put the
wire or whatever on a power supply and crank up the current to a quarter
amp, and then measure the V drop and calculate the resistance from that.

> Thanks,
>
> A

1943. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 11:36:20 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <115ffk78ocf354d@corp.supernews.com>
Source record: 19476
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Ian Stirling" <root@mauve.demon.co.uk> wrote in message
news:4255a86c$0$94508$ed2619ec@ptn-nntp-reader01.plus.net...
> In sci.electronics.design Albert <> wrote:
> > Does anyone know how to measure or determine the wire size. I have
> > tons of motors, solenoids, and similar items. I need some #24 wire
and
> > some #30 for a coil, but have to be sure regarding the wire diameter
> > as it's a critical ap and the author of the article says 'don't
> > substitute'.
>
> Micrometer.
> Vernier caliper may also work.
> Either under $30US.

I don't believe anyone uses vernier calipers anymore. I've got a Helios
dial caliper made a long time ago in Deutschland, but nowadays a caliper
with a LCD is probably a lot cheaper.

1944. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 11:42:05 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <115ffv13fo6lp8a@corp.supernews.com>
Source record: 19477
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Dave Platt" <dplatt@radagast.org> wrote in message
news:115ba7h4jis5k32@corp.supernews.com...
> >Does anyone know how to measure or determine the wire size. I have
> >tons of motors, solenoids, and similar items. I need some #24 wire
and
> >some #30 for a coil, but have to be sure regarding the wire diameter
> >as it's a critical ap and the author of the article says 'don't
> >substitute'.
>
> A cautionary note - if it's that critical, then re-using wire which
> has alread been wound might not be the best idea. You'd be starting
> with wire which had already been bent/flexed, and if you aren't
> careful this might put some kinks or irregularities in the winding of
> your new coil which might affect its impedance or Q.
>
> >I know I can weigh it, provided it's not on a spool or motor winding
> >already.
> >
> >My local electrical shop has a wire gauge, but it stops at 18 gauge.
> >
> >A microscope might work, but ones that have calibrated distance
> >measuring on the eyepiece are expensive.
>
> You might be able to do it with a vernier caliper.
>
> 24 gauge has a diameter of .511 mm or .0020"
>
> 30 gauge has a diameter of .255 mm or .001"

Man, are you _way_ off! By an order of magnitude! Put your glass on
and reread the wire tables.

> Every 3 gauge numbers corresponds to a 2:1 ratio in wire area (amount
> of copper). Every 6 gauge numbers corresponds to a 2:1 ratio in wire
> diameter.
>
> --
> Dave Platt <dplatt@radagast.org>
AE6EO
> Hosting the Jade Warrior home page:
http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

1945. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 11:54:14 UTC
From: Peter A Forbes <diesel@easynet.co.uk>
Message-ID: <mfgf51lf0dcnnb02kdltrlr4b6b2nv7a0m@4ax.com>
Source record: 19478
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Sat, 9 Apr 2005 04:36:20 -0700, "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com> wrote:

>
>"Ian Stirling" <root@mauve.demon.co.uk> wrote in message
>news:4255a86c$0$94508$ed2619ec@ptn-nntp-reader01.plus.net...
>> In sci.electronics.design Albert <> wrote:
>> > Does anyone know how to measure or determine the wire size. I have
>> > tons of motors, solenoids, and similar items. I need some #24 wire
>and
>> > some #30 for a coil, but have to be sure regarding the wire diameter
>> > as it's a critical ap and the author of the article says 'don't
>> > substitute'.
>>
>> Micrometer.
>> Vernier caliper may also work.
>> Either under $30US.
>
>I don't believe anyone uses vernier calipers anymore. I've got a Helios
>dial caliper made a long time ago in Deutschland, but nowadays a caliper
>with a LCD is probably a lot cheaper.
>

I do, got fed up with resetting the mechanical dial type through the rack and pinion becoming dirty, and electronics/robustness issues with electronic types.

Peter

1946. Re: The Season for needing Surge Protectors and Interference Filters is upon us.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 11:55:13 UTC
From: Bruce Fletcher <r1card1an@bt1nternet.c0m>
Message-ID: <d38fr1$q8d$1@hercules.btinternet.com>
Source record: 19479

American Technical Resources wrote:
> The season for needing Surge Protectors and Interference Filters is
> upon us

It might be true in your part of the world but not here in the UK.
--
Bruce Fletcher
Stronsay, Orkney UK
<www.stronsay.co.uk/claremont>

1947. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 11:57:50 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <pDZu4uN+M8VCFwfX@jmwa.demon.co.uk>
Source record: 19482
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

I read in sci.electronics.design that "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com> wrote (in <115ffk78ocf354d@corp.supernews.com>) about 'wire size question', on Sat, 9 Apr 2005:

>I don't believe anyone uses vernier calipers anymore. I've got a
>Helios dial caliper made a long time ago in Deutschland, but nowadays a
>caliper with a LCD is probably a lot cheaper.

In UK, you can get vernier calipers for around GBP1 (and mine check out as quite sufficiently accurate). LCD calipers are about GBP35.
--
Regards, John Woodgate, OOO - Own Opinions Only.
There are two sides to every question, except
'What is a Moebius strip?'
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1948. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 12:06:36 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <115fhd3suclv358@corp.supernews.com>
Source record: 19480
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

<LenAnderson@ieee.org> wrote in message
news:1112985620.147867.306410@g14g2000cwa.googlegroups.com...
> From: "Henry Kolesnik" on Thurs,Apr 7 2005 10:15 pm
>
> >Get a nice piece of smooth round rod and tightly wind a little over a
> lineal
> >inch of wire closely spaced as possible. Count the turns in one inch
> and
> >divide the number of turns into one inch and you'll have a very good
> >measurement without any cost.
> >
> >73
> >Hank WD5JFR
> >
> ><Albert> wrote in message
> news:0s8b5190savvispr1ga5he5hih23dgm41k@4ax.com...
> >> Does anyone know how to measure or determine the wire size. I have
> >> tons of motors, solenoids, and similar items. I need some #24 wire
> and
> >> some #30 for a coil, but have to be sure regarding the wire
diameter
> >> as it's a critical ap and the author of the article says 'don't
> >> substitute'.
> >>
> >> I know I can weigh it, provided it's not on a spool or motor
winding
> >> already.
> >>
> >> My local electrical shop has a wire gauge, but it stops at 18
gauge.
> >>
> >> A microscope might work, but ones that have calibrated distance
> >> measuring on the eyepiece are expensive.
> >>
> >> Perhaps a milliohm meter might be able to measure the difference in
> >> resistance of a foot of it or so, but that's hardly a standard item
> >> either.
> >>
> >> Any suggestions?
>
> A non-destructive measurement is best. Along about
> 1946 my middle school (we called it "junior high" back
> then) electric shop instructor demonstrated how to use

> a mechanical caliper and how NOT to squeeze too hard in
> doing so. Soft-drawn copper common to wire is fairly
> easy to squash when using a caliper. Using one requires
> a VERY light touch on the wire, just enough to be able
> to pull it slightly through the caliper jaws. Even so,
> pulling on soft-drawn copper wire is going to distort it
> slightly so the measurement is going to be on the small
> side. Snipping off ten or twenty short lengths, then
> measuring the total width and dividing by the number of
> lengths will be a bit better in accuracy.

HUH? What do you mean, Jellybean?

[snip]
> Just some practical thoughts after doing a bit of
> winding in my time...

Uh, yeah...

> LenAnderson@ieee.org

1949. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 12:10:25 UTC
From: Pooh Bear <rabbitsfriendsandrelations@hotmail.com>
Message-ID: <4257C630.666DAD8C@hotmail.com>
Source record: 19481
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Watson A.Name - \"Watt Sun, the Dark Remover\"" wrote:

> <Albert> wrote in message
> news:0s8b5190savvispr1ga5he5hih23dgm41k@4ax.com...
> > Does anyone know how to measure or determine the wire size. I have
> > tons of motors, solenoids, and similar items. I need some #24 wire and
> > some #30 for a coil, but have to be sure regarding the wire diameter
> > as it's a critical ap and the author of the article says 'don't
> > substitute'.
> >
> > I know I can weigh it, provided it's not on a spool or motor winding
> > already.
> >
> > My local electrical shop has a wire gauge, but it stops at 18 gauge.
> >
> > A microscope might work, but ones that have calibrated distance
> > measuring on the eyepiece are expensive.
> >
> > Perhaps a milliohm meter might be able to measure the difference in
> > resistance of a foot of it or so, but that's hardly a standard item
> > either.
> >
> > Any suggestions?
>
> I use either a dial calipers or a micrometer. But then the insulation
> can make it sizeably larger than the value given in the wire tables.
> The wire tables have a column which gives 'ohms per 1000 ft' which is
> just another way of saying milliohms per foot. So if you measure ten
> feet of 30 AWG it should measure 1.04 ohms. My cheap meter test leads
> are something like .4 ohms, so it's really difficult to get any accuracy
> at that low a resistance. I have a Leeds Northrup wheatstone bridge,
> and it's not very good either at that low a resistance. So I put the
> wire or whatever on a power supply and crank up the current to a quarter
> amp, and then measure the V drop and calculate the resistance from that.

I use that trick too. The only sensible way to measure a coil's winding R.

Graham

1950. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 12:15:15 UTC
From: Pooh Bear <rabbitsfriendsandrelations@hotmail.com>
Message-ID: <4257C753.8258F88D@hotmail.com>
Source record: 19483
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Watson A.Name - \"Watt Sun, the Dark Remover\"" wrote:

> "Ian Stirling" <root@mauve.demon.co.uk> wrote in message
> news:4255a86c$0$94508$ed2619ec@ptn-nntp-reader01.plus.net...
> > In sci.electronics.design Albert <> wrote:
> > > Does anyone know how to measure or determine the wire size. I have
> > > tons of motors, solenoids, and similar items. I need some #24 wire
> and
> > > some #30 for a coil, but have to be sure regarding the wire diameter
> > > as it's a critical ap and the author of the article says 'don't
> > > substitute'.
> >
> > Micrometer.
> > Vernier caliper may also work.
> > Either under $30US.
>
> I don't believe anyone uses vernier calipers anymore. I've got a Helios
> dial caliper made a long time ago in Deutschland, but nowadays a caliper
> with a LCD is probably a lot cheaper.

Ohhh... I assumed anyone serious would be using a Mitotuyo ? digital LCD
vernier caliper anyway. We certainly have one.

Graham

1951. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 13:36:36 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <pmlf51liibpc341vr755mj6ts5en80g93r@4ax.com>
Source record: 19484
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Sat, 9 Apr 2005 12:57:50 +0100, the renowned John Woodgate
<jmw@jmwa.demon.contraspam.yuk> wrote:

>I read in sci.electronics.design that "Watson A.Name - \"Watt Sun, the
>Dark Remover\"" <NOSPAM@dslextreme.com> wrote (in
><115ffk78ocf354d@corp.supernews.com>) about 'wire size question', on
>Sat, 9 Apr 2005:
>
>>I don't believe anyone uses vernier calipers anymore. I've got a
>>Helios dial caliper made a long time ago in Deutschland, but nowadays a
>>caliper with a LCD is probably a lot cheaper.
>
>In UK, you can get vernier calipers for around GBP1 (and mine check out
>as quite sufficiently accurate). LCD calipers are about GBP35.

You can get low-end LCD calipers in the US for the equivalent of about
GPB8 plus tax. For GPB1 (<$1.99) I think you'd get some stamped or
plastic item that would only be good to 0.01".

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

1952. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 13:55:07 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <TR4AseB769VCFwIx@jmwa.demon.co.uk>
Source record: 19485
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

I read in sci.electronics.design that Spehro Pefhany
<speffSNIP@interlogDOTyou.knowwhat> wrote (in
<pmlf51liibpc341vr755mj6ts5en80g93r@4ax.com>) about 'wire size
question', on Sat, 9 Apr 2005:

>You can get low-end LCD calipers in the US for the equivalent of about
>GPB8 plus tax. For GPB1 (<$1.99) I think you'd get some stamped or
>plastic item that would only be good to 0.01".

No, they are metal, and claim to measure to 0.001 inch, 0.02 mm. I've
checked mine against a good micrometer and it's as accurate as I can
read the vernier. YCCMV, of course.
--
Regards, John Woodgate, OOO - Own Opinions Only.
There are two sides to every question, except
'What is a Moebius strip?'
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1953. Power amp cooling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 15:17:56 UTC
From: Patrick <tk5ep@free.fr>
Message-ID: <4257f227$0$1961$626a14ce@news.free.fr>
Source record: 19486

Hi All,

I'm about to build a 4CX1500B amplifier for 2m.

Most, if not all, descriptions are blowing air into the enclosure on the base side of the tube and the air goes through the socket and finaly through the anode chimney.
For several reasons i would like to blow into the anode enclosure directly onto the anode, the air would then go out through the anode chimney. Only a small part of the air would cool the base of the tube through small holes in the anode/cathode separation.

Is that a stupid idea ? Is there any reason not doing so ?

73, Patrick

1954. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 15:37:09 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <115ftnqkcvc5j10@corp.supernews.com>
Source record: 19487
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"John Woodgate" <jmw@jmwa.demon.contraspam.yuk> wrote in message
news:pDZu4uN+M8VCFwfX@jmwa.demon.co.uk...
> I read in sci.electronics.design that "Watson A.Name - \"Watt Sun, the
> Dark Remover\"" <NOSPAM@dslextreme.com> wrote (in
> <115ffk78ocf354d@corp.supernews.com>) about 'wire size question', on
> Sat, 9 Apr 2005:
>
> >I don't believe anyone uses vernier calipers anymore. I've got a
> >Helios dial caliper made a long time ago in Deutschland, but nowadays
a
> >caliper with a LCD is probably a lot cheaper.
>
> In UK, you can get vernier calipers for around GBP1 (and mine check
out

For that cheap, you probably get plastic!
http://www.widgetsupply.com/page/WS/PROD/caliper-vernier/BET07

> as quite sufficiently accurate). LCD calipers are about GBP35.

These look like a good deal on your side of the pond.
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=20766&item=436984
3430&rd=1

> --
> Regards, John Woodgate, OOO - Own Opinions Only.
> There are two sides to every question, except
> 'What is a Moebius strip?'
> http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1955. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 15:47:43 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <DSx08kFfk$VCFwqa@jmwa.demon.co.uk>
Source record: 19489
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

I read in sci.electronics.design that "Watson A.Name - \"Watt Sun, the
Dark Remover\"" <NOSPAM@dslextreme.com> wrote (in
<115ftnqkcvc5j10@corp.supernews.com>) about 'wire size question', on
Sat, 9 Apr 2005:
>These look like a good deal on your side of the pond.
>http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=20766&item=436984
>3430&rd=1

No longer there.
--
Regards, John Woodgate, OOO - Own Opinions Only.
There are two sides to every question, except
'What is a Moebius strip?'
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1956. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 15:58:40 UTC
From: Michael <NoSpam@att.net>
Message-ID: <4257FBA6.B84FD22F@att.net>
Source record: 19488
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

LenAnderson@ieee.org wrote:
(snip)
> pulling on soft-drawn copper wire is going to distort it
> slightly so the measurement is going to be on the small
> side. Snipping off ten or twenty short lengths, then
> measuring the total width and dividing by the number of
> lengths will be a bit better in accuracy.
(snip)

Really? Hmmmm ...

1957. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 16:18:37 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <2nvf511q2knlan947dal1ujga3h7hve19g@4ax.com>
Source record: 19490
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Sat, 9 Apr 2005 16:47:43 +0100, John Woodgate
<jmw@jmwa.demon.contraspam.yuk> wrote:

>I read in sci.electronics.design that "Watson A.Name - \"Watt Sun, the
>Dark Remover\"" <NOSPAM@dslextreme.com> wrote (in
><115ftnqkcvc5j10@corp.supernews.com>) about 'wire size question', on
>Sat, 9 Apr 2005:
>>These look like a good deal on your side of the pond.
>>http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=20766&item=436984
>>3430&rd=1
>
>No longer there.

The link was too long and got broken.

Much better to enclose all links in <> brackets, which will still work
right even if split/word-wrapped into multiple lines. Works with all
of the browsers I have used.

For example:
<http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=20766&item=4369843430&rd=1>
for the item above, which works as Watson intended.

There are also options like tinyurl, but some do not trust that.

Happy trails,
Gary (net.yogi.bear)
--
At the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

1958. Recording Tape Mfgr Closed (was Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 16:21:43 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <115g0bd2knp4k3a@corp.supernews.com>
Source record: 19491
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Pooh Bear" <rabbitsfriendsandrelations@hotmail.com> wrote in message
news:4257C630.666DAD8C@hotmail.com...
> "Watson A.Name - \"Watt Sun, the Dark Remover\"" wrote:
>
> > <Albert> wrote in message
> > news:0s8b5190savvispr1ga5he5hih23dgm41k@4ax.com...
> > > Does anyone know how to measure or determine the wire size. I have
> > > tons of motors, solenoids, and similar items. I need some #24 wire
and
> > > some #30 for a coil, but have to be sure regarding the wire
diameter
> > > as it's a critical ap and the author of the article says 'don't
> > > substitute'.
> > >
> > > I know I can weigh it, provided it's not on a spool or motor
winding
> > > already.
> > >
> > > My local electrical shop has a wire gauge, but it stops at 18
gauge.
> > >
> > > A microscope might work, but ones that have calibrated distance
> > > measuring on the eyepiece are expensive.
> > >
> > > Perhaps a milliohm meter might be able to measure the difference
in
> > > resistance of a foot of it or so, but that's hardly a standard
item
> > > either.
> > >
> > > Any suggestions?
> >
> > I use either a dial calipers or a micrometer. But then the
insulation
> > can make it sizeably larger than the value given in the wire tables.
> > The wire tables have a column which gives 'ohms per 1000 ft' which
is
> > just another way of saying milliohms per foot. So if you measure
ten
> > feet of 30 AWG it should measure 1.04 ohms. My cheap meter test
leads
> > are something like .4 ohms, so it's really difficult to get any
accuracy

> > at that low a resistance. I have a Leeds Northrup wheatstone
bridge,
> > and it's not very good either at that low a resistance. So I put
the
> > wire or whatever on a power supply and crank up the current to a
quarter
> > amp, and then measure the V drop and calculate the resistance from
that.
>
> I use that trick too. The only sensible way to measure a coil's
winding R.

Long as it doesn't start glowing red. ;-)

Probably not such a good idea for measuring the series R of inductors.
Unless you run a Hi Power tape demagnetizer over it when you're done..

BTW, speaking of tapes.. I read that the company that made Irish and
Ampex tape has closed. Looks like everyone has been going to CD-Rs.

http://members4.boardhost.com/culturama/msg/3217.html

> Graham

1959. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 16:30:23 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <115g0rk6b927ab3@corp.supernews.com>
Source record: 19492
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Pooh Bear" <rabbitsfriendsandrelations@hotmail.com> wrote in message
news:4257C753.8258F88D@hotmail.com...
>
>
> "Watson A.Name - \"Watt Sun, the Dark Remover\"" wrote:
>
> > "Ian Stirling" <root@mauve.demon.co.uk> wrote in message
> > news:4255a86c$0$94508$ed2619ec@ptn-nntp-reader01.plus.net...
> > > In sci.electronics.design Albert <> wrote:
> > > > Does anyone know how to measure or determine the wire size. I
have
> > > > tons of motors, solenoids, and similar items. I need some #24
wire
> > and
> > > > some #30 for a coil, but have to be sure regarding the wire
diameter
> > > > as it's a critical ap and the author of the article says 'don't
> > > > substitute'.
> > >
> > > Micrometer.
> > > Vernier caliper may also work.
> > > Either under $30US.
> >
> > I don't believe anyone uses vernier calipers anymore. I've got a
Helios
> > dial caliper made a long time ago in Deutschland, but nowadays a
caliper
> > with a LCD is probably a lot cheaper.
>
> Ohhh... I assumed anyone serious would be using a Mitotuyo ? digital
LCD
> vernier caliper anyway. We certainly have one.

I'm trying to figure out why they would be called vernier when they have
a LCD display.

> Graham

1960. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 16:34:52 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <115g141b0h9s193@corp.supernews.com>
Source record: 19493
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Spehro Pefhany" <speffSNIP@interlogDOTyou.knowwhat> wrote in message
news:pmlf51liibpc341vr755mj6ts5en80g93r@4ax.com...
> On Sat, 9 Apr 2005 12:57:50 +0100, the renowned John Woodgate
> <jmw@jmwa.demon.contraspam.yuk> wrote:
>
> >I read in sci.electronics.design that "Watson A.Name - \"Watt Sun,
the
> >Dark Remover\"" <NOSPAM@dslextreme.com> wrote (in
> ><115ffk78ocf354d@corp.supernews.com>) about 'wire size question', on
> >Sat, 9 Apr 2005:
> >
> >>I don't believe anyone uses vernier calipers anymore. I've got a
> >>Helios dial caliper made a long time ago in Deutschland, but
nowadays a
> >>caliper with a LCD is probably a lot cheaper.
> >
> >In UK, you can get vernier calipers for around GBP1 (and mine check
out
> >as quite sufficiently accurate). LCD calipers are about GBP35.
>
> You can get low-end LCD calipers in the US for the equivalent of about
> GPB8 plus tax. For GPB1 (<$1.99) I think you'd get some stamped or
> plastic item that would only be good to 0.01".

Zackly. The ones I've seen in stores don't go down to a thousandth.
Not to mention the jaws probably wear and/or get dimpled by the sharp
edges of objects, ruining the accuracy.

But at two bucks apiece, you just treat them as disposable and discard
them at the end of the day. ;-)

Unless, of course, you're a plastic surgeon using them to measure the
results of your liposuction machine. ;-))

> Best regards,
> Spehro Pefhany
> --
> "it's the network..." "The Journey is the
reward"
> speff@interlog.com Info for manufacturers:
http://www.trexon.com
> Embedded software/hardware/analog Info for designers:
http://www.speff.com

1961. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 16:38:31 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <115g1as1mafij53@corp.supernews.com>
Source record: 19494
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Michael" <NoSpam@att.net> wrote in message
news:4257FBA6.B84FD22F@att.net...
> LenAnderson@ieee.org wrote:
> (snip)
> > pulling on soft-drawn copper wire is going to distort it
> > slightly so the measurement is going to be on the small
> > side. Snipping off ten or twenty short lengths, then
> > measuring the total width and dividing by the number of
> > lengths will be a bit better in accuracy.
> (snip)
>
> Really? Hmmmm ...

Bumfuzzles me why you'd want to cut it up into a bunch of hard-to-handle
strands. Just wind it around a dowel as someone else suggested.

1962. Re: Power amp cooling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 17:38:04 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <avKdnTPCRIRjj8XfRVn-uA@comcast.com>
Source record: 19495

"Patrick" <tk5ep@free.fr> wrote in message
news:4257f227$0$1961$626a14ce@news.free.fr...
> Hi All,
>
> I'm about to build a 4CX1500B amplifier for 2m.
>
> Most, if not all, descriptions are blowing air into the enclosure on the
> base side of the tube and the air goes through the socket and finaly
> through the anode chimney.
> For several reasons i would like to blow into the anode enclosure directly
> onto the anode, the air would then go out through the anode chimney. Only
> a small part of the air would cool the base of the tube through small
> holes in the anode/cathode separation.
>
> Is that a stupid idea ? Is there any reason not doing so ?
>
> 73, Patrick

Patrick -

I would suggest that you look at the 6M DXpedition Amplifier designed by
Chris, G3WOS.
Great photographs and commentary on desire to stay portable, cooling
requirements and
overall compartment design of the amplifier. It may give you a few ideas.
He used a Eimac 3CX1500A7 (8877) tube.
http://www.gare.co.uk/amplifier/

For your tetrode 4CX1500B amplifier, I would strongly suggest using Ian
White's (G3SEK) control board:
http://www.ifwtech.co.uk/g3sek/boards/tetrode/tetrode-1.htm

Ian also has his 1997 QEX article available for reading on tetrode designs:
http://www.ifwtech.co.uk/g3sek/boards/tetrode/tetrode-3.htm

w9gb

1963. Re: SMALL TRANSFORMER

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 17:44:39 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <uZWdnWzLrvoVicXfRVn-sQ@comcast.com>
Source record: 19496
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

"Heytubeguy" <heytubeguy@worldnet.att.net> wrote in message
news:0LG5e.543457$w62.392614@bgtnsc05-news.ops.worldnet.att.net...
> Looking for a small transformer rated at 125-130 output @ 40-100 ma and
> 6.3v as well. Need for small project. Used ok if good. tnx heytubeguy
IF you find a junked Heahtkit IM-18 (or earlier of this series) VTVM ... it
had a transformer with about those ratings.

Greg

1964. Re: Power amp cooling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 18:03:31 UTC
From: Alfred Green <nu8i@cox.net>
Message-ID: <_LU5e.937$lv1.745@fed1read06>
Source record: 19497

Patrick enscribed:
> Hi All,
>
> I'm about to build a 4CX1500B amplifier for 2m.
>
> Most, if not all, descriptions are blowing air into the enclosure on the
> base side of the tube and the air goes through the socket and finaly
> through the anode chimney.
> For several reasons i would like to blow into the anode enclosure
> directly onto the anode, the air would then go out through the anode
> chimney. Only a small part of the air would cool the base of the tube
> through small holes in the anode/cathode separation.
>
> Is that a stupid idea ? Is there any reason not doing so ?
>
> 73, Patrick

No, not a stupid idea at all. That's the way I do it on my current
4CX800 2m amp, and I have used that method on several 4cx250 class amps
in previous years. I think its was popularized, if not initiated, by
K2RIW some decades ago in his classic 432 amp.
Three things to watch for:
1) make sure there is a good seal from the outer part of the plate
resonator to the outside world; I use 25mil teflon sheet as a chimney
with clamps made from brass strip.
2) ensure there is an exit in the grid compartment so that the air can
flow through adequately.
3) put some mesh on the blower inlet to the plate cavity, otherwise the
resonance will be affected by the fan rotation. Gives a subtle, but
noticeable AM buzz.

Good luck with the project.

73 Alf NU8I (aka G4ABB,ON8KL,VK6GA,PZ5AG, etc)
Scottsdale AZ DM43an

1965. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 18:32:49 UTC
From: Ian Stirling <root@mauve.demon.co.uk>
Message-ID: <42581fd1$0$63434$ed2e19e4@ptn-nntp-reader04.plus.net>
Source record: 19398
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

In sci.electronics.design "Watson A.Name - \"Watt Sun, the Dark Remover\""
<NOSPAM@dslextreme.com> wrote:
>
> "Ian Stirling" <root@mauve.demon.co.uk> wrote in message
> news:4255a86c$0$94508$ed2619ec@ptn-nntp-reader01.plus.net...
>> In sci.electronics.design Albert <> wrote:
>> > Does anyone know how to measure or determine the wire size. I have
>> > tons of motors, solenoids, and similar items. I need some #24 wire
> and
>> > some #30 for a coil, but have to be sure regarding the wire diameter
>> > as it's a critical ap and the author of the article says 'don't
>> > substitute'.
>>
>> Micrometer.
>> Vernier caliper may also work.
>> Either under $30US.
>
> I don't believe anyone uses vernier calipers anymore. I've got a Helios
> dial caliper made a long time ago in Deutschland, but nowadays a caliper
> with a LCD is probably a lot cheaper.

I do.

I haven't got a LCD one, but a magazine sends me one every year.
Ok, it's made of plastic, but it works fine, and is accurate enough for
me, seeming to be within about .05mm

I'd like an LCD one of course.

1966. Re: Power amp cooling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 19:45:11 UTC
From: yea right <spam@spam.spam>
Message-ID: <pan.2005.04.09.19.45.10.374417@spam.spam>
Source record: 19399

On Sat, 09 Apr 2005 17:17:56 +0200, Patrick wrote:

> Hi All,
>
> I'm about to build a 4CX1500B amplifier for 2m.
>
<snip>
> For several reasons i would like to blow into the anode enclosure directly
> onto the anode, the air would then go out through the anode chimney.
<snip>

Not sure if this matters but on the larger tubes, the cool air was needed to keep the tube contacts from heating. Also, there was an issue with heat buildup on the base of the tube due to the filaments.

The tubes I am talking about were the 3cx15k and larger in a broadcast environment so this could be moot.

1967. Re: Power amp cooling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 19:53:50 UTC
From: Patrick <tk5ep@free.fr>
Message-ID: <425832d2$0$23105$626a14ce@news.free.fr>
Source record: 19400

Hi Al,

OK, thanks for the ideas. My first guess was that i will have difficulties to find a blower that can give me enough pressure !

I think that there will be less back pressure than blowing all the air through the socket...

I want to maximize the RF shielding between anode and cathode, by leaving the smallest space possible in the socket. Doing this, the air would have some difficulties to travel through... I could also drill some holes at the other end of the cabinet, but that would reduce the useful air flow also !

I will have a look on K2RIW's amps. Tnx for the info.

btw, i want to make my amp as small and simple as possible.. I will use a cathode driven design with G2 grounded and plate resonator made by a simple 1 turn coil, no line, no PFTE, etc ... (seen on YU1AW's "lazy builder" page)

My actual concern is to find a simple but stable way to make a 10 pF HV variable cap. Berylium copper and/or vacuum caps are not common here on Corsica ! hi hi

73, Patrick. TK5EP.

Alfred Green a ï¿½crit :

>
> No, not a stupid idea at all. That's the way I do it on my current
> 4CX800 2m amp, and I have used that method on several 4cx250 class amps
> in previous years. I think its was popularized, if not initiated, by
> K2RIW some decades ago in his classic 432 amp.
> Three things to watch for:
> 1) make sure there is a good seal from the outer part of the plate
> resonator to the outside world; I use 25mil teflon sheet as a chimney
> with clamps made from brass strip.
> 2) ensure there is an exit in the grid compartment so that the air can
> flow through adequately.
> 3) put some mesh on the blower inlet to the plate cavity, otherwise the
> resonance will be affected by the fan rotation. Gives a subtle, but
> noticeable AM buzz.
>
> Good luck with the project.
>
> 73 Alf NU8I (aka G4ABB,ON8KL,VK6GA,PZ5AG, etc)

> Scottsdale AZ DM43an

1968. Re: The Season for needing Surge Protectors and Interference Filters is upon us.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 19:58:25 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <BtW5e.18953$pA6.11695@newsfe1-win.ntli.net>
Source record: 19401

> > The season for needing Surge Protectors and Interference Filters is
> > upon us
>
> It might be true in your part of the world but not here in the UK.
> --
> Bruce Fletcher
==========
You probably mean , NOT here on Stronsay.

Frank GM0CSZ / KN6WH Ross-shire

1969. Re: The Season for needing Surge Protectors and Interference Filters is upon us.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 20:10:05 UTC
From: Roger Conroy <rogerconroy@nospam.hotmail.com>
Message-ID: <d3ah7j$6ta$1@ctb-nnrp2.saix.net>
Source record: 19408

"Bruce Fletcher" <r1card1an@bt1nternet.c0m> wrote in message
news:d38fr1$q8d$1@hercules.btinternet.com...
> American Technical Resources wrote:
> > The season for needing Surge Protectors and Interference Filters is
> > upon us
>
> It might be true in your part of the world but not here in the UK.
> --
> Bruce Fletcher
> Stronsay, Orkney UK
> <www.stronsay.co.uk/claremont>

Same here - our thunderstorm season is ending now

73
Roger ZR3RC

1970. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 20:40:20 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <i6fg519t1kl79e3qttdm3r2c15i3q0mo23@4ax.com>
Source record: 19402
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On 09 Apr 2005 18:32:49 GMT, the renowned Ian Stirling
<root@mauve.demon.co.uk> wrote:

>In sci.electronics.design "Watson A.Name - \"Watt Sun, the Dark Remover\""
<NOSPAM@dslextreme.com> wrote:
>>
>> "Ian Stirling" <root@mauve.demon.co.uk> wrote in message
>> news:4255a86c$0$94508$ed2619ec@ptn-nntp-reader01.plus.net...
>>> In sci.electronics.design Albert <> wrote:
>>> > Does anyone know how to measure or determine the wire size. I have
>>> > tons of motors, solenoids, and similar items. I need some #24 wire
>> and
>>> > some #30 for a coil, but have to be sure regarding the wire diameter
>>> > as it's a critical ap and the author of the article says 'don't
>>> > substitute'.
>>>
>>> Micrometer.
>>> Vernier caliper may also work.
>>> Either under $30US.
>>
>> I don't believe anyone uses vernier calipers anymore. I've got a Helios
>> dial caliper made a long time ago in Deutschland, but nowadays a caliper
>> with a LCD is probably a lot cheaper.
>
>I do.
>
>I haven't got a LCD one, but a magazine sends me one every year.
>Ok, it's made of plastic, but it works fine, and is accurate enough for
>me, seeming to be within about .05mm
>
>I'd like an LCD one of course.

You should shell out the $20 or whatever then (or $100 and get a
Mitutoyo or other brand name with a bit better "feel"). I use mine all
the time- for rough (0.001") width, diameter, inside diameter
(rougher) and depth measurements. A micrometer is useful for precision
measurements, but less necessary for an EE.

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

1971. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 20:52:54 UTC
From: Ian Stirling <root@mauve.demon.co.uk>
Message-ID: <425840a6$0$94509$ed2619ec@ptn-nntp-reader01.plus.net>
Source record: 19403
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

In sci.electronics.design Spehro Pefhany <speffSNIP@interlogdotyou.knowwhat> wrote:
> On 09 Apr 2005 18:32:49 GMT, the renowned Ian Stirling
> <root@mauve.demon.co.uk> wrote:
>
>>In sci.electronics.design "Watson A.Name - \"Watt Sun, the Dark Remover\""
<NOSPAM@dslextreme.com> wrote:
>>>
>>> "Ian Stirling" <root@mauve.demon.co.uk> wrote in message
>>> news:4255a86c$0$94508$ed2619ec@ptn-nntp-reader01.plus.net...
>>>> In sci.electronics.design Albert <> wrote:
>>>> > Does anyone know how to measure or determine the wire size. I have
>>>> > tons of motors, solenoids, and similar items. I need some #24 wire
>>> and
>>>> > some #30 for a coil, but have to be sure regarding the wire diameter
>>>> > as it's a critical ap and the author of the article says 'don't
>>>> > substitute'.
>>>>
>>>> Micrometer.
>>>> Vernier caliper may also work.
>>>> Either under $30US.
>>>
>>> I don't believe anyone uses vernier calipers anymore. I've got a Helios
>>> dial caliper made a long time ago in Deutschland, but nowadays a caliper
>>> with a LCD is probably a lot cheaper.
>>
>>I do.
>>
>>I haven't got a LCD one, but a magazine sends me one every year.
>>Ok, it's made of plastic, but it works fine, and is accurate enough for
>>me, seeming to be within about .05mm
>>
>>I'd like an LCD one of course.
>
> You should shell out the $20 or whatever then (or $100 and get a
> Mitutoyo or other brand name with a bit better "feel"). I use mine all
> the time- for rough (0.001") width, diameter, inside diameter
> (rougher) and depth measurements. A micrometer is useful for precision
> measurements, but less necessary for an EE.

Unfortunately, $20 is quite a lot of money at the moment :/

I don't have any real need for it - I've got a 0-25mm micrometer, and
the plastic caliper fills in for the rest.

I don't have any tools that can maintain that sort of tollerance anyway,
so my need is less.

1972. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 21:08:59 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <figg515jr9ad7j17npt03ila4irnd11l61@4ax.com>
Source record: 19404
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On 09 Apr 2005 20:52:54 GMT, the renowned Ian Stirling
<root@mauve.demon.co.uk> wrote:

>In sci.electronics.design Spehro Pefhany <speffSNIP@interlogdotyou.knowwhat> wrote:
>> On 09 Apr 2005 18:32:49 GMT, the renowned Ian Stirling
>> <root@mauve.demon.co.uk> wrote:
>>
>>>In sci.electronics.design "Watson A.Name - \"Watt Sun, the Dark Remover\""
<NOSPAM@dslextreme.com> wrote:
>>>>
>>>> "Ian Stirling" <root@mauve.demon.co.uk> wrote in message
>>>> news:4255a86c$0$94508$ed2619ec@ptn-nntp-reader01.plus.net...
>>>>> In sci.electronics.design Albert <> wrote:
>>>>> > Does anyone know how to measure or determine the wire size. I have
>>>>> > tons of motors, solenoids, and similar items. I need some #24 wire
>>>> and
>>>>> > some #30 for a coil, but have to be sure regarding the wire diameter
>>>>> > as it's a critical ap and the author of the article says 'don't
>>>>> > substitute'.
>>>>>
>>>>> Micrometer.
>>>>> Vernier caliper may also work.
>>>>> Either under $30US.
>>>>
>>>> I don't believe anyone uses vernier calipers anymore. I've got a Helios
>>>> dial caliper made a long time ago in Deutschland, but nowadays a caliper
>>>> with a LCD is probably a lot cheaper.
>>>
>>>I do.
>>>
>>>I haven't got a LCD one, but a magazine sends me one every year.
>>>Ok, it's made of plastic, but it works fine, and is accurate enough for
>>>me, seeming to be within about .05mm
>>>
>>>I'd like an LCD one of course.
>>
>> You should shell out the $20 or whatever then (or $100 and get a
>> Mitutoyo or other brand name with a bit better "feel"). I use mine all
>> the time- for rough (0.001") width, diameter, inside diameter
>> (rougher) and depth measurements. A micrometer is useful for precision
>> measurements, but less necessary for an EE.
>
>Unfortunately, $20 is quite a lot of money at the moment :/

Mm.. 'kay. Hope things get better fast for you.

>I don't have any real need for it - I've got a 0-25mm micrometer, and
>the plastic caliper fills in for the rest.
>
>I don't have any tools that can maintain that sort of tollerance anyway,
>so my need is less.

You don't have a file? ;-) Just double-checking lead pitch etc. is
worth a lot by times.

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

1973. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 21:49:00 UTC
From: Ian Stirling <root@mauve.demon.co.uk>
Message-ID: <42584dcc$0$63437$ed2e19e4@ptn-nntp-reader04.plus.net>
Source record: 19405
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

In sci.electronics.design Spehro Pefhany <speffSNIP@interlogdotyou.knowwhat> wrote:
> On 09 Apr 2005 20:52:54 GMT, the renowned Ian Stirling
> <root@mauve.demon.co.uk> wrote:
>
>>In sci.electronics.design Spehro Pefhany <speffSNIP@interlogdotyou.knowwhat> wrote:
>>> On 09 Apr 2005 18:32:49 GMT, the renowned Ian Stirling
>>> <root@mauve.demon.co.uk> wrote:
>>>
>>>>In sci.electronics.design "Watson A.Name - \"Watt Sun, the Dark Remover\""
<NOSPAM@dslextreme.com> wrote:
>>>>>
>>>>> "Ian Stirling" <root@mauve.demon.co.uk> wrote in message
>>>>> news:4255a86c$0$94508$ed2619ec@ptn-nntp-reader01.plus.net...
>>>>>> In sci.electronics.design Albert <> wrote:
>>>>>> > Does anyone know how to measure or determine the wire size. I have
>>>>>> > tons of motors, solenoids, and similar items. I need some #24 wire
>>>>> and
>>>>>> > some #30 for a coil, but have to be sure regarding the wire diameter
>>>>>> > as it's a critical ap and the author of the article says 'don't
>>>>>> > substitute'.
>>>>>>
>>>>>> Micrometer.
>>>>>> Vernier caliper may also work.
>>>>>> Either under $30US.
>>>>>
>>>>> I don't believe anyone uses vernier calipers anymore. I've got a Helios
>>>>> dial caliper made a long time ago in Deutschland, but nowadays a caliper
>>>>> with a LCD is probably a lot cheaper.

>>>>I'd like an LCD one of course.
>>>
>>> You should shell out the $20 or whatever then (or $100 and get a
>>> Mitutoyo or other brand name with a bit better "feel"). I use mine all
>>> the time- for rough (0.001") width, diameter, inside diameter
>>> (rougher) and depth measurements. A micrometer is useful for precision
>>> measurements, but less necessary for an EE.
>>
>>Unfortunately, $20 is quite a lot of money at the moment :/
>
> Mm.. 'kay. Hope things get better fast for you.
>
>>I don't have any real need for it - I've got a 0-25mm micrometer, and
>>the plastic caliper fills in for the rest.

>>
>>I don't have any tools that can maintain that sort of tollerance anyway,
>>so my need is less.
>
> You don't have a file? ;-) Just double-checking lead pitch etc. is
> worth a lot by times.

True.
I don't really have that much that I need to hold accurate tollerances
for anyway.

The file is a much underestimated metalworking tool.

1974. Re: Crystal radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 22:19:53 UTC
From: Mike Coslo <mremovethiscoslo@adelphia.net>
Message-ID: <xK-dnb2QVtCayMXfRVn-qw@adelphia.com>
Source record: 19406

Bill M wrote:
> Gary S. wrote:
>
>> On Sat, 09 Apr 2005 00:35:11 -0400, Bill M
>> <dontspamoleexray@coqui.net> wrote:
>>
>>
>>> Tim Wescott wrote:
>>>
>>>
>>>> charge regulator IC's are kinda hard to grok when you're not firm on
>>>> how a diode works).
>>>>
>>>
>>> Help out an oldster. What the heck does "grok" mean?
>>>
>>> -Bill
>>
>>
>>
>> A word from Robert Heinlein's 1961 novel "Stranger in a Strange Land".
>> Rough meaning is to understand thoroughly and profoundly.
>>
>> "As one character from Heinlein's novel says:
>>
>> 'Grok' means to understand so thoroughly that the observer becomes
>> a part of the observed - to merge, blend, intermarry, lose identity in
>> group experience. It means almost everything that we mean by religion,
>> philosophy, and science - and it means as little to us (because we are
>> from Earth) as color means to a blind man. "
>>
>> From:
>> <http://whatis.techtarget.com/definition/0,,sid9_gci212216,00.html>
>>
>> Happy trails,
>> Gary (net.yogi.bear)
>
>
>
> Well THAT explains it!

And now you grok!

- Mike KB3EIA -

1975. Re: Recording Tape Mfgr Closed (was Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 22:37:39 UTC
From: mc <mc_no_spam@uga.edu>
Message-ID: <4258614d$1@mustang.speedfactory.net>
Source record: 19422
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Watson A.Name - "Watt Sun, the Dark Remover"" <NOSPAM@dslextreme.com> wrote
in message news:115g0bd2knp4k3a@corp.supernews.com...

> BTW, speaking of tapes.. I read that the company that made Irish and
> Ampex tape has closed. Looks like everyone has been going to CD-Rs.
>
> http://members4.boardhost.com/culturama/msg/3217.html

Who still makes audio recording tape? I thought Ampex was the last.

1976. Re: Recording Tape Mfgr Closed (was Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 22:42:16 UTC
From: mc <mc_no_spam@uga.edu>
Message-ID: <42586263$1@mustang.speedfactory.net>
Source record: 19421
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

They're not dead yet. See this:
http://www.wtvm.com/Global/story.asp?S=3126689&nav=8fapXvG5

1977. Re: Recording Tape Mfgr Closed (was Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-09 23:29:15 UTC
From: Michael <NoSpam@att.net>
Message-ID: <4258653A.45345A98@att.net>
Source record: 19407
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Watson A.Name - \"Watt Sun, the Dark Remover\"" wrote:
(snip)
> BTW, speaking of tapes.. I read that the company that made Irish and
> Ampex tape has closed. Looks like everyone has been going to CD-Rs.

No tears here about that demise. I haven't used Ampex tape since 1969, in Korea. We switched our three 12-track recorders to 3M tape because Ampex sandpapered the heads.

This old war horse finally went CD-R and CD-RW about a year ago. CD-RW is wonderful for PC HD backup. Can't bear to let go of my Teac 4010-SL r/r deck though. I bought it in Thailand in '71, used it until '81 or so, and then packed it in its original box. It's been used twice since then. Every once in a while I pull it out to show to some kid as an antique. :-)

1978. Re: The Season for needing Surge Protectors and Interference Filters is upon us.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-10 17:03:19 UTC
From: Bruce Fletcher <r1card1an@bt1nternet.c0m>
Message-ID: <d3bm8n$pe0$2@sparta.btinternet.com>
Source record: 19409

Highland Ham wrote:
>>>The season for needing Surge Protectors and Interference Filters is
>>>upon us
>>
>>It might be true in your part of the world but not here in the UK.
>>--
>>Bruce Fletcher
>
> ==========
> You probably mean , NOT here on Stronsay.
>
> Frank GM0CSZ / KN6WH Ross-shire
>

Frank,
Stronsay is part of the UK - or it was last time I looked. <g>
Bruce

1979. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-10 18:01:31 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d3bplr$8r1$1@titan.btinternet.com>
Source record: 19410
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

What wire gauge, if one at all, do metricated industrial countries use?

France, Germany, Russia, China, for example.

1980. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-10 18:21:15 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <z8zYXcbb6WWCFwmf@jmwa.demon.co.uk>
Source record: 19411
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

I read in sci.electronics.design that Reg Edwards
<g4fgq.regp@ZZZbtinternet.com> wrote (in
<d3bplr$8r1$1@titan.btinternet.com>) about 'wire size question', on Sun,
10 Apr 2005:
>What wire gauge, if one at all, do metricated industrial countries
>use?
>
>France, Germany, Russia, China, for example.
>
>
There is an IEC standard, IEC 60317-0-1, which specifies a range of
metric diameters for enamelled copper winding wires.
--
Regards, John Woodgate, OOO - Own Opinions Only.
There are two sides to every question, except
'What is a Moebius strip?'
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1981. Do DSPs (digital signal processors) really work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-11 02:45:02 UTC
From: straydog <advocacy@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.61.0504110234040.1747@sdf.lonestar.org>
Source record: 19412
Cross-posted to: rec.radio.amateur.boatanchors,rec.antiques.radio+phono,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

A ham friend told me that he heard that DSPs really work at least a little bit. He doesn't have one and neither do I (although many of the newer and more expensive rigs have them, and there are one or two outboard DSPs that are available that can be added to older rigs in some ways). I don't know all that they can do (auto null heterodynes? auto noise reduction [what kind of noise reduction?]? audio enhancement [or audio bandpass shaping] of some kind?) but if static crashes can be really removed or attenuated, that would be of use to me. Auto null of heterodynes would be nice on those occassions when tuner-uppers decide to tune up on my frequency in which I am already in two way contact with others (on ssb phone). And, maybe there are some other useful characteristics I don't know about. But, are these really effective? For example, a 20 db heterodyne null is not much. Nulls have to be about 50-60 db to be useful.

I'll take any kind of comments, suggestions, refernces to testing, or personal experience, pro & con recomendations, ...anything...

Art, W4PON

1982. Re: Do DSPs (digital signal processors) really work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-11 03:05:23 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <TPl6e.2130$MZ2.243817@news20.bellglobal.com>
Source record: 19413
Cross-posted to: rec.radio.amateur.boatanchors,rec.antiques.radio+phono,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

There are some good demos at
http://www.radio.bhinstrumentation.co.uk/html/demonstration.html . I have a
cheap Radio Shack DSP40 that performs at the lower end of the scale as far
as these go. It does a remarkable job of multiple heterodyne reduction and
selectable audio passband but its noise blanker is next to useless and it
does not do noise reduction other than through selectivity.

Tom

"straydog" <advocacy@sdf.lonestar.org> wrote in message
news:Pine.NEB.4.61.0504110234040.1747@sdf.lonestar.org...
>
> A ham friend told me that he heard that DSPs really work at least a little
> bit. He doesn't have one and neither do I (although many of the newer and
> more expensive rigs have them, and there are one or two outboard DSPs that
> are available that can be added to older rigs in some ways). I don't know
> all that they can do (auto null heterodynes? auto noise reduction [what
> kind of noise reduction?]? audio enhancement [or audio bandpass shaping]
> of some kind?) but if static crashes can be really removed or attenuated,
> that would be of use to me. Auto null of heterodynes would be nice on
> those
> occassions when tuner-uppers decide to tune up on my frequency in which I
> am already in two way contact with others (on ssb phone). And, maybe there
> are some other useful characteristics I don't know about. But, are these
> really effective? For example, a 20 db heterodyne null is not much. Nulls
> have to be about 50-60 db to be useful.
>
> I'll take any kind of comments, suggestions, refernces to testing, or
> personal experience, pro & con recomendations, ...anything...
>
> Art, W4PON
>
>
>

1983. Re: Do DSPs (digital signal processors) really work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-11 03:36:11 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4259F0A8.BCA7B8D8@earthlink.net>
Source record: 19414
Cross-posted to: rec.radio.amateur.boatanchors,rec.antiques.radio+phono,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Tom Holden wrote:
>
> There are some good demos at
> http://www.radio.bhinstrumentation.co.uk/html/demonstration.html . I have a
> cheap Radio Shack DSP40 that performs at the lower end of the scale as far
> as these go. It does a remarkable job of multiple heterodyne reduction and
> selectable audio passband but its noise blanker is next to useless and it
> does not do noise reduction other than through selectivity.
>
> Tom

The performance of a DSP is very dependant on the software it runs
under.

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

1984. Re: Do DSPs (digital signal processors) really work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-11 05:29:59 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <425a0b57$0$292$cc9e4d1f@news-text.dial.pipex.com>
Source record: 19415
Cross-posted to: rec.radio.amateur.boatanchors,rec.antiques.radio+phono,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

http://www.geocities.com/leon_heller
"straydog" <advocacy@sdf.lonestar.org> wrote in message
news:Pine.NEB.4.61.0504110234040.1747@sdf.lonestar.org...
>
> A ham friend told me that he heard that DSPs really work at least a little
> bit. He doesn't have one and neither do I (although many of the newer and
> more expensive rigs have them, and there are one or two outboard DSPs that
> are available that can be added to older rigs in some ways). I don't know
> all that they can do (auto null heterodynes? auto noise reduction [what
> kind of noise reduction?]? audio enhancement [or audio bandpass shaping]
> of some kind?) but if static crashes can be really removed or attenuated,
> that would be of use to me. Auto null of heterodynes would be nice on
> those
> occassions when tuner-uppers decide to tune up on my frequency in which I
> am already in two way contact with others (on ssb phone). And, maybe there
> are some other useful characteristics I don't know about. But, are these
> really effective? For example, a 20 db heterodyne null is not much. Nulls
> have to be about 50-60 db to be useful.
>
> I'll take any kind of comments, suggestions, refernces to testing, or
> personal experience, pro & con recomendations, ...anything...

If they didn't work, none of the current military radio systems would be any use - they all use DSP! I've designed an audio processing DSP system using one of the new dsPIC devices and a codec - just two small chips. The codec includes a mic pre-amp and headphone amp.

73, Leon

1985. Re: Do DSPs (digital signal processors) really work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-11 08:16:07 UTC
From: K4YZ <k4yz@aol.com>
Message-ID: <1113207367.943385.55120@l41g2000cwc.googlegroups.com>
Source record: 19416
Cross-posted to: rec.radio.amateur.boatanchors,rec.antiques.radio+phono,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

straydog wrote:
> A ham friend told me that he heard that DSPs really work at least a
little
> bit.

Snip to...

> I'll take any kind of comments, suggestions, refernces to testing, or

> personal experience, pro & con recomendations, ...anything...

I've not had a lot of opportunity to use DSP for Amateur
applications, however I have used it in the Icom IC-718 for Civil Air
Patrol applications.

Several of CAP's 4mHz frequencies suffer from foreign hetrodynes
and other ectopics. The DSP has been over 90% effective in making the
channel "usable".

73

Steve, K4YZ
(TennesseeCAP 250)

1986. ** FLEA at MIT ** Sunday April 17th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-11 10:20:00 UTC
From: w1gsl@mit.edu
Message-ID: <425a4f50$0$580$b45e6eb0@senator-bedfellow.mit.edu>
Source record: 19417
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

This coming Sunday.... The seasons first....

+++ Now even more Buyers Parking !!!
Thanks to TKT we have use of their new parking lot
across Albany St from the SWAPFEST !!!

!! ** More Buyers PARKING is available ** for details see
http://web.mit.edu/w1gsl/Public/flyer

*** !!!! In our Traditional GARAGE and the adjacent lot !!!! ****
so come rain or shine or super heat the Flea is on !!!

********* $1 buyers discount with hardcopy of this notice ********

COMPUTERS - ELECTRONICS - HAM RADIO - COMPUTERS - ELECTRONICS - HAM RADIO

FLEA all SUMMER at MIT
Sunday April 17th 2005
9AM-2PM

Come to the city for a great flea - plenty of free parking.

MIT's electronics and ham radio flea will take
place on the third Sunday of each month this summer,
April thru October.

There is tailgate space for over 600 sellers and
free, off-street parking for >2000 cars!

Buyers admission is $5 (you get $1 off if
you're lucky enough to have a copy of our ad)
and sellers spaces are $20 for the first and
$15 for each additional at the gate.

The flea will be held at the corner of Albany and
Main streets in Cambridge; right in the Kendall
Square area from 9AM to 2PM, with sellers set-up
time starting at 7AM.

SEASON PASS + Advance Seller Discount

A sellers discount season pass is available which
offers a 30% discount. By prepaying you get a
discount and earlier admission. See the registration form.

*** Attention Sellers ***
Prepaid vendors.. Season Pass or monthly,

will be admitted FIRST.
Separate lines will form prior to gate opening
for prepaid and nonprepaid vendors

!! RAIN or SHINE !! Have no fear of rain, a covered
well illuminated tailgate area is available for all
sellers (6'8" clearance).

Talk-in: 145.23- (PL 88.5) W1BOS/R and
W1XM/R-449.725/444.725 (PL 114.8/2A).

Sponsors: MIT Electronics Research Society
MIT UHF Repeater Association (W1XM)
MIT Radio Society (W1MX)
Harvard Wireless Club (W1AF)

For more info / advanced reservations 617 253 3776

********** $1 buyers discount with hard copy of this notice ************

<<<<<<<<<<<<<<<<<<<<<<< cut here >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

Mail the coupon below by the 5th of the month to be a Prepaid Vendor.

FLEA at MIT 2005 Rates

SELLERS

To use your prepaid spaces the named vendor MUST be present.
Rates include one admission per space.

Season Pass Sellers admission to all seven meets this year
$99 First Space
$70 Each Additional space
Must be received by April 17th.

Advance $17 First space - includes $10 Cambridge Vendor License
$12 Additional Spaces
Must be received by the 5th of the month.

Gate Admission $20 First Space - includes $10 Cambridge Vendor License
$15 Additional Spaces
Admission is after the prepaid vendors

Early Bird Buyer -Admission after the prepaid vendor line is admitted. ~ 7:15AM
** You may not sell. **
$15 per person at the gate.

****************************** cut here ******************************

FLEA at MIT 2005 Advance Space Application

____April ____May ____June ____ July ____Aug ___Sept ____Oct
@ $17 for the first each month + $12 each additional
____ Season Pass $99 first space $70 each additional

Name _____ Call _____ $ Included_____

Address _____ Phone _____ Make Check to
The MIT Radio Society
City _____ State _____ Zip _____ PO Box 397082
Cambridge MA 02139
E-mail _____

****
Steve Finberg W1GSL w1gsl@mit.edu
PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754
****

1987. Re: Do DSPs (digital signal processors) really work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-11 11:05:37 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <9Ss6e.4602$xN.3842@fe05.lga>
Source record: 19418
Cross-posted to: rec.radio.amateur.boatanchors,rec.antiques.radio+phono,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"straydog" <advocacy@sdf.lonestar.org> wrote in message
news:Pine.NEB.4.61.0504110234040.1747@sdf.lonestar.org...

> A ham friend told me that he heard that DSPs really work at least a little

Of course they work. How well, as Michael points out, depends on the
software.

> are available that can be added to older rigs in some ways). I don't know
> all that they can do (auto null heterodynes? auto noise reduction [what

DSPs can be programmed to do almost anything, but in amateur radios, they
generally are used to reduce noise and null hetrodynes.

> of some kind?) but if static crashes can be really removed or attenuated,

In general, the point of DSPs tends not to be to remove static crashes.
Some of the newer noise blankers are, in fact, processors that might be hard
to distinguish from DSPs. They tend to do a very good job on pulse noise,
but I haven't tripped across any that are even decent on static crashes.

> really effective? For example, a 20 db heterodyne null is not much. Nulls
> have to be about 50-60 db to be useful.

Remember, these things are software rather than filters. The stronger the
heterodyne, the easier it is for the software to recognize it.
Unfortunately, it's not magic. A really strong heterodyne is going to be
driving your AGC and perhaps overloading some amps in your chain, so it
isn't like it magically disappears with no other effect. Still, very often
the DSP can make life more pleasant in the presence of lids.

..

1988. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-11 19:18:17 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.04.11.19.18.20.11540@example.net>
Source record: 19419
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On Sat, 09 Apr 2005 09:30:23 -0700, Watson A.Name - "Watt Sun, the Dark
Remover" wrote:

>
> "Pooh Bear" <rabbitsfriendsandrelations@hotmail.com> wrote in message
> news:4257C753.8258F88D@hotmail.com...
>>
>>
>> "Watson A.Name - \"Watt Sun, the Dark Remover\"" wrote:
>>
>> > "Ian Stirling" <root@mauve.demon.co.uk> wrote in message
>> > news:4255a86c$0$94508$ed2619ec@ptn-nntp-reader01.plus.net...
>> > > In sci.electronics.design Albert <> wrote:
>> > > > Does anyone know how to measure or determine the wire size. I
> have
>> > > > tons of motors, solenoids, and similar items. I need some #24
> wire
>> > and
>> > > > some #30 for a coil, but have to be sure regarding the wire
> diameter
>> > > > as it's a critical ap and the author of the article says 'don't
>> > > > substitute'.
>> > >
>> > > Micrometer.
>> > > Vernier caliper may also work.
>> > > Either under $30US.
>> >
>> > I don't believe anyone uses vernier calipers anymore. I've got a
> Helios
>> > dial caliper made a long time ago in Deutschland, but nowadays a
> caliper
>> > with a LCD is probably a lot cheaper.
>>
>> Ohhh... I assumed anyone serious would be using a Mitotuyo ? digital
> LCD
>> vernier caliper anyway. We certainly have one.
>
> I'm trying to figure out why they would be called vernier when they have a
> LCD display.
>

To distingush it from a micrometer caliper at one end of the tool
spectrum, and a monkey wrench at the other. ;-)

Cheers!
Rich

1989. FS. TOWER_MOTOR_ROTOR_FOLD_OVER_SELF_SUPPORTING

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-12 00:35:12 UTC
From: ME <aeschelon@hotmail.com>
Message-ID: <sg5m5116s6d85fh49rph2hti8sp4irpbof@4ax.com>
Source record: 19420
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

It is with great misgivings that I am about to sell my
precious tower.

I am moving and also getting older and not going to put up
the tower at he new location.

I have a Telex 55 foot, fold-over, MOTORIZED,
self-supporting tower that is in excellent shape. This is a
SERIOUSLY HEAVY-DUTY TOWER.

This has a commercially built rotor control box that
controls a prop pitch motor that would turn a tank. The
prop-pitch motor is included and already mounted. For a few
bucks more, I will include the t-6061 mast and even a
fiberglass cross-mast.

This jewel is in my backyard and is currently up.

After I take it down, it will be ready to put up and get on
the air. I have everything with it including the in-shack
control box (HAM_M).

I NEED TO DETERMINE if anyone is seriously interested in
this because I have other things that I need to do rather
than take down a tower that there is not a serious prospect
for.

The tower is in Houston, Texas but is well worth a drive to
Texas

I am expecting to offer this for around $2500.00 FIRM.

Thanks

reply to aeschelon@hotmail.com

1990. Re: Do DSPs (digital signal processors) really work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-12 13:23:51 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <425bcbe8$0$20415$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 19424

Noise blankers tend to work best if the noise gate is derived from a
broadband signal, separate to the wanted signal. No amount of DSP magic
will help if the signal is already bandlimited
The Linrad page at http://www.nitehawk.com/sm5bsz/linuxdsp/linrad.htm

discusses this in detail.

R

Tom Holden wrote:
> There are some good demos at
> http://www.radio.bhinstrumentation.co.uk/html/demonstration.html . I have a
> cheap Radio Shack DSP40 that performs at the lower end of the scale as far
> as these go. It does a remarkable job of multiple heterodyne reduction and
> selectable audio passband but its noise blanker is next to useless and it
> does not do noise reduction other than through selectivity.
>
> Tom
>
> "straydog" <advocacy@sdf.lonestar.org> wrote in message
> news:Pine.NEB.4.61.0504110234040.1747@sdf.lonestar.org...
>
>>A ham friend told me that he heard that DSPs really work at least a little
>>bit. He doesn't have one and neither do I (although many of the newer and
>>more expensive rigs have them, and there are one or two outboard DSPs that
>>are available that can be added to older rigs in some ways). I don't know
>>all that they can do (auto null heterodynes? auto noise reduction [what
>>kind of noise reduction?]? audio enhancement [or audio bandpass shaping]
>>of some kind?) but if static crashes can be really removed or attenuated,
>>that would be of use to me. Auto null of heterodynes would be nice on
>>those
>>occassions when tuner-uppers decide to tune up on my frequency in which I
>>am already in two way contact with others (on ssb phone). And, maybe there
>>are some other useful characteristics I don't know about. But, are these
>>really effective? For example, a 20 db heterodyne null is not much. Nulls
>>have to be about 50-60 db to be useful.
>>
>>I'll take any kind of comments, suggestions, refernces to testing, or
>>personal experience, pro & con recomendations, ...anything...
>>
>>Art, W4PON
>>
>>
>>
>

>
>

1991. Re: Do DSPs (digital signal processors) really work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-12 13:33:03 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <j6Q6e.12128$8Z6.10902@attbi_s21>
Source record: 19423

In-band noise blankers can do a pretty good job at lower cost and less complexity if they are designed properly. The book "HF Radio Systems and Circuits" from Noble Publishing, also available from ARRL as item 7253, has some material and references on this subject.

Bill W0IYH

"Richard Hosking" <richardh@iinet.net.au> wrote in message news:425bcbe8$0$20415$5a62ac22@per-qv1-newsreader-01.iinet.net.au...
> Noise blankers tend to work best if the noise gate is derived from a
> broadband signal, separate to the wanted signal. No amount of DSP magic
> will help if the signal is already bandlimited
> The Linrad page at http://www.nitehawk.com/sm5bsz/linuxdsp/linrad.htm
>
> discusses this in detail.
>
> R
>
> Tom Holden wrote:
>> There are some good demos at
>> http://www.radio.bhinstrumentation.co.uk/html/demonstration.html . I have
>> a cheap Radio Shack DSP40 that performs at the lower end of the scale as
>> far as these go. It does a remarkable job of multiple heterodyne
>> reduction and selectable audio passband but its noise blanker is next to
>> useless and it does not do noise reduction other than through
>> selectivity.
>>
>> Tom
>>
>> "straydog" <advocacy@sdf.lonestar.org> wrote in message
>> news:Pine.NEB.4.61.0504110234040.1747@sdf.lonestar.org...
>>
>>>A ham friend told me that he heard that DSPs really work at least a
>>>little bit. He doesn't have one and neither do I (although many of the
>>>newer and more expensive rigs have them, and there are one or two
>>>outboard DSPs that are available that can be added to older rigs in some
>>>ways). I don't know all that they can do (auto null heterodynes? auto
>>>noise reduction [what kind of noise reduction?]? audio enhancement [or
>>>audio bandpass shaping] of some kind?) but if static crashes can be
>>>really removed or attenuated,
>>>that would be of use to me. Auto null of heterodynes would be nice on
>>>those
>>>occassions when tuner-uppers decide to tune up on my frequency in which I
>>>am already in two way contact with others (on ssb phone). And, maybe
>>>there are some other useful characteristics I don't know about. But, are

>>>these really effective? For example, a 20 db heterodyne null is not much.
>>>Nulls have to be about 50-60 db to be useful.
>>>
>>>I'll take any kind of comments, suggestions, refernces to testing, or
>>>personal experience, pro & con recomendations, ...anything...
>>>
>>>Art, W4PON
>>>
>>>
>>>
>>
>>

1992. Re: Do DSPs (digital signal processors) really work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-12 18:55:08 UTC
From: Peter Barbella <nonobar@verizon.net>
Message-ID: <gQU6e.14294$nH4.4122@trndny05>
Source record: 19425
Cross-posted to: rec.radio.amateur.boatanchors,rec.antiques.radio+phono,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Isn't the effectiveness of DSP critically dependent upon the A/D converter;
its dynamic range, it's number of bits and it's sampling speed?

Pete
KB1LZH

"straydog" <advocacy@sdf.lonestar.org> wrote in message
news:Pine.NEB.4.61.0504110234040.1747@sdf.lonestar.org...
>
> A ham friend told me that he heard that DSPs really work at least a little
> bit. He doesn't have one and neither do I (although many of the newer and
> more expensive rigs have them, and there are one or two outboard DSPs that
> are available that can be added to older rigs in some ways). I don't know
> all that they can do (auto null heterodynes? auto noise reduction [what
> kind of noise reduction?]? audio enhancement [or audio bandpass shaping]
> of some kind?) but if static crashes can be really removed or attenuated,
> that would be of use to me. Auto null of heterodynes would be nice on
> those
> occassions when tuner-uppers decide to tune up on my frequency in which I
> am already in two way contact with others (on ssb phone). And, maybe there
> are some other useful characteristics I don't know about. But, are these
> really effective? For example, a 20 db heterodyne null is not much. Nulls
> have to be about 50-60 db to be useful.
>
> I'll take any kind of comments, suggestions, refernces to testing, or
> personal experience, pro & con recomendations, ...anything...
>
> Art, W4PON
>
>
>

1993. Thanks to all who responded....was: Re: Do DSPs (digital signal processors) really work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-12 19:13:42 UTC
From: straydog <advocacy@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.61.0504121859030.3428@ukato.freeshell.org>
Source record: 19426
Cross-posted to: rec.radio.amateur.boatanchors,rec.antiques.radio+phono,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Re: Peter's comment below; I don't know enough about DSPs to answer. I got a few ideas and notions from all that responded. Me? I was most interested to learn whether any DSPs could do noise reduction of any kind. Heterodyne from lid tuner-uppers would be nice, too, and so would passband width and position.

I did google "DSP & ham radio" and quite a bit came up and it will take me some time to check out enough to figure out if it might be worth chucking out $200+ on a decent outboard unit (I can't justify laying out a big chunk of money on a really modern xcvr with built in DSP just for those relatively rare moments when I have pulse noise, hash noise, or a heterodyne, or someone with spillover from an adjacent frequency), so I need something that works pretty good. One guy said there is no "magic" meaning to me that maybe I should not expect rabbits to come out of hats easily and quickly. My friend with whom I have weekly ragchew ssb QSOs told me that just putting on headphones helped him read me when I was weak and his noise level was high. Also, it helped him a lot when I bought a linear and went from barefoot to four 811As. But, if a nearby QSO starts and thier audio is broad, the spillover can be annoying if they are stronger. Thus, if I could "DSP" a narrower passband and shift the frequency (or at least shift the "knee"), that might be useful.

Regarding efficacy, I remember back some 3-4 decades ago they were coming out with audio compandors that "compressed" 2.5+ khz of audio bandwidth into a signal about 1.2 khz wide, thus saving bandwidth but the gadgets never caught on bigtime and some gossip said that the extra "audio punch" and thus power boost (3 db-ish) really didn't end up doing that much. So, that is one example of a fancy-schmantzy gadget that didn't last long. This new PSK-31 audio jazz is also out there (the box is about $500 ?) and you need one at both ends of the voice QSO and I have not yet heard many of them (the review said that if the signal drops too low, the voice info just stops coming through the speaker, so it has its caveats, too).

Again, thanks to all those who made comments.

Art, W4PON

======= no change to below, included for reference and context ====
On Tue, 12 Apr 2005, Peter Barbella wrote:

> Date: Tue, 12 Apr 2005 18:55:08 GMT
> From: Peter Barbella <nonobar@verizon.net>
> Newsgroups: rec.radio.amateur.boatanchors, rec.antiques.radio+phono,

> rec.radio.amateur.equipment, rec.radio.amateur.homebrew,
> rec.radio.amateur.policy
> Subject: Re: Do DSPs (digital signal processors) really work?
>
> Isn't the effectiveness of DSP critically dependent upon the A/D converter;
> its dynamic range, it's number of bits and it's sampling speed?
>
> Pete
> KB1LZH
>
>
> "straydog" <advocacy@sdf.lonestar.org> wrote in message
> news:Pine.NEB.4.61.0504110234040.1747@sdf.lonestar.org...
>>
>> A ham friend told me that he heard that DSPs really work at least a little
>> bit. He doesn't have one and neither do I (although many of the newer and
>> more expensive rigs have them, and there are one or two outboard DSPs that
>> are available that can be added to older rigs in some ways). I don't know
>> all that they can do (auto null heterodynes? auto noise reduction [what
>> kind of noise reduction?]? audio enhancement [or audio bandpass shaping]
>> of some kind?) but if static crashes can be really removed or attenuated,
>> that would be of use to me. Auto null of heterodynes would be nice on
>> those
>> occassions when tuner-uppers decide to tune up on my frequency in which I
>> am already in two way contact with others (on ssb phone). And, maybe there
>> are some other useful characteristics I don't know about. But, are these
>> really effective? For example, a 20 db heterodyne null is not much. Nulls
>> have to be about 50-60 db to be useful.
>>
>> I'll take any kind of comments, suggestions, refernces to testing, or
>> personal experience, pro & con recomendations, ...anything...
>>
>> Art, W4PON
>>
>>
>>
>
>
>

1994. FA:TELREX Ant. Catalogs x17

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-12 19:49:29 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <dDV6e.68928$cg1.20016@bgtnsc04-news.ops.worldnet.att.net>
Source record: 19427
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

17 Telrex antenna catalogs + other stuff too at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

tnx , heytubeguy

1995. Re: Recording Tape Mfgr Closed (was Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-12 22:23:26 UTC
From: mcalhoun@ksu.edu
Message-ID: <d3hhou$b08@unix2.cc.ksu.edu>
Source record: 19428
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

>> BTW, speaking of tapes.. I read that the company that made Irish and
>> Ampex tape has closed. Looks like everyone has been going to CD-Rs.
>Who still makes audio recording tape? I thought Ampex was the last.

Whoa! Right now I have four shoeboxes of old Morse-code tapes sitting
on the workbench waiting to be carried out to the trashcan. Should I
advertise them on Ebay instead?
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

1996. How much concrete below this mast?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-12 22:34:06 UTC
From: mcalhoun@ksu.edu
Message-ID: <d3hicu$b80@unix2.cc.ksu.edu>
Source record: 19429

I just purchased a tilt-over mast that I'd like to erect:

The base section begins with a 16"-square piece of 1/2" steel with four holes on 12" centers and is welded (with four pieces of steel, sorta like rocket fins) to a pipe which rises 17.5' to the pivot point. The tilting part extends 16' further. All of the above pipe is 2 3/8" in diameter, but a smaller-diameter pipe (for mounting a rotor?) sticks out the top end of the tilting section another foot or two.

Can someone suggest how big a blob of concrete and how much rebar I'll need at the bottom to erect this mast to be freestanding?
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

1997. Re: Recording Tape Mfgr Closed (was Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-12 23:07:36 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <l4lo5154vj8clhmom7frjjlaobeg1e21bi@4ax.com>
Source record: 19430
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

On 12 Apr 2005 17:23:26 -0500, the renowned mcalhoun@ksu.edu wrote:

>>> BTW, speaking of tapes.. I read that the company that made Irish and
>>> Ampex tape has closed. Looks like everyone has been going to CD-Rs.
>>Who still makes audio recording tape? I thought Ampex was the last.
>
>Whoa! Right now I have four shoeboxes of old Morse-code tapes sitting
>on the workbench waiting to be carried out to the trashcan. Should I
>advertise them on Ebay instead?

Got any old copies of _Electronics_ magazine? This one probably passed
through many of our hands...

http://wantitnow.ebay.com/ws/eBayISAPI.dll?WantItNowView&adid=6955863859

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

1998. Re: How much concrete below this mast?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-12 23:09:23 UTC
From: Bill Grimwood <bill@grimwood.net>
Message-ID: <1e4ad$425c5523$42b8ebda$31544@EDELTACOM.COM>
Source record: 19431

Contact the manufacturer of the tower and see what they recommend. My U.S. Tower is 55 feet high and required a slab 5 feet by 5 feet, steel reinforced and 6 feet deep. This is quite a blob of concrete and the type of concrete is important also. My son is a civil engineer and I did what he recommended.

73

W4WEG
<mcalhoun@ksu.edu> wrote in message news:d3hicu$b80@unix2.cc.ksu.edu...
>I just purchased a tilt-over mast that I'd like to erect:
>
> The base section begins with a 16"-square piece of 1/2" steel with four
> holes on 12" centers and is welded (with four pieces of steel, sorta
> like rocket fins) to a pipe which rises 17.5' to the pivot point.
> The tilting part extends 16' further. All of the above pipe is 2 3/8"
> in diameter, but a smaller-diameter pipe (for mounting a rotor?) sticks
> out the top end of the tilting section another foot or two.
>
> Can someone suggest how big a blob of concrete and how much rebar I'll
> need at the bottom to erect this mast to be freestanding?
> --
> --Myron A. Calhoun.
> Five boxes preserve our freedoms: soap, ballot, witness, jury, and
> cartridge
> PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785)
> 539-4448
> NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle,
> Pistol)

1999. Re: Recording Tape Mfgr Closed (was Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-13 02:43:30 UTC
From: mc <mc_no_spam@uga.edu>
Message-ID: <425c8f8b@mustang.speedfactory.net>
Source record: 19432
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

<mcalhoun@ksu.edu> wrote in message news:d3hhou$b08@unix2.cc.ksu.edu...
>>> BTW, speaking of tapes.. I read that the company that made Irish and
>>> Ampex tape has closed. Looks like everyone has been going to CD-Rs.
>>Who still makes audio recording tape? I thought Ampex was the last.
>
> Whoa! Right now I have four shoeboxes of old Morse-code tapes sitting
> on the workbench waiting to be carried out to the trashcan. Should I
> advertise them on Ebay instead?

Depends. Some tapes (reportedly mostly from the 1970s) disintegrate. A
couple of years ago I had no trouble playing my tapes from the late 1960s,
but...

2000. Re: Recording Tape Mfgr Closed (was Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-13 02:44:16 UTC
From: mc <mc_no_spam@uga.edu>
Message-ID: <425c8fb7$1@mustang.speedfactory.net>
Source record: 19433
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

> Got any old copies of _Electronics_ magazine? This one probably passed
> through many of our hands...
>
> http://wantitnow.ebay.com/ws/eBayISAPI.dll?WantItNowView&adid=6955863859

In fact it prompted one of our librarians to go and get our university's
copy of it and lock it away...

2001. Re: Recording Tape Mfgr Closed (was Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-13 03:58:58 UTC
From: Bill M <dontspamoleexray@coqui.net>
Message-ID: <115p683taom6sbf@corp.supernews.com>
Source record: 19434
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

mc wrote:

> <mcalhoun@ksu.edu> wrote in message news:d3hhou$b08@unix2.cc.ksu.edu...
>

>>Whoa! Right now I have four shoeboxes of old Morse-code tapes sitting
>>on the workbench waiting to be carried out to the trashcan. Should I
>>advertise them on Ebay instead?
>
>
> Depends. Some tapes (reportedly mostly from the 1970s) disintegrate. A
> couple of years ago I had no trouble playing my tapes from the late 1960s,
> but...
>
>
I'd attempt to hawk em on ebay before tossing them. Maybe somebody can
do something with them regardless of condition or relevance of code
practice. It doesn't make sense to just cart them to the dump without
trying.

-Bill

2002. Re: Do DSPs (digital signal processors) really work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-13 11:53:46 UTC
From: "Edward A. Feustel" <efeustel@direcway.com>
Message-ID: <425d0919$1_2@127.0.0.1>
Source record: 19435
Cross-posted to: rec.radio.amateur.boatanchors,rec.antiques.radio+phono,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Peter Barbella" <nonobar@verizon.net> wrote in message
news:gQU6e.14294$nH4.4122@trndny05...
> Isn't the effectiveness of DSP critically dependent upon the A/D
> converter; its dynamic range, it's number of bits and it's sampling speed?
>
> Pete
> KB1LZH
Yes, and the AGC system that makes maximum use of the A/D and D/A range.
See for example the organization of the Ten Tec Orion.
Ed,
N5EI

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

2003. Re: How much concrete below this mast?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-13 13:28:30 UTC
From: K7MEM <k7mem@my_nospam_realbox.com>
Message-ID: <d3j6pv$1ct3@cui1.lmms.lmco.com>
Source record: 19436

mcalhoun@ksu.edu wrote:
> I just purchased a tilt-over mast that I'd like to erect:
>
> The base section begins with a 16"-square piece of 1/2" steel with four
> holes on 12" centers and is welded (with four pieces of steel, sorta
> like rocket fins) to a pipe which rises 17.5' to the pivot point.
> The tilting part extends 16' further. All of the above pipe is 2 3/8"
> in diameter, but a smaller-diameter pipe (for mounting a rotor?) sticks
> out the top end of the tilting section another foot or two.
>
> Can someone suggest how big a blob of concrete and how much rebar I'll
> need at the bottom to erect this mast to be freestanding?

I have a Triex W-51 Crankup in my yard. Collapsed it is about 22 feet high and extended it is 51 feet. The manufacturers recommendation for the "blob" of concrete is 3 feet by 3 feet by 5 feet deep, roughly. This is about 1.5 Cubic Yards of concrete. I don't have the specs handy, but I believe the rebar mount extended about 3 feet down and was centered so that it is at least 6 inches from any side. To make sure that everything sits where it is suppose to, and will be plumb when erected, the rebar mount was bolted to a 2" x 6" wooden form, leveled properly, and then the concrete was poured around it.

There is a reflector around called something like "Tower Talk" that would be able to give you more details and advice. However, I don't remember the link. Maybe someone else can supply it.

It's a fairly big job and takes a bit of planning.

--
Martin E. Meserve - K7MEM
http://www.k7mem.com
(remove _nospam_ from my email to reply)

2004. FA:TA-53-M NIB 50% OFF

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-13 15:06:57 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <lAa7e.571323$w62.293427@bgtnsc05-news.ops.worldnet.att.net>
Source record: 19437
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rce.radio.amateur.equipment

Mosley TA-53-M NIB at 50% off, see item and other stuff too at;

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx heytubeguy

2005. FS: RF & Microwave Components

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-13 18:32:01 UTC
From: Murray Pasternack <w6krc@arrl.net>
Message-ID: <eAd7e.955$xE2.806@fed1read04>
Source record: 19438
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

COAX CONNECTORS & ADAPTERS, NEW
---

(46) Amphenol # 31-5061, TNC male, clamp attachment for RG-59, $.50 ea.
(46) Amphenol # 31-5157, TNC male, Crimp attachment for RG-59, $.50 ea.
(7) UG 21B/U, Radiall- France, N male, for RG-8,RG-9, RG-213, RG-214,
$2.00 ea.
(3) M/A Omni Spectra 2031-5014-64 SMA male, $1.00 ea.
(1) GR 874 to TNC male adapter, $10.00
(1) UHF female to female adapter, teflon, gold plated contact, $1.00
(3) Pasternack PE4071, TNC male, crimp attachment for RG-59, RG-62,
$2.00 ea.
(1) Pasternack PE4458, TNC female, crimp attachment for RG-58, $2.00
(1) M/A Omni Spectra, # 2084-5079-00, SMA (f) to N (f) bulkhead,
SS/gold, $10.00
(1) TNC "T" f/m/f, $2.00
(1) BNC male to BNC male adapter, $1.50
(1) TNC male to male adapter, $2.00
(3) Phono jack to Phono jack adapter, $.50 ea.
(1) SMA male to SMA male adapter, $4.00
(1) SMA female to SMA female adapter, $3.00
(1) SMA bulkhead female to female adapter, $4.00
(1) SMA right angle male to female adapter, $4.00
(3) N male to N male adapter, $6.00
(1) N female to N female adapter, $8.00
(1) N right angle male to female adapter, $8.00
(1) BNC male to SMA female adapter, $6.00
(1) BNC female to SMA male, adapter, $6.00
(1) N male to BNC female adapter, $7.50

COAX CABLE

RG223/U, Alpha # 9223, 50 ohm, double shielded, silver plated, $.75 per ft
or $600 per 1000 ft spool (large quantity available).

COAX SWITCHS
---

(1) Coax Switch - Surge Protector, Alpha Delta Model Delta - 4, Type N
female connectors, never used, $60.00

MICROWAVE COMPONENTS
---

(1) HP model X382A, X Band waveguide Variable Attenuator, used, good condition, $75.00
(1) VARIAN, VA-224E, X Band Klystron, new, never used, $45.00
(1) VARIAN, X-26F Klystron, new, never used, $45.00
(2) Western Microwave, Isolator, model 2JC-2040, 2 to 4 GHz, new, $30 each
(1) Western Microwave, Isolator, model 2JC-2040, 2 to 4 GHz, used, $15

FREE SHIPPING for USA addresses.
For shipping cost outside of USA , e-mail your address and items you are interested in and I will provide a quotation.
All prices are in US $, No minimum order.
Prices valid while supply lasts.

To reserve any of the above items, e-mail w6krc@arrl.net

Murray Pasternack, W6KRC, PO Box 73160, San Clemente, 92673-0105, USA

e-mail: "w6krc@arrl.net"

fax: 949 369 3860

phone (most of the time it is voice mail) 949 369 3800

2006. Re: Do DSPs (digital signal processors) really work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-13 19:06:07 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <bhnq51hn65oh9fh9cir5h55o5b3e2rposs@4ax.com>
Source record: 19439
Cross-posted to: rec.radio.amateur.boatanchors,rec.antiques.radio+phono,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Wed, 13 Apr 2005 07:53:46 -0400, "Edward A. Feustel"
<efeustel@direcway.com> wrote:

>
>"Peter Barbella" <nonobar@verizon.net> wrote in message
>news:gQU6e.14294$nH4.4122@trndny05...
>> Isn't the effectiveness of DSP critically dependent upon the A/D
>> converter; its dynamic range, it's number of bits and it's sampling speed?

>Yes, and the AGC system that makes maximum use of the A/D and D/A range.
>See for example the organization of the Ten Tec Orion.

If the DSP system really needs some kind of AGC, then it is a useless
toy :-).

If you have a strong and a weak signal in the ADC input bandwidth and
the system gain depends on the strong signal, then the weak signal is
going to be drowned into the (quantisation)noise whenever the
amplitude of the strong signal is increased.

Any properly working DSP system should be designed in a way that it is
capable of properly converting the thermal noise as well as the
combination of all strong signals in the input.

The only justification for using AGC in front of a DSP system is that
if antennas with dramatically different efficiencies are used. For
instance, if the receiver input is switched between a full sized
dipole on 160 m and a ferrite rod (with perhaps -40 dB gain), then it
is quite acceptable to modify the gain with some kind of AGC, but this
could be handled as well with some antenna specific gain presets.

If the system is working an hour on a specific band with a specific
antenna, you should not need any kind of AGC depending on the actual
signal level. If you need AGC for this, then you are going to have
problems, if you are trying to receive any weak signal close to a
strong signal.

Paul OH3LWR

2007. Re: Do DSPs (digital signal processors) really work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-13 19:31:11 UTC
From: robert casey <wa2ise@ix.netcom.com>
Message-ID: <3se7e.6417$sp3.4597@newsread3.news.atl.earthlink.net>
Source record: 19440
Cross-posted to: rec.radio.amateur.boatanchors,rec.antiques.radio+phono,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

>
> If the system is working an hour on a specific band with a specific
> antenna, you should not need any kind of AGC depending on the actual
> signal level. If you need AGC for this, then you are going to have
> problems, if you are trying to receive any weak signal close to a
> strong signal.
>

What one really needs are ADCs with many bits, say 24 bits,
sampled at least twice the highest signal frequency to be digitized.
One has to avoid saturation (overflow) else the rest of the
signal gets blanked during the overflows.

sklee@ati.com

2008. FA: SMALL XFMR FOUND, TNX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-13 21:16:05 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <p_f7e.72638$cg1.5663@bgtnsc04-news.ops.worldnet.att.net>
Source record: 19441
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Tnx of all who had this item-I now have one-ur help was greatly appreciated,
Joe, heytubeguy

2009. Re: Do DSPs (digital signal processors) really work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-14 01:57:18 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <08GdnR09Na4tUMDfRVn-tw@comcast.com>
Source record: 19442
Cross-posted to: rec.radio.amateur.boatanchors,rec.antiques.radio+phono,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Lloyd,

"Lloyd" <lloyd@no.spam> wrote in message
news:ggg87017833.2458F8789@tarrnews.net...
> Not really. All you need is any modern floating point ADC, and the
> truncation problem is overcome.

I wasn't aware such devices were common place. Do you have any favorite
part numbers that are of this type? (E.g., from Analog Devices, TI, etc.)

2010. Re: How much concrete below this mast?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-14 02:04:42 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <o9k7e.62958$vK6.21141@bignews3.bellsouth.net>
Source record: 19443

K7MEM wrote:
> mcalhoun@ksu.edu wrote:
>
>> I just purchased a tilt-over mast that I'd like to erect:
>>
>> The base section begins with a 16"-square piece of 1/2" steel with four
>> holes on 12" centers and is welded (with four pieces of steel, sorta
>> like rocket fins) to a pipe which rises 17.5' to the pivot point.
>> The tilting part extends 16' further. All of the above pipe is 2 3/8"
>> in diameter, but a smaller-diameter pipe (for mounting a rotor?) sticks
>> out the top end of the tilting section another foot or two.
>>
>> Can someone suggest how big a blob of concrete and how much rebar I'll
>> need at the bottom to erect this mast to be freestanding?
>
>
> I have a Triex W-51 Crankup in my yard. Collapsed it is about 22 feet high
> and extended it is 51 feet. The manufacturers recommendation for the "blob"
> of concrete is 3 feet by 3 feet by 5 feet deep, roughly. This is about
> 1.5 Cubic Yards of concrete. I don't have the specs handy, but I believe
> the rebar mount extended about 3 feet down and was centered so that it
> is at least 6 inches from any side. To make sure that everything sits
> where it is suppose to, and will be plumb when erected, the rebar mount
> was bolted to a 2" x 6" wooden form, leveled properly, and then the
> concrete was poured around it.
>
> There is a reflector around called something like "Tower Talk" that would
> be able to give you more details and advice. However, I don't remember the
> link. Maybe someone else can supply it.
>
> It's a fairly big job and takes a bit of planning.
>
Keep in mind that some cities engineering departments are ultra
conservative and will double or triple(!) their requirements over
what the tower maker recommends. This happend to a friend of mine
who ended up with about 3-4 cubic yards being poured for a 20' crank up

2011. Maintenance Manuals for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-14 02:18:25 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <s4-dnX9_S9ZxT8DfRVn-ig@bright.net>
Source record: 19444

GE Mastr II UHF
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5767586544&ssPageName=ADME:B:LC:US:1

Motorola Micor UHF
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5767588869&ssPageName=ADME:B:LC:US:1

Motorola Starpoint Microwave
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5767590447&ssPageName=ADME:B:LC:US:1

Scott
N0EDV

2012. Re: How much concrete below this mast?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-14 03:28:03 UTC
From: mcalhoun@ksu.edu
Message-ID: <d3ko03$773@unix1.cc.ksu.edu>
Source record: 19446

I originally wrote:
>>>...[snip]...
>>> Can someone suggest how big a blob of concrete and how much rebar I'll
>>> need at the bottom to erect this [tiltover] mast to be freestanding?

Someone wrote:
>Contact the manufacturer of the tower and see what they recommend.

I'm pretty-sure it's a home-brew mast probably made from old oil-field pipe!

Someone else wrote:
>Keep in mind that some cities engineering departments are ultra
>conservative and will double or triple(!) their requirements over
>what the tower maker recommends....

Fortunately, I live OUTSIDE the city limits and have enough land that
I can erect it where it won't hit anything of importance if it falls!

Thanks to all who wrote to describe their own tower's blob-size.
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

2013. Re: Do DSPs (digital signal processors) really work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-14 11:03:41 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <5qcs51hfrpohf0m496b11706atdfesp67q@4ax.com>
Source record: 19445
Cross-posted to: rec.radio.amateur.boatanchors,rec.antiques.radio+phono,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On 13 Apr 2005 20:21:05 GMT, "Lloyd" <lloyd@no.spam> wrote:

>On Wed, 13 Apr 2005 19:31:11 GMT, robert casey <wa2ise@ix.netcom.com> wrote:
>>
>> >
>> > If the system is working an hour on a specific band with a specific
>> > antenna, you should not need any kind of AGC depending on the actual
>> > signal level. If you need AGC for this, then you are going to have
>> > problems, if you are trying to receive any weak signal close to a
>> > strong signal.
>> >
>>
>> What one really needs are ADCs with many bits, say 24 bits,
>> sampled at least twice the highest signal frequency to be digitized.

The LSB should be less than the band or thermal noise in the _input_
bandwidth, so that it would act as dithering noise. For terrestrial
VHF/UHF/SHF systems, the antenna temperature is close to 300 K and
thus a noise density of -174 dBm/Hz. Assuming 10 kHz ADC input
bandwidth, the equivalent noise power would be -134 dBm. In order to
be able to correctly convert a strong signal _and_ the broad band
noise riding on it correctly, the maximum signal level at the antenna
for 16, 20 and 24 bits would be -38 dBm, -14 dBm resp. +10 dBm or
assuming 50 ohm antenna impedance 2.7 mV, 44 mV resp. 710 mV. Not
very common values on VHF/UHF.

At HF, the band noise is typically at least 20 dB stronger, so the
gain in front of the ADC can be reduced and thus the maximum antenna
voltage would be at least 10 times larger, so even the 16 bit
converter would tolerate a single S9+55 dB signal.

However, in order to be able recover weak narrow band that would be
buried in the 10 kHz broadband noise, quite good linearity is required
for the dithering process. The dithering noise properties are also
critical, e.g. if it contains mostly impulse noise instead of white
thermal noise. You may have to move the ADC LSB deeper into the noise
floor, which would reduce the maximum input voltage allowed or require
more bits.

>> One has to avoid saturation (overflow) else the rest of the
>> signal gets blanked during the overflows.
>
>Not really. All you need is any modern floating point ADC, and the
>truncation problem is overcome. Back in the old days of integer ADCs,

>you had the weak / strong signal problem as well as the overflow /
>underflow problem. Modern ADCs typically generate IEEE format
>floating point numbers "on the fly" by using triple or even quadruple
>banks of digitizers, all contained in a small amount of chip real
>estate, and all controlled by a small microprocessor.

The exponent is just the gain in front of the ADC and the mantissa is the real converted data bits. If the exponent bits varies constantly, this just reflects the "AGC" control voltage of the preamplifier. The number of mantissa bits is the critical thing for a radio receiver. The mantissa bits must still be able to represent the broadband noise riding on strong signals. In practical terms, the exponent could only be used to reflect the broadband noise and antenna gain on a particular band and remain constant as long as the receiver is on that band.

Of course, if we could get a true IEEE float data type ADC with 24 significant bits in the mantissa and nearly 1500 dB dynamic range, there would not be much problems in data conversions :-).

While the use of floating point formats greatly simplifies range problems associated with multiplications and divisions, it still does not do any good for additions and subtractions, so you still have to watch for repeated additions of very small values to a large value and possibly regroup the repeated small number additions.

Paul OH3LWR

2014. Re: How much concrete below this mast?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-14 13:35:36 UTC
From: K7MEM <k7mem@my_nospam_realbox.com>
Message-ID: <d3lrj9$1ct4@cui1.lmms.lmco.com>
Source record: 19447

Ken Scharf wrote:
> K7MEM wrote:
>
>> mcalhoun@ksu.edu wrote:
>>
>>> I just purchased a tilt-over mast that I'd like to erect:
>>>
>>> The base section begins with a 16"-square piece of 1/2" steel with four
>>> holes on 12" centers and is welded (with four pieces of steel, sorta
>>> like rocket fins) to a pipe which rises 17.5' to the pivot point.
>>> The tilting part extends 16' further. All of the above pipe is 2 3/8"
>>> in diameter, but a smaller-diameter pipe (for mounting a rotor?) sticks
>>> out the top end of the tilting section another foot or two.
>>>
>>> Can someone suggest how big a blob of concrete and how much rebar I'll
>>> need at the bottom to erect this mast to be freestanding?
>>
>>
>>
>> I have a Triex W-51 Crankup in my yard. Collapsed it is about 22 feet
>> high
>> and extended it is 51 feet. The manufacturers recommendation for the
>> "blob"
>> of concrete is 3 feet by 3 feet by 5 feet deep, roughly. This is about
>> 1.5 Cubic Yards of concrete. I don't have the specs handy, but I believe
>> the rebar mount extended about 3 feet down and was centered so that it
>> is at least 6 inches from any side. To make sure that everything sits
>> where it is suppose to, and will be plumb when erected, the rebar mount
>> was bolted to a 2" x 6" wooden form, leveled properly, and then the
>> concrete was poured around it.
>>
>> There is a reflector around called something like "Tower Talk" that would
>> be able to give you more details and advice. However, I don't remember
>> the
>> link. Maybe someone else can supply it.
>>
>> It's a fairly big job and takes a bit of planning.
>>
> Keep in mind that some cities engineering departments are ultra
> conservative and will double or triple(!) their requirements over
> what the tower maker recommends. This happend to a friend of mine
> who ended up with about 3-4 cubic yards being poured for a 20' crank up

Yes, I found that part very interesting. There are a lot of houses and schools in my area, but there are no specific covenants on erecting structures. I have a cul-de-sac lot and had the necessary room on one side of my house.

So I thought I would check with the city. I was really prepared. My documentation included the designers calculations and California compliance certification. I live in the Phoenix area, but thought that this would be sufficient for approval. California is usually a little tighter on their requirements. Anyway, when I went downtown to the city planners, it turned out that, because the tower and antenna were not for commercial use, and there was no electrical wiring (I use a battery powered electric drill to crank the tower), there were no structural requirements or inspections. So I just followed the manufactures recommendations.

When the tower is cranked down, my antenna nestles itself within a group of trees, and is barely noticeable from the street. Most people that come to my house, don't notice it. This also seems to keep the neighbors happy, and, so far, I haven't had any complaints (knock on wood).

If you go to http://lists.contesting.com/archives/html/Towertalk/ and do a search on "tower base recommendations" you will find some very good discussions on things to consider when erecting a tower.

--
Martin E. Meserve - K7MEM
http://www.k7mem.com
(remove _nospam_ from my email to reply)

2015. Re: Do DSPs (digital signal processors) really work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-14 13:56:14 UTC
From: kludge@panix.com
Message-ID: <d3lspu$j3b$1@panix2.panix.com>
Source record: 19298
Cross-posted to: rec.radio.amateur.boatanchors,rec.antiques.radio+phono,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com> wrote:
>
>"Lloyd" <lloyd@no.spam> wrote in message
>news:ggg87017833.2458F8789@tarrnews.net...
>> Not really. All you need is any modern floating point ADC, and the
>> truncation problem is overcome.
>
>I wasn't aware such devices were common place. Do you have any favorite
>part numbers that are of this type? (E.g., from Analog Devices, TI, etc.)

Most of the folks doing FP (for radar work, for instance) use a pair
of converters and successive-approximation logic to do scaling.

I'm also going to point out here that there are two different kinds of
DSP systems being discussed here.

First of all there are audio processors, which take the demodulated audio
from the receiver, digitize it, and process it. This is what the original
poster is talking about, and these gadgets work pretty well to deal with
heterodyne whistles. Some of them also work pretty well on impulse noise,
at least better than the noise limiter on an R-390. There is a wide
variety of them on the market, each of which has an audio-speed D/A and
A/D pair. The dynamic range required really isn't very high since the
AGC of the receiver has done all the hard part for you. 16-bit converters
are cheap and plentiful and more than enough. For the most part, though,
these devices are noise reduction units and can't do much about improving
receiver selectivity or reducing passband group delay.

SECONDLY, and a totally different animal, there are DSP systems that
directly digitize the receiver IF, and do IF filtration and demodulation
in the digital domain. They may _also_ do some audio processing, but
the big deal with these is that they now have very sharp IF filters
without substantial ringing, and they have extremely good demodulation
without a lot of group delay problems in general. These systems require
much wider input dynamic range, which is usually accomplished with
prescaling. These can be found built into the latest generation of
communications receiver, although folks like Watkins-Johnson also make
retrofit units that you could hang off your old Hallicrafters if you
don't mind paying a few hundred times what the radio costs.
--scott
--
"C'est un Nagra. C'est suisse, et tres, tres precis."

2016. Replacement for Motorola FM Dual Conversion IC's

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-14 22:09:31 UTC
From: Bernard <bernard.debbasch_removethis_@mail.com>
Message-ID: <vSB7e.6580$lv1.244@fed1read06>
Source record: 19299

I have seen posts on this subject but no definitive answer. Outside limited supply, the MC 3362 and derivatives are gone. If one wanted to start a new design for a dual conversion, narrow band FM VHF receiver (for example a 72 MHz R/C) the options are now limited.

The solutions I have seen mentioned are:

- SA602 + SA615 drawback: 2 IC's instead of one. BTW, are they still mainsteam IC's ?
- Some Japanese IC manufacturers may have some equivalent IC's Drawback: limited documentation and availability

I am forgetting something ?

Note: I don't consider the option of using the limited, often expensive, supply of Motorola / ON IC's to be a good one

2017. Hacking long distance cordless phones to 2m transciever

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-15 08:11:26 UTC
From: zeb <aurangzebhaque@yahoo.com>
Message-ID: <1113552686.111793.314160@f14g2000cwb.googlegroups.com>
Source record: 19300

Hi,

Has anyone thought about or worked on long distance cordless phones, in converting these to 2m transcievers. Where I live they have these old unsellable Senao sets, readily available. I thought maybe we could use them for 2m.

If someone has info on this his/her help is most appreciated.

I think these are around 200MHz with a power o/p of about 5W or so, from the base unit. I haven't checked more than that, in order for the guy not thinking that he has an interested buyer and thus jacking up the price.

Regards

AP2AUH

2018. Special Events Station, WWII Equipment, April 15-17th

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-15 13:12:28 UTC
From: David Stinson <arc5@ix.netcom.com>
Message-ID: <425FBDBB.1080500@ix.netcom.com>
Source record: 19301
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

On April 15-17th, the Shreveport Amateur Radio Association
will run Special Events Station W5E from the Eight Air Force
Museum at Barksdale Air Force Base in Bossier City, Louisiana,
home of the 8th Air Force. The station commemorates the 60th
anniversary of the last combat mission of the 8th Air Force
over Europe. An authentic SCR-287 WWII bomber radio station
and an SCR-274N station will be on the air,
along with other equipment working all bands.
A beautiful QSL will be sent to stations contacted.
More information is available at:

http://www.k5sar.com/HTML/SEW5E.htm

Authentic WWII SCR-287 Station Operation:
While there will be intermittant operation of the
vintage gear throughout Friday and Saturday, on or around
the frequencies below.
The WWII Bomber radio station, SCR-287, running 70 watts of AM,
will operate officially on 3880 KC on Saturday, April 16th from
6 PM until 10 PM Central time, plus or minus 5 KCs for QRM.

There will be a special endorsement to your QSL for working
the vintage station(s). Please note that WWII equipment is
not YeaComWood; some drift and/or chirp may be expected.
We respectfully request the support of the AM community for
our operation of this event. We will also have a complete
and operational SCR-274N station, as well as a display of
the radios used in ferrying operations by the
Women's Army Service Pilots and Women's Army Corps during WWII.

As time and ops permit, we plan to operate the vintage equipment
on other freqs. Look for us around 1845, 3545, 7045, and 7245
(WWII ended in 1945).
Thanks and hope to work you.

2019. Ambit DFM7 circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-15 13:39:40 UTC
From: rawdon@hotmail.com
Message-ID: <3pgv511ps3hg6h6ergctd77g7e3n34mm1a@4ax.com>
Source record: 19302

Hi,
I built one of these LW/MW/SW/VHF DFMs in the early '80s, and now want to modify the offset settings for use with a different radio. Unfortunately, the circuit & instructions were lost a long tome ago.
Does anyone have a circuit for this unit they could let me have a copy of, or even just details of the diode matrix for setting the offsets?

TIA

TL.

(Ps. reply to the group in the first instance)

2020. STOP MARKETING. Get 1000 Paid Sign-up's Without Advertising

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-15 18:31:06 UTC
From: biznet <biznet_contactNOSPAM@yahoo.com>
Message-ID: <42604b97$1_3@127.0.0.1>
Source record: 19307

If you have a business YOU need to have CUSTOMERS and/or AFFILIATES right? We will make YOUR Affiliate / Customer business EXPLODE - Guaranteed! Our service is GUARANTEED. When YOU order 1,600 customers and 1,000 affiliates to join YOUR down-line we would easily source them from our HUGE B2B and B2C databases and deliver the exact number required within the time allocated by YOU. By ordering a guaranteed fulfillment package YOU are NOT buying or renting email addresses or opt-in names, YOU are engaging a UNIQUE and REVOLUTIONARY service that delivers the exact number of customers and affiliates to YOUR business without fail. YOUR business will benefit from customer commissions and YOU will EARN membership fees, overrides and residual from the affiliates that join YOUR down-line. Guaranteed Success! If you want to get all the details email to: biznet_contact@yahoo.com. On the subject write: 1000 Paid Sign-up&#65533;s MORE INFO, on the body please describe the business your want to promote. In 24 hrs I will send you the link so YOU can start building YOUR Affiliate / Customer business.

MAF Anti-Spam ID: 20050303105947V2i8YoV9

2021. push-pull in output..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-15 19:07:19 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <HhU7e.2547$VA3.1040@newssvr30.news.prodigy.com>
Source record: 19303

I just noticed in this ad: http://hamstation.com/ybstkftmk5.htm that
Yaesu's FT-1000 finals are MOSETS in push-pull. I don't ever recall
seeing a pair of final tubes in an xcvr or linear in push-pull except
perhaps way back in a very old QST. Can someone explain why push-pull is
used in the Yaesu and why we don't see it in "modern" tube amps?
tnx

--

73
Hank WD5JFR

2022. Re: push-pull in output..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-15 19:26:47 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <ha5061pak4ah2pda7l4aqj8i3i1qn5m9bf@4ax.com>
Source record: 19304

On Fri, 15 Apr 2005 19:07:19 GMT, "Henry Kolesnik"
<kolesnik@sbcglobal.net> wrote:

>I just noticed in this ad: http://hamstation.com/ybstkftmk5.htm that
>Yaesu's FT-1000 finals are MOSETS in push-pull. I don't ever recall
>seeing a pair of final tubes in an xcvr or linear in push-pull except
>perhaps way back in a very old QST. Can someone explain why push-pull is
>used in the Yaesu and why we don't see it in "modern" tube amps?
>tnx

Cuz a single 3CX3000A is all you need?

Seriously, tubes are (relatively) high impedance devices and except
for distributed amplifiers, are usually tuned. The high impedance
step down to 50 Ohm requires large transformation ratios that are more
easily implemented with tuned circuits. Push-pull tuned circuits are
a pain in the ass to implement, especially when you want band
switching.

Bipolar and MOSFET amplifiers are by comparison low impedance devices
and are usually untuned. Instead of tuned circuits, broadband
transformers are used for coupling, impedance transformation and in
this case, power combining. The push-pull circuit requires lower peak
supply current and has inherent suppression of even-order harmonics.

2023. Re: push-pull in output..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-15 19:31:31 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <nEU7e.18662$GJ.4966@attbi_s71>
Source record: 19305

With MOSFETS or bipolar transistors, push-pull is easy to get using either push-pull conventional transformers or balanced transmission line transformers. It is easier because of the much lower impedance levels that transistors operate at. The push-pull amplifier has much better reduction of second harmonic output, which makes the low pass filters simpler. Tuned tank circuits are hardly ever used with transistors beyond the QRP level.

Bill W0IYH

"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message news:HhU7e.2547$VA3.1040@newssvr30.news.prodigy.com...
>I just noticed in this ad: http://hamstation.com/ybstkftmk5.htm that
>Yaesu's FT-1000 finals are MOSETS in push-pull. I don't ever recall
>seeing a pair of final tubes in an xcvr or linear in push-pull except
>perhaps way back in a very old QST. Can someone explain why push-pull is
>used in the Yaesu and why we don't see it in "modern" tube amps?
> tnx
>
> --
>
> 73
> Hank WD5JFR
>

2024. Re: push-pull in output..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-15 22:58:12 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <8GX7e.5587$443.5301@newsfe3-gui.ntli.net>
Source record: 19306

"> I just noticed in this ad: http://hamstation.com/ybstkftmk5.htm that
> Yaesu's FT-1000 finals are MOSETS in push-pull. I don't ever recall
> seeing a pair of final tubes in an xcvr or linear in push-pull except
> perhaps way back in a very old QST. Can someone explain why push-pull is
> used in the Yaesu and why we don't see it in "modern" tube amps?
==========
Tube amps with 2 output valves can be used in push- pull but then for 1 band
only unless you would switch multiple inductors.
A single valve or multiple valve in parallel can readily output into a
multi-band PI filter arrangement.
In QST -March 1967 , pages 11 - 15 there is an article on a 1kW amplifier
for 50 MHz with 2 pcs 4-125A or 4-250A or 4-400A push pull . This is a
single band amplifier with inductive coupling on in- and output.
Unless you would perform band switching by changing the inductors through
plug-in , switching for various bands would be very complicated.

Frank GM0CSZ / KN6WH.

2025. Re: push-pull in output..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-16 00:27:09 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d3pm4t$f4c$1@sparta.btinternet.com>
Source record: 19309

```
> Bipolar and MOSFET amplifiers are by comparison low impedance
devices
>
==============================
Actually they are not. But everything else you say is quite correct.
```

2026. Re: FS Teflon 22 AWG

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-16 00:27:54 UTC
From: Charlie <w8aws@charter.net>
Message-ID: <1113611274.320331.46620@g14g2000cwa.googlegroups.com>
Source record: 19308
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

James Skalski wrote:
> I have some packs of 22 AWG Teflon insulated, silver plated, stranded

> wire. It is in packs of five 50 foot rolls (250' per pack). Should
be
> able to get five different colors per pack. Sorry no choices of
colors.
> No other gauges available at this time. This wire is rated 200degrees
C
> and 600V. great for both tube and solid state equipment. It won't
melt
> or shrink or stink when you solder it :))
>
> The deal is for Three Packs (3 x 250ft or 750feet total.
>
> Total cost is $25 including shipping. This is for lower 48 States.
>
> Email to reserve. I have to package it. Shipping within 48 hours. 2-3

> day shipping time typical.
>
> qrz.com address OK. paypal available.
>
> 73,
>
> Jim n2go

2027. Re: push-pull in output..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-16 03:42:37 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <ic2161h5v4hpdq5gi6qikf6r1h4uj3decd@4ax.com>
Source record: 19310

On Sat, 16 Apr 2005 00:27:09 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>
>> Bipolar and MOSFET amplifiers are by comparison low impedance
>devices
>>
>==============================
>Actually they are not.

Please expand upon your remarks.

>But everything else you say is quite correct.
>

2028. Re: push-pull in output..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-16 04:43:42 UTC
From: atec <atec77@XXXhotmail.com>
Message-ID: <4260981d$1@dnews.tpgi.com.au>
Source record: 19311

Wes Stewart wrote:
> On Sat, 16 Apr 2005 00:27:09 +0000 (UTC), "Reg Edwards"
> <g4fgq.regp@ZZZbtinternet.com> wrote:
>
>
>>>Bipolar and MOSFET amplifiers are by comparison low impedance
>>
>>devices
>>
>>==============================
>>Actually they are not.
>
>
> Please expand upon your remarks.
>
>
>>But everything else you say is quite correct.
>>
>
>
Mosfets , consider them cold cathode tubes and ignore the fact they are
not :_)

2029. Re: Hacking long distance cordless phones to 2m transciever

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-16 04:55:55 UTC
From: Murray <me@erewhon.com.au>
Message-ID: <42609acc$0$18126$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 19312

Some from Hong Kong run about 146+ as that is outside the allocation in
that country.
Murray vk4aok
zeb wrote:
> Hi,
>
> Has anyone thought about or worked on long distance cordless phones, in
> converting these to 2m transcievers. Where I live they have these old
> unsellable Senao sets, readily available. I thought maybe we could use
> them for 2m.
>
> If someone has info on this his/her help is most appreciated.
>
> I think these are around 200MHz with a power o/p of about 5W or so,
> from the base unit. I haven't checked more than that, in order for the
> guy not thinking that he has an interested buyer and thus jacking up
> the price.
>
> Regards
>
> AP2AUH
>

2030. Re: push-pull in output..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-16 09:47:25 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d3qmvd$hj6$1@sparta.btinternet.com>
Source record: 19313

> Bipolar and MOSFET amplifiers are by comparison (with tubes) low
impedance
> >devices
> >>
> >==========
> >Actually they are not.
>
> Please expand upon your remarks.
>
==========

For example, the internal resistance, Ra, of a triode tube is -

Ra = Mu / Gm

where Mu is the amplification factor and Gm is the mutual conductance.

Typical values for a triode are Mu = 10 and Gm = 5 milliamps per volt
which gives Ra = 2000 ohms.

Corresponding values for a silicon NPN bipolar transistor are Mu =
1000 and Gm = 40 milliamps per volt which gives an internal resistance
of 25,000 ohms.

Typical values for a beam tetrode are Mu = 200 and Gm = 5 mA/volt
which gives Ra = 40,000 ohms.

For a field effect transistor Mu = 1000, Gm = 10 mA/volt and an
internal resistance of 100,000 ohms.

Typically, transistors have higher internal resistances than tubes.
The volts and amps at which they work, the power ratings, are
coincidental and have nothing to do with it except that when comparing
one device with another they should have similar power ratings.

Take a look at their DC characteristic curves. Internal resistance is
the SLOPE of the anode (collector) current versus anode (collector)
volts characteristic for constant grid (gate) volts (or constant base
current).

OK?

Reg, G4FGQ

2031. The REAL Turnkey Solution to NetMarketing Success

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-16 10:11:37 UTC
From: biznet <biznet_contactNOSPAM@yahoo.com>
Message-ID: <42612803$1_1@127.0.0.1>
Source record: 19319

Increase your wealth today! Why should you join the longest running Internet business opportunity in existence? Because it works! Check it out and request your free sample of the Excellence magazine NOW! http://tinyurl.com/3wxco

---
MAF Anti-Spam ID: 20050303105947V2i8YoV9

Posted Via Usenet.com Premium Usenet Newsgroup Services

** SPEED ** RETENTION ** COMPLETION ** ANONYMITY **
----
http://www.usenet.com

2032. Re: push-pull in output..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-16 11:09:30 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d3qrpa$n2t$1@sparta.btinternet.com>
Source record: 19314

"Reg Edwards" wrote -

> Take a look at their DC characteristic curves. Internal resistance
is
> the SLOPE of the anode (collector) current versus anode (collector)
> volts characteristic for constant grid (gate) volts (or constant
base
> current).
>
==========

And, incidentally, this is the internal resistance which determines whether or not a Conjugate Match exists between the PA device and its load resistance.

Note that it is not under the control of the circuit designer or tuner-upper who is not permtted to change tubes during a tune-up operation in order to obtain a 1-to-1 SWR.

Reg, G4FGQ

2033. Re: push-pull in output..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-16 11:26:19 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <vD68e.20432$Bb3.7544@attbi_s22>
Source record: 19315

The internal impedance of the device is irrelevant.

My correct previous statement was that transistor power amplifiers operate "at lower impedance levels" because of the lower DC supply voltages and higher DC current, therefore the much lower values of output load and driver impedance levels.

These lower levels make broadband designs easier to accomplish. The fixed-tuned lowpass filters at the output are easier to bandswitch. The old "dip and load" procedures are no longer needed.

Bill W0IYH

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:d3qmvd$hj6$1@sparta.btinternet.com...
>> Bipolar and MOSFET amplifiers are by comparison (with tubes) low
> impedance
>> >devices
>> >>
>> >==========
>> >Actually they are not.
>>
>> Please expand upon your remarks.
>>
> ==========
>
> For example, the internal resistance, Ra, of a triode tube is -
>
> Ra = Mu / Gm
>
> where Mu is the amplification factor and Gm is the mutual conductance.
>
> Typical values for a triode are Mu = 10 and Gm = 5 milliamps per volt
> which gives Ra = 2000 ohms.
>
> Corresponding values for a silicon NPN bipolar transistor are Mu =
> 1000 and Gm = 40 milliamps per volt which gives an internal resistance
> of 25,000 ohms.
>
> Typical values for a beam tetrode are Mu = 200 and Gm = 5 mA/volt
> which gives Ra = 40,000 ohms.
>
> For a field effect transistor Mu = 1000, Gm = 10 mA/volt and an
> internal resistance of 100,000 ohms.
>

> Typically, transistors have higher internal resistances than tubes.
> The volts and amps at which they work, the power ratings, are
> coincidental and have nothing to do with it except that when comparing
> one device with another they should have similar power ratings.
>
> Take a look at their DC characteristic curves. Internal resistance is
> the SLOPE of the anode (collector) current versus anode (collector)
> volts characteristic for constant grid (gate) volts (or constant base
> current).
>
> OK?
> ----
> Reg, G4FGQ
>
>

2034. Re: push-pull in output..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-16 11:35:29 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <5M68e.20446$Bb3.20273@attbi_s22>
Source record: 19316

Back in the 1950s and 1960s a few vacuum tube PAs were sold that did not use the conventional plate-tuned circuit, but used broadband tranformers. They died an early death, thank heaven.

Push-pull tube amplifiers with link coupled coils etc were very difficult to TVI proof. The pi-network (and pi-ell) with tubes in parallel was a big improvement.

Bill W0IYH

"Highland Ham" <abcgm0csz.kn6whxyz@abcntlworldxyz.com> wrote in message news:8GX7e.5587$443.5301@newsfe3-gui.ntli.net...
>"> I just noticed in this ad: http://hamstation.com/ybstkftmk5.htm that
>> Yaesu's FT-1000 finals are MOSETS in push-pull. I don't ever recall
>> seeing a pair of final tubes in an xcvr or linear in push-pull except
>> perhaps way back in a very old QST. Can someone explain why push-pull is
>> used in the Yaesu and why we don't see it in "modern" tube amps?
> ============================
> Tube amps with 2 output valves can be used in push- pull but then for 1
> band
> only unless you would switch multiple inductors.
> A single valve or multiple valve in parallel can readily output into a
> multi-band PI filter arrangement.
> In QST -March 1967 , pages 11 - 15 there is an article on a 1kW amplifier
> for 50 MHz with 2 pcs 4-125A or 4-250A or 4-400A push pull . This is a
> single band amplifier with inductive coupling on in- and output.
> Unless you would perform band switching by changing the inductors through
> plug-in , switching for various bands would be very complicated.
>
> Frank GM0CSZ / KN6WH.
>
>
>

2035. Re: Hacking long distance cordless phones to 2m transciever

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-16 12:48:19 UTC
From: zeb <aurangzebhaque@yahoo.com>
Message-ID: <1113655699.749448.54900@z14g2000cwz.googlegroups.com>
Source record: 19317

Hi,

This is even better, being so close to the 2m ham band.
Any brand names that I could check.

73

AP2AUH

2036. Re: push-pull in output..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-16 13:21:31 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <mv32615r3cvitbocatfd2asv42k8bofvd1@4ax.com>
Source record: 19318

On Sat, 16 Apr 2005 09:47:25 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>> Bipolar and MOSFET amplifiers are by comparison (with tubes) low
>impedance
>> >devices
>> >>
>> >==============================
>> >Actually they are not.
>>
>> Please expand upon your remarks.
>>
>==============================
>
>For example, the internal resistance, Ra, of a triode tube is -
>
>Ra = Mu / Gm
>
>where Mu is the amplification factor and Gm is the mutual conductance.
>
>Typical values for a triode are Mu = 10 and Gm = 5 milliamps per volt
>which gives Ra = 2000 ohms.
>
>Corresponding values for a silicon NPN bipolar transistor are Mu =
>1000 and Gm = 40 milliamps per volt which gives an internal resistance
>of 25,000 ohms.
>
>Typical values for a beam tetrode are Mu = 200 and Gm = 5 mA/volt
>which gives Ra = 40,000 ohms.
>
>For a field effect transistor Mu = 1000, Gm = 10 mA/volt and an
>internal resistance of 100,000 ohms.
>
>Typically, transistors have higher internal resistances than tubes.
>The volts and amps at which they work, the power ratings, are
>coincidental and have nothing to do with it except that when comparing
>one device with another they should have similar power ratings.
>
>Take a look at their DC characteristic curves. Internal resistance is
>the SLOPE of the anode (collector) current versus anode (collector)
>volts characteristic for constant grid (gate) volts (or constant base
>current).
>
>OK?

No.

All of this is very interesting, but you are referring to the
devices that are used in the amplifier, while I said, "Bipolar and
MOSFET *amplifiers* are by comparison low impedance.

2037. Re: push-pull in output..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-16 19:30:24 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <WDd8e.62084$UW6.59404@bignews5.bellsouth.net>
Source record: 19320

Reg Edwards wrote:
>>Bipolar and MOSFET amplifiers are by comparison low impedance
>
> devices
>
> ==============================
> Actually they are not. But everything else you say is quite correct.
>
>
Well their INPUT IMPEDANCE can be high, but their
OUTPUT IMPEDANCE when used as a power amp is just as
low as bipolar transistors, so the broadband transformers
are just as valid. And as far as their input impedance,
well these are class AB or B power amps, so they take
some driving power. In this case because of the required
driving power, the input impedance isn't very high.

2038. macgyverisms and brainstorms.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-16 19:50:07 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <bYd8e.92516$vK6.39742@bignews3.bellsouth.net>
Source record: 19321

Every now and then a need for a tool not on hand occurs, or
a required part isn't available for a repair. Then the
proverbal light bulb appears over one's head (homage to
Edison no doubt). Today I was running some RG8/U into my
attic crawl space to access a conduit into my shack. I drilled
a hole into the roof overhang and pushed the cable into the
hole. As Murphy would have it, the end of the cable being pushed
into the hole was the end wound onto the core of the spool, so the
cable was very 'springy' resulting in it all bunching up right
at the hole inside the attic. When I climbed into the attic
I couldn't reach the cable, it was sitting in a coiled up bunch
at the wall. No way I was going to be able to crawl the distance
and reach out to grab the cable.

Now for the macgyverism ....
I found a 6 foot piece of left over 1/2 pvc pipe and a 3" U-bolt.
I attached the u bolt to the end of the pipe with electrical tape
and used the new tool to reach and hook the coax.

Ok, I'm sure we've all come up with these macgyverism's from time
to time. Anybody care to share their brainstorms...?

2039. Re: wire size question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-16 22:08:48 UTC
From: David Lesher <wb8foz@panix.com>
Message-ID: <d3s2dg$8ki$1@reader1.panix.com>
Source record: 19322
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> writes:

>Which gauge are you using?

>British Standard wire gauge (SWG) ?
>American wire gauge (AWG) ?
>Birmingham wire gauge (BWG) ?
Navy Gauge?

{I recall US Navy had some scheme that was its alone; sizes were
directly proportional to label...}

--
A host is a host from coast to coast.................wb8foz@nrk.com
& no one will talk to a host that's close........[v].(301) 56-LINUX
Unless the host (that isn't close).........................pob 1433
is busy, hung or dead....................................20915-1433

2040. Re: push-pull in output..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-17 04:13:30 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d3snpaepm1@hercules.btinternet.com>
Source record: 19323

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
news:WDd8e.62084$UW6.59404@bignews5.bellsouth.net...
> Reg Edwards wrote:
> >>Bipolar and MOSFET amplifiers are by comparison low impedance
> > >
> > > devices
> > >
> > > ==============================
> > > Actually they are not. But everything else you say is quite
correct.
> > >
> > >
> Well their INPUT IMPEDANCE can be high, but their
> OUTPUT IMPEDANCE when used as a power amp is just as
> low as bipolar transistors, so the broadband transformers
> are just as valid. And as far as their input impedance,
> well these are class AB or B power amps, so they take
> some driving power. In this case because of the required
> driving power, the input impedance isn't very high.
====================================

This little discussion is about the relative internal resistance of tubes and transistors. It has nothing to do with driving resistance which, in the case of tubes and FET transistors, are both very high.

Somebody said the internal resistance of transistors, in general, was much lower than that of tubes. He was incorrect.

Of course, it is possible to find an example of a high power transistor which has a lower internal resistance than a given low power tube.

But, in general, transistors have high internal resistances, greater than tubes.

To base conclusions on the greatly different working voltages and currents of devices is entirely incorrect. But it is easily done and leads to misunderstandings when novices and learners attempt to analyse circuit operation.

Reg, G4FGQ

2041. Re: push-pull in output..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-17 13:14:06 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <yit8e.21056$8Z6.13477@attbi_s21>
Source record: 19324

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:d3snpaepm1@hercules.btinternet.com...
>
>
> To base conclusions on the greatly different working voltages and
> currents of devices is entirely incorrect. But it is easily done and
> leads to misunderstandings when novices and learners attempt to
> analyse circuit operation.

It is not incorrect. It is quite correct, and everyone who designs
solid-state linear RF power amplifiers (including me, not a novice) knows
that it is correct. The truth in this matter is perfectly obvious to any
really knowledgeable individual.

Bill W0IYH

2042. Re: macgyverisms and brainstorms.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-17 18:44:34 UTC
From: Roger and Ute Brown <rogerbrown@gci.net>
Message-ID: <1165bkjojen6268@corp.supernews.com>
Source record: 19325

I'd have pushed the coax into the 6 foot 1/2" PVC pipe. Then I'd have inserted the PVC into the hole under the eves and into the attic. From the attic I'd have retrieved the end of the 1/2" PVC and slipped it off the coax. Thus, ending up with the coax in my hand and ready to pull and feed into the conduit. Not sure that the hole under the eves would have allowed 1/2" clearance - but might have worked. Just a variation on your theme.
Roger, KL7Q

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
news:bYd8e.92516$vK6.39742@bignews3.bellsouth.net...
> Every now and then a need for a tool not on hand occurs, or
> a required part isn't available for a repair. Then the
> proverbal light bulb appears over one's head (homage to
> Edison no doubt). Today I was running some RG8/U into my
> attic crawl space to access a conduit into my shack. I drilled
> a hole into the roof overhang and pushed the cable into the
> hole. As Murphy would have it, the end of the cable being pushed
> into the hole was the end wound onto the core of the spool, so the
> cable was very 'springy' resulting in it all bunching up right
> at the hole inside the attic. When I climbed into the attic
> I couldn't reach the cable, it was sitting in a coiled up bunch
> at the wall. No way I was going to be able to crawl the distance
> and reach out to grab the cable.
>
> Now for the macgyverism ....
> I found a 6 foot piece of left over 1/2 pvc pipe and a 3" U-bolt.
> I attached the u bolt to the end of the pipe with electrical tape
> and used the new tool to reach and hook the coax.
>
> Ok, I'm sure we've all come up with these macgyverism's from time
> to time. Anybody care to share their brainstorms...?

2043. Re: macgyverisms and brainstorms.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-17 19:28:34 UTC
From: handy man <handy@andy.com>
Message-ID: <4262b8e1$1@news.comindico.com.au>
Source record: 19326

Stand by for the next episode of How to do it yourself.

2044. OHP transparency dielectric...?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-17 20:53:10 UTC
From: Chris <cjewell@cjewell.servebeer.com>
Message-ID: <BKqdnXPgcbEkUf_fRVn-qw@mersinet.co.uk>
Source record: 19327

Hi,

I'm currently having to build some high-voltage capacitors for an auto-ATU that I'm building. The capacitors are made from interleaving brass shim with some kind of dielectric. It was suggested that the dielectric was made from a triple layer of polyethylene sheet (ie freezer bag) stuck together with DC4 grease to exclude any air. However, this seems a messy approach and some engineer friends suggested that instead I use overhead projector transparency. I found that a double layer of this transparency worked to give me reasonable capacitor values with a reasonable number of plates per capacitor.

Now, as the project requires, I fiddled the caps into a binary addition series (1pF, 2pF, 4pF, ... , 1024pF) using a capacitance bridge with a 1kHz oscillator. I was careful to measure the caps in situ so as to take into account any stray capacitance on the circuit board. However, the tuner doesn't appear to be matching as expected (its an L-match). Does anyone have any views on using this dielectric? Is it possible that it has a frequency-dependent dielectric constant so that the cap values as measured at 1kHz are different at HF?

Any comments/help etc gratefully received!

73

Chris 2E0AYO

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.788 / Virus Database: 533 - Release Date: 01/11/2004

2045. Re: OHP transparency dielectric...?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-17 23:16:31 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d3uqof$7gr$1@sparta.btinternet.com>
Source record: 19328

When measuring capacitors at HF and UHF you get higher values of capacitance than at audio frequencies. This is due to the inductance and inductive reactance of the connecting leads between the capacitor and the measuring instrument,

Furthermore, the capacitors themselves when connected into a practical circuit, in series with their connecting wires, behave at HF and VHF as if they have larger capacitances than their audio frequency values.

The actual values of capacitors do not change of course.

Large capacitors (1000 pF) are affected much more than small values (10 pF).

The dielectric constants of low-loss plastic insulating materials are constant between AF and VHF. Apparent changes in capacitance are NOT due to changes in the dielectric constant.

On the other hand, what does it matter. When adjusting a tuner one's eyes are focussed on the SWR meter and not on the capacitor values. And the same applies to automatic tuners which don't have eyes.

Reg, G4FGQ

2046. HF MOBILE OF THE MONTH

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-17 23:32:56 UTC
From: K2BJ <webmaster@k2bj.com>
Message-ID: <ImC8e.2836$mG3.1456@twister.nyroc.rr.com>
Source record: 19329

Submit pictures and show off your HF mobile setup and see many others already on line...

http://www.k2bj.com

2047. Tenma oscope ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 02:00:50 UTC
From: Phil <pjock@xSpearNet.net>
Message-ID: <Xns963BDFEFBE8FBpjockxxxSpearNetnet@216.196.97.142>
Source record: 19330

Help! (again)

I bought a semi-working Tenma model 72-6602 oscilloscope
and it showed up without a manual (or any documentation.)

Does anyone have a schematic or manual or any docs for
this unit? Google choked on this one...

Thanks in advance for any help,

phil

2048. Re: Tenma oscope ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 05:35:09 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4263470A.69F42EDE@earthlink.net>
Source record: 19331

Phil wrote:
>
> Help! (again)
>
> I bought a semi-working Tenma model 72-6602 oscilloscope
> and it showed up without a manual (or any documentation.)
>
> Does anyone have a schematic or manual or any docs for
> this unit? Google choked on this one...
>
> Thanks in advance for any help,
>
> phil

http://www.tenma.com/ might help.
--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

2049. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 06:09:20 UTC
From: mike742 <gqrxzy8974@ftml.net>
Message-ID: <1113804560.423992.194120@z14g2000cwz.googlegroups.com>
Source record: 19332
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

>> I've always noted with some curiosity that 77.503kHz,
>> 60.002kHz, and 60.005kHz are off-the-shelf crystals too...
>> used in a direct conversion receiver for DCF/WWV to 3Hz, 2Hz,
>> and 5Hz carrier-detect frequencies maybe?

>Strange. Maybe another resonance mode?

I'd guess the specified frequency is parallel resonance with
the specified load capacitance.

I have some Digi-Key SE3320-ND 60 Khz xctls (C-2 60.000KC-P).

My best try at measuring the series resonant frequency shows
59998 Hz. Perhaps the 60.002 Khz ones are series resonant at
60000 Hz. I don't have any of those to measure.

2050. Re: Tenma oscope ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 07:17:18 UTC
From: Bruce Fletcher <r1card1an@bt1nternet.c0m>
Message-ID: <d3vmtu$95g$1@titan.btinternet.com>
Source record: 19333

Phil wrote:
> Help! (again)
>
> I bought a semi-working Tenma model 72-6602 oscilloscope
> and it showed up without a manual (or any documentation.)
>
> Does anyone have a schematic or manual or any docs for
> this unit? Google choked on this one...

Try <http://www.mcmb2b.com/cgi-bin/test/72-6602.html?id=8eJPB9Rf>
--
Bruce Fletcher
Stronsay, Orkney
<www.stronsay.co.uk/claremont>

2051. Re: Tenma oscope ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 09:39:06 UTC
From: handy man <handy@andy.com>
Message-ID: <42638039$1@news.comindico.com.au>
Source record: 19334

Not much on the net for this one.

http://www.newark.com/product-details/text/mcm/html/72-6602.html

http://www.newark.com/NewarkWebCommerce/newark/en_US/endecaSearch/partDetail.jsp?SKU=50N1368&N=4

http://www.spctechnology.com/prodinfo/specs/50N1368.pdf

2052. Re: OHP transparency dielectric...?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 10:41:53 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <R9M8e.35514$pA6.16388@newsfe1-win.ntli.net>
Source record: 19335

> Now, as the project requires, I fiddled the caps into a binary addition
> series (1pF, 2pF, 4pF, ... , 1024pF) using a capacitance bridge with a
1kHz
> oscillator. I was careful to measure the caps in situ so as to take into
> account any stray capacitance on the circuit board. However, the tuner
> doesn't appear to be matching as expected (its an L-match). Does anyone
> have any views on using this dielectric? Is it possible that it has a
> frequency-dependent dielectric constant so that the cap values as measured
> at 1kHz are different at HF?
>
> Any comments/help etc gratefully received!
==========
Have you tried to make capacitors from pieces of double sided fibreglass PCB
material ? Or even better the thin teflon material used for microwave
frequencies (expensive stuff). Because the dielectric material is thicker
,you might need a larger area to arrive at the wanted capacitance.

If you own or can borrow a MFJ 259B analyser ,you can measure the
capacitance at the operating frequency instead of at 1000 Hz.

Frank GM0CSZ / KN6WH

2053. Re: OHP transparency dielectric...?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 13:02:29 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <FdO8e.35897$qO6.2581@trnddc05>
Source record: 19336

"Chris" <cjewell@cjewell.servebeer.com> wrote in message
news:BKqdnXPgcbEkUf_fRVn-qw@mersinet.co.uk...
> Hi,
>
> I'm currently having to build some high-voltage capacitors for an auto-ATU
> that I'm building. The capacitors are made from interleaving brass shim
> with some kind of dielectric. It was suggested that the dielectric was
made
> from a triple layer of polyethylene sheet (ie freezer bag) stuck together
> with DC4 grease to exclude any air. However, this seems a messy approach
> and some engineer friends suggested that instead I use overhead projector
> transparency. I found that a double layer of this transparency worked to
> give me reasonable capacitor values with a reasonable number of plates per
> capacitor.

I would be a little concerned about the loss factor of the transparency
material. The polyethylene originally suggested is an excellent dielectric-
the transparency material may yield reasonable capacitor values, but if the
loss factor is high, wach them smoke.
As suggested, teflon is also excellent.
For the lower values a good qulaity 50 Ohm coax will yield about 29pF/foot.

Dale W4OP

2054. Measuring current with LM3914 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 13:19:14 UTC
From: Patrick <tk5ep@free.fr>
Message-ID: <4263b3d1$0$11249$636a15ce@news.free.fr>
Source record: 19337

Hi all,

I started a new amplifier project, a 4CX1500B 2m amplifier.
Wanting to make it a bit more state of the art, i want to replace the old meters by Led bars...
The simplest way to do that is to use a LM3914 bar display which can measure voltages with a ground reference.

My design will use a cathode driven, DC grounded screen. So measures must be make "floating" as the ref is the cathode .

How can i achieve this in a simple way ??

73, Patrick TK5EP
http://tk5ep.free.fr

2055. ANC-4 principle?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 13:22:17 UTC
From: Ron Hardin <rhhardin@mindspring.com>
Message-ID: <4263B47F.4C2A@mindspring.com>
Source record: 19338

How does an ANC-4 work, _as to the phase shift_? Is the one input just split
and one leg run thru a capacitor and resistor to ground, and you select
some linear combination of the two inputs?

That selection then being added to the reference antenna's.

I'm interested in building an 8-input ANC-4, in effect.
--
Ron Hardin
rhhardin@mindspring.com

On the internet, nobody knows you're a jerk.

2056. Re: OHP transparency dielectric...?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 13:29:05 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <BCO8e.11673$44.4718@newsread1.news.atl.earthlink.net>
Source record: 19339

"Chris" <cjewell@cjewell.servebeer.com> wrote in message
news:BKqdnXPgcbEkUf_fRVn-qw@mersinet.co.uk...
> Hi,
>
> I'm currently having to build some high-voltage capacitors for an auto-ATU
> that I'm building. The capacitors are made from interleaving brass shim
> with some kind of dielectric. It was suggested that the dielectric was
made
> from a triple layer of polyethylene sheet (ie freezer bag) stuck together
> with DC4 grease to exclude any air. However, this seems a messy approach
> and some engineer friends suggested that instead I use overhead projector
> transparency. I found that a double layer of this transparency worked to
> give me reasonable capacitor values with a reasonable number of plates per
> capacitor.
>
>

Look for some Kayton made by Dupont. It is a high voltage plastic like film
similar looking to the mylar sheets. It is especially made for applications
like you want.

2057. Re: Tenma oscope ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 13:41:17 UTC
From: "David L. Foreman" <davelf11@cox.net>
Message-ID: <s4e76116bl6rc0aspquk0drskaco8pk6ek@4ax.com>
Source record: 19340

On Sun, 17 Apr 2005 21:00:50 -0500, Phil <pjock@xSpearNet.net> wrote:

>Help! (again)
>
>I bought a semi-working Tenma model 72-6602 oscilloscope
>and it showed up without a manual (or any documentation.)
>
>Does anyone have a schematic or manual or any docs for
>this unit? Google choked on this one...
>
>Thanks in advance for any help,
>
>phil

Phil
Try the following URL.
>http://mail.mcminone.com/<

MCM sells the Tenma line of test equipment.
If the scope isn't too old, they may still have
documentation for it.
Dave Foreman

2058. Re: ANC-4 principle?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 13:42:21 UTC
From: Dan Richardson <k6mhe@arrl.net>
Message-ID: <o6e7619mjmajmkvkl5ir6hplklu98cqmme@4ax.com>
Source record: 19341

On Mon, 18 Apr 2005 13:22:17 GMT, Ron Hardin <rhhardin@mindspring.com>
wrote:

>How does an ANC-4 work, _as to the phase shift_? Is the one input just split
>and one leg run thru a capacitor and resistor to ground, and you select
>some linear combination of the two inputs?
>

The ANC-4 noise canceller works by cancelling the noise before it
affects the receiver AGC circuits. It connects between you antenna and
receiver. A second antenna acts as a noise pickup. The front panel
controls allow adjustment of signal phase and magnitude from the two
antennas to effect noise cancellation. The ANC-4 can also operate as
an active antenna using a noise antenna and noise gain control to
amplify antenna output. And, it can be used as a diversity combiner to
pick up weak signals or null interfering signals. Complete
specifications on the ANC-4 are available from Timewave's web site.

Danny, K6MHE

2059. Re: OHP transparency dielectric...?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 13:46:31 UTC
From: atec <atec77@XXXhotmail.com>
Message-ID: <4263ba55@dnews.tpgi.com.au>
Source record: 19342

Ralph Mowery wrote:
> "Chris" <cjewell@cjewell.servebeer.com> wrote in message
> news:BKqdnXPgcbEkUf_fRVn-qw@mersinet.co.uk...
>
>>Hi,
>>
>>I'm currently having to build some high-voltage capacitors for an auto-ATU
>>that I'm building. The capacitors are made from interleaving brass shim
>>with some kind of dielectric. It was suggested that the dielectric was
>
> made
>
>>from a triple layer of polyethylene sheet (ie freezer bag) stuck together
>>with DC4 grease to exclude any air. However, this seems a messy approach
>>and some engineer friends suggested that instead I use overhead projector
>>transparency. I found that a double layer of this transparency worked to
>>give me reasonable capacitor values with a reasonable number of plates per
>>capacitor.
>>
>>
>
>
> Look for some Kayton made by Dupont. It is a high voltage plastic like film
> similar looking to the mylar sheets. It is especially made for applications
> like you want.
>
>
sometimes sold as an insulator in sheets for transistors

2060. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 13:56:08 UTC
From: garyr@fidalgo.net
Message-ID: <1113832568.095649.315770@z14g2000cwz.googlegroups.com>
Source record: 19343
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

My appologies for the late reply but what is a "PLL stabilized
Q-multiplier"?

2061. Re: ANC-4 principle?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 14:24:31 UTC
From: Ron Hardin <rhhardin@mindspring.com>
Message-ID: <4263C315.7BBB@mindspring.com>
Source record: 19344

Dan Richardson wrote:
>
> On Mon, 18 Apr 2005 13:22:17 GMT, Ron Hardin <rhhardin@mindspring.com>
> wrote:
>
> >How does an ANC-4 work, _as to the phase shift_? Is the one input just split
> >and one leg run thru a capacitor and resistor to ground, and you select
> >some linear combination of the two inputs?
> >
>
> The ANC-4 noise canceller works by cancelling the noise before it
> affects the receiver AGC circuits. It connects between you antenna and
> receiver. A second antenna acts as a noise pickup. The front panel
> controls allow adjustment of signal phase and magnitude from the two
> antennas to effect noise cancellation. The ANC-4 can also operate as
> an active antenna using a noise antenna and noise gain control to
> amplify antenna output. And, it can be used as a diversity combiner to
> pick up weak signals or null interfering signals. Complete
> specifications on the ANC-4 are available from Timewave's web site.
>
> Danny, K6MHE

The question I had was how it achieves a phase shift, though.
--
Ron Hardin
rhhardin@mindspring.com

On the internet, nobody knows you're a jerk.

2062. Re: Measuring current with LM3914 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 15:10:51 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <8ej761lt391q2nvfesflq2o2h8qbocua79@4ax.com>
Source record: 19345

On Mon, 18 Apr 2005 15:19:14 +0200, Patrick <tk5ep@free.fr> wrote:

>Hi all,
>
>I started a new amplifier project, a 4CX1500B 2m amplifier.
>Wanting to make it a bit more state of the art, i want to replace the
>old meters by Led bars...
>The simplest way to do that is to use a LM3914 bar display which can
>measure voltages with a ground reference.
>
>My design will use a cathode driven, DC grounded screen. So measures
>must be make "floating" as the ref is the cathode .
>
>How can i achieve this in a simple way ??

Without more thought on my part I can't say whether this will help,
but it sure won't hurt to look.

http://wd7s.home.att.net/ds-1.htm

2063. Re: Tenma oscope ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 15:15:20 UTC
From: Phil <pjock@xSpearNet.net>
Message-ID: <Xns963C72808E826pjockxxxSpearNetnet@216.196.97.142>
Source record: 19346

Thanks all, but the links suggested did not have any
schematics, manuals, etc. (www.tenma.com just
redirects to an MCM site with info and price, etc.)

BUT! I called Tenma (actually MCM who sells this
made-in-Taiwan special) and they referred me to
Sypris, who do their warranty maintenance.

There a fine young lady copied the schematic and
emailed it to me. What a surprise, real customer
service, albeit in a round about fashion.

I am ready to jump on that low intensity problem now.

Again, thanks to all and if any one needs this schematic,
just let me know.

phil

> Help! (again)
>
> I bought a semi-working Tenma model 72-6602 oscilloscope
> and it showed up without a manual (or any documentation.)
>
> Does anyone have a schematic or manual or any docs for
> this unit? Google choked on this one...
>
> etc. . .

2064. Re: Measuring current with LM3914 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 16:55:59 UTC
From: Patrick <tk5ep@free.fr>
Message-ID: <4263e6a7$0$3584$626a14ce@news.free.fr>
Source record: 19347

Hi Wes,

Thanks for the info. I've looked on the pages you gave me and see that
all measures are made with a ground reference... :(

I will drop a mail to wd7s and ask some suggestions...

Thanks for the answer !

73, Patrick

Wes Stewart a ï¿½crit :

> On Mon, 18 Apr 2005 15:19:14 +0200, Patrick <tk5ep@free.fr> wrote:
>
>
>>Hi all,
>>
>>I started a new amplifier project, a 4CX1500B 2m amplifier.
>>Wanting to make it a bit more state of the art, i want to replace the
>>old meters by Led bars...
>>The simplest way to do that is to use a LM3914 bar display which can
>>measure voltages with a ground reference.
>>
>>My design will use a cathode driven, DC grounded screen. So measures
>>must be make "floating" as the ref is the cathode .
>>
>>How can i achieve this in a simple way ??
>
>
> Without more thought on my part I can't say whether this will help,
> but it sure won't hurt to look.
>
> http://wd7s.home.att.net/ds-1.htm
>

2065. Re: Power amp cooling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 17:11:51 UTC
From: Skipp <nospamplease@yahoo.com>
Message-ID: <d40pon$4ij$1@skeeter.ucdavis.edu>
Source record: 19348

You need to have cool air moving across the tube base pins. The
conventional method of under-up cooling supplies the base pins
with safe cooling. If you blow into the anode, what happens to
the air reaching the base pins/contacts? The seal around the
tube base contacts also needs cooling and it should not be already
hot air from passing by the anode.

Smaller tubes are forgiving in cost and operation. Jump to
the 4cx1000/4cx1500 size and you had best not over heat the
tube, both base pins and anode.

cheers,
skipp

www.radiowrench.com/sonic I have a diagram of the Collins 30S-1 available
(as well as many others).

: Patrick <tk5ep@free.fr> wrote:
: Hi All,

: I'm about to build a 4CX1500B amplifier for 2m.

: Most, if not all, descriptions are blowing air into the enclosure on the
: base side of the tube and the air goes through the socket and finaly
: through the anode chimney.
: For several reasons i would like to blow into the anode enclosure
: directly onto the anode, the air would then go out through the anode
: chimney. Only a small part of the air would cool the base of the tube
: through small holes in the anode/cathode separation.

: Is that a stupid idea ? Is there any reason not doing so ?

: 73, Patrick

2066. Re: Power amp cooling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 17:38:11 UTC
From: Patrick <tk5ep@free.fr>
Message-ID: <4263F083.10606@free.fr>
Source record: 19349

Hi Skipp,

Thanks for the advice.

Yes, in fact must the base be cooled as well !
I don't think the air that will go to the base will be hot, the air will be under pressure in the anode cabinet and the hotest air will be created on the anode cooler and be exhausted almost immediately.

I have seen a description where there are 2 Papst 3472 fans, one blowing and one extracting the air. These fans can produce abt 36 CFM at a very low noise level. Maybe a not too bad idea compared to a squirel radial fan that produces the same volume but at a much higher noise level !!

Any suggestions ??

73 Patrick

Skipp a ï¿½crit :
> You need to have cool air moving across the tube base pins. The
> conventional method of under-up cooling supplies the base pins
> with safe cooling. If you blow into the anode, what happens to
> the air reaching the base pins/contacts? The seal around the
> tube base contacts also needs cooling and it should not be already
> hot air from passing by the anode.
>
> Smaller tubes are forgiving in cost and operation. Jump to
> the 4cx1000/4cx1500 size and you had best not over heat the
> tube, both base pins and anode.
>
> cheers,
> skipp
>
> www.radiowrench.com/sonic I have a diagram of the Collins 30S-1 available
> (as well as many others).
>
>
>
> : Patrick <tk5ep@free.fr> wrote:
> : Hi All,
>
> : I'm about to build a 4CX1500B amplifier for 2m.
>
> : Most, if not all, descriptions are blowing air into the enclosure on the
> : base side of the tube and the air goes through the socket and finaly
> : through the anode chimney.

> : For several reasons i would like to blow into the anode enclosure
> : directly onto the anode, the air would then go out through the anode
> : chimney. Only a small part of the air would cool the base of the tube
> : through small holes in the anode/cathode separation.
>
> : Is that a stupid idea ? Is there any reason not doing so ?
>
> : 73, Patrick

2067. Re: OHP transparency dielectric...?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 18:39:46 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <90r7615kok3uaufpkm9vfi9rba2ln8e2ph@4ax.com>
Source record: 19350

On Mon, 18 Apr 2005 10:41:53 GMT, "Highland Ham"
<abcgm0csz.kn6whxyz@abcntlworldxyz.com> wrote:

>Have you tried to make capacitors from pieces of double sided fibreglass PCB
>material ?

With traditional FR4/G10 materials you are only going to achieve
Q-factors of the order of 20-30 with a PCB capacitor even on HF, so
don't be upset, if the PCB material generates a lot of smoke :-) even
when exposed with only 100 W of RF power, especially if some high
impedances are involved.

>Or even better the thin teflon material used for microwave
>frequencies (expensive stuff).

Teflon has low losses on HF, tolerates high fields strengths and might
be quite usable material for HV RF capacitors, despite the lower
dielectric constant.

Paul OH3LWR

2068. Re: Power amp cooling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 18:55:07 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <1k0861h7jl6fe3g6674ob78qjtioah3rm7@4ax.com>
Source record: 19351

The problem is back pressure on the fan. Most axial fans do not do
well with much back pressure. The flow drops sharply. Squirrel cage
type blowers are usually needed for those type tubes. For a 4cx1000
type tube you need a minimum of a 3 inch wheel on the blower at 3100
rpm and that is with a wide open socket and air path. A smaller blower
would need to be higher speed.

73
Gary K4FMX

On Mon, 18 Apr 2005 19:38:11 +0200, Patrick <tk5ep@free.fr> wrote:

>Hi Skipp,
>
>Thanks for the advice.
>
>Yes, in fact must the base be cooled as well !
>I don't think the air that will go to the base will be hot, the air will
>be under pressure in the anode cabinet and the hotest air will be
>created on the anode cooler and be exhausted almost immediately.
>
>I have seen a description where there are 2 Papst 3472 fans, one blowing
> and one extracting the air. These fans can produce abt 36 CFM at a
>very low noise level. Maybe a not too bad idea compared to a squirel
>radial fan that produces the same volume but at a much higher noise level !!
>
>Any suggestions ??
>
>73 Patrick
>
>Skipp a ï¿½crit :
>> You need to have cool air moving across the tube base pins. The
>> conventional method of under-up cooling supplies the base pins
>> with safe cooling. If you blow into the anode, what happens to
>> the air reaching the base pins/contacts? The seal around the
>> tube base contacts also needs cooling and it should not be already
>> hot air from passing by the anode.
>>
>> Smaller tubes are forgiving in cost and operation. Jump to
>> the 4cx1000/4cx1500 size and you had best not over heat the
>> tube, both base pins and anode.
>>
>> cheers,
>> skipp
>>

>> www.radiowrench.com/sonic I have a diagram of the Collins 30S-1 available
>> (as well as many others).
>>
>>
>>
>> : Patrick <tk5ep@free.fr> wrote:
>> : Hi All,
>>
>> : I'm about to build a 4CX1500B amplifier for 2m.
>>
>> : Most, if not all, descriptions are blowing air into the enclosure on the
>> : base side of the tube and the air goes through the socket and finaly
>> : through the anode chimney.
>> : For several reasons i would like to blow into the anode enclosure
>> : directly onto the anode, the air would then go out through the anode
>> : chimney. Only a small part of the air would cool the base of the tube
>> : through small holes in the anode/cathode separation.
>>
>> : Is that a stupid idea ? Is there any reason not doing so ?
>>
>> : 73, Patrick

2069. Re: Power amp cooling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 20:42:03 UTC
From: Patrick <tk5ep@free.fr>
Message-ID: <42641b9a$0$3567$626a14ce@news.free.fr>
Source record: 19352

Hi gary,

You're right. But how does a combination of those fans work ?
One "pushing" and one "pulling" ?? The back pressure must certainly be
reduced ?! That's a problem for a hydraulic engineer !! hi hi

73, Patrick

Gary Schafer a ï¿½crit :
> The problem is back pressure on the fan. Most axial fans do not do
> well with much back pressure. The flow drops sharply. Squirrel cage
> type blowers are usually needed for those type tubes. For a 4cx1000
> type tube you need a minimum of a 3 inch wheel on the blower at 3100
> rpm and that is with a wide open socket and air path. A smaller blower
> would need to be higher speed.
>
> 73
> Gary K4FMX
>
> On Mon, 18 Apr 2005 19:38:11 +0200, Patrick <tk5ep@free.fr> wrote:
>
>
>>Hi Skipp,
>>
>>Thanks for the advice.
>>
>>Yes, in fact must the base be cooled as well !
>>I don't think the air that will go to the base will be hot, the air will
>>be under pressure in the anode cabinet and the hotest air will be
>>created on the anode cooler and be exhausted almost immediately.
>>
>>I have seen a description where there are 2 Papst 3472 fans, one blowing
>> and one extracting the air. These fans can produce abt 36 CFM at a
>>very low noise level. Maybe a not too bad idea compared to a squirel
>>radial fan that produces the same volume but at a much higher noise level !!
>>
>>Any suggestions ??
>>
>>73 Patrick
>>
>>Skipp a ï¿½crit :
>>
>>>You need to have cool air moving across the tube base pins. The
>>>conventional method of under-up cooling supplies the base pins
>>>with safe cooling. If you blow into the anode, what happens to

>>>the air reaching the base pins/contacts? The seal around the
>>>tube base contacts also needs cooling and it should not be already
>>>hot air from passing by the anode.
>>>
>>>Smaller tubes are forgiving in cost and operation. Jump to
>>>the 4cx1000/4cx1500 size and you had best not over heat the
>>>tube, both base pins and anode.
>>>
>>>cheers,
>>>skipp
>>>
>>>www.radiowrench.com/sonic I have a diagram of the Collins 30S-1 available
>>>(as well as many others).
>>>
>>>
>>>
>>>: Patrick <tk5ep@free.fr> wrote:
>>>: Hi All,
>>>
>>>: I'm about to build a 4CX1500B amplifier for 2m.
>>>
>>>: Most, if not all, descriptions are blowing air into the enclosure on the
>>>: base side of the tube and the air goes through the socket and finaly
>>>: through the anode chimney.
>>>: For several reasons i would like to blow into the anode enclosure
>>>: directly onto the anode, the air would then go out through the anode
>>>: chimney. Only a small part of the air would cool the base of the tube
>>>: through small holes in the anode/cathode separation.
>>>
>>>: Is that a stupid idea ? Is there any reason not doing so ?
>>>
>>>: 73, Patrick
>
>

2070. Vacuum Variable Capacitor Cross-Reference.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 20:56:59 UTC
From: Sandlapper <k4nau@hotmail.com>
Message-ID: <xPidnZ5SY--FgvnfRVn-rg@comcast.com>
Source record: 19353
Cross-posted to: rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi Folks,

Anyone out there have the specs on an EEV(English Electric Valve) Variable Vacuum Capacitor
#UC600A-6-70, or failing that, have a cross-reference for it to Jennings, Comet, etc.?? Need to determine the range and voltage.

Thanks,
Butch K4NAU

2071. HF ANTENNA TO SALE - SOMMER XP707

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 21:13:21 UTC
From: Jos&#65533; Lopes <fartolopes@mail.telepac.pt>
Message-ID: <42642305$0$27122$a729d347@news.telepac.pt>
Source record: 19354

I am interested to sale my hf antenna above mentioned that is in very good conditions.

Reason: need to renew and create a new set up of antennas.

Antenna: Sommer (DJ2UT Beam)
Model: XP 707
Bands: 10, 12, 15, 17, 20, 30 and 40 meters
Balun: The balun furnished with the Sommer antennas is a low-loss air core type using RG142 (BU) Teflon cable. The balun will handle 2.9 kW continuous output at 30 MHz with a loss of only 0.05 dB.
This antenna it still on my tower and working very well.
For price please send one email to:
fartolopes@mail.telepac.pt

The transports costs will be at the resposability of the buyer.
If you are interestes we can sed some actual pictures, and for all the informations concerning gain and front/back, please go to the oficial site:
http://www.sommerantennas.com/beaminfo.html
Best 73, Lopes - CT1CJJ

2072. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-18 21:52:15 UTC
From: LenAnderson@ieee.org
Message-ID: <1113861135.501787.292340@g14g2000cwa.googlegroups.com>
Source record: 19355
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

From: "mike742" on Sun,Apr 17 2005 11:09 pm

>>> I've always noted with some curiosity that 77.503kHz,
>>> 60.002kHz, and 60.005kHz are off-the-shelf crystals too...
>>> used in a direct conversion receiver for DCF/WWV to 3Hz, 2Hz,
>>> and 5Hz carrier-detect frequencies maybe?
>
>>Strange. Maybe another resonance mode?
>
>I'd guess the specified frequency is parallel resonance with
>the specified load capacitance.
>
>I have some Digi-Key SE3320-ND 60 Khz xctls (C-2 60.000KC-P).>
>
>My best try at measuring the series resonant frequency shows
>59998 Hz. Perhaps the 60.002 Khz ones are series resonant at
>60000 Hz. I don't have any of those to measure.

To help us out, it would be best if you describe your
method of testing the resonance frequencies and the
accuracy of your frequency meter/counter.

A -2 Hz "error" in frequency is about 33 PPM (Parts
Per Million) or 0.0033 %. That seems to be within
manufacturer's stated tolerance.

For what it's worth, the spectral occupancy needed
by the WWVB signal is roughly 5 Hz. That is good
enough to demodulate the AM of WWVB and still
preserve the (relative) sharpness of the digital
amplitude transitions for purposes of obtaining the
correct time of day. Modulation on WWVB is roughly
30% AM at 1 second periodicity.

In my TRF receiver for 60 KHz, the carrier is
extracted by amplifying the filtered signal and
applying it to an over-driven MC1350P which acts
as a limiter. Outside of the (relatively) broad
selectivity of the tuned loop (Q roughly 45) and
an interstage L-C tuned coupling, the final filter
is simply two ECS crystals in series with a small
capacitor to ground at the series connection point.
The capacitor value was arrived at by "cut and
try" substitution, much quicker than trying to
calculate everything after an elaborate crystal

measurement exercise. :-)

The final selectivity is narrow enough to eliminate most of the LF hash around the spectrum, especially the 4th harmonics of the TV set horizontal sweep frequency. That should work equally well on non-limiting demodulation to get the time-of-day data. [without the DSP supplied by the microcontrollers in the radio clocks...we have two commercial units in the house for that]

Measuring the exact crystal resonance frequency is NOT a simple exercise at 60 KHz. I would suggest looking closer at the Digi-Key links for technical data direct from the manufacturer. Those are found on the Digi-Key final part-number page just below the electronic catalog page PDF link. Manufacturer's data yields the parallel capacitance, maximum series resonance crystal equivalent resistance, and either the equivalent series inductance or the equivalent series capacitance. Digi-Key is excellent in their links to manufacturer's data in my estimation.

LenAnderson@ieee.org

2073. Re: macgyverisms and brainstorms.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-19 00:15:56 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <K_X8e.80733$f%4.24104@bignews1.bellsouth.net>
Source record: 19356

Roger and Ute Brown wrote:
> I'd have pushed the coax into the 6 foot 1/2" PVC pipe. Then I'd have
> inserted the PVC into the hole under the eves and into the attic. From the
> attic I'd have retrieved the end of the 1/2" PVC and slipped it off the
> coax. Thus, ending up with the coax in my hand and ready to pull and feed
> into the conduit. Not sure that the hole under the eves would have allowed
> 1/2" clearance - but might have worked. Just a variation on your theme.
> Roger, KL7Q
>
> "Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
> news:bYd8e.92516$vK6.39742@bignews3.bellsouth.net...
>
>>Every now and then a need for a tool not on hand occurs, or
>>a required part isn't available for a repair. Then the
>>proverbal light bulb appears over one's head (homage to
>>Edison no doubt). Today I was running some RG8/U into my
>>attic crawl space to access a conduit into my shack. I drilled
>>a hole into the roof overhang and pushed the cable into the
>>hole. As Murphy would have it, the end of the cable being pushed
>>into the hole was the end wound onto the core of the spool, so the
>>cable was very 'springy' resulting in it all bunching up right
>>at the hole inside the attic. When I climbed into the attic
>>I couldn't reach the cable, it was sitting in a coiled up bunch
>>at the wall. No way I was going to be able to crawl the distance
>>and reach out to grab the cable.
>>
>>Now for the macgyverism ....
>>I found a 6 foot piece of left over 1/2 pvc pipe and a 3" U-bolt.
>>I attached the u bolt to the end of the pipe with electrical tape
>>and used the new tool to reach and hook the coax.
>>
>>Ok, I'm sure we've all come up with these macgyverism's from time
>>to time. Anybody care to share their brainstorms...?
>
>
>
1/2" pvc is somewhere between 3/4-7/8" in dia, and I only
had a 5/8" drill bit to get into the attic. So pushing the
pvc into the attic wasn't going to work. I had thought of
that though. At one time someone made a thin wall sleeve for
the purpose of lining holes in exterior walls to push coax
through. If you drill through CBS walls and hit a hollow
pocket you will have a problem getting the coax through
if it curls up inside the pocket, hence the sleeve.

The local ham radio outlet didn't have any of the sleeving
though. (Wonder where I saw it...?)

2074. Re: Power amp cooling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-19 00:23:14 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <apj8611o48valrghpuua6oesb6ce9s4t27@4ax.com>
Source record: 19357

You don't get much pressure relief pulling. Better to push.

73
Gary K4FMX

On Mon, 18 Apr 2005 22:42:03 +0200, Patrick <tk5ep@free.fr> wrote:

>Hi gary,
>
>You're right. But how does a combination of those fans work ?
>One "pushing" and one "pulling" ?? The back pressure must certainly be
>reduced ?! That's a problem for a hydraulic engineer !! hi hi
>
>73, Patrick
>
>Gary Schafer a ï¿½crit :
>> The problem is back pressure on the fan. Most axial fans do not do
>> well with much back pressure. The flow drops sharply. Squirrel cage
>> type blowers are usually needed for those type tubes. For a 4cx1000
>> type tube you need a minimum of a 3 inch wheel on the blower at 3100
>> rpm and that is with a wide open socket and air path. A smaller blower
>> would need to be higher speed.
>>
>> 73
>> Gary K4FMX
>>
>> On Mon, 18 Apr 2005 19:38:11 +0200, Patrick <tk5ep@free.fr> wrote:
>>
>>
>>>Hi Skipp,
>>>
>>>Thanks for the advice.
>>>
>>>Yes, in fact must the base be cooled as well !
>>>I don't think the air that will go to the base will be hot, the air will
>>>be under pressure in the anode cabinet and the hotest air will be
>>>created on the anode cooler and be exhausted almost immediately.
>>>
>>>I have seen a description where there are 2 Papst 3472 fans, one blowing
>>> and one extracting the air. These fans can produce abt 36 CFM at a
>>>very low noise level. Maybe a not too bad idea compared to a squirel
>>>radial fan that produces the same volume but at a much higher noise level !!
>>>
>>>Any suggestions ??
>>>

>>>73 Patrick
>>>
>>>Skipp a ï¿½crit :
>>>
>>>>You need to have cool air moving across the tube base pins. The
>>>>conventional method of under-up cooling supplies the base pins
>>>>with safe cooling. If you blow into the anode, what happens to
>>>>the air reaching the base pins/contacts? The seal around the
>>>>tube base contacts also needs cooling and it should not be already
>>>>hot air from passing by the anode.
>>>>
>>>>Smaller tubes are forgiving in cost and operation. Jump to
>>>>the 4cx1000/4cx1500 size and you had best not over heat the
>>>>tube, both base pins and anode.
>>>>
>>>>cheers,
>>>>skipp
>>>>
>>>>www.radiowrench.com/sonic I have a diagram of the Collins 30S-1 available
>>>>(as well as many others).
>>>>
>>>>
>>>>
>>>>: Patrick <tk5ep@free.fr> wrote:
>>>>: Hi All,
>>>>
>>>>: I'm about to build a 4CX1500B amplifier for 2m.
>>>>
>>>>: Most, if not all, descriptions are blowing air into the enclosure on the
>>>>: base side of the tube and the air goes through the socket and finaly
>>>>: through the anode chimney.
>>>>: For several reasons i would like to blow into the anode enclosure
>>>>: directly onto the anode, the air would then go out through the anode
>>>>: chimney. Only a small part of the air would cool the base of the tube
>>>>: through small holes in the anode/cathode separation.
>>>>
>>>>: Is that a stupid idea ? Is there any reason not doing so ?
>>>>
>>>>: 73, Patrick
>>
>>

2075. Re: macgyverisms and brainstorms.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-19 00:59:54 UTC
From: mikea@mikea.ath.cx
Message-ID: <d41l6apur1@puck.litech.org>
Source record: 19358

Ken Scharf <wa2mzeNOTTHIS@bellsouth.net> wrote:

> 1/2" pvc is somewhere between 3/4-7/8" in dia, and I only
> had a 5/8" drill bit to get into the attic. So pushing the
> pvc into the attic wasn't going to work. I had thought of
> that though. At one time someone made a thin wall sleeve for
> the purpose of lining holes in exterior walls to push coax
> through. If you drill through CBS walls and hit a hollow
> pocket you will have a problem getting the coax through
> if it curls up inside the pocket, hence the sleeve.
> The local ham radio outlet didn't have any of the sleeving
> though. (Wonder where I saw it...?)

Radio Shack sells something of that sort. It comes with a plug at each
end, with an RG-58-sized hole in the plug. The sleeve itself isn't
quite big enough to pass a PL-259, which I found disappointing.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

2076. Re: OHP transparency dielectric...?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-19 02:23:31 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <44q8615i660npvvg7jd0k6lr9ugq3jtlc6@4ax.com>
Source record: 19360

On Mon, 18 Apr 2005 13:29:05 GMT "Ralph Mowery"
<rmowery28146@earthlink.net> wrote:

>Look for some Kayton made by Dupont.

I suspect that you are thinking of Kapton.

-

Jim Adney jadney@vwtype3.org
Madison, WI 53711 USA

2077. Re: macgyverisms and brainstorms.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-19 02:31:41 UTC
From: atec <atec77@XXXhotmail.com>
Message-ID: <42646dae$1@dnews.tpgi.com.au>
Source record: 19359

Mike Andrews wrote:
> Ken Scharf <wa2mzeNOTTHIS@bellsouth.net> wrote:
>
>
>>1/2" pvc is somewhere between 3/4-7/8" in dia, and I only
>>had a 5/8" drill bit to get into the attic. So pushing the
>>pvc into the attic wasn't going to work. I had thought of
>>that though. At one time someone made a thin wall sleeve for
>>the purpose of lining holes in exterior walls to push coax
>>through. If you drill through CBS walls and hit a hollow
>>pocket you will have a problem getting the coax through
>>if it curls up inside the pocket, hence the sleeve.
>>The local ham radio outlet didn't have any of the sleeving
>>though. (Wonder where I saw it...?)
>
>
> Radio Shack sells something of that sort. It comes with a plug at each
> end, with an RG-58-sized hole in the plug. The sleeve itself isn't
> _quite_ big enough to pass a PL-259, which I found disappointing.
>
This is amusing , I do this stuff a lot (Im a cabler and electrian) and
there are better ways to do it , try not to make a simple thing too had
guys .

2078. Re: OHP transparency dielectric...?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-19 02:58:22 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <it_8e.9145$sp3.3332@newsread3.news.atl.earthlink.net>
Source record: 19361

"Jim Adney" <jadney@vwtype3.org> wrote in message
news:44q8615i660npvvg7jd0k6lr9ugq3jtlc6@4ax.com...
> On Mon, 18 Apr 2005 13:29:05 GMT "Ralph Mowery"
> <rmowery28146@earthlink.net> wrote:
>
> >Look for some Kayton made by Dupont.
>
> I suspect that you are thinking of Kapton.
>
>
It could be. I copied the spelling from another artical as I could not
remember exectally how it was spelled or what it was called.
The Kapton really does sound right.

Yep, that is it.

http://www.dupont.com/kapton/

2079. Re: macgyverisms and brainstorms.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-19 04:43:12 UTC
From: Bruce Fletcher <r1card1an@bt1nternet.c0m>
Message-ID: <d4228v$6j3$2@hercules.btinternet.com>
Source record: 19362

atec wrote:
> Mike Andrews wrote:
>> Radio Shack sells something of that sort. It comes with a plug at each
>> end, with an RG-58-sized hole in the plug. The sleeve itself isn't
>> _quite_ big enough to pass a PL-259, which I found disappointing.
>
> This is amusing , I do this stuff a lot (Im a cabler and electrian) and
> there are better ways to do it , try not to make a simple thing too had
> guys .

Would you please enlighten us mere mortals and describe one or more of
your 'better ways'?
--
Bruce Fletcher
Stronsay, Orkney
<www.stronsay.co.uk/claremont>

2080. Re: macgyverisms and brainstorms.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-19 04:56:16 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <42648F6F.D053D041@earthlink.net>
Source record: 19363

Bruce Fletcher wrote:
>
> Would you please enlighten us mere mortals and describe one or more of
> your 'better ways'?
> --
> Bruce Fletcher

I always like the "Diversibit" method myself.

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

2081. Re: macgyverisms and brainstorms.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-19 05:22:59 UTC
From: atec <atec77@XXXhotmail.com>
Message-ID: <426495ce$1@dnews.tpgi.com.au>
Source record: 19364

Bruce Fletcher wrote:
> atec wrote:
>
>> Mike Andrews wrote:
>>
>>> Radio Shack sells something of that sort. It comes with a plug at each
>>> end, with an RG-58-sized hole in the plug. The sleeve itself isn't
>>> _quite_ big enough to pass a PL-259, which I found disappointing.
>>
>>
>> This is amusing , I do this stuff a lot (Im a cabler and electrian)
>> and there are better ways to do it , try not to make a simple thing
>> too had guys .
>
>
> Would you please enlighten us mere mortals and describe one or more of
> your 'better ways'?
No , that's why I charge like a scrub bull on a considered hourly rate .
the manner described works but it can be improved upon :_)
I normally use a ferret and a couple of special tools .

2082. FA:Aero Coil('27) & Taylor Tube ('40) Catalogs....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-19 12:56:39 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <be79e.607020$w62.67624@bgtnsc05-news.ops.worldnet.att.net>
Source record: 19365
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

See at :

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking. Will have new email address come May? as I may be changing ISP. heytubeguy

2083. FCC / FM Tx

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-19 15:10:40 UTC
From: erichmadison <eric_harms@charter.net>
Message-ID: <1113923440.007509.114960@o13g2000cwo.googlegroups.com>
Source record: 19366

Newbie here with a few questions regarding low power FM transmission. Please excuse my possibnle improper use of vernacular. I just purchased a 50mW FM transmitter for playing music in my home. It was built from a kit and sold to a first owner, then sold to me... if that matters.

Since the FCC now uses the guideline of "250mV @ 3 meters" power limitation, one needs to know what their transmission output is. What sort of device would measure this? If I am pushing too much power, can I shorten my antenna (currently 2 lengths of wire coming from the back of the unit), in hopes to lessen the range? The unit is in my basement, which reduces the effective range and possibility of interference with licensed users, but it may still be exceeding the part 15 power output limitations.

Second, if the FCC does "hunt you down" based on complaints, do they issue a warning typically for first time offenders or do they go straight for the $10,000 fine? Or is it purely based on what mood the FCC investigators (or whatever they would be called) are in? I know there are many variables with this, and that they would probably come down harder if you were broadcasting sold advertisements, political propaganda, etc.

Just wondering if I jumped into something to deep.

Thanks

2084. Re: Vacuum Variable Capacitor Cross-Reference.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-19 16:50:18 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@abcntlworldxyz.com>
Message-ID: <eFa9e.14521$443.1070@newsfe3-gui.ntli.net>
Source record: 19367
Cross-posted to: rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

> Anyone out there have the specs on an EEV(English Electric Valve) Variable
> Vacuum Capacitor
> #UC600A-6-70, or failing that, have a cross-reference for it to Jennings,
> Comet, etc.?? Need to determine the range and voltage.
==========

This being a homebrew =home'do' newsgroup ,may I suggest you check the capacitance range with (for example) a MFJ 259B analyser (bought or borrowed). This enables you to check capacitance range at RF frequencies up to 170 MHz.

Max operating voltage can be checked with a 'HiPot' tester which can be homebrewed or perhaps borrowed (local radio club member) If you have other High Voltage components to be tested , it is very much worthwhile to homebrew a Hipot tester.
Have a look at Rich Measures AG6K's website .
I am the happy owner of a Danish made 30kV non-destructive insulation tester ,bought from a surplus store for equiv. $ 30.-
This instrument determines the breakdown voltage (in 3 ranges : 0 - 3 , 30 and 30 kV) of components at a current down to 1 microampere.

Frank GM0CSZ / KN6WH.

2085. Any sources for TDA1572?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-19 17:00:05 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <Pb6dna-f1u-NpPjfRVn-hg@comcast.com>
Source record: 19368

Does anyone here know of onesy-twosy sources for the Philips TDA1572T?

The Philips website shows the part is in "full production" status (amazing - part that's not already obsolete 8-)..... however, the only distributor they list (Avnet) shows no inventory. A check of the "usual suspects" (Digikey, et.al.) comes up with nothing and I've had no luck with Google either.

Any suggestions appreciated.
Bill

2086. Re: FCC / FM Tx

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-19 17:23:26 UTC
From: Me <Me@shadow.orgs>
Message-ID: <Me-D2B45B.09230819042005@netnews.att.net>
Source record: 19369

In article <1113923440.007509.114960@o13g2000cwo.googlegroups.com>,
"erichmadison" <eric_harms@charter.net> wrote:

> Newbie here with a few questions regarding low power FM transmission.
> Please excuse my possibnle improper use of vernacular. I just purchased
> a 50mW FM transmitter for playing music in my home. It was built from a
> kit and sold to a first owner, then sold to me... if that matters.
>
> Since the FCC now uses the guideline of "250mV @ 3 meters" power
> limitation, one needs to know what their transmission output is. What
> sort of device would measure this? If I am pushing too much power, can
> I shorten my antenna (currently 2 lengths of wire coming from the back
> of the unit), in hopes to lessen the range? The unit is in my basement,
> which reduces the effective range and possibility of interference with
> licensed users, but it may still be exceeding the part 15 power output
> limitations.
>
> Second, if the FCC does "hunt you down" based on complaints, do they
> issue a warning typically for first time offenders or do they go
> straight for the $10,000 fine? Or is it purely based on what mood the
> FCC investigators (or whatever they would be called) are in? I know
> there are many variables with this, and that they would probably come
> down harder if you were broadcasting sold advertisements, political
> propaganda, etc.
>
> Just wondering if I jumped into something to deep.
>
> Thanks
>

The FCC is a "Paper Tiger" ever since the gutted the Field Operations
Staff back in the Clinton/Gore Reinvention of Government days. They
don't have enough Field Staff to investigate the Public Safety
Interference complaints let alone any Ham or Consumer complaints.
If you make an absolute fool of yourself, maybe in ten years they might
get around to you, but other than that, it isn't gong to happen.
The FCC has to much Bandwidth to sell, to be worried about any microFM
Transmitters......

Me

2087. Re: FCC / FM Tx

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-19 18:23:53 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <11c9e.10371$c42.186@fe07.lga>
Source record: 19370

"Me" <Me@shadow.orgs> wrote in message
news:Me-D2B45B.09230819042005@netnews.att.net...

> The FCC is a "Paper Tiger" ever since the gutted the Field Operations
> Staff back in the Clinton/Gore Reinvention of Government days. They
> don't have enough Field Staff to investigate the Public Safety
> Interference complaints let alone any Ham or Consumer complaints.

I wouldn't go quite that far, there have been some pretty aggressive prosecutions lately. But with a 50 mW transmitter, you would have to be pretty creative at causing trouble to get their notice.

What will get you in trouble is causing interference and then being arrogant about it. So, if you do exceed the field strength rules, there is a remote possibility that some FM station might decide you are interfering with them or competing with them. They might send you a nasty letter. If you stop interfering, it will stop there. If you don't, they *might* shoot of a letter to the FCC and the FCC *might* send you a nastynote. If you write back and agree to stop, and then actually do stop, it will probably end there. However, if you send them back some nasty response, or ignore their letter, then you could be in trouble. Even then there will be proceedings after proceedings before things escalate to the $10K level.

In other words, you not only have to break the rules, but you need to be really stupid about it. It does happen, though. Among amateurs, who tend to know the rules and have the equipment to measure compliance, there are probably one or two prosecutions a month. Those amateur prosecutions usually happen with a lot of help from the ARRL, however. If you interfere with a ham, chances are he will help you figure out how to operate your transmitter without interfering. And if he escalates it to his OO, the local OOC will likely get more technical help to see how you can accomplish your goals in a non-interfering way. If the local section can't resolve it, they will request help from the ARRL headquarters who will also be more interested in solving the problem than prosecuting. All this before Charlie ever learns of the problem.

It really does take an astonishing level of stupidity to get prosecuted, so don't stress over it too much.

However, if you happen to live next door to an FCC listening post or some sensitive government facility, then all bets are off.

..

2088. Variable Transformer Dial Plate & Knob Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-19 23:34:06 UTC
From: Ed <none@this-time>
Message-ID: <xMudnT8uxPbwCPjfRVn-oA@giganews.com>
Source record: 19371

The knob needs to be for a 3/4 inch shaft and about 6 inches in diameter.
The dial plate is supposed to be about 7 3/4 inches in diameter.
If you have one or both these please contact me directly: eh54 at sbcglobal
dot net
Thanks,
Ed

2089. Baluns

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-19 23:39:55 UTC
From: Peter Barbella <nonobar@verizon.net>
Message-ID: <fFg9e.21856$Xm3.3008@trndny01>
Source record: 19372

I just finished looking at the new ARRL handbook's section on Baluns. I was astonished at how little I understood. The "bazooka" balun described in the book looks like something that does nothing. Anyone know what I don't understand?

Anyway, what's wrong with a simple transformer - primary attached to unbalanced coax line from transmitter, and (grounded) center tapped secondary attached to balanced dipole?

In fact, do I really need a grounded center tap?

Pete
KB1LZH

2090. Re: macgyverisms and brainstorms.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-20 00:18:19 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <rbh9e.85845$vL3.76125@bignews4.bellsouth.net>
Source record: 19373

atec wrote:
> Bruce Fletcher wrote:
>
>> atec wrote:
>>
>>> Mike Andrews wrote:
>>>
>>>> Radio Shack sells something of that sort. It comes with a plug at each
>>>> end, with an RG-58-sized hole in the plug. The sleeve itself isn't
>>>> _quite_ big enough to pass a PL-259, which I found disappointing.
>>>
>>>
>>>
>>> This is amusing , I do this stuff a lot (Im a cabler and electrian)
>>> and there are better ways to do it , try not to make a simple thing
>>> too had guys .
>>
>>
>>
>> Would you please enlighten us mere mortals and describe one or more of
>> your 'better ways'?
>
> No , that's why I charge like a scrub bull on a considered hourly rate .
> the manner described works but it can be improved upon :_)
> I normally use a ferret and a couple of special tools .
Just what I need, a large pet rat running around in my attic.

2091. Re: push-pull in output..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-20 00:22:10 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <2fh9e.85846$vL3.44521@bignews4.bellsouth.net>
Source record: 19374

William E. Sabin wrote:
> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
> news:d3snpaepm1@hercules.btinternet.com...
>
>>
>>To base conclusions on the greatly different working voltages and
>>currents of devices is entirely incorrect. But it is easily done and
>>leads to misunderstandings when novices and learners attempt to
>>analyse circuit operation.
>
>
> It is not incorrect. It is quite correct, and everyone who designs
> solid-state linear RF power amplifiers (including me, not a novice) knows
> that it is correct. The truth in this matter is perfectly obvious to any
> really knowledgeable individual.
>
> Bill W0IYH
>
>
Are we confusing load impedance with the device equavalent resistance?

2092. Need Serial number for FT-847 supercontrol version 2.5

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-20 00:27:21 UTC
From: Andr&#65533; <aoosterbaan@home.nl>
Message-ID: <d44alldbg1@news1.tilbu1.nb.home.nl>
Source record: 19375

If anybody can help me with that number y would be verry glad.

2093. Re: push-pull in output..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-20 00:27:57 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <ukh9e.85847$vL3.39559@bignews4.bellsouth.net>
Source record: 19376

Highland Ham wrote:
> "> I just noticed in this ad: http://hamstation.com/ybstkftmk5.htm that
>
>>Yaesu's FT-1000 finals are MOSETS in push-pull. I don't ever recall
>>seeing a pair of final tubes in an xcvr or linear in push-pull except
>>perhaps way back in a very old QST. Can someone explain why push-pull is
>>used in the Yaesu and why we don't see it in "modern" tube amps?
>
> ============================
> Tube amps with 2 output valves can be used in push- pull but then for 1 band
> only unless you would switch multiple inductors.
> A single valve or multiple valve in parallel can readily output into a
> multi-band PI filter arrangement.
> In QST -March 1967 , pages 11 - 15 there is an article on a 1kW amplifier
> for 50 MHz with 2 pcs 4-125A or 4-250A or 4-400A push pull . This is a
> single band amplifier with inductive coupling on in- and output.
> Unless you would perform band switching by changing the inductors through
> plug-in , switching for various bands would be very complicated.
>
> Frank GM0CSZ / KN6WH.
>
>
>
There were dual band tank circuits for tube amps that worked on
both 6m and 2m without changing coils. The circuit was made in
both single ended and push pull versions. The push pull circuit
had two separate pick up link coils and basicly was series tuned
on 2 meters and parallel tuned on 6. The 6 meter tank coils were used
as rf chokes on 2 meters. The single ended version used a similar
trick, but was link coupled on 2 meters, and could either be link
coupled or a Pi network on 6 meters.
Source: old ARRL handbooks and VHF manuals from the 50's and 60's.

2094. Re: Baluns

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-20 00:54:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <116ba2ffbqdi846@corp.supernews.com>
Source record: 19377

You might take a look at "Baluns: What They Do and How They Do It". It was published in the ARRL Antenna Compendium, Vol. 1 and is now available as http://eznec.com/Amateur/Articles/Baluns.pdf.

Roy Lewallen, W7EL

Peter Barbella wrote:
> I just finished looking at the new ARRL handbook's section on Baluns. I was
> astonished at how little I understood. The "bazooka" balun described in the
> book looks like something that does nothing. Anyone know what I don't
> understand?
>
> Anyway, what's wrong with a simple transformer - primary attached to
> unbalanced coax line from transmitter, and (grounded) center tapped
> secondary attached to balanced dipole?
>
> In fact, do I really need a grounded center tap?
>
> Pete
> KB1LZH
>
>

2095. Re: Ambit DFM7 circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-20 01:25:48 UTC
From: JRCCrabtree@gmail.com
Message-ID: <1113960348.589712.40080@f14g2000cwb.googlegroups.com>
Source record: 19378

Hi

I have the diode matrix settings for the MSM5527RS chip whcih is at the heart of the unit. Please contact me directly at the email address below.

73 John KC0GGH
crabtreejr at aol dot com

rawdon@hotmail.com wrote:
> Hi,
> I built one of these LW/MW/SW/VHF DFMs in the early '80s, and now want to modify
> the offset settings for use with a different radio. Unfortunately, the circuit &
> instructions were lost a long tome ago.
> Does anyone have a circuit for this unit they could let me have a copy of, or
> even just details of the diode matrix for setting the offsets?
>
> TIA
>
> TL.
>
> (Ps. reply to the group in the first instance)

2096. Re: Ambit DFM7 circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-20 01:26:14 UTC
From: JRCCrabtree@gmail.com
Message-ID: <1113960374.084150.263400@o13g2000cwo.googlegroups.com>
Source record: 19379

Hi

I have the diode matrix settings for the MSM5527RS chip whcih is at the heart of the unit. Please contact me directly at the email address below.

73 John KC0GGH
crabtreejr at aol dot com

rawdon@hotmail.com wrote:
> Hi,
> I built one of these LW/MW/SW/VHF DFMs in the early '80s, and now want to modify
> the offset settings for use with a different radio. Unfortunately, the circuit &
> instructions were lost a long tome ago.
> Does anyone have a circuit for this unit they could let me have a copy of, or
> even just details of the diode matrix for setting the offsets?
>
> TIA
>
> TL.
>
> (Ps. reply to the group in the first instance)

2097. Re: Any sources for TDA1572?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-20 01:32:01 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <lii9e.610303$w62.414063@bgtnsc05-news.ops.worldnet.att.net>
Source record: 19380

I checked with the Philips website.....it was discontinued December,
2002. This was the heart of the MW receiver we are going to market. I did
discover a new chip that we will use.
How many do you need? SMD or DIP?
E-mail me directly.

Pete

"Netgeek" <no_spam@comcast.net> wrote in message
news:Pb6dna-f1u-NpPjfRVn-hg@comcast.com...
> Does anyone here know of onesy-twosy sources for the Philips
> TDA1572T?
>
> The Philips website shows the part is in "full production" status
> (amazing - part that's not already obsolete 8-)..... however, the
> only distributor they list (Avnet) shows no inventory. A check of
> the "usual suspects" (Digikey, et.al.) comes up with nothing and
> I've had no luck with Google either.
>
> Any suggestions appreciated.
> Bill
>
>

2098. Need Heath SB-401/303 aligned in Canada.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-20 01:55:20 UTC
From: Robert Myers <rsmyers@rogers.com>
Message-ID: <4265B688.BD94FFF@rogers.com>
Source record: 19381

Sorry for the cross posts. I'm trying to locate someone.

I'm looking for a ham living in Calgary who was going to align my
Heathkit SB-401/SB-303 combo last year (or was it two years ago?). I
lost the email address and phone number --- everything. He mentioned he
could also align my Cardon "Spitfire" as well (if that rings a bell).
I'd like to ship the pair off for alignment now that it's warm weather.

Also, if there is anyone else who can do this, please contact me in case
I can't find the above person.

Thanks very much.
--- Rob
VE3 JQL
(Ottawa ON Canada)

2099. Re: macgyverisms and brainstorms.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-20 02:19:05 UTC
From: atec <atec77@XXXhotmail.com>
Message-ID: <4265bc34$1@dnews.tpgi.com.au>
Source record: 19382

Ken Scharf wrote:
> atec wrote:
>
>> Bruce Fletcher wrote:
>>
>>> atec wrote:
>>>
>>>> Mike Andrews wrote:
>>>>
>>>>> Radio Shack sells something of that sort. It comes with a plug at each
>>>>> end, with an RG-58-sized hole in the plug. The sleeve itself isn't
>>>>> _quite_ big enough to pass a PL-259, which I found disappointing.
>>>>
>>>>
>>>>
>>>>
>>>> This is amusing , I do this stuff a lot (Im a cabler and electrian)
>>>> and there are better ways to do it , try not to make a simple thing
>>>> too had guys .
>>>
>>>
>>>
>>>
>>> Would you please enlighten us mere mortals and describe one or more
>>> of your 'better ways'?
>>
>>
>> No , that's why I charge like a scrub bull on a considered hourly rate .
>> the manner described works but it can be improved upon :_)
>> I normally use a ferret and a couple of special tools .
>
> Just what I need, a large pet rat running around in my attic.
Close , a ferrit is the apprentice "+_)

2100. Re: push-pull in output..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-20 02:31:08 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <7tdb61la631ivltuqqusk9b892g957mq34@4ax.com>
Source record: 19383

On Tue, 19 Apr 2005 20:22:10 -0400, Ken Scharf
<wa2mzeNOTTHIS@bellsouth.net> wrote:

>William E. Sabin wrote:
>> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
>> news:d3snpaepm1@hercules.btinternet.com...
>>
>>>
>>>To base conclusions on the greatly different working voltages and
>>>currents of devices is entirely incorrect. But it is easily done and
>>>leads to misunderstandings when novices and learners attempt to
>>>analyse circuit operation.
>>
>>
>> It is not incorrect. It is quite correct, and everyone who designs
>> solid-state linear RF power amplifiers (including me, not a novice) knows
>> that it is correct. The truth in this matter is perfectly obvious to any
>> really knowledgeable individual.
>>
>> Bill W0IYH
>>
>>
>Are we confusing load impedance with the device equavalent (sic) resistance?

You may be confused, I am not. The OP wanted to know why solid-state amps were push-pull without tuned matching networks while tube amps are usually single-ended and have tuned matching networks. Bill and I offered accurate explanations for this and Reg, as often happens, wanted to inject comments designed to obfuscate the discussion.

Reg also opined, "Somebody said the internal resistance of transistors, in general, was much lower than that of tubes. He was incorrect." I believe that he was trying to put these words in my mouth when of course, I didn't say that, nor did I see anyone else saying that in this thread.

A vacuum tube amplifier operating at Ep = 4 KV, Ip = 500 mA and a 50 Ohm load impedance almost demands a tuned matching network.

An FET amplifier operating at Ed = 50V, Id = 40A is more readily matched using broad-band transformers.

When comparing *one to the other* I contend that the vacuum tube *amplifier* is a relatively high impedance device and the FET *amplifier* is a relatively low impedance device.

As Bill already stated correctly, "The internal impedance of the device is irrelevant."

2101. Re: push-pull in output..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-20 02:33:31 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <apfb611u6i7boqbgc47mr2hi1s0j2tk9fm@4ax.com>
Source record: 19384

On Tue, 19 Apr 2005 20:27:57 -0400, Ken Scharf
<wa2mzeNOTTHIS@bellsouth.net> wrote:
[snip]

>There were dual band tank circuits for tube amps that worked on
>both 6m and 2m without changing coils. The circuit was made in
>both single ended and push pull versions. The push pull circuit
>had two separate pick up link coils and basicly was series tuned
>on 2 meters and parallel tuned on 6. The 6 meter tank coils were used
>as rf chokes on 2 meters. The single ended version used a similar
>trick, but was link coupled on 2 meters, and could either be link
>coupled or a Pi network on 6 meters.

Only someone who never used one of thse would claim that they
"worked." [g]

2102. Need help with aligning Racal 6217

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-20 05:13:02 UTC
From: Reggie <moody1951@aol.com>
Message-ID: <1113973982.057416.215760@l41g2000cwc.googlegroups.com>
Source record: 19385

My radio is off 17 khz and I would like to align it. Does anyone have the alignment procedure?

Thanks

2103. Re: FCC / FM Tx

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-20 11:03:02 UTC
From: cl <clfurentN@Syahoo.com>
Message-ID: <uHq9e.64543$NC6.21692@newsread1.mlpsca01.us.to.verio.net>
Source record: 19386

"xpyttl" <xpyttl_NOSPAM@earthling.net> wrote in message
news:11c9e.10371$c42.186@fe07.lga...
> "Me" <Me@shadow.orgs> wrote in message
> news:Me-D2B45B.09230819042005@netnews.att.net...
>
>> The FCC is a "Paper Tiger" ever since the gutted the Field Operations
>> Staff back in the Clinton/Gore Reinvention of Government days. They
>> don't have enough Field Staff to investigate the Public Safety
>> Interference complaints let alone any Ham or Consumer complaints.
>
> I wouldn't go quite that far, there have been some pretty aggressive
> prosecutions lately. But with a 50 mW transmitter, you would have to be
> pretty creative at causing trouble to get their notice.
>

I can agree with this..... I know of a guy running a transmitter which interfered with an AM station. It wasn't long before the FCC knocked on the "owner's" door and confiscated all his equipment. The stupid bastard didn't learn the first time. He had a repeat performance. The last I heard, he went bye bye. IF they want to find you, they can and will. Make no mistake about it. Cable companies have been shut down due to creating interference to the Aircraft frequencies. Aircraft "is" a "form" of Public Safety. There are other instances. Don't sell yourself short to think they won't come in. You may be "un" pleasantly surprised. I know instances of them busting volunteer agencies for "rules" infractions - things said on the airwaves contrary to the rules. Quite a few "Pirate" radio stations have been shut down recently - as well. So, the FCC "is" out doing what they need to do - even if limited in funds. But - the hefty fines should start building a healthy coffer I would have to think. There have been quite a few very heft fines put out lately and I'm not talking just from the Janet Jackson escapades. I'm talking fines of tens of thousands of dollars for some offenses up to hundreds of thousands for others. Rolling the dice isn't a smart move. The louder the squeak, the more attention it will get. Be a persistent squeak - even if not loud, you'll get attention sooner or later - but it will come.

If you're only wanting to transmit within your house, then you shouldn't need much of an antenna at all. Keep it at the absolute minimum length needed for a clear signal and you should have no trouble. IF it is "still" creating a problem, rather than getting cocky with them, ask for advice, they're likely to lend some advice and see you're trying to comply. Arrogance will draw their attention, like crap draws flies.

cl

2104. Re: FCC / FM Tx

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-20 12:39:04 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <I3s9e.23750$Zn3.11689@trnddc02>
Source record: 19387

erichmadison wrote:
> Newbie here with a few questions regarding low power FM transmission.
> Please excuse my possibnle improper use of vernacular. I just purchased
> a 50mW FM transmitter for playing music in my home. It was built from a
> kit and sold to a first owner, then sold to me... if that matters.
>
> Since the FCC now uses the guideline of "250mV @ 3 meters" power
> limitation, one needs to know what their transmission output is. What
> sort of device would measure this? If I am pushing too much power, can
> I shorten my antenna (currently 2 lengths of wire coming from the back
> of the unit), in hopes to lessen the range? The unit is in my basement,
> which reduces the effective range and possibility of interference with
> licensed users, but it may still be exceeding the part 15 power output
> limitations.

(snip)

Perhaps the information on the FCC Website is old, but it currently reads

"Sec. 15.239 Operation in the band 88-108 MHz.

...
(b) The field strength of any emissions within the permitted 200 kHz
band shall not exceed 250 microvolts/meter at 3 meters. The emission
limit in this paragraph is based on measurement instrumentation
employing an average detector. The provisions in Sec. 15.35 for
limiting peak emissions apply."

So, rather than 250 mV/meter you are allowed only 250 uV/meter.

It takes less than 20 nanowatts of power into a practical antenna to get 250
uV/meter at 3 meters. Conversely, your 50 mW into a realizable antenna will
result in a little under 400,000 uV/meter at 3 meters.

Good luck.

John

2105. LCD adapter ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-20 12:45:52 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <4as9e.548$%L1.431@newssvr30.news.prodigy.com>
Source record: 19388
Cross-posted to: sci.electronics.components,sci.electronics.repair,rec.radio.amateur.homebrew

I think I've found an 6 digit 50 pin LCD that will work electrically with the MM5453N but its a liitle too big physically.
http://www.lumex.com/product.asp?id=1000510

They are $7.26 from Mouser or DigiKey. If the pinout is correct the problem will be the double row spacing. The chip is 40mm between rows of pins while the double row spacing on my Lowe receiver has 33mm and I don't think the LCD pins are long enough to bend and get a fit. The glass is much bigger but I think it would fit. Does anyone know of any adapters, or a way to get this LCD to fit my radio?
tnx

--

73
Hank WD5JFR

2106. Re: FCC / FM Tx

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-20 13:47:46 UTC
From: Spajky <Spajky@##volja.net>
Message-ID: <m8mc611minjn6tiij09r6h5m7mfd035slr@4ax.com>
Source record: 19389

On 19 Apr 2005 08:10:40 -0700, "erichmadison" <eric_harms@charter.net>
wrote:

> low power FM transmission.
>. I just purchased
>a 50mW FM transmitter for playing music in my home.

it is Ok for few tenth meters range & IMHO enough low power not to
have problems fith FCC ...
--
Regards , SPAJKY ®
mail addr. @ my site @ http://www.spajky.vze.com
3rd Ann.: - "Tualatin OC-ed / BX-Slot1 / inaudible setup!"

2107. Re: Need help with aligning Racal 6217

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-20 14:14:55 UTC
From: Dan Rae <danrae@verizonEXTRACTTHIS.net>
Message-ID: <ztt9e.10495$c93.5897@trnddc08>
Source record: 19390

The original UK version RA1217 is similar enough for the alignment
procedures for that to be useful. This manual is available on line.
It's a lot more than I'd want to put in an email ;^)
If it's just the 2nd VFO though, the coil and trimmer adjustments for
that are very visible.
Good luck,
Dan
ac6ao / g3ncr

Reggie wrote:

> My radio is off 17 khz and I would like to align it. Does anyone have
> the alignment procedure?
>
> Thanks
>

2108. Re: Need Heath SB-401/303 aligned in Canada.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-20 16:05:43 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnd6cven.1dig.bit-bucket@shell.config.com>
Source record: 19391

On Tue, 19 Apr 2005 21:55:20 -0400, Robert Myers wrote:
> Sorry for the cross posts.

You did not cross-post these. You multi-posted them -- a more
egregious transgression. :-)

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

2109. Re: Need Heath SB-401/303 aligned in Canada.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-20 16:39:05 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <d460j9$bn0$1@theodyn.ncf.ca>
Source record: 19392

Allodoxaphobia (bit-bucket@config.com) writes:
> On Tue, 19 Apr 2005 21:55:20 -0400, Robert Myers wrote:
>> Sorry for the cross posts.
>
> You did not cross-post these. You multi-posted them -- a more
> egregious transgression. :-)
>
> Jonesy

Only after he massively cross-posted it, not much before the
multi-posting.

Michael VE2BVW

2110. Re: FCC / FM Tx

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-20 17:45:22 UTC
From: Me <Me@shadow.orgs>
Message-ID: <Me-1C8951.09450520042005@netnews.worldnet.att.net>
Source record: 19393

In article <uHq9e.64543$NC6.21692@newsread1.mlpsca01.us.to.verio.net>,
"cl" <clfurentN@Syahoo.com> wrote:

> But - the hefty fines should start building a healthy
> coffer I would have to think.

all FCC fines and forfitures go DIRECTLY into the General Fund......

Me

2111. Energy storage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-20 20:59:47 UTC
From: Muhzark <neffm2005@yahoo.com>
Message-ID: <1114030787.693411.59860@z14g2000cwz.googlegroups.com>
Source record: 19394

Hello all, I am working on a project I had had in mind for some time now, I am looking for input on a certain aspect of it, to be more specific, what would be the best way to collect electricity from 12 dc generator [inductive] at varying voltage, condense it, and release it at a moderated 12vdc at around 300-500 amps? I was thinking maybe a big'ol capacitor and voltage regulator circuit, though I honestly don't know alot about the different types of capacitors and their capabilities. If anyone knows a good way to do this I would appreciate it, or anywhere I could go to find out would be helpful to.

2112. Re: Energy storage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-20 22:42:57 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1114036977.378704.107980@z14g2000cwz.googlegroups.com>
Source record: 19395

How much energy do you wish to store, for how long, and how long do you wish to deliver the 300-500 amp output? It is possible to get high current out of fairly small capacitors, but only for a short time. Batteries generally work better for high energy storage. You might want to search for info on hybrid automobile energy storage systems.

Some simple formulas for (ideal) capacitors:

energy = (voltage^2)*capacitance/2
current = capacitance*dV/dt
where dV/dt is the rate of change of voltage with respect to time

So a 1uF capacitor designed for extremely low inductance and low series resistance, charged to 12V, could perhaps deliver 500 amps, but the dV/dt would be half a volt per nanosecond...at a constant 500 amps, it would be completely discharged in 24 nanoseconds. (The required inductance would be less than half a nanohenry, which may not be practical...) Note that capacitors aren't very good at delivering energy at a constant voltage. "Supercapacitors" (available up to many farads) could be a better option, but may be too pricey for you.

Rechargable batteries are commonly rated for ampere-hours of storage, at a (reasonably) constant voltage, and for maximum charging and discharging currents. A standard 12V automotive battery should be able to deliver a few hundred amps, but maybe not at a full 12V terminal voltage because of internal resistance.

Cheers,
Tom

Muhzark wrote:
> Hello all, I am working on a project I had had in mind for some time
> now, I am looking for input on a certain aspect of it, to be more
> specific, what would be the best way to collect electricity from 12
dc
> generator [inductive] at varying voltage, condense it, and release it
> at a moderated 12vdc at around 300-500 amps? I was thinking maybe a
> big'ol capacitor and voltage regulator circuit, though I honestly
don't
> know alot about the different types of capacitors and their
> capabilities. If anyone knows a good way to do this I would
appreciate
> it, or anywhere I could go to find out would be helpful to.

2113. Re: Energy storage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-21 00:48:02 UTC
From: Yukio YANO <yano@shaw.ca>
Message-ID: <6LC9e.1086627$6l.37165@pd7tw2no>
Source record: 19396

Muhzark wrote:
> Hello all, I am working on a project I had had in mind for some time
> now, I am looking for input on a certain aspect of it, to be more
> specific, what would be the best way to collect electricity from 12 dc
> generator [inductive] at varying voltage, condense it, and release it
> at a moderated 12vdc at around 300-500 amps? I was thinking maybe a
> big'ol capacitor and voltage regulator circuit, though I honestly don't
> know alot about the different types of capacitors and their
> capabilities. If anyone knows a good way to do this I would appreciate
> it, or anywhere I could go to find out would be helpful to.
>
I think it is revealing that Capacitor Storage is typically rated in
Watt/Seconds and battery Capacity is typically rated in Watt/hours ie a
typical Automotive storage Battery would be rated 100 amps at a 10 hour
discharge rate or about 1.2 Kilowatts hour

A hefty Electronic Photo-flash Unit would be rated at 50~100 Watt-Seconds

Yukio YANO

2114. Re: FCC / FM Tx

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-21 01:56:14 UTC
From: cl <clfurentN@Syahoo.com>
Message-ID: <OLD9e.65049$NC6.21825@newsread1.mlpsca01.us.to.verio.net>
Source record: 19397

"Me" <Me@shadow.orgs> wrote in message
news:Me-1C8951.09450520042005@netnews.worldnet.att.net...
> In article <uHq9e.64543$NC6.21692@newsread1.mlpsca01.us.to.verio.net>,
> "cl" <clfurentN@Syahoo.com> wrote:
>
>> But - the hefty fines should start building a healthy
>> coffer I would have to think.
>
> all FCC fines and forfitures go DIRECTLY into the General Fund......
>
>
> Me

Maybe so, but being they're handing them out..... they're earning their
pay check.

cl

2115. Re: FCC / FM Tx

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-21 02:25:49 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1cd0af0527280da998970f@localhost>
Source record: 19248

In article <Me-D2B45B.09230819042005@netnews.att.net>, Me@shadow.orgs says...

<snippety>

> The FCC is a "Paper Tiger" ever since the gutted the Field Operations
> Staff back in the Clinton/Gore Reinvention of Government days. They
> don't have enough Field Staff to investigate the Public Safety
> Interference complaints let alone any Ham or Consumer complaints.
> If you make an absolute fool of yourself, maybe in ten years they might
> get around to you, but other than that, it isn't gong to happen.
> The FCC has to much Bandwidth to sell, to be worried about any microFM
> Transmitters......

If you really believe that the FCC is a "paper tiger," I suggest you keep an eye on this link.

http://www.arrl.org/news/enforcement_logs/

And that's just on the amateur radio side. Granted, they've done a crappy job in that they've been pandering to the nascent BPL industry, but keep in mind that Michael Powell has resigned, and is on his way out. Once he goes, something good may actually happen (for a change).

Keep the peace(es).

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped
with surreal ports?"

2116. Re: SMALL TRANSFORMER

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-21 03:13:50 UTC
From: Gizmofiddler <file13@nojunkmail.com>
Message-ID: <4267162e$1_2@newspeer2.tds.net>
Source record: 19249
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Also a junked GR-64 Heathkit Shortwave receiver is close, but the filament
output is 12.6 V. I used one to make a 90VDC/2VDC battery eliminator for an
old 1936 farm radio - works great.
I imagine alot of the Heathkit signal generators, signal tracers, etc..
would have similar transformers - you could check specs of online manuals
then zero in on your exact needs.
~Gizmofiddler

"Heytubeguy" <heytubeguy@worldnet.att.net> wrote in message
news:0LG5e.543457$w62.392614@bgtnsc05-news.ops.worldnet.att.net...
> Looking for a small transformer rated at 125-130 output @ 40-100 ma and
> 6.3v as well. Need for small project. Used ok if good. tnx heytubeguy
>

2117. Re: macgyverisms and brainstorms.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-21 03:23:55 UTC
From: Gizmofiddler <file13@nojunkmail.com>
Message-ID: <426718d3_1@newspeer2.tds.net>
Source record: 19250

I wanted to fish some telephone wire (and later speaker wire for ceiling speakers) over the suspended ceiling in the lower level of my house - about 25 or 30 feet. The clown that built the ceiling wired the supports at every corner so the panels cannot be lifted in order to feed the wire through. I had to cut a couple just to gain access. To feed the wires from one end to the other was easily done using a 30' tape measure. I extended it out to the opposite side of the room above the ceiling panels. It is just stiff enough to hop over obstacles like wires and hangers, ducts, etc.. Once there, lock the tape measure and set it down. Go to the other end and tape the wire to the end tab of the measuring tape. Go back and reel it in - helps if someone else is there to feed the wire. I suppose others have thought of this, but I was patting my ego on the back the rest of the day for doing this.
-Gizmofiddler

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
news:bYd8e.92516$vK6.39742@bignews3.bellsouth.net...
> Every now and then a need for a tool not on hand occurs, or
> a required part isn't available for a repair. Then the
> proverbal light bulb appears over one's head (homage to
> Edison no doubt). Today I was running some RG8/U into my
> attic crawl space to access a conduit into my shack. I drilled
> a hole into the roof overhang and pushed the cable into the
> hole. As Murphy would have it, the end of the cable being pushed
> into the hole was the end wound onto the core of the spool, so the
> cable was very 'springy' resulting in it all bunching up right
> at the hole inside the attic. When I climbed into the attic
> I couldn't reach the cable, it was sitting in a coiled up bunch
> at the wall. No way I was going to be able to crawl the distance
> and reach out to grab the cable.
>
> Now for the macgyverism ....
> I found a 6 foot piece of left over 1/2 pvc pipe and a 3" U-bolt.
> I attached the u bolt to the end of the pipe with electrical tape
> and used the new tool to reach and hook the coax.
>
> Ok, I'm sure we've all come up with these macgyverism's from time
> to time. Anybody care to share their brainstorms...?

2118. Re: Need Heath SB-401/303 aligned in Canada.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-21 04:33:43 UTC
From: Robert Myers <rsmyers@rogers.com>
Message-ID: <42672D27.ECE6C3E3@rogers.com>
Source record: 19251

Yes. I did cross-post massively first, but it appeared to be rejected
for propagation by my ISP, as they never showed up from what I could see
from here. So, I redid it as a multi-posting, but kept the same message
w/appology.

As I said, sorry about that. It's not my habit. I just couldn't
remember the original newsgroup where I made contact with this ham from
Calgary, so I tried several groups hoping to find him.

C'mon guys, take it easy.
--- Robert Myers
VE3 JQL

Michael Black wrote:

> Allodoxaphobia (bit-bucket@config.com) writes:
> > On Tue, 19 Apr 2005 21:55:20 -0400, Robert Myers wrote:
> >> Sorry for the cross posts.
> >
> > You did not cross-post these. You multi-posted them -- a more
> > egregious transgression. :-)
> >
> > Jonesy
>
> Only after he massively cross-posted it, not much before the
> multi-posting.
>
> Michael VE2BVW

2119. Re: macgyverisms and brainstorms.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-21 06:30:20 UTC
From: atec <atec77@XXXhotmail.com>
Message-ID: <42674897@dnews.tpgi.com.au>
Source record: 19252

Gizmofiddler wrote:
> I wanted to fish some telephone wire (and later speaker wire for ceiling
> speakers) over the suspended ceiling in the lower level of my house - about
> 25 or 30 feet. The clown that built the ceiling wired the supports at every
> corner so the panels cannot be lifted in order to feed the wire through. I
> had to cut a couple just to gain access. To feed the wires from one end to
> the other was easily done using a 30' tape measure. I extended it out to the
> opposite side of the room above the ceiling panels. It is just stiff enough
> to hop over obstacles like wires and hangers, ducts, etc.. Once there, lock
> the tape measure and set it down. Go to the other end and tape the wire to
> the end tab of the measuring tape. Go back and reel it in - helps if someone
> else is there to feed the wire. I suppose others have thought of this, but I
> was patting my ego on the back the rest of the day for doing this.
> -Gizmofiddler
>
> "Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
> news:bYd8e.92516$vK6.39742@bignews3.bellsouth.net...
>
>>Every now and then a need for a tool not on hand occurs, or
>>a required part isn't available for a repair. Then the
>>proverbal light bulb appears over one's head (homage to
>>Edison no doubt). Today I was running some RG8/U into my
>>attic crawl space to access a conduit into my shack. I drilled
>>a hole into the roof overhang and pushed the cable into the
>>hole. As Murphy would have it, the end of the cable being pushed
>>into the hole was the end wound onto the core of the spool, so the
>>cable was very 'springy' resulting in it all bunching up right
>>at the hole inside the attic. When I climbed into the attic
>>I couldn't reach the cable, it was sitting in a coiled up bunch
>>at the wall. No way I was going to be able to crawl the distance
>>and reach out to grab the cable.
>>
>>Now for the macgyverism ....
>>I found a 6 foot piece of left over 1/2 pvc pipe and a 3" U-bolt.
>>I attached the u bolt to the end of the pipe with electrical tape
>>and used the new tool to reach and hook the coax.
>>
>>Ok, I'm sure we've all come up with these macgyverism's from time
>>to time. Anybody care to share their brainstorms...?
>
>
>
Ill make it easier next time , in this part of the world certain floor
and wall panels are made crom compressed wood chip , the edges are

grooved and a plastic strip inerted and glued when laying .
The strip is either yellow or red colour delineating hardness and you need one of these strips which can easily be got from building site
I have several which are about 2.5 mm thick by 12 mm wide and 3 metres long the rest is structure dependant.
To get a wall socket fitted you cut a suitable hole in the wall on exterior stuctural walls (but inside in the drywall)walls , insert the strip and push up inside the wall between the frame and bricks , normally with most apllication it will go easily up and when hitting the roof fold over into the roof cavity so when drawing into the roof cavity the wire you attatched is easily pulled into place . On internal walls you drill down with a special drill , I made several from 10 mm steel rod with a suitable fitting welded on to hold a 22 mm spade bit , then drop a weighted string down the hole and measuring with care cut your wallplate hole , easy huh ? . Getting cable inside the roof if its tigth is easiest by taping the cable to a 4 metre 20 mm conduite and poking it across , if poorly accesable lift a couple of roof tiles and off you go , remember to refit correctly .
It can be very hard work and very hot so be sure to drink lots of suitable fluids and I have had to save many from roof cavities after only a few minutesd in our climate . (Ive seen 79 deg C on a hot day in a roof)

2120. FA: ANTIQUE NIB Swinging choke,1 day left

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-21 12:47:17 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <phN9e.619304$w62.131534@bgtnsc05-news.ops.worldnet.att.net>
Source record: 19253
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Jefferson swinging choke NOS, + Aero coil catalog: see at

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking. heytubeguy

2121. Re: FCC / FM Tx

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-21 14:08:21 UTC
From: cl <clfurentN@Syahoo.com>
Message-ID: <duO9e.65073$NC6.17226@newsread1.mlpsca01.us.to.verio.net>
Source record: 19254

"Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null> wrote in message
news:MPG.1cd0af0527280da998970f@localhost...
> In article <Me-D2B45B.09230819042005@netnews.att.net>, Me@shadow.orgs
> says...
>
> <snippety>
>
>> The FCC is a "Paper Tiger" ever since the gutted the Field Operations
>> Staff back in the Clinton/Gore Reinvention of Government days. They
>> don't have enough Field Staff to investigate the Public Safety
>> Interference complaints let alone any Ham or Consumer complaints.
>> If you make an absolute fool of yourself, maybe in ten years they might
>> get around to you, but other than that, it isn't gong to happen.
>> The FCC has to much Bandwidth to sell, to be worried about any microFM
>> Transmitters......
>
> If you really believe that the FCC is a "paper tiger," I suggest
> you keep an eye on this link.
>
> http://www.arrl.org/news/enforcement_logs/
>
> And that's just on the amateur radio side. Granted, they've done a
> crappy job in that they've been pandering to the nascent BPL industry,
> but keep in mind that Michael Powell has resigned, and is on his way
> out. Once he goes, something good may actually happen (for a change).
>
> Keep the peace(es).
>
>
> --
> Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
> (Known to some as Bruce Lane, ARS KC7GR,
> kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
> "If Salvador Dali had owned a computer, would it have been equipped
> with surreal ports?"

"Paper" tiger = "paper" bites. They can be painful. A big bite via paper -
called a citation. That "tiger" could take a big ole bite out the paper - in
your wallet.

As the man said, they may have dropped the ball on the BPL, but they've been
sticking it to quite a few - with fines. I sure wouldn't be so quick to sell
them as being dead when it comes to enforcement.

cl

2122. Re: FCC / FM Tx

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-21 15:52:02 UTC
From: Me <Me@shadow.orgs>
Message-ID: <Me-D7ABDF.07514521042005@netnews.worldnet.att.net>
Source record: 19255

In article <OLD9e.65049$NC6.21825@newsread1.mlpsca01.us.to.verio.net>,
"cl" <clfurentN@Syahoo.com> wrote:

> Maybe so, but being they're handing them out..... they're earning their
> pay check.
>
> cl

Now if someoe were to compare the enforcment effort now, with that
before Clinton/Gore..... the truth would become VERY apparent...
Riely is a very good guy, and all, but he is just one guy, and
enforcement isn't near what it used to be.... Paper Tiger is
exactly right, and if you guys only knew how many Monitoring Sites
are "Actually" operational, and manned, you would be very suprised.....

Me

2123. Re: FCC / FM Tx

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-21 19:50:04 UTC
From: cl <clfurentN@Syahoo.com>
Message-ID: <zuT9e.65103$NC6.45313@newsread1.mlpsca01.us.to.verio.net>
Source record: 19256

"Me" <Me@shadow.orgs> wrote in message
news:Me-D7ABDF.07514521042005@netnews.worldnet.att.net...
> In article <OLD9e.65049$NC6.21825@newsread1.mlpsca01.us.to.verio.net>,
> "cl" <clfurentN@Syahoo.com> wrote:
>
>> Maybe so, but being they're handing them out..... they're earning
>> their
>> pay check.
>>
>> cl
>
> Now if someoe were to compare the enforcment effort now, with that
> before Clinton/Gore..... the truth would become VERY apparent...
> Riely is a very good guy, and all, but he is just one guy, and
> enforcement isn't near what it used to be.... Paper Tiger is
> exactly right, and if you guys only knew how many Monitoring Sites
> are "Actually" operational, and manned, you would be very suprised.....
>
>
> Me

Doesn't take many "monitoring" sites, when the fingers are pointed towards a culprit, then they can move in for the kill - collecting evidence. If they get enough bitching of a problem, they'll come knocking. It doesn't take a rocket scientist to pinpoint a signal. Many Hams and/or 2 way radio shops have the proper equipment to do the job. I've tracked a few signals down in my time thus far and also filled out papers to the FCC for stations "accused" of interference by a neighbor.
And, there are often "weekly" lists of "Radio Stations" busted for violations. They can't be sitting on their ass and doing this stuff! As I said, don't count them as down and out.

cl

2124. Re: ANC-4 principle?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-22 02:16:08 UTC
From: merkinp <merkinp@worldnet.att.net>
Message-ID: <I7Z9e.100043$cg1.17252@bgtnsc04-news.ops.worldnet.att.net>
Source record: 19257

More than a year ago I downloaded a copy of the circuit diagram
from the Timewave website. My interpretation of the diagram is
that the noise antenna goes to Q1 that has a transformer-coupled
output whose phase, relative to the input, can be shifted by varying
R6. From there the phase-shifted 'noise' is applied to Q2 and a
portion of the output, determined by R12, passes to Q3, probably
a buffer stage. In T4 the phase-shifted 'noise' is combined with the
main antenna signal to give the desired output. I hope this explanation
is generally correct and is of some use.

"Ron Hardin" <rhhardin@mindspring.com> wrote in message
news:4263B47F.4C2A@mindspring.com...
> How does an ANC-4 work, _as to the phase shift_? Is the one input just
split
> and one leg run thru a capacitor and resistor to ground, and you select
> some linear combination of the two inputs?
>
> That selection then being added to the reference antenna's.
>
> I'm interested in building an 8-input ANC-4, in effect.
> --
> Ron Hardin
> rhhardin@mindspring.com
>
> On the internet, nobody knows you're a jerk.

2125. Re: ANC-4 principle?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-22 04:49:35 UTC
From: Rob Mills <robmills@cox.net>
Message-ID: <xn%9e.17411$L64.13970@okepread07>
Source record: 19258

"Ron Hardin" <rhhardin@mindspring.com> wrote in message
news:4263B47F.4C2A@mindspring.com...

>>> I'm interested in building an 8-input ANC-4, in effect.<<<

This may or may not be of interest but here it is anyway. Doug Demaw did construction articles in the May 96 and July 97(improved version) issues of CQ for a "QRN Squelcher". He did a similar article in Monitoring Times but omitted the TR switch He compares this unit as an equal to the ANC4.
I ordered the circuit boards for the project from Far circuits (www.farcuits.net) but haven't started the project yet, saving it until I finish some other already started projects. RM~

PS, Far has the boards listed in the Audio section of their online catalog and they will supply a copy of the CQ article for an extra $1.50.

2126. Help Identifying RF Power Transistors ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-22 10:41:39 UTC
From: skavanagh73@yahoo.ca
Message-ID: <347cf68.0504220241.7e423657@posting.google.com>
Source record: 19259

I have a surplus board containing a number of RF power transistors.
The board is marked "65W PA" and appears to be for VHF or UHF FM
(bases are grounded). It appears to be of North American manufacture.
I removed the input transistor years ago. There are 4 stages left.
All use flange mount transistors with round ceramic cases (two devices
in push-pull in the output stage). The first (remaining) stage uses a
device in a .380" diameter 4-lead case. The rest are all 0.500"
diameter 6-lead cases. Each transistor has four lines of marking on
the case, which read as follows:

Stage 1: 947 7249-2 7901 C
Stage 2: C 185 281-1 912
Stage 3(driver): 947 7282-2 7200-9 C
Stage 4(output): C 185 283-2 008

Can anyone suggest part numbers for these transistors ?

73,
Steve VE3SMA

2127. lubricating drive on ts 520

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-22 12:33:11 UTC
From: Greg <greg.doughty@vbschools.com>
Message-ID: <1114173191.545117.202670@g14g2000cwa.googlegroups.com>
Source record: 19260

I have an incredibly tight drive control on my ts 520. Does anyone have suggestions for lubricant and where to put it on the rod? Do I lube the chains, rod, etc?

thanks
greg
ki4bbl

2128. Wanted - Tube base pins

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-22 13:19:14 UTC
From: Bill M <dontspamoleexray@coqui.net>
Message-ID: <116huekmpcjnd28@corp.supernews.com>
Source record: 19261

Hi,
I'm looking for a source of 'pins' similar to those used on tube bases.
Diameter 0.125 and 0.150 inches. From collar to tip 0.500
Here's a pic
http://www.sparkbench.com/xtubepins.jpg

Any leads?

Thanks,
Bill WX4A
exray at coqui dot net

2129. Re: Wanted - Tube base pins

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-22 14:10:17 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1114179017.052629.230380@f14g2000cwb.googlegroups.com>
Source record: 19262

> Diameter 0.125 and 0.150 inches. From collar to tip 0.500

Keystone 1220 is 0.125" diameter and 0.5" long overall, but only 0.379"
from collar to tip. Keystone 1210 is .566" from collar to tip.

1230 and 1231 are similar for 0.156" diameter.

Tim.

2130. Re: Wanted - Tube base pins

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-22 14:24:01 UTC
From: Bill M <dontspamoleexray@coqui.net>
Message-ID: <116i282f2065fb4@corp.supernews.com>
Source record: 19263

Tim Shoppa wrote:

>>Diameter 0.125 and 0.150 inches. From collar to tip 0.500
>
>
> Keystone 1220 is 0.125" diameter and 0.5" long overall, but only 0.379"
> from collar to tip. Keystone 1210 is .566" from collar to tip.
>
> 1230 and 1231 are similar for 0.156" diameter.
>
> Tim.
>

Thanks. I'll look those up.

-Bill

2131. Re: Measuring current with LM3914 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-23 13:09:15 UTC
From: John Walton <jdwalton@comcast.net>
Message-ID: <1o-dnYXQTP_y2vffRVn-uA@comcast.com>
Source record: 19264

National Semiconductor has a high voltage application note in the PDF which describes the product.

Or you could use an opto-isolator (an analog version like the HCNR200) to read the voltage across a shunt. You will need a drive transistor because the usual opamp suspects won't be able to provide enough current for a LED bargraph.

"Patrick" <tk5ep@free.fr> wrote in message
news:4263b3d1$0$11249$636a15ce@news.free.fr...
> Hi all,
>
> I started a new amplifier project, a 4CX1500B 2m amplifier.
> Wanting to make it a bit more state of the art, i want to replace the
> old meters by Led bars...
> The simplest way to do that is to use a LM3914 bar display which can
> measure voltages with a ground reference.
>
> My design will use a cathode driven, DC grounded screen. So measures
> must be make "floating" as the ref is the cathode .
>
> How can i achieve this in a simple way ??
>
> 73, Patrick TK5EP
> http://tk5ep.free.fr

2132. dsPIC AF filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-23 16:36:35 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <426a7993$0$290$cc9e4d1f@news-text.dial.pipex.com>
Source record: 19265

I've designed a simple PCB using the new Microchip dsPIC30F4013 and an SI3000 codec that is ideal for DSP applications like filtering:

http://www.geocities.com/leon_heller/dspic.html

73, Leon
--
Leon Heller, G1HSM
http://www.geocities.com/leon_heller

2133. FS Icom RF deck

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-23 16:57:10 UTC
From: James Skalski <jskalski@yahoo.com>
Message-ID: <426A4638.3080208@yahoo.com>
Source record: 19266

I have a new rf deck with LPF,BPF and PA for a M700 HF transceiver. I think it is rated at 150-200 watts. It is mounted on the black finned heat sink and has all cables and connectors to plug into a low level rf source. I had planned on using it with a SDR1000 transceiver but have since changed plans. $75 plus UPS.

Jim n2go

2134. Re: dsPIC AF filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-23 20:09:28 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <Mc6dnRvZgJfhNvffRVn-2g@comcast.com>
Source record: 19267

Leon,

Looks like you're doing some interesting things with these DSPics. I'm curious to know if you've had a chance to use some of the Microchip tools (e.g. their digital filter package) and what your impressions are.

OTOH, if you're using something else - what can you recommend?

Regards,

Bill

"Leon Heller" <leon_heller@hotmail.com> wrote in message news:426a7993$0$290$cc9e4d1f@news-text.dial.pipex.com...
> I've designed a simple PCB using the new Microchip dsPIC30F4013 and an
> SI3000 codec that is ideal for DSP applications like filtering:
>
> http://www.geocities.com/leon_heller/dspic.html
>
> 73, Leon
> --
> Leon Heller, G1HSM
> http://www.geocities.com/leon_heller
>
>

2135. Re: ANC-4 principle?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-23 20:15:39 UTC
From: RadioGuy <nospam@nospam.com>
Message-ID: <L1yae.633193$w62.504967@bgtnsc05-news.ops.worldnet.att.net>
Source record: 19268

Ron Hardin <rhhardin@mindspring.com> wrote in message
news:4263B47F.4C2A@mindspring.com...
> How does an ANC-4 work, _as to the phase shift_? Is the one input just
split
> and one leg run thru a capacitor and resistor to ground, and you select
> some linear combination of the two inputs?
>
> That selection then being added to the reference antenna's.
>
> I'm interested in building an 8-input ANC-4, in effect.

It works the same way as the one on the Hallicrafters (or was it Hammerlund)
receiver back in the 1940/50's. Odd that the rice boxes don't come with one
already built-in---they are not complicated circuits.

Vic Misek has a couple of circuits in his Beverage Antenna Handbook. He
uses them to null steer parallel wires or two-wire Beverage antennas

RG

2136. FS: RF Connectors & Microwave Components

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-23 20:31:32 UTC
From: Murray Pasternack <w6krc@arrl.net>
Message-ID: <dgyae.3185$Zi.2768@fed1read04>
Source record: 19269
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,sci.electronics.components

COAX CONNECTORS & ADAPTERS, NEW
---

(46) Amphenol # 31-5061, TNC male, clamp attachment for RG-59, $.50 ea.
(46) Amphenol # 31-5157, TNC male, Crimp attachment for RG-59, $.50 ea.
(7) UG 21B/U, Radiall- France, N male, for RG-8,RG-9, RG-213, RG-214,
$2.00 ea.
(3) M/A Omni Spectra 2031-5014-64 SMA male, $1.00 ea.
(1) GR 874 to TNC male adapter, $10.00
(1) UHF female to female adapter, teflon, gold plated contact, $1.00
(3) Pasternack PE4071, TNC male, crimp attachment for RG-59, RG-62,
$2.00 ea.
(1) Pasternack PE4458, TNC female, crimp attachment for RG-58, $2.00
(1) M/A Omni Spectra, # 2084-5079-00, SMA (f) to N (f) bulkhead,
SS/gold, $10.00
(1) TNC "T" f/m/f, $2.00
(1) BNC male to BNC male adapter, $1.50
(1) TNC male to male adapter, $2.00
(3) Phono jack to Phono jack adapter, $.50 ea.
(1) SMA male to SMA male adapter, $4.00
(1) SMA female to SMA female adapter, $3.00
(1) SMA bulkhead female to female adapter, $4.00
(1) SMA right angle male to female adapter, $4.00
(3) N male to N male adapter, $6.00
(1) N female to N female adapter, $8.00
(1) N right angle male to female adapter, $8.00
(1) BNC male to SMA female adapter, $6.00
(1) BNC female to SMA male, adapter, $6.00
(1) N male to BNC female adapter, $7.50

COAX CABLE

RG223/U, Alpha # 9223, 50 ohm, double shielded, silver plated, $.75 per ft
or $600 per 1000 ft spool (large quantity available).

COAX SWITCHS
---

(1) Coax Switch - Surge Protector, Alpha Delta Model Delta - 4, Type N
female connectors, never used, $60.00

MICROWAVE COMPONENTS
---

(1) HP model X382A, X Band waveguide Variable Attenuator, used, good condition, $75.00
(1) VARIAN, VA-224E, X Band Klystron, new, never used, $45.00
(1) VARIAN, X-26F Klystron, new, never used, $45.00
(2) Western Microwave, Isolator, model 2JC-2040, 2 to 4 GHz, new, $30 each
(1) Western Microwave, Isolator, model 2JC-2040, 2 to 4 GHz, used, $15

FREE SHIPPING for USA addresses.
For shipping cost outside of USA , e-mail your address and items you are interested in and I will provide a quotation.
All prices are in US $, No minimum order.
Prices valid while supply lasts.

To reserve any of the above items, e-mail w6krc@arrl.net

Murray Pasternack, W6KRC, PO Box 73160, San Clemente, 92673-0105, USA

e-mail: "w6krc@arrl.net"

fax: 949 369 3860

phone (most of the time it is voice mail) 949 369 3800

2137. Dip Meter with MFJ 259b

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-23 21:14:00 UTC
From: leon_it@hotmail.com
Message-ID: <cb052a89.0504231313.3f620ccd@posting.google.com>
Source record: 19270

Hi to everyone,
anyone can provide me instructions appeared in the Nov 93 QST, pp 45-46, about
dip adapter for the MFJ analyzer ?
Thanks.

2138. Re: lubricating drive on ts 520

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-24 00:11:31 UTC
From: tina <tina@nospam.com>
Message-ID: <426AE418.C453C6@nospam.com>
Source record: 19271

hello greg,

no need to lube the chains or plastic gears the chains mesh with.

Is the drive control similar in tension / resistance compared to
the plate ? if so should be ok, not like the volume or gain pots.

are you on the group

http://groups.yahoo.com/group/TS-520_820_530_830/

73 tina

Greg wrote:

> I have an incredibly tight drive control on my ts 520. Does anyone
> have suggestions for lubricant and where to put it on the rod? Do I
> lube the chains, rod, etc?
>
> thanks
> greg
> ki4bbl

2139. Re: dsPIC AF filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-24 04:32:43 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <426b216c$0$296$cc9e4d1f@news-text.dial.pipex.com>
Source record: 19272

"Netgeek" <no_spam@comcast.net> wrote in message
news:Mc6dnRvZgJfhNvffRVn-2g@comcast.com...
> Leon,
>
> Looks like you're doing some interesting things with these DSPics. I'm
> curious to know if you've had a chance to use some of the Microchip
> tools (e.g. their digital filter package) and what your impressions are.

Haven't tried it yet, I just used some dsPIC code written by someone else
for the bigger 'F6014 on the dsPICDEM 1.1 development board. I'll be
creating my own filter coefficients and will try the Microchip software.
I've used Scilab in the past for FIR filter design, and a few other
programs.

One problem with the 'F4013 is that any software using the codec interface
works OK under the ICD 2 in-circuit debugger, but not when actually
programmed into the chip. I'm waiting for a response from Microchip about
it.

Leon
--
Leon Heller, G1HSM
http://www.geocities.com/leon_heller

2140. Re: Do DSPs (digital signal processors) really work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-24 05:24:36 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <r4Gae.940$eR7.19836006@news.sisna.com>
Source record: 19274
Cross-posted to: rec.radio.amateur.boatanchors,rec.antiques.radio+phono,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Why not just download some DSP software, hook an audio out to the line in of
your computer sound card and try some processing for yourself?

Regards,
John

"straydog" <advocacy@sdf.lonestar.org> wrote in message
news:Pine.NEB.4.61.0504110234040.1747@sdf.lonestar.org...
>
> A ham friend told me that he heard that DSPs really work at least a little
> bit. He doesn't have one and neither do I (although many of the newer and
> more expensive rigs have them, and there are one or two outboard DSPs that
> are available that can be added to older rigs in some ways). I don't know
> all that they can do (auto null heterodynes? auto noise reduction [what
> kind of noise reduction?]? audio enhancement [or audio bandpass shaping]
> of some kind?) but if static crashes can be really removed or attenuated,
> that would be of use to me. Auto null of heterodynes would be nice on
> those
> occassions when tuner-uppers decide to tune up on my frequency in which I
> am already in two way contact with others (on ssb phone). And, maybe there
> are some other useful characteristics I don't know about. But, are these
> really effective? For example, a 20 db heterodyne null is not much. Nulls
> have to be about 50-60 db to be useful.
>
> I'll take any kind of comments, suggestions, refernces to testing, or
> personal experience, pro & con recomendations, ...anything...
>
> Art, W4PON
>
>
>

2141. Re: Measuring current with LM3914 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-24 06:47:42 UTC
From: Patrick <tk5ep@free.fr>
Message-ID: <426b410e$0$8474$636a15ce@news.free.fr>
Source record: 19273

Hi John,

Thanks for the answer and suggestion.

I have the LM3914 datasheet and since my first post, i've had a serious brainstroming about the way to do that.

The best solution is to use a HALL current detector, then the rest of the measure can be completely isolated. ALLEGRO makes very nice small things but only for higher current. The smallest is for +/- 5A with 133mV/A sensitivity.

Otherwise i could use an OP amp followed by an optocoupler HCNR200 or IL300 with a feedback. Linearity is then almost perfect But i still have to supply the OP amp on the "hot side". The display part would be completely isolated.

Last guess is to use as you suggest an opto coupler via a shunt on the hot side. Nothing to supply and everything is isolated. Best is a FET opto coupler like the H11F1

The problem is to know if i will be able to measure low currents. The screen has max a few ten of mA. At what current will the opto coupler start to light and what the transfer is?

Did anyone play with this ?

Patrick.

John Walton a ï¿½crit :
> National Semiconductor has a high voltage application note in the PDF which
> describes the product.
>
> Or you could use an opto-isolator (an analog version like the HCNR200) to
> read the voltage across a shunt. You will need a drive transistor because
> the usual opamp suspects won't be able to provide enough current for a LED
> bargraph.
>
> "Patrick" <tk5ep@free.fr> wrote in message
> news:4263b3d1$0$11249$636a15ce@news.free.fr...
>
>>Hi all,
>>
>>I started a new amplifier project, a 4CX1500B 2m amplifier.
>>Wanting to make it a bit more state of the art, i want to replace the
>>old meters by Led bars...
>>The simplest way to do that is to use a LM3914 bar display which can

>>measure voltages with a ground reference.
>>
>>My design will use a cathode driven, DC grounded screen. So measures
>>must be make "floating" as the ref is the cathode .
>>
>>How can i achieve this in a simple way ??
>>
>>73, Patrick TK5EP
>>http://tk5ep.free.fr
>
>
>

2142. DDS VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-24 13:12:39 UTC
From: cvniras@hotmail.com
Message-ID: <930c1acd.0504240512.7346458a@posting.google.com>
Source record: 19275

HI,
My DDS projects in www.hamradioindia.org link has been changed new
link is as shown below

http://www.hamradioindia.org/circuits/dds.php

Also some more microcontroller projects are found here

http://www.hamradioindia.org/circuits

73's
VU3CNS

2143. FS PANEL METER LOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-24 14:43:55 UTC
From: Chris NI4L <ni4l@charter.net>
Message-ID: <9gOae.20607$Ow2.14913@fe06.lga>
Source record: 19276
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.equipment

I have a nice collection of panel meters 16 total for sale.
I will only sell as one lot as i do not wish to make a bunch of trips to the PO. I hope you can understand. All measurements are of the FACE not the Hole cutout.
I will list L/R as pic shows. 1)AC AMPERES 0-15 Simpson 3"x3" 2) AC VOLTS 0-500 Simpson 3 1/4"x3 1/4" 3) AC MILLIAMPERES 0-10 3 1/4"X3 1/4" Simpson 4)KILOVOLTS DC 0-5 Weston 3"x3" 5) AMPERES DC 0-50 Simpson 3"x3" 6)AMPERES DC 0-30 Westinghouse 3"x3" 7)VOLTS DC Weston 0-200 3 1/2" 8)AC VOLTS 0-50 Triplet 3 1/2" 9) DC VOLTS -10-+10 0 CENTER 2"X 3/4" 10)DC AMPERES 0-5 Shurite 2 5/8"x2 5/8" 11) AC VOLTS 0-300 Shurite 2 5/8"x2 5/8" 12)DC VOLTS 3 SCALES 0-1000 0-400 0-200 Westinghouse 4"x4" 13)DC MILLIAMPERES 0-500 Hickok 3 1/2" 14)DC MILLIAMPERES 0-200 Triplet 3 1/2" 15) DC VOLTS 0-300 Weston 2 5/8" 16) AC HOURS IN USE 240 AC Engler 2 3/4" All meters do work and in nice shape. Some of these are hard to come by, I would like 125.00 shipped for all OBO. Can do PayPal.
http://swap.qth.com/view_ad.php?counter=467361

thanks for looking
Chris NI4L

2144. Re: Measuring current with LM3914 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-24 15:52:44 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_426bb470@fidonet.org>
Source record: 19278

"Patrick" bravely wrote to "All" (24 Apr 05 08:47:42)
--- on the heady topic of "Re: Measuring current with LM3914 ?"

Pa> From: Patrick <tk5ep@free.fr>
Pa> Xref: aeinews rec.radio.amateur.homebrew:9454

Pa> Hi John,

Pa> Thanks for the answer and suggestion.

Pa> I have the LM3914 datasheet and since my first post, i've had a
Pa> serious brainstroming about the way to do that.

Pa> The best solution is to use a HALL current detector, then the rest of
Pa> the measure can be completely isolated. ALLEGRO makes very nice small
Pa> things but only for higher current. The smallest is for +/- 5A with
Pa> 133mV/A sensitivity.

Pa> Otherwise i could use an OP amp followed by an optocoupler HCNR200 or
Pa> IL300 with a feedback. Linearity is then almost perfect But i still
Pa> have to supply the OP amp on the "hot side". The display part would be
Pa> completely isolated.

Pa> Last guess is to use as you suggest an opto coupler via a shunt on the
Pa> hot side. Nothing to supply and everything is isolated. Best is a FET
Pa> opto coupler like the H11F1

Pa> The problem is to know if i will be able to measure low currents. The
Pa> screen has max a few ten of mA. At what current will the opto coupler
Pa> start to light and what the transfer is?

Pa> Did anyone play with this ?

Patrick, optocouplers are as sensitive as the light from the internal
LED. I'd roughly estimate the lowest end LED current at about 0.1mA...
but would have to count on at least 1mA to be sure it was lit.

I'm looking at a spec sheet just now and that is roughly ballpark,
since the graphs start at 0.1mA. The one I'm looking at starts the LED
current vs collector current at 0.3mA vs 0.1mA. That is about 3 times
less than I expected. Keep in mind a minimum 3 volt LED voltage drop.
The isolation voltage is pretty good at from about 1500 to 3500 volts.

BTW I really like your brainstorm idea of using a Hall Effect device
but I don't know what the typical sensitivity of these can be.

I think the sure way is to have a floating source of voltage to power
the sending circuit, either a little battery or an ac transformer with

rectifier supply.

A*s*i*m*o*v

... I think my learning curve is a circle!

2145. WTB: NEED SX-9 (S-9) Hallicrafters manual

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-24 21:17:21 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <B1Uae.109202$cg1.44492@bgtnsc04-news.ops.worldnet.att.net>
Source record: 19277
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Desperately in need of manual for Hali SX-9 - a basket case in need of much surgery.
Pse advise if you have a copy / new for sale. Tnx Joe WS&#65533;E

2146. FS: Ryan Communications 30 meter CW-QRP transmitter.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-24 23:33:38 UTC
From: ars_wa8mea@netzero.com
Message-ID: <1114385618.544444.156160@o13g2000cwo.googlegroups.com>
Source record: 19279

FS: Ryan Communications 30 meter CW-QRP transmitter. Milliwatts to five watts with 9 volts to 14 volts. Comes with an extra final & a crystal for 10.106 MHz, the 30m QRP stand-by frequency. FULLY assembled and two different size crystal sockets are on the tx board. I use my three other Ryan transmitters with my Sony 7600 receiver and it makes for a great little portable ham station. ONLY $29.95 w/ crystal, instructions and extra final amp transistor!!! (Plus $5.95 First Class USPS mail & insurance.) wa8mea@hotmail.com.

73, Bill - WA8MEA
Spring Antenna FUN!! Visit: http://qth.com/dwm

2147. Re: Dip Meter with MFJ 259b

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-25 01:00:07 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <riXae.5707$yc.4954@trnddc02>
Source record: 19280

"leon_it" <leon_it@hotmail.com> wrote in message
news:cb052a89.0504231313.3f620ccd@posting.google.com...
> Hi to everyone,
> anyone can provide me instructions appeared in the Nov 93 QST, pp 45-46,
about
> dip adapter for the MFJ analyzer ?
> Thanks.

If you have not already bought the accessory- skip it. By far the worst implementation of a dip meter I have ever seen. At the other end of the scale is the Measurments Model 59, commonly available on EBay.
With it, you can dip the center of a 36" rod- and see a HUGE dip even while inches away. The MFJ can't find it if it's on top of it- and most others aren't much better.
Dale W4OP

2148. Re: NEED SX-9 (S-9) Hallicrafters manual

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-25 07:58:03 UTC
From: yeah man <radio@sometime.com>
Message-ID: <426ca30a$1@news.comindico.com.au>
Source record: 19281
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Bloody hell mate. You know how to pick them.
This page has nearly all of them but ....yes you guessed it. ...
http://bama.edebris.com/manuals/hallicra/
But look at them anyway. You might find a similiar circuit.

"Heytubeguy" <heytubeguy@worldnet.att.net> wrote in message
news:B1Uae.109202$cg1.44492@bgtnsc04-news.ops.worldnet.att.net...
> Desperately in need of manual for Hali SX-9 - a basket case in need of
much
> surgery.
> Pse advise if you have a copy / new for sale. Tnx Joe WS?E
>
>
>

2149. Re: Dip Meter with MFJ 259b

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-25 13:40:40 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <sr6be.2$vj1.0@trnddc01>
Source record: 19282

Dale Parfitt wrote:
> "leon_it" <leon_it@hotmail.com> wrote in message
> news:cb052a89.0504231313.3f620ccd@posting.google.com...
>
>>Hi to everyone,
>>anyone can provide me instructions appeared in the Nov 93 QST, pp 45-46,
>
> about
>
>>dip adapter for the MFJ analyzer ?
>>Thanks.
>
>
> If you have not already bought the accessory- skip it. By far the worst
> implementation of a dip meter I have ever seen. At the other end of the
> scale is the Measurments Model 59, commonly available on EBay.
> With it, you can dip the center of a 36" rod- and see a HUGE dip even while
> inches away. The MFJ can't find it if it's on top of it- and most others
> aren't much better.
> Dale W4OP

I have the MFJ with the accessory *and* the Model 59. I can't agree more
with Dale's assessment.

John

2150. Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-25 18:48:07 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <HXabe.46$Ju4.1182744@news.sisna.com>
Source record: 19283

Anyone ever replaced a 6CW4 Nuvistor with a fet or other transistor?
Got a schematic? Idea of one?

Regards,
John

2151. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-25 20:32:44 UTC
From: mike742 <gqrxzy8974@ftml.net>
Message-ID: <1114461164.391716.252350@l41g2000cwc.googlegroups.com>
Source record: 19284
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

>>I have some Digi-Key SE3320-ND 60 Khz xctls (C-2 60.000KC-P).>
>>
>>My best try at measuring the series resonant frequency shows
>>59998 Hz. Perhaps the 60.002 Khz ones are series resonant at
>>60000 Hz. I don't have any of those to measure.

> To help us out, it would be best if you describe your
> method of testing the resonance frequencies and the
> accuracy of your frequency meter/counter.
....

> Measuring the exact crystal resonance frequency is
> NOT a simple exercise at 60 KHz. I would suggest
> looking closer at the Digi-Key links for technical
> data direct from the manufacturer. Those are found
> on the Digi-Key final part-number page just below
> the electronic catalog page PDF link. Manufacturer's
> data yields the parallel capacitance, maximum series
> resonance crystal equivalent resistance, and either
> the equivalent series inductance or the equivalent
> series capacitance. Digi-Key is excellent in their
> links to manufacturer's data in my estimation.

> A -2 Hz "error" in frequency is about 33 PPM (Parts
> Per Million) or 0.0033 %. That seems to be within
> manufacturer's stated tolerance.

I see what you're asking.

The Digi-Key pages says 100 ppm (+/- 6 Hz @ 60 Khz). The Epson
web page says they are photolithography-finished and at least
one Epson data sheet says the standard frequency tolerance is
20 ppm. Possibly they have no problem hitting 20 ppm and the
actual tolerance is much better than that (but not over
temperature).

20 ppm is still 1.2 Hz wide and the resonance probably is
sharper than that (Q > 50K?).

This measuring project started when I tried to use the Epson
crystal data to calculate what the series resonant frequency
would be of the 60 Khz parallel specified crystals. After
much mucking around with various numbers I decided to measure
it.

And you're right, I've been ignoring calibration. Here's how
I'm measuring the resonance:

I have a homebrew LC VCO running at 6 Mhz. It's full frequency
range is about 5.99180 to 6.0053 Mhz. This is divided by 100
(two 74LS90's) and then low pass filtered resulting in a sine
wave around 60 Khz.

The signal level is attenuated via 10k/1k resistors and then fed
through the crystal with a 10k load on the other side. There's
some additional loading from the x100 gain amplifier and then
into a scope.

The circuit around the xctl looks like:
.1 10k
from-e-follower-lowpass--||----/\/\/\/\/----+---| xctl |----+---> to
x100 amp
< >
> <
< 1k < 10k
> >
< <
gnd gnd

I can see a noise widened trace on the scope plus some
switching spikes/artifacts. As I tune the VCO, the noise
trace is flat except at one specific frequency, which is
about 1 Hz at most wide where the noise band becomes a sine
wave.

I'm measuring the frequency of the 6 Mhz VCO with a
Ramsey C-125 frequency counter. It's a standard ICM7216D
counter with a cheap 10 Mhz crystal as the time base. It's
uncalibrated (other than the factory, not sure of the date,
possibly in the 70s?).

Ok, how to calibrate the frequency counter?

And how stable is the frequency counter?

I'm living in a cloud of RF noise, plus computers. In addition
the frequency counter is a real RF noise generator too
(multiplexed LEDs in addition to the counting circuitry).

By moving the counter and short wave radio to a different room
I managed to hear the 2nd harmonic of a 5 Mhz crystal oscillator
on 10 Mhz with WWV. It sounded like the beat frequency was lower
in frequency than the 100 Hz WWV modulation pulses. So an upper
bound of +/- 100 Hz at 10 Mhz would put the upper bound on the
frequency counter of 10 ppm.

I'm not really happy with this calibration, I'll have to see what
I can do to improve it.

2152. Re: Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-25 20:53:46 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <wNcbe.63$nS.1382507@news.sisna.com>
Source record: 19285

I have been toying with pen and paper...
It looks like like the grid circuit to the 6CW4 could have an isolation capacitor inserted to remove and DC bias from the gate of the replacement fet. And, the plate of the 6CW4 circuit could have the B+ side of the rf xfrmr moved to a low volage supply (perhaps rectify and filter a 12v AC heater supply to supply the new voltage.)
And, a proper bias supply constructed to supply a necessary bias to the gate...
And, ideas?

Regards,
John

"John Smith" <assemblywizard@gmail.com> wrote in message news:HXabe.46$Ju4.1182744@news.sisna.com...
> Anyone ever replaced a 6CW4 Nuvistor with a fet or other transistor?
> Got a schematic? Idea of one?
>
> Regards,
> John
>

2153. Re: Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-25 22:03:04 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <116qq8cqkbjm635@corp.supernews.com>
Source record: 19286

John Smith wrote:

> I have been toying with pen and paper...
> It looks like like the grid circuit to the 6CW4 could have an isolation
> capacitor inserted to remove and DC bias from the gate of the replacement
> fet. And, the plate of the 6CW4 circuit could have the B+ side of the rf
> xfrmr moved to a low volage supply (perhaps rectify and filter a 12v AC
> heater supply to supply the new voltage.)
> And, a proper bias supply constructed to supply a necessary bias to the
> gate...
> And, ideas?
>
> Regards,
> John
>
>
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:HXabe.46$Ju4.1182744@news.sisna.com...
>
>>Anyone ever replaced a 6CW4 Nuvistor with a fet or other transistor?
>>Got a schematic? Idea of one?
>>
I've seen works on "transistorizing" tube radios, but the
characteristics of tubes and transistors are sufficiently different that
in general you have to approach this on a case by case basis. So while
I don't think you have any hope of making a plug-in compatible 6CW4
replacement, I _do_ think that you could often use most of a circuit
designed for a 6CW4 with some other device.

Having said all that, I would probably either buy another 6CW4, or
design & build a new circuit inspired by the old.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

2154. Re: Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-25 22:28:09 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <bhebe.65$fO5.1730625@news.sisna.com>
Source record: 19288

Yes, that is exactly what is occuring here, a "new" circuit is being designed... and, a turns ratio change may have to be contemplated in the drain circuit (existing rf transformer)--not the gate circuit, that existing circuit, decoupled through an isolating cap should be just fine (the fet is a high input impedance device)--this is the front end of a receiver, the actual signal levels here are low...

But, I am interested, what roadblocks do you see to "I don't think you have any hope of making a plug-in compatible 6CW4 replacement..." ?????

Warmest regards,
John

"Tim Wescott" <tim@wescottnospamdesign.com> wrote in message news:116qq8cqkbjm635@corp.supernews.com...
> John Smith wrote:
>
>> I have been toying with pen and paper...
>> It looks like like the grid circuit to the 6CW4 could have an isolation
>> capacitor inserted to remove and DC bias from the gate of the replacement
>> fet. And, the plate of the 6CW4 circuit could have the B+ side of the rf
>> xfrmr moved to a low volage supply (perhaps rectify and filter a 12v AC
>> heater supply to supply the new voltage.)
>> And, a proper bias supply constructed to supply a necessary bias to the
>> gate...
>> And, ideas?
>>
>> Regards,
>> John
>>
>>
>> "John Smith" <assemblywizard@gmail.com> wrote in message
>> news:HXabe.46$Ju4.1182744@news.sisna.com...
>>
>>>Anyone ever replaced a 6CW4 Nuvistor with a fet or other transistor?
>>>Got a schematic? Idea of one?
>>>
> I've seen works on "transistorizing" tube radios, but the characteristics
> of tubes and transistors are sufficiently different that in general you
> have to approach this on a case by case basis. So while I don't think you
> have any hope of making a plug-in compatible 6CW4 replacement, I _do_
> think that you could often use most of a circuit designed for a 6CW4 with
> some other device.
>
> Having said all that, I would probably either buy another 6CW4, or design

> & build a new circuit inspired by the old.
>
> --
>
> Tim Wescott
> Wescott Design Services
> http://www.wescottdesign.com

2155. Re: Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-25 22:38:49 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <zkebe.66$lB5.1718422@news.sisna.com>
Source record: 19287

I should have mentioned the freqs in question are under 30 Mhz... even a
junkbox fet should do it!

Regards,
John

"John Smith" <assemblywizard@gmail.com> wrote in message
news:bhebe.65$fO5.1730625@news.sisna.com...
> Yes, that is exactly what is occuring here, a "new" circuit is being
> designed... and, a turns ratio change may have to be contemplated in the
> drain circuit (existing rf transformer)--not the gate circuit, that
> existing circuit, decoupled through an isolating cap should be just fine
> (the fet is a high input impedance device)--this is the front end of a
> receiver, the actual signal levels here are low...
>
> But, I am interested, what roadblocks do you see to "I don't think you
> have any hope of making a plug-in compatible 6CW4 replacement..." ?????
>
> Warmest regards,
> John
>
>
> "Tim Wescott" <tim@wescottnospamdesign.com> wrote in message
> news:116qq8cqkbjm635@corp.supernews.com...
>> John Smith wrote:
>>
>>> I have been toying with pen and paper...
>>> It looks like like the grid circuit to the 6CW4 could have an isolation
>>> capacitor inserted to remove and DC bias from the gate of the
>>> replacement fet. And, the plate of the 6CW4 circuit could have the B+
>>> side of the rf xfrmr moved to a low volage supply (perhaps rectify and
>>> filter a 12v AC heater supply to supply the new voltage.)
>>> And, a proper bias supply constructed to supply a necessary bias to the
>>> gate...
>>> And, ideas?
>>>
>>> Regards,
>>> John
>>>
>>>
>>> "John Smith" <assemblywizard@gmail.com> wrote in message
>>> news:HXabe.46$Ju4.1182744@news.sisna.com...
>>>
>>>>Anyone ever replaced a 6CW4 Nuvistor with a fet or other transistor?
>>>>Got a schematic? Idea of one?

>>>>
>> I've seen works on "transistorizing" tube radios, but the characteristics
>> of tubes and transistors are sufficiently different that in general you
>> have to approach this on a case by case basis. So while I don't think
>> you have any hope of making a plug-in compatible 6CW4 replacement, I _do_
>> think that you could often use most of a circuit designed for a 6CW4 with
>> some other device.
>>
>> Having said all that, I would probably either buy another 6CW4, or design
>> & build a new circuit inspired by the old.
>>
>> --
>>
>> Tim Wescott
>> Wescott Design Services
>> http://www.wescottdesign.com
>
>

2156. Re: Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-25 23:59:32 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <116r12spk7k6414@corp.supernews.com>
Source record: 19289

John Smith wrote:

> Yes, that is exactly what is occuring here, a "new" circuit is being
> designed... and, a turns ratio change may have to be contemplated in the
> drain circuit (existing rf transformer)--not the gate circuit, that existing
> circuit, decoupled through an isolating cap should be just fine (the fet is
> a high input impedance device)--this is the front end of a receiver, the
> actual signal levels here are low...
>
> But, I am interested, what roadblocks do you see to "I don't think you have
> any hope of making a plug-in compatible 6CW4 replacement..." ?????
>
Even though a FET and a tube bear superficial resemblances, the FET is a
much lower impedance device, with different restrictions on allowable
gate (grid) voltage, drain (plate) voltage, source (cathode) currents,
etc. The interelectrode capacitances are, in general, markedly
different and the whole FET circuit operates at a markedly different
impedance level than the tube circuit does. If that weren't enough the
mechanisms by which the tube gain drops off as frequency increases is
different than those for the FET, and the general circuit behavior of
the two changes differently as a function of frequency.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

2157. Re: Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 00:24:29 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <T0gbe.73$Mw7.1988677@news.sisna.com>
Source record: 19290

Yes, and most of that would be taken care of just by choosing an "rf fet" as compared to an "audio fet."
At least in the circuit I am looking at, the 6cw4 is operating at in input impedance of ~500K-1 meg--the fet circuit will of course, expect 1 meg--no sweat for a even a cheap rf fet...
As mentioned, the blocking cap removes all question of danger of HV bias (I will supply the bias--most likely though a resistor bias arangement (perhaps clamping it with a diode if there is any danger of damage), and the power supply mentioned removes all danger of high B+ voltage...
This 6cw4 is the preamp in a frontend, signal levels are very low, there is a buffer stage following, with an amp behind that... certainly a signal level compatible with a small signal fet...
The 6cw4 is a "hybrid" device... I am looking for a datasheet on it now, I think replacement will go quickly and be simple, probably not even requiring revamping of the rf xfrmr on the drain (will revamp if noticible degrade in preformance....)

I was just hoping someone had walked this path before and could speed my way and hold my hand....

At this point, I am simply wondering, "Why hasn't someone done this before!"

Is there a big call for these devices? Perhaps I can build them and market them on Ebay... <grin>

Warmest regards,
John

"Tim Wescott" <tim@wescottnospamdesign.com> wrote in message news:116r12spk7k6414@corp.supernews.com...
> John Smith wrote:
>
>> Yes, that is exactly what is occuring here, a "new" circuit is being
>> designed... and, a turns ratio change may have to be contemplated in the
>> drain circuit (existing rf transformer)--not the gate circuit, that
>> existing circuit, decoupled through an isolating cap should be just fine
>> (the fet is a high input impedance device)--this is the front end of a
>> receiver, the actual signal levels here are low...
>>
>> But, I am interested, what roadblocks do you see to "I don't think you
>> have any hope of making a plug-in compatible 6CW4 replacement..." ?????
>>
> Even though a FET and a tube bear superficial resemblances, the FET is a
> much lower impedance device, with different restrictions on allowable gate
> (grid) voltage, drain (plate) voltage, source (cathode) currents, etc.
> The interelectrode capacitances are, in general, markedly different and

> the whole FET circuit operates at a markedly different impedance level
> than the tube circuit does. If that weren't enough the mechanisms by
> which the tube gain drops off as frequency increases is different than
> those for the FET, and the general circuit behavior of the two changes
> differently as a function of frequency.
>
> --
>
> Tim Wescott
> Wescott Design Services
> http://www.wescottdesign.com

2158. Re: Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 02:06:54 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <2nhbe.3058$Yc.2448@trnddc06>
Source record: 19291

"John Smith" <assemblywizard@gmail.com> wrote in message
news:T0gbe.73$Mw7.1988677@news.sisna.com...
> Yes, and most of that would be taken care of just by choosing an "rf fet"
as
> compared to an "audio fet."
> At least in the circuit I am looking at, the 6cw4 is operating at in input
> impedance of ~500K-1 meg--the fet circuit will of course, expect 1 meg--no
> sweat for a even a cheap rf fet...
> As mentioned, the blocking cap removes all question of danger of HV bias
(I
> will supply the bias--most likely though a resistor bias arangement
(perhaps
> clamping it with a diode if there is any danger of damage), and the power
> supply mentioned removes all danger of high B+ voltage...
> This 6cw4 is the preamp in a frontend, signal levels are very low, there
is
> a buffer stage following, with an amp behind that... certainly a signal
> level compatible with a small signal fet...
> The 6cw4 is a "hybrid" device... I am looking for a datasheet on it now, I
> think replacement will go quickly and be simple, probably not even
requiring
> revamping of the rf xfrmr on the drain (will revamp if noticible degrade
in
> preformance....)
>
> I was just hoping someone had walked this path before and could speed my
way
> and hold my hand....
>
> At this point, I am simply wondering, "Why hasn't someone done this
before!"
>
> Is there a big call for these devices? Perhaps I can build them and
market
> them on Ebay... <grin>
>
> Warmest regards,
> John
Hi John,
Guess I'm just a boatanchor fan and would leave the circuits alone-
especially if there is no improvement in functionality.

Dale W4OP

2159. Re: Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 02:14:05 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <Rthbe.80$Yl7.1912968@news.sisna.com>
Source record: 19293

well, that is fine, however if you don't have a 6cw4 this fix would be a God send...

I don't know of anyone making them anymore, like the gold, the timber, the water, and like oil, an end will come...

But these rigs can still live on...

Regards,
John

"Dale Parfitt" <par@parelectronics.com> wrote in message news:2nhbe.3058$Yc.2448@trnddc06...
>
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:T0gbe.73$Mw7.1988677@news.sisna.com...
>> Yes, and most of that would be taken care of just by choosing an "rf fet"
> as
>> compared to an "audio fet."
>> At least in the circuit I am looking at, the 6cw4 is operating at in
>> input
>> impedance of ~500K-1 meg--the fet circuit will of course, expect 1
>> meg--no
>> sweat for a even a cheap rf fet...
>> As mentioned, the blocking cap removes all question of danger of HV bias
> (I
>> will supply the bias--most likely though a resistor bias arangement
> (perhaps
>> clamping it with a diode if there is any danger of damage), and the power
>> supply mentioned removes all danger of high B+ voltage...
>> This 6cw4 is the preamp in a frontend, signal levels are very low, there
> is
>> a buffer stage following, with an amp behind that... certainly a signal
>> level compatible with a small signal fet...
>> The 6cw4 is a "hybrid" device... I am looking for a datasheet on it now,
>> I
>> think replacement will go quickly and be simple, probably not even
> requiring
>> revamping of the rf xfrmr on the drain (will revamp if noticible degrade
> in
>> preformance....)
>>
>> I was just hoping someone had walked this path before and could speed my
> way
>> and hold my hand....

>>
>> At this point, I am simply wondering, "Why hasn't someone done this
> before!"
>>
>> Is there a big call for these devices? Perhaps I can build them and
> market
>> them on Ebay... <grin>
>>
>> Warmest regards,
>> John
> Hi John,
> Guess I'm just a boatanchor fan and would leave the circuits alone-
> especially if there is no improvement in functionality.
>
> Dale W4OP
>
>

2160. Re: Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 03:04:44 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <d4kb4cmks1@theodyn.ncf.ca>
Source record: 19292

"John Smith" (assemblywizard@gmail.com) writes:
> Anyone ever replaced a 6CW4 Nuvistor with a fet or other transistor?
> Got a schematic? Idea of one?
>
> Regards,
> John
>
>

I can't provide any references, but converters and preamps were some
of the first things that were transistorized. They were simple with
a single stage or at most a few, so once FETs came along they were
put to use. ON one level it was likely just to try it, but of
course the lower noise figure probably was a lure.

Given that that there might have only been one tube in the thing,
probably many were treated just as a foundation without much concern
for a direct plug in. I can picture an article in "73" from 1967
where someone talked about putting an FET in a nuvistor preamp, and
it wasn't much more than shorting out the cathode resistor (or something
like that) and a returning. The basic scheme would be the same
whether it was a triode or an FET, so it certainly is a relatively
easy thing. The same article had the author putting FETs into
other things, like a Command set transmitter, or rather the VFO
section, and that too was pretty simple.

Decades ago, I got ahold of some Collins PTOs that covered the
broadcast band, and I didn't have to do much to put an FET in
them beyond soldering in the FET and running the thing off a
12V or so supply.

It tended to get more complicated with multiple stage units, or
perhaps just that it ceased to be easy to put it back together
if it didn't work right. There'd be articles about conversions
that sometimes were about replacing function, some about modifying
the circuitry so the FET or whatever would fit in, and of course
the simplest (for the equipment, but not so much for the replacement),
a universal plug in.

Michael VE2BVW

2161. Re: Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 05:11:46 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <m4kbe.89$SZ4.3224710@news.sisna.com>
Source record: 19295

well, it works, there was a 1k resistor bypassed by a .01 cap on the cathode
of the 6cw4, I just hooked the source of the fet to it, adding a 500 ohm
resistor to the drain which passes though the primary of a rf xfmr feeding
the next stage, it is fed with ~16V B+. Works great, since the 6cw4 was bad
there is no way to compare how this affected preformance, but receive seems
hot... noise level good...
Even if a dozen 6cw4's dropped from the sky, I'd just look at 'em....

Regards,
John

"John Smith" <assemblywizard@gmail.com> wrote in message
news:HXabe.46$Ju4.1182744@news.sisna.com...
> Anyone ever replaced a 6CW4 Nuvistor with a fet or other transistor?
> Got a schematic? Idea of one?
>
> Regards,
> John
>

2162. Re: Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 05:24:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <egkbe.91$Bd5.3293351@news.sisna.com>
Source record: 19294

Michael:

As usual, I am behind the times--would have been a great article to write up
back in 1967, huh? <grin>

Thanks for the encouragement.
The fet I used only has house numbers but it came from the parts box where I
keep hf rf parts--obiviously a N channel fet--it works great....

Regards,
John

"Michael Black" <et472@FreeNet.Carleton.CA> wrote in message
news:d4kb4cmks1@theodyn.ncf.ca...
>
> "John Smith" (assemblywizard@gmail.com) writes:
>> Anyone ever replaced a 6CW4 Nuvistor with a fet or other transistor?
>> Got a schematic? Idea of one?
>>
>> Regards,
>> John
>>
>>
>
> I can't provide any references, but converters and preamps were some
> of the first things that were transistorized. They were simple with
> a single stage or at most a few, so once FETs came along they were
> put to use. ON one level it was likely just to try it, but of
> course the lower noise figure probably was a lure.
>
> Given that that there might have only been one tube in the thing,
> probably many were treated just as a foundation without much concern
> for a direct plug in. I can picture an article in "73" from 1967
> where someone talked about putting an FET in a nuvistor preamp, and
> it wasn't much more than shorting out the cathode resistor (or something
> like that) and a returning. The basic scheme would be the same
> whether it was a triode or an FET, so it certainly is a relatively
> easy thing. The same article had the author putting FETs into
> other things, like a Command set transmitter, or rather the VFO
> section, and that too was pretty simple.
>
> Decades ago, I got ahold of some Collins PTOs that covered the
> broadcast band, and I didn't have to do much to put an FET in
> them beyond soldering in the FET and running the thing off a
> 12V or so supply.

>
> It tended to get more complicated with multiple stage units, or
> perhaps just that it ceased to be easy to put it back together
> if it didn't work right. There'd be articles about conversions
> that sometimes were about replacing function, some about modifying
> the circuitry so the FET or whatever would fit in, and of course
> the simplest (for the equipment, but not so much for the replacement),
> a universal plug in.
>
> Michael VE2BVW
>
>
>

2163. Re: Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 09:29:08 UTC
From: Murray <me@erewhon.com.au>
Message-ID: <426e09e5$0$3730$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 19296

It should be remembered that FETs are a voltage controlled
current device. A tube is a voltage controlled voltage device.
A bipolar transistor is a current controlled current device.

A FET is therefore somewhere in between a tube and a transistor.
I did have some luck with a FRG7000. the IF (which does all
the work in a radio) was connected in the old triode configuration.
Signal to the 1Meg gate and the drain working into a parallel
IF can. I had a good look and the designers had used regular
transistor IF cans but ignored the tapping on the output side.

By cutting the tracks and making little jumpers i was able to
boost the rx signal by using the tap on the coil to the drain. I had to
put caps in to connect to the next stage - the IF cans were now working
as voltage transformers and improvement in reception was dramatic.
What was a 'deaf' reciever was now pretty useful.

Anyone wanting to use FETs for tube replacements should remember
they aren't voltage amplifiers - only current amplifiers.

Hope i have made myself clear? :-)

Murray vk4aok

John Smith wrote:
> well, it works, there was a 1k resistor bypassed by a .01 cap on the cathode
> of the 6cw4, I just hooked the source of the fet to it, adding a 500 ohm
> resistor to the drain which passes though the primary of a rf xfmr feeding
> the next stage, it is fed with ~16V B+. Works great, since the 6cw4 was bad
> there is no way to compare how this affected preformance, but receive seems
> hot... noise level good...
> Even if a dozen 6cw4's dropped from the sky, I'd just look at 'em....
>
> Regards,
> John
>
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:HXabe.46$Ju4.1182744@news.sisna.com...
>
>>Anyone ever replaced a 6CW4 Nuvistor with a fet or other transistor?
>>Got a schematic? Idea of one?
>>
>>Regards,
>>John
>>
>

>
>

2164. Re: Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 14:43:04 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <Yrsbe.22209$r53.21419@attbi_s21>
Source record: 19297

"Murray" <me@erewhon.com.au> wrote in message
news:426e09e5$0$3730$5a62ac22@per-qv1-newsreader-01.iinet.net.au...
> It should be remembered that FETs are a voltage controlled
> current device. A tube is a voltage controlled voltage device.

A tube is also a voltage controlled current device because of its transconductance (gm) as well as a voltage controlled voltage device because if its amplification factor (mu).

A FET can be thought of in the same way if the gate is not forward biased. MOSFETs are even more closely related. The difference involves the way that the device is used. In some transistor circuits the "topologies" are amost identical to tube circuits.

FETs almost always operate at lower B+ voltage than tubes, so drain voltage max-to-min swings are smaller and drain current max-to-min swings are greater, which suggests lower values of drain load resistance.

Fifty years ago I designed pulse amplifiers at work (GE)for nuclear event detectors using the 6CW4.

At one time special low plate-voltage (12.6V) tubes were made for car radios in order to eliminate the high voltage power supply that used either vibrators or the 0Z4 tube.

Bill W0IYH

2165. Re: Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 14:59:14 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <8Hsbe.116$A83.4709512@news.sisna.com>
Source record: 19198

Yes, quite, and ohms law makes it plain that current through a resistance
causes a voltage drop across it...
And, logically following, a voltage placed across a resistance causes a
current to flow through the resistance--
hey, this is excellent idea for a voltage-to-current/current-to-voltage
conversion device--ya suppose someone else has thought of that??? <grin>

Regards,
John

"Murray" <me@erewhon.com.au> wrote in message
news:426e09e5$0$3730$5a62ac22@per-qv1-newsreader-01.iinet.net.au...
> It should be remembered that FETs are a voltage controlled
> current device. A tube is a voltage controlled voltage device.
> A bipolar transistor is a current controlled current device.
>
> A FET is therefore somewhere in between a tube and a transistor.
> I did have some luck with a FRG7000. the IF (which does all
> the work in a radio) was connected in the old triode configuration.
> Signal to the 1Meg gate and the drain working into a parallel
> IF can. I had a good look and the designers had used regular
> transistor IF cans but ignored the tapping on the output side.
>
> By cutting the tracks and making little jumpers i was able to
> boost the rx signal by using the tap on the coil to the drain. I had to
> put caps in to connect to the next stage - the IF cans were now working
> as voltage transformers and improvement in reception was dramatic.
> What was a 'deaf' reciever was now pretty useful.
>
> Anyone wanting to use FETs for tube replacements should remember
> they aren't voltage amplifiers - only current amplifiers.
>
> Hope i have made myself clear? :-)
>
> Murray vk4aok
>
> John Smith wrote:
>> well, it works, there was a 1k resistor bypassed by a .01 cap on the
>> cathode of the 6cw4, I just hooked the source of the fet to it, adding a
>> 500 ohm resistor to the drain which passes though the primary of a rf
>> xfmr feeding the next stage, it is fed with ~16V B+. Works great, since
>> the 6cw4 was bad there is no way to compare how this affected
>> preformance, but receive seems hot... noise level good...
>> Even if a dozen 6cw4's dropped from the sky, I'd just look at 'em....
>>

>> Regards,
>> John
>>
>> "John Smith" <assemblywizard@gmail.com> wrote in message
>> news:HXabe.46$Ju4.1182744@news.sisna.com...
>>
>>>Anyone ever replaced a 6CW4 Nuvistor with a fet or other transistor?
>>>Got a schematic? Idea of one?
>>>
>>>Regards,
>>>John
>>>
>>
>>

2166. Re: Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 15:12:56 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <d4llpo$fc8$1@theodyn.ncf.ca>
Source record: 19199

"William E. Sabin" (w.sabin@mchsi.com) writes:

> At one time special low plate-voltage (12.6V) tubes were made for car radios
> in order to eliminate the high voltage power supply that used either
> vibrators or the 0Z4 tube.
>
And I seem to recall there was even a Nuvistor or two that was designed
for low voltage operation. I can picture an RCA "Ham Tips" that had a
mobile converter using them.

Michael VE2BVW

2167. Shielded inductors -- why do they work so well?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 15:24:15 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <116sn92hsqv3b45@corp.supernews.com>
Source record: 19201

I've noticed that the various tunable inductors (and transformers) in a metal can are much better shielded than I might have initially guessed, based upon the premise that most all of the flux from the coil in concentrated inside the coil which is 'visible' through the hole in the can (so that the thing can be tuned!). In thinking about this, I've pretty much convinced myself that the shielding works as well as it does because electrically it still "looks" pretty much contiguous at the frequencies you're typically operating the coil at (e.g., tens of MHz for a 1/4" hole), in a similar manner to how perforated enclosures make an effective shield so long as the holes are small enough (...and how you can even calculate the attenuation based on "waveguide below cutoff" formulas).

Is that correct?

If so, it seems that if you tune the slug so far "out" that it protrudes from the top of the can, you're probably starting to seriously degrade the shielding... right?

Thanks,
---Joel Kolstad

2168. Re: Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 15:24:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <a3tbe.120$oz4.4782175@news.sisna.com>
Source record: 19200

In the circuit I revamped--a varying current through the primary of the rf xfrmr causes a varying current through the secondary of the rf xfrmr--at the same time--the current is made to vary because of the voltage placed across the primary and the voltage caused in the secondary by the current which has been induced there... these actions being caused by the amplification of the fet...

While one could look at it--that this is current amplification which is occurring--the current holds a direct correlation to the varying voltages occurring... and I didn't count the turns on the xfrmr!

My final analysis, "Hey, IT WORKS!!!" <tongue-in-cheek-grin>

Warmest regards,
John

"William E. Sabin" <w.sabin@mchsi.com> wrote in message
news:Yrsbe.22209$r53.21419@attbi_s21...
>
> "Murray" <me@erewhon.com.au> wrote in message
> news:426e09e5$0$3730$5a62ac22@per-qv1-newsreader-01.iinet.net.au...
>> It should be remembered that FETs are a voltage controlled
>> current device. A tube is a voltage controlled voltage device.
>
> A tube is also a voltage controlled current device because of its
> transconductance (gm) as well as a voltage controlled voltage device
> because if its amplification factor (mu).
>
> A FET can be thought of in the same way if the gate is not forward biased.
> MOSFETs are even more closely related. The difference involves the way
> that the device is used. In some transistor circuits the "topologies" are
> amost identical to tube circuits.
>
> FETs almost always operate at lower B+ voltage than tubes, so drain
> voltage max-to-min swings are smaller and drain current max-to-min swings
> are greater, which suggests lower values of drain load resistance.
>
> Fifty years ago I designed pulse amplifiers at work (GE)for nuclear event
> detectors using the 6CW4.
>
> At one time special low plate-voltage (12.6V) tubes were made for car
> radios in order to eliminate the high voltage power supply that used
> either vibrators or the 0Z4 tube.
>
> Bill W0IYH

>

2169. Re: Shielded inductors -- why do they work so well?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 15:47:38 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <ItOdnUNOVbkTwvPfRVn-2A@adelphia.com>
Source record: 19202

Joel Kolstad wrote:
> I've noticed that the various tunable inductors (and transformers) in a metal
> can are much better shielded than I might have initially guessed, based upon
> the premise that most all of the flux from the coil in concentrated inside the
> coil which is 'visible' through the hole in the can (so that the thing can be
> tuned!). In thinking about this, I've pretty much convinced myself that the
> shielding works as well as it does because electrically it still "looks"
> pretty much contiguous at the frequencies you're typically operating the coil
> at (e.g., tens of MHz for a 1/4" hole), in a similar manner to how perforated
> enclosures make an effective shield so long as the holes are small enough
> (...and how you can even calculate the attenuation based on "waveguide below
> cutoff" formulas).
This is the idea for radiated energy.

> Is that correct?
>
> If so, it seems that if you tune the slug so far "out" that it protrudes from
> the top of the can, you're probably starting to seriously degrade the
> shielding... right?
>
Think current in a shorted turn.

In order for magnetic field to protrude through a hole, current is
circulated around the hole, like a shorted turn around a transformer.
If the L/R time constant of the turn is much longer than the the
period of the cycle, the magnetic field caused by the shorted turn is
almost exactly equal and opposite of the magnetic field trying to get
through the hole, and the two fields almost perfectly cancel. If the
slug protrudes through the hole, though there is a slight increase in
the external field, it makes more current circulate around the hole,
and reduces the inductance of the coil a lot more since this more
effectively couples this shorted turn to the rest of the coil.

2170. Re: Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 16:34:01 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <116srbc8hmohb54@corp.supernews.com>
Source record: 19203

John Smith wrote:

> well, that is fine, however if you don't have a 6cw4 this fix would be a God
> send...
>
> I don't know of anyone making them anymore, like the gold, the timber, the
> water, and like oil, an end will come...
>
> But these rigs can still live on...
>
> Regards,
> John
>
> "Dale Parfitt" <par@parelectronics.com> wrote in message
> news:2nhbe.3058$Yc.2448@trnddc06...
>
>>"John Smith" <assemblywizard@gmail.com> wrote in message
>>news:T0gbe.73$Mw7.1988677@news.sisna.com...
>>
>>>Yes, and most of that would be taken care of just by choosing an "rf fet"
>>
>>as
>>
>>>compared to an "audio fet."
>>>At least in the circuit I am looking at, the 6cw4 is operating at in
>>>input
>>>impedance of ~500K-1 meg--the fet circuit will of course, expect 1
>>>meg--no
>>>sweat for a even a cheap rf fet...
>>>As mentioned, the blocking cap removes all question of danger of HV bias
>>
>>(I
>>
>>>will supply the bias--most likely though a resistor bias arangement
>>
>>(perhaps
>>
>>>clamping it with a diode if there is any danger of damage), and the power
>>>supply mentioned removes all danger of high B+ voltage...
>>>This 6cw4 is the preamp in a frontend, signal levels are very low, there
>>
>>is
>>
>>>a buffer stage following, with an amp behind that... certainly a signal

>>>level compatible with a small signal fet...
>>>The 6cw4 is a "hybrid" device... I am looking for a datasheet on it now,
>>>I
>>>think replacement will go quickly and be simple, probably not even
>>
>>requiring
>>
>>>revamping of the rf xfrmr on the drain (will revamp if noticible degrade
>>
>>in
>>
>>>preformance....)
>>>
>>>I was just hoping someone had walked this path before and could speed my
>>
>>way
>>
>>>and hold my hand....
>>>
>>>At this point, I am simply wondering, "Why hasn't someone done this
>>
>>before!"
>>
>>>Is there a big call for these devices? Perhaps I can build them and
>>
>>market
>>
>>>them on Ebay... <grin>
>>>
>>>Warmest regards,
>>>John
>>
>>Hi John,
>>Guess I'm just a boatanchor fan and would leave the circuits alone-
>>especially if there is no improvement in functionality.
>>
>>Dale W4OP
>>
>>
>
$14.80 at Antique Electronics Supply, www.tubesandmore.com. At that
price there's still plenty out there -- look at the price for the 2A3,
or a '45 for comparison.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

2171. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 17:07:04 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1114535224.836730.108080@f14g2000cwb.googlegroups.com>
Source record: 19204
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

> I'm not really happy with this calibration,
> I'll have to see what I can do to improve it.

Zero-beat to WWV is hard to do better than 50Hz by ear. Mechanical aids will get you a little better but then at the few Hz level you hit variations in carrier due to ionospheric variation.

For a few hundred $, HP Z3801A's are available on the surplus market. They're a 10MHz OCXO locked to GPS. Short term Allan variation is 10^-12 or better over 1-100 seconds. Many lab counters and a lot of ham radio frequency counters will happily accept the 10MHz reference that the Z3801A makes.

Other telecom-related GPS-locked OCXO's/rubidium oscillators are available on the surplus market too, some make telco-related reference frequencies like 1.544MHz or 19.6608MHz which can be used to calibrate on.

Tim.

2172. Re: Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 17:49:17 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <xavbe.10596$Nc.4659@trnddc09>
Source record: 19205

> >
> $14.80 at Antique Electronics Supply, www.tubesandmore.com. At that
> price there's still plenty out there -- look at the price for the 2A3,
> or a '45 for comparison.
>
> --
>
> Tim Wescott
> Wescott Design Services
> http://www.wescottdesign.com

Or go to Ameco on Ebay- where you can buy a CN- converter for $10 and p/u three at a shot. Some years back I laid aside a pile of 6CW4 and 6DS4's + sockets awaiting a nice homebrew project.

Dale W4OP

2173. Re: Shielded inductors -- why do they work so well?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 18:21:35 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1114539695.895831.45310@z14g2000cwz.googlegroups.com>
Source record: 19206

Along the same lines the John P. took, think of a coil inside a shield which has no holes. It is current that the coil induces into the shield which results in a field which cancels the coil's field external to the shield. Now, where does the current flow in the shield? Is there any significant current flowing in a little disk of the shield which is on-axis with the coil? I'd say no, most of the current is around the shield just outside the coil. So if you remove a little disk which has "no" current in it, have you disturbed the magnetic fields? And if you haven't disturbed the fields, have you reduced the shielding effectiveness?

Cheers,
Tom

2174. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 18:45:57 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <YnBixcNlxobCFwLW@jmwa.demon.co.uk>
Source record: 19207
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

I read in sci.electronics.design that Tim Shoppa
<shoppa@trailing-edge.com> wrote (in
<1114535224.836730.108080@f14g2000cwb.googlegroups.com>) about 'wwvb
receiver chip needed', on Tue, 26 Apr 2005:

>Zero-beat to WWV is hard to do better than 50Hz by ear.

Have you tried a Lissajou display?
--
Regards, John Woodgate, OOO - Own Opinions Only.
There are two sides to every question, except
'What is a Moebius strip?'
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

2175. Re: Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 19:44:30 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_426e8c44@fidonet.org>
Source record: 19214

"Murray" bravely wrote to "All" (26 Apr 05 19:29:08)
--- on the heady topic of "Re: Replace 6CW4?"

Mu> From: Murray <me@erewhon.com.au>
Mu> Xref: aeinews rec.radio.amateur.homebrew:9477

Mu> It should be remembered that FETs are a voltage controlled
Mu> current device. A tube is a voltage controlled voltage device.
Mu> A bipolar transistor is a current controlled current device.

Mu> A FET is therefore somewhere in between a tube and a transistor.

If we look at the characteristic I/V plate curves for a pentode it is
easy to see a similarity with the collector saturation plots of a
transistor. The FET in my opinion is different from the pentode
analogy but it is a little more like the triode.

The combination of bipolar transistor and FET is called a BiFET and
this is perhaps most like a pentode than anything. There is also power
HEXFETs which are something amazing with extremely low ON resistances
in the milli-ohm range. These might be more like a triode on steroids.
These come in pretty high voltage versions which seem to me more
suitable to replace a 6CW4 with some bias voltage adjusting of course.

A*s*i*m*o*v

... "If it ain't broke, you're not tryin!" - Red Green

2176. Re: Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 19:44:51 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <USwbe.137$jf5.5271705@news.sisna.com>
Source record: 19208

```
Wow!!! I saved about $14.30 figuring the cost of parts--approx. .50 cents!
<grin>
But, then figuring my design costs and labor... <frown>

Warmest regards,
John

"Tim Wescott" <tim@wescottnospamdesign.com> wrote in message
news:116srbc8hmohb54@corp.supernews.com...
> John Smith wrote:
>
>> well, that is fine, however if you don't have a 6cw4 this fix would be a
>> God send...
>>
>> I don't know of anyone making them anymore, like the gold, the timber,
>> the water, and like oil, an end will come...
>>
>> But these rigs can still live on...
>>
>> Regards,
>> John
>>
>> "Dale Parfitt" <par@parelectronics.com> wrote in message
>> news:2nhbe.3058$Yc.2448@trnddc06...
>>
>>>"John Smith" <assemblywizard@gmail.com> wrote in message
>>>news:T0gbe.73$Mw7.1988677@news.sisna.com...
>>>
>>>>Yes, and most of that would be taken care of just by choosing an "rf
>>>>fet"
>>>
>>>as
>>>
>>>>compared to an "audio fet."
>>>>At least in the circuit I am looking at, the 6cw4 is operating at in
>>>>input
>>>>impedance of ~500K-1 meg--the fet circuit will of course, expect 1
>>>>meg--no
>>>>sweat for a even a cheap rf fet...
>>>>As mentioned, the blocking cap removes all question of danger of HV bias
>>>
>>>(I
>>>
>>>>will supply the bias--most likely though a resistor bias arangement
>>>
```

>>>(perhaps
>>>
>>>>clamping it with a diode if there is any danger of damage), and the
>>>>power
>>>>supply mentioned removes all danger of high B+ voltage...
>>>>This 6cw4 is the preamp in a frontend, signal levels are very low, there
>>>
>>>is
>>>
>>>>a buffer stage following, with an amp behind that... certainly a signal
>>>>level compatible with a small signal fet...
>>>>The 6cw4 is a "hybrid" device... I am looking for a datasheet on it now,
>>>>I
>>>>think replacement will go quickly and be simple, probably not even
>>>
>>>requiring
>>>
>>>>revamping of the rf xfrmr on the drain (will revamp if noticible degrade
>>>
>>>in
>>>
>>>>preformance....)
>>>>
>>>>I was just hoping someone had walked this path before and could speed my
>>>
>>>way
>>>
>>>>and hold my hand....
>>>>
>>>>At this point, I am simply wondering, "Why hasn't someone done this
>>>
>>>before!"
>>>
>>>>Is there a big call for these devices? Perhaps I can build them and
>>>
>>>market
>>>
>>>>them on Ebay... <grin>
>>>>
>>>>Warmest regards,
>>>>John
>>>
>>>Hi John,
>>>Guess I'm just a boatanchor fan and would leave the circuits alone-
>>>especially if there is no improvement in functionality.
>>>
>>>Dale W4OP
>>>
>>>
>>

> $14.80 at Antique Electronics Supply, www.tubesandmore.com. At that price
> there's still plenty out there -- look at the price for the 2A3, or a '45
> for comparison.
>
> --
>
> Tim Wescott
> Wescott Design Services
> http://www.wescottdesign.com

2177. Re: Shielded inductors -- why do they work so well?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 19:56:36 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <116t77mk4gkb6f1@corp.supernews.com>
Source record: 19209

Thanks for the responses, Tom and John -- it makes more sense now.

I do wonder how much of the shield could be removed before the shielding effectiveness would drop significantly? I believe that some transformers are shielded just by having a large metal band that covers perhaps 2/3 of the transformer's area, right? ...and presumably they're still quite efficient.

---Joel

2178. K9 email filter--EXCELLENT & FREE!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 21:22:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <piybe.149$qR5.5308564@news.sisna.com>
Source record: 19210

K9 email filter is free. It is an excellent way to deal with spam. And, it supports perl regular expressions. Set up correctly it can deal with ~100% of spam--silently deleting it without a bother...
Without it, you cannot use usenet--with a valid email address--without being spammed to death--with it, you don't even know the spammers exist...
http://keir.net/k9.html

Regards,
John

2179. Re: Shielded inductors -- why do they work so well?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 21:29:21 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <Roybe.17552$WI3.12208@attbi_s71>
Source record: 19211

In a solenoidal, helically wound coil, most of the magnetic flux is aligned with the center of the coil and flows along the axis of the coil. Relatively little flux is outside the coil because of cancellation effects. For a single turn, current in different parts of that turn tend to partially cancel flux in regions that are outside that turn.

To see this, draw a circle of wire and show a current at one point flowing in one direction (out of the page). At the corresponding point diametrically opposite, that same current flows in the opposite direction (into the page). Inside the turn the two magnetic fluxes that encircle the wire add in-phase, but outside the turn these same fluxes cancel in opposite phase. This effect is more pronounced in a coil of small diameter.

Coils of that kind are pretty well self-shielding for regions beyond the *side* of the coil.

But if a copper disc is placed near the *end* of the coil a large circulating current is induced around the edge of the disk and a flux is created that opposes the flux inside the coil (Lenz's law) and a significant reduction of the inductance of the coil can occur. This effect has been used to "tune" coils.

The completely enclosed metal shield helps to create a closed path for leakage current that makes the shield much more effective.

The shield around the coil can also reduce capacitive coupling to adjacent circuitry. This is often important.

Bill W0IYH

"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> wrote in message news:116sn92hsqv3b45@corp.supernews.com...
> I've noticed that the various tunable inductors (and transformers) in a
> metal
> can are much better shielded than I might have initially guessed, based
> upon
> the premise that most all of the flux from the coil in concentrated inside
> the
> coil which is 'visible' through the hole in the can (so that the thing can
> be
> tuned!). In thinking about this, I've pretty much convinced myself that
> the
> shielding works as well as it does because electrically it still "looks"
> pretty much contiguous at the frequencies you're typically operating the
> coil
> at (e.g., tens of MHz for a 1/4" hole), in a similar manner to how

> perforated
> enclosures make an effective shield so long as the holes are small enough
> (...and how you can even calculate the attenuation based on "waveguide
> below
> cutoff" formulas).
>
> Is that correct?
>
> If so, it seems that if you tune the slug so far "out" that it protrudes
> from
> the top of the can, you're probably starting to seriously degrade the
> shielding... right?
>
> Thanks,
> ---Joel Kolstad
>
>

2180. FS Teflon wire

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 21:50:03 UTC
From: James Skalski <jskalski@yahoo.com>
Message-ID: <426E7F5B.8090606@yahoo.com>
Source record: 19212
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

I have some teflon insulated, silver plated stranded 22AWG wire for
sale. It is in 10 fifty foot rolls (500feet total)
At least five different colors. No choices of colors. The wire is rated
200~C and 600V.
Great for audio, solid state or tube applications, boat anchor repair or
new construction. Price $14 per 500' assortment.

Shipping $4 for lower 48 states
Shipping to Canada $11 for Global priority mail.

Would like to sell some before going to Dayton to free up some dough for
more radio stuff :)

Jim n2go

2181. Re: Shielded inductors -- why do they work so well?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-26 22:37:58 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <apzbe.17809$c24.17010@attbi_s72>
Source record: 19213

"William E. Sabin" <w.sabin@mchsi.com> wrote in message
news:Roybe.17552$WI3.12208@attbi_s71...
> In a solenoidal, helically wound coil, most of the magnetic flux is
> aligned with the center of the coil and flows along the axis of the coil.
> Relatively little flux is outside the coil because of cancellation
> effects. For a single turn, current in different parts of that turn tend
> to partially cancel flux in regions that are outside that turn.
>
> To see this, draw a circle of wire and show a current at one point flowing
> in one direction (out of the page). At the corresponding point
> diametrically opposite, that same current flows in the opposite direction
> (into the page). Inside the turn the two magnetic fluxes that encircle
> the wire add in-phase, but outside the turn these same fluxes cancel in
> opposite phase. This effect is more pronounced in a coil of small
> diameter.
>
> Coils of that kind are pretty well self-shielding for regions beyond the
> *side* of the coil.

The flux at the center of the coil is highly concentrated. This flux then leaves one end of the coil and returns to the other end via an external path, just as it is supposed to do, but at a much smaller value of flux *density* in the external path. This external flux can induce "eddy" currents in a shield that can decrease coil inductance and Q, usually only a small amount if the shield is not too "close".

This is in addition to the things mentioned before.

Bill W0IYH

2182. Re: Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-27 02:22:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <116ttrqbjlcgl6d@corp.supernews.com>
Source record: 19215

Asimov wrote:
> . . .
> There is also power
> HEXFETs which are something amazing with extremely low ON resistances
> in the milli-ohm range. These might be more like a triode on steroids.
> These come in pretty high voltage versions which seem to me more
> suitable to replace a 6CW4 with some bias voltage adjusting of course.

Have you compared the capacitances of the 6CW4 and Hexfet? Note also that the FET capacitance is highly nonlinear, varying greatly with reverse junction voltage.

Roy Lewallen, W7EL

2183. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-27 13:01:02 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <116v37hgr5glgae@corp.supernews.com>
Source record: 19216
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"John Woodgate" <jmw@jmwa.demon.contraspam.yuk> wrote in message
news:YnBixcNlxobCFwLW@jmwa.demon.co.uk...
> I read in sci.electronics.design that Tim Shoppa
> <shoppa@trailing-edge.com> wrote (in
> <1114535224.836730.108080@f14g2000cwb.googlegroups.com>) about 'wwvb
> receiver chip needed', on Tue, 26 Apr 2005:
>
> >Zero-beat to WWV is hard to do better than 50Hz by ear.
>
> Have you tried a Lissajou display?
> --

Or use the S-meter to see very low freq beats.

2184. Re: Shielded inductors -- why do they work so well?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-27 13:10:02 UTC
From: Pipex News Server <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <RoqdnQx9fpjUEvLfRVnytw@pipex.net>
Source record: 19217

> The flux at the center of the coil is highly concentrated. This flux then
> leaves one end of the coil and returns to the other end via an external
> path, just as it is supposed to do, but at a much smaller value of flux
> *density* in the external path. This external flux can induce "eddy"
> currents in a shield that can decrease coil inductance and Q, usually only
> a small amount if the shield is not too "close".
==========
The above sparks-off my following question:

If an antenna matching unit (some prefer calling it a tuner) has air
/ceramic/polystyrene wound inductors ,to which extent will a metal cabinet
affect the Q of the said inductors ?
I have read somewhere that to maintain the best possible Q , the distance
between the inductor(s) and other metal parts should be not less than the
diameter of the inductor. Does this make sense ?

TIA for any response

Frank GM0CSZ / KN6WH

2185. Re: Shielded inductors -- why do they work so well?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-27 14:00:47 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <jWMbe.25255$r53.20606@attbi_s21>
Source record: 19218

"Pipex News Server" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:RoqdnQx9fpjUEvLfRVnytw@pipex.net...
>> The flux at the center of the coil is highly concentrated. This flux then
>> leaves one end of the coil and returns to the other end via an external
>> path, just as it is supposed to do, but at a much smaller value of flux
>> *density* in the external path. This external flux can induce "eddy"
>> currents in a shield that can decrease coil inductance and Q, usually
>> only a small amount if the shield is not too "close".
> ====================
> The above sparks-off my following question:
>
> If an antenna matching unit (some prefer calling it a tuner) has air
> /ceramic/polystyrene wound inductors ,to which extent will a metal
> cabinet affect the Q of the said inductors ?
> I have read somewhere that to maintain the best possible Q , the distance
> between the inductor(s) and other metal parts should be not less than the
> diameter of the inductor. Does this make sense ?
>
> TIA for any response
>
> Frank GM0CSZ / KN6WH

I prefer the term "tuner" because the unit very seldom actually "matches" impedances. Instead, it "transforms" the impedance at the sending end of the transmission line, coax or whatever, to the 50 ohms resistance that the transmitter is usually (these days) designed for. The term "tuner" is common usage and it's OK.

The coil in a CLC tee-type tuner can have a Q as high as 400, and stray coupling to the metal cabinet or ground plane can easily cut the Q in half. What effect that has depends on the load impedance of the antenna feedpoint. If the load is highly reactive (high X, low R) the coil can get quite hot.

I believe it is important that the open ends of the coil should be at least one coil diameter away from any metal surface. The sides of the coil are less critical, but the mechanical design should do a pretty reasonable job of reducing that stray coupling to a low value also.

Stray capacitance from coil to ground or elsewhere can be a problem sometimes.

I have been thinking about my previous inputs to this thread, and I am not entirely satisfied with them. I will try to improve them sometime today.

Bill W0IYH

2186. Re: wwvb receiver chip needed

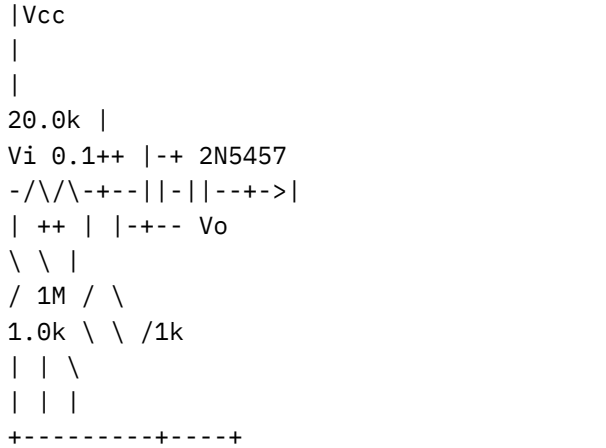
Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-27 14:37:12 UTC
From: garyr <garyr@fidalgo.net>
Message-ID: <1114612632.906573.147140@z14g2000cwz.googlegroups.com>
Source record: 19219
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

mike742 wrote:
> >> I've always noted with some curiosity that 77.503kHz,
> >> 60.002kHz, and 60.005kHz are off-the-shelf crystals too...
> >> used in a direct conversion receiver for DCF/WWV to 3Hz, 2Hz,
> >> and 5Hz carrier-detect frequencies maybe?
>
> >Strange. Maybe another resonance mode?
>
> I'd guess the specified frequency is parallel resonance with
> the specified load capacitance.
>
> I have some Digi-Key SE3320-ND 60 Khz xctls (C-2 60.000KC-P).
>
> My best try at measuring the series resonant frequency shows
> 59998 Hz. Perhaps the 60.002 Khz ones are series resonant at
> 60000 Hz. I don't have any of those to measure.

Here are some measurement of a few Epson Type 2 60 kHz crystals I made
recently:

Fs BW Fp
60001.6 4.6 60009.9
60001.2 4.6 60009.7
60002.2 5.6 60010.6
60001.1 4.4 60009.5

The test setup is shown below. The input signal was produced
by my homebrew function generator implemented with an AD9833.
The clock for the 9833 is an 10 MHz SG-615B which
has a specified frequency stability of 100 PPM.



|
V

2187. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-27 14:43:35 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <gDNbe.24445$Gq6.1646@fe02.lga>
Source record: 19220
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

"Watson A.Name - "Watt Sun, the Dark Remover"" <NOSPAM@dslextreme.com> wrote
in message news:116v37hgr5glgae@corp.supernews.com...
>
> Or use the S-meter to see very low freq beats.

Check out the latest Atlanticon proceedings, or the upcoming issue of the
Homebrewer for a circuit to allow you to see zero beat to within a fraction
of a Hz.

..

2188. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-27 16:04:33 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnd6ve0h.1ff8.bit-bucket@shell.config.com>
Source record: 19221
Cross-posted to: sci.electronics.design,sci.electronics.components,rec.radio.amateur.homebrew

["Followup-To:" header set to rec.radio.amateur.homebrew.]
On Wed, 27 Apr 2005 06:01:02 -0700, Watson A.Name wrote:
>
> "John Woodgate" <jmw@jmwa.demon.contraspam.yuk> wrote in message
> news:YnBixcNlxobCFwLW@jmwa.demon.co.uk...
>> I read in sci.electronics.design that Tim Shoppa
>> <shoppa@trailing-edge.com> wrote (in
>> <1114535224.836730.108080@f14g2000cwb.googlegroups.com>) about 'wwvb
>> receiver chip needed', on Tue, 26 Apr 2005:
>>
>> >Zero-beat to WWV is hard to do better than 50Hz by ear.
>>
>> Have you tried a Lissajou display?
>
> Or use the S-meter to see very low freq beats.

S-Meter! On 'modern' gear?? All they give you is a bank of
eye candy in the form of leds.

But, yes -- I've used Real S-Meters to get Real Damn Close to zero
best in days past.

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

2189. Re: Shielded inductors -- why do they work so well?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-27 18:05:45 UTC
From: Peter Orban <peter.orban@nrc.ca>
Message-ID: <d4ok3d$6ud$1@nrc-news.nrc.ca>
Source record: 19222

William E. Sabin wrote:
...
>
> The coil in a CLC tee-type tuner can have a Q as high as 400, and stray
> coupling to the metal cabinet or ground plane can easily cut the Q in half.
> What effect that has depends on the load impedance of the antenna
> feedpoint. If the load is highly reactive (high X, low R) the coil can get
> quite hot.
>
> I believe it is important that the open ends of the coil should be at least
> one coil diameter away from any metal surface. The sides of the coil are
> less critical, but the mechanical design should do a pretty reasonable job
> of reducing that stray coupling to a low value also.
>
...
Hi Bill,

In practical tuner applications the unused part of the coil is usually
shorted. The reasoning is that it prevents the generation of high RF
voltages. Shorting part of the coil should ruin the Q quite a bit.
Any comment on this practice?

Thanks, Peter

2190. Re: Shielded inductors -- why do they work so well?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-27 18:54:39 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <QdRbe.2759$ux6.2791527@news.sisna.com>
Source record: 19226

You certainly have your mind strolling down paths I have wandered...
Yes, it does seems so--is that found to be true when carried into actual construction practices--well, yes and no, but not to any extent which poses a "real" problem...

Or, simply put, I no longer lose sleep over the fact my L-Tuner shorts turns when tuning the coil...

Regards,
John

2191. Re: Shielded inductors -- why do they work so well?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-27 20:17:09 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <9rSbe.21106$WI3.17494@attbi_s71>
Source record: 19223

Some years ago I found that leaving the unused turns open-circuit caused very serious interactions with the remaining part of the coil at certain frequencies, and actually made the tuner untunable at those frequencies. I was sure that the open turns and the capacitances involved with those turns was resonating, causing "suckouts". If the unused turns were shorted, the spurious resonances in the coil disappeared, a well as I could determine.

Assume the shorting bar is perfect (lossless). Then:

The equivalent circuit just for the coil alone is the used part with its resistance, magnetically coupled to the shorted part with its resistance. The coupling from the shorted part to the used part adds an inductive reactance plus some resistance in series with the used part. The shorted turns have nearly the same ratio of inductive reactance per inch of coil length to resistance per inch of coil length as the rest of the coil, so the Q should not be degraded by this coupling. In other words the net loss is the same as that of the entire coil operating alone. The perfect short does not add power loss into the coil.

Assume the shorting bar is not perfect (not lossless). Then:

Some additional power loss is added to the shorting bar and the Q should decrease.

Bill W0IYH

"Peter Orban" <peter.orban@nrc.ca> wrote in message
news:d4ok3d$6ud$1@nrc-news.nrc.ca...
>
>
> William E. Sabin wrote:
> ...
>>
>> The coil in a CLC tee-type tuner can have a Q as high as 400, and stray
>> coupling to the metal cabinet or ground plane can easily cut the Q in
>> half. What effect that has depends on the load impedance of the antenna
>> feedpoint. If the load is highly reactive (high X, low R) the coil can
>> get quite hot.
>>
>> I believe it is important that the open ends of the coil should be at
>> least one coil diameter away from any metal surface. The sides of the
>> coil are less critical, but the mechanical design should do a pretty
>> reasonable job of reducing that stray coupling to a low value also.
>>
> ...
> Hi Bill,

>
> In practical tuner applications the unused part of the coil is usually
> shorted. The reasoning is that it prevents the generation of high RF
> voltages. Shorting part of the coil should ruin the Q quite a bit.
> Any comment on this practice?
>
> Thanks, Peter
>

2192. Re: wwvb receiver chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-27 20:22:39 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnd6vt4f.ll1.bit-bucket@shell.config.com>
Source record: 19224

On 27 Apr 2005 16:04:33 GMT, Allodoxaphobia wrote:
>
> But, yes -- I've used Real S-Meters to get Real Damn Close to zero
> best in days past.

Well, ... "best beat" works, too.

Jonesy

2193. Help! uWave xistor bias oscillates!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-27 20:23:00 UTC
From: sdeyoreo@hotmail.com
Message-ID: <04tv619h0mso27sicegrmo1df2v4f9uihj@4ax.com>
Source record: 19225

I'm fooling around, trying to measure the S params of an HXTR-6101, Low noise npn uWave transistor. The transistor breaks into low freq oscillations as I increae the base current. I've got it in a stripline fixture, I made. I'm feeding the base from a supply,thru a 50KOhm, to a .1uF & 22 uF cap to ground and 47uH coil to the base stripline run. Same with the collector. How can I stop the low freq oscillations? You can see a drawing of the stripline here:

http://sdeyoreo.tripod.com/id18.html

Thanks.

2194. Searching for custom quartz producer.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-27 21:20:10 UTC
From: Mauro <mauro.succi@libero.it>
Message-ID: <emTbe.88002$zZ1.2470159@twister1.libero.it>
Source record: 19227

I'm looking for a producer that can make 2 pieces of quartz at 268.435 MHz
(or 134.217MHz).
Any advice please?
Thanks.
Mauro

2195. Balanced-Twin Line as a Tuned Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-27 22:02:18 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d4p25aken1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 19228

New Program "TWINTUNE.exe"

Using a tuning capacitor across one end of a balanced-twin line with a
short circuit at the other, the combination of line and capacitor
behaves as a high-Q parallel-tuned circuit.

Applications include push-pull VHF power amplifiers and power
oscillators.

The program also assists with design of ordinary HF balanced-twin
open-wire transmission lines. Zo and attenuation is computed.

Download program TWINTUNE from website below in a few seconds and run
immediately.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

2196. Re: Searching for custom quartz producer.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-28 01:10:03 UTC
From: Bob Stein <bobstein@sbcglobal.net>
Message-ID: <LJWbe.8763$J12.4761@newssvr14.news.prodigy.com>
Source record: 19229

Mauro wrote:
> I'm looking for a producer that can make 2 pieces of quartz at 268.435 MHz
> (or 134.217MHz).
> Any advice please?
> Thanks.
> Mauro
>
>
Try Vectron International (formerly Croven). They will make crystals to
order, but it will cost you. I do not know anything about the name
change, but Croven crystals were, and probably still are, the best that
money could buy.

Bob

--
Remove spam-suppression X from my address

2197. Re: Searching for custom quartz producer.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-28 01:37:40 UTC
From: atec <atec77@XXhotmail.com>
Message-ID: <42703e74$1@dnews.tpgi.com.au>
Source record: 19230

Mauro wrote:
> I'm looking for a producer that can make 2 pieces of quartz at 268.435 MHz
> (or 134.217MHz).
> Any advice please?
> Thanks.
> Mauro
>
>
Plenty in AUstralia :_)
http://www.yellowpages.com.au
star and lots of others , about 10 days turn around .

2198. Re: Help! uWave xistor bias oscillates!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-28 02:06:34 UTC
From: Cliff Curry <cliffcurry323@comcast.net>
Message-ID: <WeGdncvutPqp2O3fRVn-1w@comcast.com>
Source record: 19231

I think your problem is your bias circuits.
I suppose you are trying to measure S-parameters at a fairly high frequency.
Your inductors are way too big. Such large inductors will have resonances
at very low
frequencies. If you can, do away with inductors in your bias networks all
toghether and use high value
resistors. At the minimum, use much smaller inductances that have resonant
frequencies several times the
frequencies of interest. What you really want is resonances at frequencies
larger than the ft of the transistor.

reguards,
Cliff

<sdeyoreo@hotmail.com> wrote in message
news:04tv619h0mso27sicegrmo1df2v4f9uihj@4ax.com...
> I'm fooling around, trying to measure the S params of an HXTR-6101,
> Low noise npn uWave transistor. The transistor breaks into low freq
> oscillations as I increae the base current. I've got it in a stripline
> fixture, I made. I'm feeding the base from a supply,thru a 50KOhm, to
> a .1uF & 22 uF cap to ground and 47uH coil to the base stripline run.
> Same with the collector. How can I stop the low freq oscillations? You
> can see a drawing of the stripline here:
>
> http://sdeyoreo.tripod.com/id18.html
>
> Thanks.
>

2199. Re: Shielded inductors -- why do they work so well?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-28 10:09:25 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <pD2ce.30573$r53.9085@attbi_s21>
Source record: 19232

"William E. Sabin" <w.sabin@mchsi.com> wrote in message
news:9rSbe.21106$WI3.17494@attbi_s71...
>
> Assume the shorting bar is perfect (lossless). Then:
>
> The equivalent circuit just for the coil alone is the used part with its
> resistance, magnetically coupled to the shorted part with its resistance.
> The coupling from the shorted part to the used part adds an inductive
> reactance plus some resistance in series with the used part. The shorted
> turns have nearly the same ratio of inductive reactance per inch of coil
> length to resistance per inch of coil length as the rest of the coil, so
> the Q should not be degraded by this coupling. In other words the net
> loss is the same as that of the entire coil operating alone. The perfect
> short does not add power loss into the coil.
>
> Assume the shorting bar is not perfect (not lossless). Then:
>
> Some additional power loss is added to the shorting bar and the Q should
> decrease.
>
> Bill W0IYH

A followup to my previous input:

I connected an old roller coil with short circuited turns to my ancient
Boonton 260A Q meter.

Over most of the inductor range at 10 MHz the Q remained "fairly" constant.
At the low values of inductance the Q (about 250) dropped about 15%. I
suspect changes in shape factor of the unshorted turns are involved. The
winding pitch of the coil is greatly reduced at low L values to try to
maintain shape factor and improve Q. At low L values, inreasing the
frequency to 15 MHz helped to restore most of the Q.

The detailed analysis of all that is going on in the roller coil is a
time-consuming chore that I don't want to get into. I believe my previous
explanation is OK under ideal textbook conditions (Kraus "Electromagnetics"
4th edition page 235, Eq 2) but of course that is just an approximation to
the actual coil, as could be expected.

On to other things.

Bill W0IYH

2200. Re: Searching for custom quartz producer.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-28 12:20:25 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <gy4ce.25619$Ow2.12598@fe06.lga>
Source record: 19233

International Crystal, of course.

Beware, however. These people are perfectionists and simply specifying 268.435 MHz isn't enough. The oscillation frequency depends on a number of factors, and they will expect you to know all about the circuit you are going to use the rock in.

Sounds like a mighty high frequency rock, though. If such a thing can be made, don't expect it to be cheap.

..

"Mauro" <mauro.succi@libero.it> wrote in message news:emTbe.88002$zZ1.2470159@twister1.libero.it...
> I'm looking for a producer that can make 2 pieces of quartz at 268.435 MHz
> (or 134.217MHz).
> Any advice please?
> Thanks.
> Mauro
>
>

2201. Re: Searching for custom quartz producer.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-28 14:34:47 UTC
From: "Odd Erling N. Eriksen" <odderi@pvv.org>
Message-ID: <d4qsa7$9dp$2@orkan.itea.ntnu.no>
Source record: 19234

Mauro wrote:

> I'm looking for a producer that can make 2 pieces of quartz at 268.435 MHz
> (or 134.217MHz).

-I have ordered crystals from www.eska.dk on several occasions. The highest frequency one they've cut for me was approx. 150MHz (LO in an AIS receiver w/10M7 IF).

Worked a charm and didn't cost too much, either. Think I paid approx. EUR15 a piece at 10pcs and two week delivery.

--
73 de LB1LF

Odd Erling, ARK

Actual newspaper headline: "Kids Make Nutritious Snacks"

2202. Re: Searching for custom quartz producer.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-28 20:00:15 UTC
From: Mauro <mauro.succi@libero.it>
Message-ID: <jhbce.69939$IN.1208395@twister2.libero.it>
Source record: 19235

Thank you all for advice.
Yes i know that just frequency is not enough for ordering a crystal.
The only problem is that in general the minimum lot is 10 pieces!
The need is for a DDS with AD9951. At that freq the microcode to drive the DDS will be very simple: i'll have just to enter the freq and shift a register 4 time.
No multiply or division that usually are slow algoritm. And resolution will be 1Hz.
Thank again.
73 Mauro - i2suh

"Mauro" <mauro.succi@libero.it> wrote in message news:emTbe.88002$zZ1.2470159@twister1.libero.it...
> I'm looking for a producer that can make 2 pieces of quartz at 268.435 MHz
> (or 134.217MHz).
> Any advice please?
> Thanks.
> Mauro
>
>

2203. FS: Mil Spec RG 223/U Coaxial Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-29 23:17:59 UTC
From: AAA RF PRODUCTS <info@aaarfproducts.com>
Message-ID: <dgzce.6$tp.2@fed1read04>
Source record: 19236
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.amateur.homebrew

FOR SALE: RG 223/U , 50 Ohm, COAXIAL CABLE BY ALPHA, Alpha #9223. Meets MIL-C-17D. Double Silver Coated Copper Shielded. Outer jacket is non-contaminating polyvinylchloride - type 2. Very large quantity available.

0 to 99 feet----------$.75/ft

100 to 499 feet------ $.60/ft

500 to 10,000 feet--- $.50/ft

All prices FOB San Clemente, CA

Other types of Coax Cable & Connectors available, email your requirements to info@AAARFProducts.com .

AAA RF Products
946 Calle Amanecer
San Clemente, CA 92673

Phone: 949 481 3154
Fax: 949 388 5448
email: info@AAARFProducts.com

2204. [FA] TIL 306, TIL 308 LED Displays

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-30 03:09:01 UTC
From: lektric.dan@gmail.com
Message-ID: <1114830541.378475.274770@g14g2000cwa.googlegroups.com>
Source record: 19237

I am auctioning two Texas Instruments TIL 306, and four TIL 308 LED displays on ebay. The TIL 306 was used in the Yaesu FT-301 series radio. The 308 was used in other scanners and radios (both were used in some microcomputer circuits). Parts are all new and unused and all tested good. see:
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5771226186&rd=1&ss...

and

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5771227025&rd=1&ss...

for details.

2205. LA8AK SK

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-30 15:32:29 UTC
From: Ian White GM3SEK <g3sek@ifwtech.co.uk>
Message-ID: <IIsps8JNU6cCFAHY@ifwtech.co.uk>
Source record: 19238

According to the announcement on his website, Jan-Martin was found dead
of a heart attack last week.

http://www.agder.net/la8ak/

Amateur radio has lost its genuine Norse Giant. Jan-Martin was a man of
huge stature, with an engineering talent to match.

--
73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2206. Re: LA8AK SK

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-04-30 23:31:33 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <deOdnU6ihfDBiOnfRVn-oA@comcast.com>
Source record: 19239

"Ian White GM3SEK" <g3sek@ifwtech.co.uk> wrote in message
news:lIsps8JNU6cCFAHY@ifwtech.co.uk...
>
> According to the announcement on his website, Jan-Martin was found dead of
> a heart attack last week.
>
> http://www.agder.net/la8ak/
>
> Amateur radio has lost its genuine Norse Giant. Jan-Martin was a man of
> huge stature, with an engineering talent to match.
> --
> 73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.co.uk/g3sek

Ian -

Thank you for posting. Within this past week, the passing of Jan-Martin and
Ron Broadbent, G3AAJ
is a loss to the hobby and their continuing contributions.

Greg, w9gb

2207. Carrier Null Adjustment on Icom IC-251A???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-01 00:24:35 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <gqydndlOEew6vOnfRVn-jg@bright.net>
Source record: 19240

I have an Icom 251A 2M all mode rig. I did a mod today to cut back the power to about 100 mW when I have a transverter connected to it. When keying up in SSB mode with no audio applied, I get approximately 10 mW of carrier. I want to null this out to an absolute minimum. I see IC4 on the main board is the balanced modulator. My guess is R270 on the main board. Can anyone with a service manual confirm this? Thanks!

Scott
N0EDV

2208. Free Coaxial Cable, Connector & Adapter Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-01 16:10:09 UTC
From: AAA RF PRODUCTS <info@aaarfproducts.com>
Message-ID: <7b7de.334$tp.248@fed1read04>
Source record: 19241
Cross-posted to: alt.ham-radio.marketplace,misc.industry.electronics.marketplace,rec.radio.amateur.homebrew

Please email sales@aaarfproducts.com & provide your snail mail address for your free copy of our latest RF product catalog.

AAA RF Products
946 Calle Amanecer, Suite E
San Clemente, CA 92673

Phone: 949 481 3154
Fax: 949 388 5448
email: info@AAARFProducts.com
web: www.aaarfproducts.com

2209. Re: Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-01 18:03:31 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <3O8de.150459$vK6.60515@bignews3.bellsouth.net>
Source record: 19242

William E. Sabin wrote:
> "Murray" <me@erewhon.com.au> wrote in message
> news:426e09e5$0$3730$5a62ac22@per-qv1-newsreader-01.iinet.net.au...
>
>>It should be remembered that FETs are a voltage controlled
>>current device. A tube is a voltage controlled voltage device.
>
>
> A tube is also a voltage controlled current device because of its
> transconductance (gm) as well as a voltage controlled voltage device because
> if its amplification factor (mu).
>
> A FET can be thought of in the same way if the gate is not forward biased.
> MOSFETs are even more closely related. The difference involves the way that
> the device is used. In some transistor circuits the "topologies" are amost
> identical to tube circuits.
>
> FETs almost always operate at lower B+ voltage than tubes, so drain voltage
> max-to-min swings are smaller and drain current max-to-min swings are
> greater, which suggests lower values of drain load resistance.
>
> Fifty years ago I designed pulse amplifiers at work (GE)for nuclear event
> detectors using the 6CW4.
>
> At one time special low plate-voltage (12.6V) tubes were made for car radios
> in order to eliminate the high voltage power supply that used either
> vibrators or the 0Z4 tube.
>
> Bill W0IYH
>
>
The "plate" (well drain) curves of a jfet have nearly the same
slope as a pentode tube. So replacing a 6cw4 with a jet would be
like sticking in a 6ak5 (or similar) tube. The big difference
between a fet and a pentode is that you can change the slope of
the curve somewhat by varying the screen grid voltage, you
can't do that with the fet (the screen voltage is built in and
fixed).

Reminds me of early regenerative receivers built with fets.
It was quickly discovered that varying the drain supply voltage
to control feedback didn't work very well (it won't work with
a pentode either!). So most fet regen sets used a throttle cap
to control feedback. You would be better off putting a pot

in the source circuit to raise it above ground, thereby increasing
the gate bias. This would move your operating point down to
a lower curve, reducing gain. But I digress....

My point is that fet's are more like pentodes than triodes, keep
that in mind when you make a circuit change from tubes.

2210. Re: Replace 6CW4?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-01 20:48:23 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pgbde.41$MF7.8452229@news.sisna.com>
Source record: 19243

Ken:

Yes, there was an existing 1K resistor in the cathode of the 6cw4--bypassed
for rf, I simply left it, it became the source resistance...

Regards,
John

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
news:3O8de.150459$vK6.60515@bignews3.bellsouth.net...
| William E. Sabin wrote:
| > "Murray" <me@erewhon.com.au> wrote in message
| > news:426e09e5$0$3730$5a62ac22@per-qv1-newsreader-01.iinet.net.au...
| >
| >>It should be remembered that FETs are a voltage controlled
| >>current device. A tube is a voltage controlled voltage device.
| >
| >
| > A tube is also a voltage controlled current device because of its
| > transconductance (gm) as well as a voltage controlled voltage device
because
| > if its amplification factor (mu).
| >
| > A FET can be thought of in the same way if the gate is not forward
biased.
| > MOSFETs are even more closely related. The difference involves the way
that
| > the device is used. In some transistor circuits the "topologies" are
amost
| > identical to tube circuits.
| >
| > FETs almost always operate at lower B+ voltage than tubes, so drain
voltage
| > max-to-min swings are smaller and drain current max-to-min swings are
| > greater, which suggests lower values of drain load resistance.
| >
| > Fifty years ago I designed pulse amplifiers at work (GE)for nuclear
event
| > detectors using the 6CW4.
| >
| > At one time special low plate-voltage (12.6V) tubes were made for car
radios
| > in order to eliminate the high voltage power supply that used either
| > vibrators or the 0Z4 tube.
| >

| > Bill W0IYH
| >
| >
| The "plate" (well drain) curves of a jfet have nearly the same
| slope as a pentode tube. So replacing a 6cw4 with a jet would be
| like sticking in a 6ak5 (or similar) tube. The big difference
| between a fet and a pentode is that you can change the slope of
| the curve somewhat by varying the screen grid voltage, you
| can't do that with the fet (the screen voltage is built in and
| fixed).
|
| Reminds me of early regenerative receivers built with fets.
| It was quickly discovered that varying the drain supply voltage
| to control feedback didn't work very well (it won't work with
| a pentode either!). So most fet regen sets used a throttle cap
| to control feedback. You would be better off putting a pot
| in the source circuit to raise it above ground, thereby increasing
| the gate bias. This would move your operating point down to
| a lower curve, reducing gain. But I digress....
|
| My point is that fet's are more like pentodes than triodes, keep
| that in mind when you make a circuit change from tubes.

2211. dsPIC audio processor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-02 10:08:08 UTC
From: Leon Heller <leon.heller@dsl.pipex.com>
Message-ID: <4275fc0b$0$305$cc9e4d1f@news-text.dial.pipex.com>
Source record: 19244
Cross-posted to: comp.dsp,comp.arch.embedded,rec.radio.amateur.homebrew,sci.electronics.design

I'm working on a simple audio processing system using the dsPIC30F4013. It's mainly intended for amateur radio use, and I've formed a Yahoo group for people interested in using dsPICs for radio applications:

http://groups.yahoo.com/group/radio_dspic/

Leon
--
Leon Heller, G1HSM
http://www.geocities.com/leon_heller

2212. Re: dsPIC audio processor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-02 11:27:39 UTC
From: Randy Yates <randy.yates@sonyericsson.com>
Message-ID: <xxpu0ll27h0.fsf@usrts005.corpusers.net>
Source record: 19245
Cross-posted to: comp.dsp,comp.arch.embedded,rec.radio.amateur.homebrew,sci.electronics.design

"Leon Heller" <leon.heller@dsl.pipex.com> writes:

> I'm working on a simple audio processing system using the dsPIC30F4013. It's
> mainly intended for amateur radio use, and I've formed a Yahoo group for
> people interested in using dsPICs for radio applications:
>
> http://groups.yahoo.com/group/radio_dspic/

Nice resource! Thanks Leon.

--
Randy Yates
Sony Ericsson Mobile Communications
Research Triangle Park, NC, USA
randy.yates@sonyericsson.com, 919-472-1124

2213. Re: dsPIC audio processor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-02 11:33:46 UTC
From: Randy Yates <randy.yates@sonyericsson.com>
Message-ID: <xxppsw9276t.fsf@usrts005.corpusers.net>
Source record: 19246
Cross-posted to: comp.dsp,comp.arch.embedded,rec.radio.amateur.homebrew,sci.electronics.design

Randy Yates <randy.yates@sonyericsson.com> writes:

> "Leon Heller" <leon.heller@dsl.pipex.com> writes:
>
> > I'm working on a simple audio processing system using the dsPIC30F4013. It's
> > mainly intended for amateur radio use, and I've formed a Yahoo group for
> > people interested in using dsPICs for radio applications:
> >
> > http://groups.yahoo.com/group/radio_dspic/
>
> Nice resource! Thanks Leon.

I meant that for your other post regarding the EDN information on DSPs.

--
Randy Yates
Sony Ericsson Mobile Communications
Research Triangle Park, NC, USA
randy.yates@sonyericsson.com, 919-472-1124

2214. HBR 16++ ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-02 16:28:19 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <Dysde.222$1o3.131@newssvr12.news.prodigy.com>
Source record: 19247

I've posted some pics on alt.binaries.pictures.radio
This may be a one of a kind individual homebrew effort for 10 thru 75
meters, eight band ssb receiver with about 30 tubes and mechanical filters.
If anyone knows anything about it, I'd sure like to know. There are some
disconnected wires and a some tubes missing. The guy I bought it from
thought someone in Alaska made it. I had to buy the ssb 6146 Tx to get it
and will post pics of it.
tnx

--

73
Hank WD5JFR

2215. Re: FS Icom RF deck- SOLD

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-02 16:48:11 UTC
From: James Skalski <jskalski@yahoo.com>
Message-ID: <427621AE.4010705@yahoo.com>
Source record: 19148

James Skalski wrote:

> I have a new rf deck with LPF,BPF and PA for a M700 HF transceiver. I
> think it is rated at 150-200 watts. It is mounted on the black finned
> heat sink and has all cables and connectors to plug into a low level rf
> source.
>
> Jim n2go
>

2216. StereoZoom microscope repair

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-02 19:15:51 UTC
From: Chuck Olson <chuckolson01@REMOVETHIScomcast.net>
Message-ID: <f76dnSHHJKju4evfRVn-tg@comcast.com>
Source record: 19149

I know, I know, send it back to the factory or to a repair center. But that costs money, and I don't learn anything if I do that.

I have a couple of 0.7 to 3.0 Bausch & Lomb microscope pods that are messed up - - one white one that requires eye convergence for less than a foot away to superimpose the images, and a black one I just bought that is okay horizontally but has a vertical offset. They don't look like they were dropped or anything, but the left eye optical path seems different from the right eye path. It may be my imagination, but the right side of each instrument looks good.

I think just about any technician or engineer who needs to work with today's surface-mount technology needs a good zoom microscope, so there must be a lot of them around. I paid $15 for the black one today, complete with stand. Okay, I should be able to afford some repair expense to put this thing back in shape, but what's it going to go for after it's fixed - - $100? Can I get it repaired for $85? I don't think so. And I Google-searched all over for some hints as to how to adjust or repair this brand of microscope, but there's not a single post that I could find that was any help. I guess all the repair techs have signed a non-disclosure agreement or something.

Getting down to business, I opened up my black $15 microscope and found a series of mirrors in the section that allows interpupillary adjustment, and two movable lenses on each side in the zoom section. The mirrors all appear to be positioned by contact with machined surfaces on pivoting aluminum castings. It doesn't look like these can move around unless one breaks loose from the glyp they put around the edges of the contact areas. Looking into the empty eyepiece holes, the left eye sees a bright elongated spot (8 to 10% of aperture area) outside the aperture at about 10:00 at all zoom settings that is not present in the right eyepiece hole - - looks like a sneak path or a chip out of a mirror. The image offset of the left when eyepieces are in place is about 1/6 of a field diameter low compared to the right, and could be converged with eyesight set for 6 ft away, if the vertical offset were not present. This offset is exactly the same at all magnifications. The white microscope behaves exactly the same at all magnifications, also.

In the zoom section, turning the zoom control rotates a pair of cam shafts grooved for pins that drive Nylon pads along guides. Each lens is fastened to its Nylon pad by a couple of screws, and it appears possible to adjust lens tilt by loosening the screws a bit. I have resisted the temptation to see what happens when the screws are loosened, but is this the only adjustment for optical convergence we have? It looks pretty sloppy and difficult to control.

So have any of you dug into your microscope and figured out how to fix it? Do any of you with B&L training care to guide an old EE to make something good out of the junk he finds at a flea market?

Thanks for all your help,

Chuck, w6pkp

2217. Re: HBR 16++ ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-02 23:50:39 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <z5Odne1UVqxFIevfRVn-1g@comcast.com>
Source record: 19150

"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
news:Dysde.222$1o3.131@newssvr12.news.prodigy.com...
> I've posted some pics on alt.binaries.pictures.radio
> This may be a one of a kind individual homebrew effort for 10 thru 75
> meters, eight band ssb receiver with about 30 tubes and mechanical
> filters.
> If anyone knows anything about it, I'd sure like to know. There are some
> disconnected wires and a some tubes missing. The guy I bought it from
> thought someone in Alaska made it. I had to buy the ssb 6146 Tx to get it
> and will post pics of it.
> tnx
> ---
> 73
> Hank WD5JFR
>
Hank -

The HBR receiver is a design by Ted Crosby (W6TC - sk) featured in a series
of QST articles from 1957 to 1969 and in The Radio Handbook, 17th Edition.

K5BCQ has entire web sites dedicated to these receivers!
http://www.qsl.net/k5bcq/HBR/hbr.html

Happy reading !

Greg, w9gb

2218. Re: HBR 16++ ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-02 23:55:42 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <FOadnSpeyvCaI-vfRVn-oQ@comcast.com>
Source record: 19151

"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
news:Dysde.222$1o3.131@newssvr12.news.prodigy.com...
> I've posted some pics on alt.binaries.pictures.radio
> This may be a one of a kind individual homebrew effort for 10 thru 75
> meters, eight band ssb receiver with about 30 tubes and mechanical
> filters.
> If anyone knows anything about it, I'd sure like to know. There are some
> disconnected wires and a some tubes missing. The guy I bought it from
> thought someone in Alaska made it. I had to buy the ssb 6146 Tx to get it
> and will post pics of it.
> tnx
>
> --
> 73
> Hank WD5JFR
>

Tom Dailey's (WA&#65533;EAJ) story is interesting -- that we live in a small world.

The HBR series of receivers (8, 11, 13, 16, & even an 18 [# of tubes])
were originally designed by Ted Crosby - W6TC SK, back in the early 60's.
The original articles appeared in QST of 1963, and many of these EXCELLENT
receivers were homebrewed by amateurs throughout the country and the world.
A testament to their quality is reflected in the fact that they're still
being built, restored, and used. Although mine is not very pretty, it works
FB, and I regularly use it on Straight Key Night with a restored Heathkit
AT-1 transmitter (and the original straight key that I bought at B-A in
1959, for $2.95). It hears as well, or better than a Kenwood TS-430S or
IC-706 MKII/G.

Kees asked for HBR stories, so I sent him this one - thought your KAR readers might enjoy reading it as well. I encourage all to visit the website, and if you're interested in putting one of these critters together, you can still find all the parts. I have all of the QST articles, "HBR Notes" (construction hints), & original spec sheets on the tuning capacitor and IF cans. Anybody who might need copies would only have to pay for the copy paper and postage, but most all the info is on the website. ZUT de WA&#65533;EAJ AR

Hi Kees,

My HBR-11 came to me via an ordinary flea market in Denver. It was bought, along with several other pieces of "junque" from a seller, by KG&#65533;HS (Carl) out here. After a few weeks, Carl asked me to look at "this thing", as it was missing a tube, and had no markings as to what it was. Finally, he just

gave it to me, as he felt he'd never get around to messing with it.

I kept it under the bench for about 6 months, until one day I noticed the slipped Dymo label, under the lip of the cabinet, saying "HBR-11". I had figured out by this time, that HBR meant "Home Brew Receiver", but still didn't know much about it.

About that time, I received yet another complimentary copy of Ham Radio Trader, which was still being printed back then. In it, I found an ad by Charlie Brenner (WB9GJW) for an "HBR-16". Figuring it had to be a cousin of the "11", I emailed him. Charlie was WONDERFUL enough to send me: the ORIGINAL QST articles, a copy of "HBR Notes" (original version), A Full schematic, and copies of the ORIGINAL cut-sheets of the tuning capacitor, & the J.W. Miller I-F cans. Armed with this info, I determined the missing tube, and brought it up s-l-o-w-l-y with my variac... Voila'... NOISE! After repairing about 14 different problems, mostly solder joints, 2 tubes, and loose hardware, I aligned it with an HP-606 (one of the few that will do a 100 kc signal), and it was terrific. I should mention, that all I had was the 40m coil-set.

About a month later, I found another piece of Dymo tape under the wiring, and it read "WA&#65533;LJO". I looked the call up in an old callbook, and found that it belonged to Everett Huizinga - listed in Denver, CO. (HEY! That's where I LIVE!) I looked up the name in a Denver phone directory, and sure enough, there was still a Huizinga at the old address. After attempting to explain why a total stranger was calling her about an old radio, the lady ultimately informed me "Oh my, that's my son... I think he was a teenager when he built that old radio!". She gave my number to Everett (who now lived in Golden, CO - about 10 miles from me), and we spoke on the phone, finally promising to try to run into each other at the next hamfest.

It gets better...

At the Jefferson County hamfest, I was walking up to the front door, and I saw my friend Carl, with another guy. Carl says "Hey, you wanna' meet the guy who built that receiver?"... I said "Sure!". We spoke, and it came to light that Carl actually WORKED WITH EVERETT! Imagine that... you buy an old radio at a "civilian" flea market, and it turns out that a guy you work with, is the guy who built it, back in 1965!. Everett and I spoke, and he said to come over to his house later... I did.

Arriving at the house, Everett came out of his old garage bearing a small cardboard box... it still had the "ALLIED RADIO" label on it, postmarked 1965. Inside was the treasure... the coil set for 20m, and 2 of the 3 coils for 80m, along with several BRAND NEW National 5-pin coil forms. I've just found some No. 26 wire, and cut down an old 100 mmfd APC variable to 55 mmfd, so will be winding the last coil this weekend.

So, how's that for a story. The amazing circular world of Ham Radio, and how Ted Crosby lives on.

Tom Dailey
WAEAJ

2219. Re: LA8AK SK

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-03 00:02:35 UTC
From: kb9olm@yahoo.com
Message-ID: <1115078555.918959.139750@g14g2000cwa.googlegroups.com>
Source record: 19152

Big loss for ham radio community.
About 10 days ago I sent email to J.M. but he never replied...
Vlad, kb9olm

Ian White GM3SEK wrote:
> According to the announcement on his website, Jan-Martin was found
dead
> of a heart attack last week.
>
> http://www.agder.net/la8ak/
>
> Amateur radio has lost its genuine Norse Giant. Jan-Martin was a man
of
> huge stature, with an engineering talent to match.
>
>
> --
> 73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.co.uk/g3sek

2220. Re: LA8AK SK

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-03 01:16:45 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <117dk7v87tjjg28@corp.supernews.com>
Source record: 19153

One of the people you could count on for a 100% correct answer, and a gentleman as well. That combination is hard to come by. My respects and condolences to his family.

The giants are slowly disappearing...

Jim
WX6RST

<kb9olm@yahoo.com> wrote in message
news:1115078555.918959.139750@g14g2000cwa.googlegroups.com...
> Big loss for ham radio community.
> About 10 days ago I sent email to J.M. but he never replied...

2221. Re: HBR 16++ ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-03 06:39:05 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <ks6e71p252kjnt7o8ao8lsrs9shu0p50pi@4ax.com>
Source record: 19154

On Mon, 2 May 2005 18:50:39 -0500, "gb" <onw9mapsgb@no.arrl.spam.net>
wrote:

>
>The HBR receiver is a design by Ted Crosby (W6TC - sk) featured in a series
>of QST articles from 1957 to 1969 and in The Radio Handbook, 17th Edition.

Ted Crosby is a silent key, but George Badger, W6TC is not.

2222. Yig connector pinouts ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-03 08:17:35 UTC
From: Alain <alain@nospam.fr>
Message-ID: <42773341$0$8209$636a15ce@news.free.fr>
Source record: 19155

Hello,
I need some information concerning the YIG OSCILLATOR 2.05 - 4.1 GHz HP 08555-60081 (HP8555A), how they works and connector pinouts.
Regards Alain (f1mdt)

XXXnaxos13@free.frXXX (remove X)

2223. Re: dsPIC audio processor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-03 12:23:41 UTC
From: Neo <zingafriend@yahoo.com>
Message-ID: <1115123021.304411.312160@g14g2000cwa.googlegroups.com>
Source record: 19156
Cross-posted to: comp.dsp,comp.arch.embedded,rec.radio.amateur.homebrew,sci.electronics.design

can you believe it I just ordered a AT90S2313 development board from futurlec after going through your site. I was hovering about to make a decision on that. strange, how decisions can be triggered.

2224. Re: dsPIC audio processor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-03 14:34:09 UTC
From: Leon Heller <leon.heller@dsl.pipex.com>
Message-ID: <42778be4$0$287$cc9e4d1f@news-text.dial.pipex.com>
Source record: 19157
Cross-posted to: comp.dsp,comp.arch.embedded,rec.radio.amateur.homebrew,sci.electronics.design

"Neo" <zingafriend@yahoo.com> wrote in message
news:1115123021.304411.312160@g14g2000cwa.googlegroups.com...
> can you believe it I just ordered a AT90S2313 development board from
> futurlec after going through your site. I was hovering about to make a
> decision on that. strange, how decisions can be triggered.

Bear in mind that the '2313 is obsolete, and has been replaced by the
Tiny2313 - cheaper, faster and with lots more stuff on the chip. They are
pin-compatible.

Leon
--
Leon Heller, G1HSM
http://www.geocities.com/leon_heller

2225. Re: dsPIC audio processor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-03 14:57:47 UTC
From: Neo <zingafriend@yahoo.com>
Message-ID: <1115132267.302129.44720@z14g2000cwz.googlegroups.com>
Source record: 19158
Cross-posted to: comp.dsp,comp.arch.embedded,rec.radio.amateur.homebrew,sci.electronics.design

Leon,
This is my first board, so if you dont mind can you suggest what other accessories I need to order along with the board to start working on a project.

2226. need CRT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-03 15:19:46 UTC
From: Phil <pjock@xSpearNet.net>
Message-ID: <Xns964B734017EF9pjockxxxSpearNetnet@216.196.97.142>
Source record: 19159

I need to replace the CRT in my Tenma 72-6602 oscilloscope.
It goes by two numbers. They are 75AWB31 and C312P31B.

Googling finds no one who sells them and very little info.

Anyone have a spare laying around or know of a more common
substitute? I would like to swap for or purchase outright.

Any help or suggestions appreciated.

phil

2227. Re: Yig connector pinouts ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-03 17:10:46 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1ce1506f18c9e5b39896b1@news-central.giganews.com>
Source record: 19160

In article <42773341$0$8209$636a15ce@news.free.fr>, alain@nospam.fr
says...
> Hello,
> I need some information concerning the YIG OSCILLATOR 2.05 - 4.1 GHz HP
> 08555-60081 (HP8555A), how they works and connector pinouts.
> Regards Alain (f1mdt)
>
> XXXnaxos13@free.frXXX (remove X)
>
>
>
>

Grab the 8555A manual from BAMA at http://bama.sbc.edu/hp.htm . It will
tell you how the YIG is hooked up.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

2228. Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-03 17:22:51 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1115140971.011202.84920@g14g2000cwa.googlegroups.com>
Source record: 19161
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

Many years ago (like, 20) I bought many 24" x 24" sheets of
single-sided PCB that I've been using to homebrew dead-bug style and
for other activities like soldering together little shielded boxes.
Probably mail-order from Fair Radio.I'm sure I paid very little for the
stuff at the time, probably a few bucks a sheet. Now my stash is
almost gone. Anyone care to recommend a good cheap supplier for
similar single-sided PCB? I'm not picky as to phenolic vs glass-epoxy
or whatever, I just need a good ground plane. Big pieces are good but
I can live with little pieces too.

The stuff I got 20 years ago was, for some reason, pre-tinned. (Maybe
this is why it was so cheap?). That was nice because I don't have to
clean off my dirty fingerprints when coming back to a project after a
few weeks or a few years :-). Pre-tinned is a big plus.

2229. Re: piezoceramic transformer/piezitransformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-03 18:21:27 UTC
From: dplatt@radagast.org
Message-ID: <117fg97k99npc2b@corp.supernews.com>
Source record: 19162

>Currently, they are used to generate high voltage for ion air
>purifiers (ozone), that are supposed to make the air safer to breathe.

Well, there's a distinction to be made between "negative ion generators" and "ozonators". The former tend to operate at significantly lower voltages, and aren't intended to create ozone (O3) although they may produce a small amount as a side effect. Their primary output is negative ions, which some people feel make the air more pleasant to breathe, and which definitely have the effect of causing pollutant particles in the air to precipitate out onto filters and onto every nearby surface.

I used to run a negative-ion generator in a commercial office space located right under the Los Angeles Airport approach pattern. Lots of stinky jet-fuel fumes and soot in the air outside. It definitely made the air in the office more breathable. It also made a horrendous mess of the walls and ceiling... after a month of operation I could see a "shadow" on the wall if I moved a calendar or poster, due to all of the soot and gunk which had precipitated out of the air. I understand that after I left the company, they had to repaint the office to get rid of the stained appearance.

Ozone generators are another matter entirely... higher voltage, more corona effect (or, they use a high-intensity shortwave UV lamp to create a similar effect by different means). I hate these things... can't stay in a room with one for more than a couple of minutes before my eyes start to burn and my lungs to ache. Why anyone would wish to generate a free-radical-producing government-listed airborne pollutant in their living space is beyond me!

Those piezeotransformer gadgets sound pretty neat, although I haven't played with one myself.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2230. Re: Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-03 20:52:07 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1ce184488114aa989896b2@news-central.giganews.com>
Source record: 19163
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

In article <1115140971.011202.84920@g14g2000cwa.googlegroups.com>,
shoppa@trailing-edge.com says...
> Many years ago (like, 20) I bought many 24" x 24" sheets of
> single-sided PCB that I've been using to homebrew dead-bug style and
> for other activities like soldering together little shielded boxes.
> Probably mail-order from Fair Radio.I'm sure I paid very little for the
> stuff at the time, probably a few bucks a sheet. Now my stash is
> almost gone. Anyone care to recommend a good cheap supplier for
> similar single-sided PCB? I'm not picky as to phenolic vs glass-epoxy
> or whatever, I just need a good ground plane. Big pieces are good but
> I can live with little pieces too.
>
> The stuff I got 20 years ago was, for some reason, pre-tinned. (Maybe
> this is why it was so cheap?). That was nice because I don't have to
> clean off my dirty fingerprints when coming back to a project after a
> few weeks or a few years :-). Pre-tinned is a big plus.
>
>

eBay.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

2231. Re: dsPIC audio processor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-03 20:53:02 UTC
From: Leon Heller <leon.heller@dsl.pipex.com>
Message-ID: <4277e4ae$0$289$cc9e4d1f@news-text.dial.pipex.com>
Source record: 19164
Cross-posted to: comp.dsp,comp.arch.embedded,rec.radio.amateur.homebrew,sci.electronics.design

"Neo" <zingafriend@yahoo.com> wrote in message
news:1115132267.302129.44720@z14g2000cwz.googlegroups.com...
> Leon,
> This is my first board, so if you dont mind can you suggest what other
> accessories I need to order along with the board to start working on a
> project.

Does it come with a programmer? If not, you will have to buy or make one.
The SP12 programmer is very simple, I've used it for years:

http://www.xs4all.nl/~sbolt/e-spider_prog.html

I'd also get a few spare 2313 chips.

Leon

2232. Re: need CRT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-03 21:01:34 UTC
From: Floyd Sense <fsense@copper.net>
Message-ID: <4277e711_4@newsfeed.slurp.net>
Source record: 19165

Try a Google search for CRT suppliers. Can't recall the name of the one I found, but there were a couple that are able to cross reference the numbers and can tell you which of the two is actually the CRT number.

73-K8AC

"Phil" <pjock@xSpearNet.net> wrote in message news:Xns964B734017EF9pjockxxxSpearNetnet@216.196.97.142...
>I need to replace the CRT in my Tenma 72-6602 oscilloscope.
> It goes by two numbers. They are 75AWB31 and C312P31B.
>
> Googling finds no one who sells them and very little info.
>
> Anyone have a spare laying around or know of a more common
> substitute? I would like to swap for or purchase outright.
>
> Any help or suggestions appreciated.
>
> phil

2233. Re: Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-03 21:08:28 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <gLRde.1742$5o2.960@newssvr13.news.prodigy.com>
Source record: 19166
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

Hello Tim,

See if there is a PCB manufacturer within resonable driving distance and ask for scraps. That's how I got a huge stash decades ago. Single and double sided, the good stuff (FR4). But it has to be picked up, in my case they wouldn't have gone through the trouble of packaging and mailing it. Basically it had to be no more effort on their part than a walk to the dumpster would have been.

Mine weren't tinned though. Also, I am not sure if constantly touching a pre-tinned board during experiments would be too healthy.

Regards, Joerg

http://www.analogconsultants.com

2234. Re: Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-03 21:15:31 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <TRRde.12358$J12.6081@newssvr14.news.prodigy.com>
Source record: 19167
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

Hello Tim,

Just one more thought: I use "living-bug" arrangements almost exclusively. Every once in a while I cut up some strips so they fit the most popular "underbellies" of chips. Then I glue the strips onto the large panel and the chips on top of the strips in a rider's fashion. Ground connection can be achieved by slightly bending down a pin, the rest gets wired up Sauerkraut style like usual. When stray capacitance is critical I take washed wood strips instead of copper clad. Makes for a really nice excuse to eat another Haagen Dasz.

This avoids having to think in reverse pinout and it often looks nicer, too. Plus you can still see the "CD4007" on the chip.

Regards, Joerg

http://www.analogconsultants.com

2235. Re: need CRT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-03 21:19:55 UTC
From: Bill <dontspamoleexray@coqui.net>
Message-ID: <117fqnsobik4re2@corp.supernews.com>
Source record: 19168

If you can further cross to see what type goes in a H-P 1222A scope -
and find a match - I've got one of those here free for the cost of shipping.

-Bill
exray at coqui dot net

Floyd Sense wrote:

> Try a Google search for CRT suppliers. Can't recall the name of the one I
> found, but there were a couple that are able to cross reference the numbers
> and can tell you which of the two is actually the CRT number.
>
> 73-K8AC
>
>
> "Phil" <pjock@xSpearNet.net> wrote in message
> news:Xns964B734017EF9pjockxxxSpearNetnet@216.196.97.142...
>
>>I need to replace the CRT in my Tenma 72-6602 oscilloscope.
>>It goes by two numbers. They are 75AWB31 and C312P31B.
>>
>>Googling finds no one who sells them and very little info.
>>
>>Anyone have a spare laying around or know of a more common
>>substitute? I would like to swap for or purchase outright.
>>
>>Any help or suggestions appreciated.
>>
>>phil
>
>
>

2236. Re: Yig connector pinouts ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-03 22:39:09 UTC
From: Alain <alain@nospam.fr>
Message-ID: <4277fd2c$0$18774$636a15ce@news.free.fr>
Source record: 19169

Thanks for the information.
73 Alain

"John Miles" <jmiles@pop.removethistomailme.net> a crit dans le message de news: MPG.1ce1506f18c9e5b39896b1@news-central.giganews.com...
> In article <42773341$0$8209$636a15ce@news.free.fr>, alain@nospam.fr
> says...
>> Hello,
>> I need some information concerning the YIG OSCILLATOR 2.05 - 4.1 GHz HP
>> 08555-60081 (HP8555A), how they works and connector pinouts.
>> Regards Alain (f1mdt)
>>
>> XXXnaxos13@free.frXXX (remove X)
>>
>>
>>
>>
>
> Grab the 8555A manual from BAMA at http://bama.sbc.edu/hp.htm . It will
> tell you how the YIG is hooked up.
>
> -- jm
>
> ---
> http://www.qsl.net/ke5fx
> Note: My E-mail address has been altered to avoid spam
> ---

2237. Re: Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-03 22:47:26 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1ce19f58fed8a8c89896b3@news-central.giganews.com>
Source record: 19170
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

In article <TRRde.12358$J12.6081@newssvr14.news.prodigy.com>,
notthisjoergsch@removethispacbell.net says...
> Hello Tim,
>
> Just one more thought: I use "living-bug" arrangements almost
> exclusively. Every once in a while I cut up some strips so they fit the
> most popular "underbellies" of chips. Then I glue the strips onto the
> large panel and the chips on top of the strips in a rider's fashion.
> Ground connection can be achieved by slightly bending down a pin, the
> rest gets wired up Sauerkraut style like usual. When stray capacitance
> is critical I take washed wood strips instead of copper clad. Makes for
> a really nice excuse to eat another Haagen Dasz.
>
> This avoids having to think in reverse pinout and it often looks nicer,
> too. Plus you can still see the "CD4007" on the chip.

Or you can just bend all but the ground pins outward from the base of
the chip (e.g., www.speakeasy.net/
~jmiles1/ke5fx/492ap/large/close1.jpg). The pins won't break if you
don't flex them more than once or twice.

Sometimes I'll use a drop of cynaoacrylate adhesive to hold the chip
into place if there are few or no grounded pins, but it's rarely
necessary.

This also works for SOICs and even TSSOPs, as long as you don't bend the
pins more than once.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

2238. Re: StereoZoom microscope repair

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-04 01:06:49 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <q50e71hor78bikcu7pm512n3pvor49q6sv@4ax.com>
Source record: 19171

On Mon, 2 May 2005 12:15:51 -0700 "Chuck Olson"
<chuckolson01@REMOVETHIScomcast.net> wrote:

>So have any of you dug into your microscope and figured out how to fix it?
>Do any of you with B&L training care to guide an old EE to make something
>good out of the junk he finds at a flea market?

I wish I knew how this was done, but I don't. I DO know that the
company I used to work for once sent out their scope to be realigned
to a local camera repair shop. They apparently had some kind of laser
alignment system which helped this process.

You might try calling such a place just to get an idea of cost.

-

Jim Adney jadney@vwtype3.org
Madison, WI 53711 USA

2239. Articles of interest

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-04 10:15:34 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <117h86crn6sm5b0@corp.supernews.com>
Source record: 19172

I've just posted a couple of QST Technical Correspondence items to my web site. Although published over 20 years ago, they're still relevant and might be of interest to some of the readers of this group. They are:

"On Solid-State PA Matching Networks" - An important characteristic of matching networks for class C solid state amplifiers, which doesn't seem to be well known even today.

"Choosing Wire Size for Toroidal Inductors" - Measurements showing that it doesn't make much difference. But people are still asking.

Both are at http://eznec.com/Amateur/Articles/.

Roy Lewallen, W7EL

2240. Re: dsPIC audio processor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-04 10:37:33 UTC
From: Neo <zingafriend@yahoo.com>
Message-ID: <1115203053.645182.63060@z14g2000cwz.googlegroups.com>
Source record: 19173
Cross-posted to: comp.dsp,comp.arch.embedded,rec.radio.amateur.homebrew,sci.electronics.design

thanks.

2241. Re: Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-04 18:53:49 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <1T8ee.2241$5o2.1697@newssvr13.news.prodigy.com>
Source record: 19174
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

Hello John,

> Or you can just bend all but the ground pins outward from the base of
> the chip (e.g., www.speakeasy.net/
> ~jmiles1/ke5fx/492ap/large/close1.jpg). The pins won't break if you
> don't flex them more than once or twice.

But then I won't have an excuse to eat another Haagen Dasz bar :-(

Regards, Joerg

http://www.analogconsultants.com

2242. Re: Articles of interest

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-04 19:00:58 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <117i6vbgguhdk13@corp.supernews.com>
Source record: 19175

The L network inductor in "On Solid-State PA Matching Networks" Fig. 1 should be 0.5 uH, not 0.5 mH. The correction I had penciled in 20 years ago was too light to reproduce and I hadn't noticed that it didn't show up. I've uploaded a corrected copy.

Thanks to John, KD5YI, for spotting the error.

Roy Lewallen, W7EL

Roy Lewallen wrote:
> I've just posted a couple of QST Technical Correspondence items to my
> web site. Although published over 20 years ago, they're still relevant
> and might be of interest to some of the readers of this group. They are:
>
> "On Solid-State PA Matching Networks" - An important characteristic of
> matching networks for class C solid state amplifiers, which doesn't seem
> to be well known even today.
>
> "Choosing Wire Size for Toroidal Inductors" - Measurements showing that
> it doesn't make much difference. But people are still asking.
>
> Both are at http://eznec.com/Amateur/Articles/.
>
> Roy Lewallen, W7EL

2243. Re: Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-04 19:57:48 UTC
From: LenAnderson@ieee.org
Message-ID: <1115236668.490732.147080@f14g2000cwb.googlegroups.com>
Source record: 19176
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

From: "Tim Shoppa" on Tues,May 3 2005 10:22 am

>Many years ago (like, 20) I bought many 24" x 24" sheets of
>single-sided PCB that I've been using to homebrew dead-bug style and
>for other activities like soldering together little shielded boxes.
>Probably mail-order from Fair Radio.I'm sure I paid very little for
the
>stuff at the time, probably a few bucks a sheet. Now my stash is
>almost gone. Anyone care to recommend a good cheap supplier for
>similar single-sided PCB? I'm not picky as to phenolic vs glass-epoxy
>or whatever, I just need a good ground plane. Big pieces are good but
>I can live with little pieces too.

Ebay might be good as someone else suggested. The best bet
for low CO$T material is to sweet-talk a PCB maker for left-
overs...if one is in your neighborhood. I've gotten fairly
good prices from www.circuitspecialists.com on double-sided
stock (comes in protective plastic envelope).

>The stuff I got 20 years ago was, for some reason, pre-tinned. (Maybe
>this is why it was so cheap?). That was nice because I don't have to
>clean off my dirty fingerprints when coming back to a project after a
>few weeks or a few years :-). Pre-tinned is a big plus.

Cleaning OLD PCB stock the "green" way -

Sprinkle any kind of table salt on the PCB stock, then take
half a lemon and rub it on the salt. Most of the blackened
oxide will disappear!

I tried that late last year on some 4" x 8" double-sided
phenolic substrate PCB stock after seeing all those "green"
site remarks that I didn't really believe. It WORKS! :-)
Those pieces had been sitting in the back of the workshop
for about 35 years.

I did "cheat" a bit. Have a year-round producing lemon
tree and my wife had some coarse salt left over from a
canning experiment. Zero cost trial...lemons at the
markets can run 50 cents each. The residue can easily
wash down the sink, don't need any gloves, nothing toxic.
Result is easily solderable although for best appearance,
some cleaning with a bleach-containing kitchen cleanser
will make it shiny and spotless.

LenAnderson@ieee.org

2244. Re: Yig connector pinouts ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-04 20:47:02 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <8eTBA6KGTTeCFwUE@g3ohx.demon.co.uk>
Source record: 19177

In message <MPG.1ce1506f18c9e5b39896b1@news-central.giganews.com>, John Miles <jmiles@pop.removethistomailme.net> writes
>In article <42773341$0$8209$636a15ce@news.free.fr>, alain@nospam.fr
>says...
>> Hello,
>> I need some information concerning the YIG OSCILLATOR 2.05 - 4.1 GHz HP
>> 08555-60081 (HP8555A), how they works and connector pinouts.
>> Regards Alain (f1mdt)
>>
>> XXXnaxos13@free.frXXX (remove X)
>>
>>
>>
>>
>
>Grab the 8555A manual from BAMA at http://bama.sbc.edu/hp.htm . It will
>tell you how the YIG is hooked up.
>
>-- jm
>
>---
>http://www.qsl.net/ke5fx
>Note: My E-mail address has been altered to avoid spam
>---

I can get to nothing to download from any of the links for any of the manufacturers. All I get is the famous 'The page cannot be displayed' message. Is it just me?
Ian.
--

2245. DC-DC up converter 12v-->24v 500 mA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-04 21:24:24 UTC
From: Rightrik <gaggiorNOSPAM@tin.it>
Message-ID: <3dsss9F1uuoU1@individual.net>
Source record: 19178

Hello, i need a little, low power (about 500 mA) step up converter from 12 v dc to 24 v dc to operate correctly a 4 ways coaxial switch.
I have found project on the net, but i wonder if there is a ready, little, not ott expensive kit or ready-to-go-module to obtain this 24-26 v dc voltage from 12 (13,8) dc volt input.

Thank you,
73 de Riccardo IK5WQO

2246. Re: DC-DC up converter 12v-->24v 500 mA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-04 22:13:55 UTC
From: Bill <dontspamoleexray@coqui.net>
Message-ID: <117ii959gfeib54@corp.supernews.com>
Source record: 19179

Rightrik wrote:

> Hello, i need a little, low power (about 500 mA) step up converter from 12 v
> dc to 24 v dc to operate correctly a 4 ways coaxial switch.
> I have found project on the net, but i wonder if there is a ready, little,
> not ott expensive kit or ready-to-go-module to obtain this 24-26 v dc
> voltage from 12 (13,8) dc volt input.
>
> Thank you,
> 73 de Riccardo IK5WQO
>
>

I think you might find a "wall-wart" power supply for a computer printer
to do the job.

You can find these in voltages like 24-28v @ 1 amp for maybe $10 new in
the US. Of course ours are 120v but I imagine you have the 240v types
available over there in I-land.

-Bill

2247. Re: DC-DC up converter 12v-->24v 500 mA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-04 23:28:27 UTC
From: Bill Janssen <billj9@ieee.org>
Message-ID: <vUcee.485$8g.245@news01.roc.ny>
Source record: 19180

Rightrik wrote:

>Hello, i need a little, low power (about 500 mA) step up converter from 12 v
>dc to 24 v dc to operate correctly a 4 ways coaxial switch.
>I have found project on the net, but i wonder if there is a ready, little,
>not ott expensive kit or ready-to-go-module to obtain this 24-26 v dc
>voltage from 12 (13,8) dc volt input.
>
>Thank you,
>73 de Riccardo IK5WQO
>
>
>
>

They are available. There are some for mobile police computers for example.
Also look for a 12 to 12 volt with isolated 12 volt output. You can use
the output in series
with the input to get the 24 volt. And a 12 to 8 or so may be OK as many
relays
will work with less than the full 24 volts.

Good luck.
Bill K7NOM

2248. Re: Yig connector pinouts ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-04 23:30:32 UTC
From: Bill Janssen <billj9@ieee.org>
Message-ID: <sWcee.486$8g.301@news01.roc.ny>
Source record: 19181

Ian Jackson wrote:

> In message <MPG.1ce1506f18c9e5b39896b1@news-central.giganews.com>,
> John Miles <jmiles@pop.removethistomailme.net> writes
>
>> In article <42773341$0$8209$636a15ce@news.free.fr>, alain@nospam.fr
>> says...
>>
>>> Hello,
>>> I need some information concerning the YIG OSCILLATOR 2.05 - 4.1
>>> GHz HP
>>> 08555-60081 (HP8555A), how they works and connector pinouts.
>>> Regards Alain (f1mdt)
>>>
>>> XXXnaxos13@free.frXXX (remove X)
>>>
>>>
>>>
>>>
>>
>> Grab the 8555A manual from BAMA at http://bama.sbc.edu/hp.htm . It will
>> tell you how the YIG is hooked up.
>>
>> -- jm
>>
>> ----------
>> http://www.qsl.net/ke5fx
>> Note: My E-mail address has been altered to avoid spam
>> ----------
>
>
> I can get to nothing to download from any of the links for any of the
> manufacturers. All I get is the famous 'The page cannot be displayed'
> message. Is it just me?
> Ian.

Don't know about "page cannot be displayed" message but when I checked
the BAMA
site recently they had removed all HP material.

Bill K7NOM

2249. Re: DC-DC up converter 12v-->24v 500 mA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 02:44:02 UTC
From: budgie <me@privacy.net>
Message-ID: <qp1j71d40hh5v200t7jqrj5bsdiooq9h43@4ax.com>
Source record: 19182

On Wed, 4 May 2005 23:24:24 +0200, "Rightrik" <gaggiorNOSPAM@tin.it> wrote:

>Hello, i need a little, low power (about 500 mA) step up converter from 12 v
>dc to 24 v dc to operate correctly a 4 ways coaxial switch.
>I have found project on the net, but i wonder if there is a ready, little,
>not ott expensive kit or ready-to-go-module to obtain this 24-26 v dc
>voltage from 12 (13,8) dc volt input.
>
>Thank you,
>73 de Riccardo IK5WQO

KEMO Electronics (germany) make these items. They have an interesting range of small modules with various functions. Have a look at their web page:

http://www.kemo-electronic.com/en/module/m029/index.htm

They are wholesale only, but have distributors around the planet.

2250. Re: Yig connector pinouts ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 03:41:13 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1ce33504750998639896b4@news-central.giganews.com>
Source record: 19183

In article <sWcee.486$8g.301@news01.roc.ny>, billj9@ieee.org says...
> Ian Jackson wrote:
>
> > In message <MPG.1ce1506f18c9e5b39896b1@news-central.giganews.com>,
> > John Miles <jmiles@pop.removethistomailme.net> writes
> >
> >> In article <42773341$0$8209$636a15ce@news.free.fr>, alain@nospam.fr
> >> says...
> >>
> >>> Hello,
> >>> I need some information concerning the YIG OSCILLATOR 2.05 - 4.1
> >>> GHz HP
> >>> 08555-60081 (HP8555A), how they works and connector pinouts.
> >>> Regards Alain (f1mdt)
> >>>
> >>> XXXnaxos13@free.frXXX (remove X)
> >>>
> >>>
> >>>
> >>>
> >>
> >> Grab the 8555A manual from BAMA at http://bama.sbc.edu/hp.htm . It will
> >> tell you how the YIG is hooked up.
> >>
> >> -- jm
> >>
> >> --
> >> http://www.qsl.net/ke5fx
> >> Note: My E-mail address has been altered to avoid spam
> >> --
> >
> >
> > I can get to nothing to download from any of the links for any of the
> > manufacturers. All I get is the famous 'The page cannot be displayed'
> > message. Is it just me?
> > Ian.
>
> Don't know about "page cannot be displayed" message but when I checked
> the BAMA
> site recently they had removed all HP material.
>
> Bill K7NOM
>

There were some legal issues, but the BAMA maintainer was able to work through them with Agilent. The HP content is back up, as of a few days ago.

Supposedly there is an effort under way at Agilent to gather and distribute .PDF manuals directly.

Apart from that, it appears that a ham in Israel has posted a link to the 8555A YIG connection specs as part of an auction for one of the YIGs in question:

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=7512226957

I have no affiliation with this seller, etc., etc.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

2251. Re: Yig connector pinouts ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 05:31:09 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4279AF95.D031C1A1@earthlink.net>
Source record: 19184

Bill Janssen wrote:
>
> Don't know about "page cannot be displayed" message but when I checked
> the BAMA site recently they had removed all HP material.

They are supposed to be putting it back after Agilent changed their
policy on out of print materials.

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

2252. VHF TX/RX switch w/ pin diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 05:44:16 UTC
From: Bernard <bernard.debbasch_removethis_@mail.com>
Message-ID: <Roiee.10101$tQ.3258@fed1read06>
Source record: 19185

I am trying to design a solid state TX/RX switch for VHF (2-meter).

```
DC (when TX)
|
| pin diode
TX------->|---------- Antenna
|
delay line
|
|-------- RX
V (pin diode)
GND
```

(I am not good at ASCII drwaings !)

My problem is the design of the 1/4 wave line that allows the RX input to be grounded while showing an open circuit at the antenna. One possible implementation would be a length of coax but at VHF frequencies that will be messy. Commercial equipments just use an LC circuit. I am looking for a pointer to the design of this cicuit.

Thanks,
Bernard

2253. Re: Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 08:27:44 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <117jm7efv7i5q7c@corp.supernews.com>
Source record: 19186
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

"Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
news:gLRde.1742$5o2.960@newssvr13.news.prodigy.com...
> Hello Tim,
>
> See if there is a PCB manufacturer within resonable driving distance
and
> ask for scraps. That's how I got a huge stash decades ago. Single and
> double sided, the good stuff (FR4). But it has to be picked up, in my
> case they wouldn't have gone through the trouble of packaging and
> mailing it. Basically it had to be no more effort on their part than a
> walk to the dumpster would have been.
>
> Mine weren't tinned though. Also, I am not sure if constantly touching
a
> pre-tinned board during experiments would be too healthy.

Why is that? Lead? I thought that paint with lead in it was a lot
worse.

> Regards, Joerg
>
> http://www.analogconsultants.com

2254. Re: Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 08:37:45 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <117jmq8c0og5g46@corp.supernews.com>
Source record: 19187
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

"Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
news:TRRde.12358$J12.6081@newssvr14.news.prodigy.com...
> Hello Tim,
>
> Just one more thought: I use "living-bug" arrangements almost
> exclusively. Every once in a while I cut up some strips so they fit
the
> most popular "underbellies" of chips. Then I glue the strips onto the
> large panel and the chips on top of the strips in a rider's fashion.
> Ground connection can be achieved by slightly bending down a pin, the
> rest gets wired up Sauerkraut style like usual. When stray capacitance
> is critical I take washed wood strips instead of copper clad. Makes
for
> a really nice excuse to eat another Haagen Dasz.
>
> This avoids having to think in reverse pinout and it often looks
nicer,
> too. Plus you can still see the "CD4007" on the chip.

Back in the early '70s I got some prototype boards from a company that made aircraft receivers. They used four push-in pins, one for each lead of the four corners of the IC. Two of these are usually power and ground, pins 7 or 8 and 14 or 16. These four hold the chip up off the board, and the other pins are wired spaghetti style, which I presume is the same as your sauerkraut style.

Speaking of this.. Last Sunday at our monthly compouter club meeting someone donated a homemade S-100 system to the consignment table, but no one bought it, so it ended up on the freebies table later, probably then into the trash later. It had a chassis and box pop riveted together, and the S-100 bus was all wire wrapped. A lotta love and time went into building that way back in the late '70s.

> Regards, Joerg
>
> http://www.analogconsultants.com

2255. Re: Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 08:45:32 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <117jn8olpcdkeef@corp.supernews.com>
Source record: 19188
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

"John Miles" <jmiles@pop.removethistomailme.net> wrote in message
news:MPG.1ce19f58fed8a8c89896b3@news-central.giganews.com...
> In article <TRRde.12358$J12.6081@newssvr14.news.prodigy.com>,
> notthisjoergsch@removethispacbell.net says...
> > Hello Tim,
> >
> > Just one more thought: I use "living-bug" arrangements almost
> > exclusively. Every once in a while I cut up some strips so they fit
the
> > most popular "underbellies" of chips. Then I glue the strips onto
the
> > large panel and the chips on top of the strips in a rider's fashion.
> > Ground connection can be achieved by slightly bending down a pin,
the
> > rest gets wired up Sauerkraut style like usual. When stray
capacitance
> > is critical I take washed wood strips instead of copper clad. Makes
for
> > a really nice excuse to eat another Haagen Dasz.
> >
> > This avoids having to think in reverse pinout and it often looks
nicer,
> > too. Plus you can still see the "CD4007" on the chip.
>
> Or you can just bend all but the ground pins outward from the base of
> the chip (e.g., www.speakeasy.net/
> ~jmiles1/ke5fx/492ap/large/close1.jpg). The pins won't break if you
> don't flex them more than once or twice.
>
> Sometimes I'll use a drop of cynaoacrylate adhesive to hold the chip
> into place if there are few or no grounded pins, but it's rarely
> necessary.
>
> This also works for SOICs and even TSSOPs, as long as you don't bend
the
> pins more than once.
>
> -- jm

What's the board in? A receiver? What's it do?

2256. Re: Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 08:54:00 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <117jnoj7dpdig06@corp.supernews.com>
Source record: 19190
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

"Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
news:1T8ee.2241$5o2.1697@newssvr13.news.prodigy.com...
> Hello John,
>
> > Or you can just bend all but the ground pins outward from the base
of
> > the chip (e.g., www.speakeasy.net/
> > ~jmiles1/ke5fx/492ap/large/close1.jpg). The pins won't break if you
> > don't flex them more than once or twice.
>
> But then I won't have an excuse to eat another Haagen Dasz bar :-(

You don't need an excuse. We give you permission. ;-)

BTW, you can go to Michaels or other hobby/crafts store and buy a whole
handful of ice scream sticks for a couple bucks. You don't have to wash
'em, then. :-P

Every year the Engineering Club has a model bridge building contest.
They make them out of ice scream sticks. They support the ends of the
bridge on some bricks and suspend a bucket from the middle. Then fill
the bucket with sand until CRACK! the bridge crumples. Pretty neat!

You could come on over afterward and get some free slightly used ice
scream sticks. :-)

> Regards, Joerg
>
> http://www.analogconsultants.com

2257. Re: VHF TX/RX switch w/ pin diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 08:54:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <117jnq03o9nok21@corp.supernews.com>
Source record: 19189

I don't know what commercial designs use, but you can simulate a 50 ohm quarter wavelength line with a lowpass pi network (shunt C, series L, shunt C). The reactance of each component should be equal to the Z0 of the "line" (e.g., 50 ohms). This will behave just like a quarter wavelength line at the design frequency, and will be a good approximation over a typical amateur band.

Roy Lewallen, W7EL

Bernard wrote:
> I am trying to design a solid state TX/RX switch for VHF (2-meter).
>
> DC (when TX)
> |
> | pin diode
> TX------->|---------- Antenna
> |
> delay line
> |
> |-------- RX
> V (pin diode)
> GND
>
> (I am not good at ASCII drwaings !)
>
> My problem is the design of the 1/4 wave line that allows the RX input to be
> grounded while showing an open circuit at the antenna. One possible
> implementation would be a length of coax but at VHF frequencies that will be
> messy. Commercial equipments just use an LC circuit. I am looking for a
> pointer to the design of this cicuit.
>
> Thanks,
> Bernard
>
>

2258. Re: Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 10:27:20 UTC
From: Bill <spam@coqui.net>
Message-ID: <c9f79$4279f50a$4232bd2d$21959@COQUI.NET>
Source record: 19191
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

beerbarrel wrote:

>
> For what it is worth, as the others say Ebay is good. I picked up 5
> 24" by 24" double sided sheets for 20 dollars.

Ditto. You got a better deal than I did. I got 5 sheets about 14x14,
single sided, for 10 bucks.

-Bill

2259. Re: Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 13:00:43 UTC
From: "Watson A.Name - \"Watt Sun, the Dark Remover\"" <NOSPAM@dslextreme.com>
Message-ID: <117k676ohnq41fb@corp.supernews.com>
Source record: 19192
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

<LenAnderson@ieee.org> wrote in message
news:1115236668.490732.147080@f14g2000cwb.googlegroups.com...
[snip]

> Cleaning OLD PCB stock the "green" way -
>
> Sprinkle any kind of table salt on the PCB stock, then take
> half a lemon and rub it on the salt. Most of the blackened
> oxide will disappear!

I've amazed a few people when we go out to eat lunch. I take a tarnished golden dollar and put it in the lemon from a drink, or catsup works just as well. Less than a minute later, it's nice and shiny again. The vinegar or citric acid reduces all that tarnish to invisible. Some say the carbonic acid in the fizz in cola will do it, too, but I haven't tried it. Check it out sometime when you're into impressing your friends.

> I tried that late last year on some 4" x 8" double-sided
> phenolic substrate PCB stock after seeing all those "green"
> site remarks that I didn't really believe. It WORKS! :-)
> Those pieces had been sitting in the back of the workshop
> for about 35 years.
>
> I did "cheat" a bit. Have a year-round producing lemon
> tree and my wife had some coarse salt left over from a
> canning experiment. Zero cost trial...lemons at the
> markets can run 50 cents each. The residue can easily
> wash down the sink, don't need any gloves, nothing toxic.

Just make sure you don't get any of it in a cut on your finger. The lemon will add a whole 'nother meaning to rubbing salt in your wounds!!

> Result is easily solderable although for best appearance,
> some cleaning with a bleach-containing kitchen cleanser
> will make it shiny and spotless.
>
> LenAnderson@ieee.org
>

2260. Re: DC-DC up converter 12v-->24v 500 mA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 13:45:50 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <UOednVd6s80vvuffRVn-1A@comcast.com>
Source record: 19193

This may be slight overkill (they claim it's good for 100W) but it's
inexpensive:

www.oatleyelectronics.com/kits/k168.html

Alternatively, you could put together something quite simple using
an MC34063A (try Google) - easy to use, readily available.

Bill

"Rightrik" <gaggiorNOSPAM@tin.it> wrote in message

<snip>
> not ott expensive kit or ready-to-go-module to obtain this 24-26 v dc
> voltage from 12 (13,8) dc volt input.

2261. FM Tx antenna options

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 15:26:18 UTC
From: erichmadison <eric_harms@charter.net>
Message-ID: <1115306778.797654.198830@z14g2000cwz.googlegroups.com>
Source record: 19194

I'm relatively new to this--pardon any vernacular errors. I've a 50mW veronica transmitter that I'm using around the house and yard. 9/12V DC power source. It currently has two flexible wire leads serving as the antenna and ground--each is 70cm in length and is directly soldered to the PCB. I usually coil them up to keep the range at a minimum.

Is there anything I can do to change the existing antenna setup? I'd like to be able to switch antennas to attain different coverages. I was told the impedance on such a unit is different than that of common connectors (BNC, F, etc). Is there any way to change this configuration to accept a whip antenna or a rubber duck antenna? I tried wrapping the existing wires around rabbit ears arranged vertically which seemed to give me an option for increased range.

Thanks.

2262. Re: VHF TX/RX switch w/ pin diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 16:50:53 UTC
From: Bernard <bernard.debbasch_removethis_@mail.com>
Message-ID: <T9see.10880$tQ.9867@fed1read06>
Source record: 19195

Thanks this helps. I went into the wrong track because I ignored the shunt C
at the antenna point. Looking at it as a pi network is definitly helping
(not that I know the formula in top of my head, but I will find it !).

Now, the next problem will be to test the efficiency/tuning of the network.
I will need to correctly evaluate the value of the equivalent C's a the
antenna point and at the grounded diode point...

Thanks again,
Bernard

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:117jnq03o9nok21@corp.supernews.com...
>I don't know what commercial designs use, but you can simulate a 50 ohm
>quarter wavelength line with a lowpass pi network (shunt C, series L, shunt
>C). The reactance of each component should be equal to the Z0 of the "line"
>(e.g., 50 ohms). This will behave just like a quarter wavelength line at
>the design frequency, and will be a good approximation over a typical
>amateur band.
>
> Roy Lewallen, W7EL
>
> Bernard wrote:
>> I am trying to design a solid state TX/RX switch for VHF (2-meter).
>>
>> DC (when TX)
>> |
>> | pin diode
>> TX------->|---------- Antenna
>> |
>> delay line
>> |
>> |-------- RX
>> V (pin diode)
>> GND
>>
>> (I am not good at ASCII drwaings !)
>>
>> My problem is the design of the 1/4 wave line that allows the RX input to
>> be grounded while showing an open circuit at the antenna. One possible
>> implementation would be a length of coax but at VHF frequencies that will
>> be messy. Commercial equipments just use an LC circuit. I am looking for
>> a pointer to the design of this cicuit.
>>
>> Thanks,

>> Bernard

2263. Re: FM Tx antenna options

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 17:11:16 UTC
From: Bill <dontspamoleexray@coqui.net>
Message-ID: <117kktoc9442r2e@corp.supernews.com>
Source record: 19196

erichmadison wrote:

> I'm relatively new to this--pardon any vernacular errors. I've a 50mW
> veronica transmitter that I'm using around the house and yard. 9/12V DC
> power source. It currently has two flexible wire leads serving as the
> antenna and ground--each is 70cm in length and is directly soldered to
> the PCB. I usually coil them up to keep the range at a minimum.
>
> Is there anything I can do to change the existing antenna setup? I'd
> like to be able to switch antennas to attain different coverages. I was
> told the impedance on such a unit is different than that of common
> connectors (BNC, F, etc). Is there any way to change this configuration
> to accept a whip antenna or a rubber duck antenna? I tried wrapping the
> existing wires around rabbit ears arranged vertically which seemed to
> give me an option for increased range.
>
> Thanks.
>

I'm guessing here.
It seems to me that if you have 140cm total antenna fed at the middle,
then you have a full size dipole (or close enough) at the FM-BC band.
That further suggests a 75 ohm output impedance.

It would take some work to match a rubber-duck antenna - and it wouldn't
be very efficient. However, you should be able to use a whip of about
70cm and not suffer too much for lack of the ground plane.

If increased range is the goal then 75-ohm cable to an outdoor antenna
(dipole, etc) would seem to be ideal. All would need to be done within
the regulations of your country, of course. :)

There's zillions of folks using the Veronica gear...keep asking around
and I'm sure you'll find something more definitive than my guesswork.

My 2c,

Bill

2264. Re: FM Tx antenna options

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 17:18:54 UTC
From: erichmadison <eric_harms@charter.net>
Message-ID: <1115313534.359872.261130@z14g2000cwz.googlegroups.com>
Source record: 19197

Bill,

One of the wires is a ground, the other is the antenna. Would this
still be a dipole? Thanks for your previous post!

2265. Re: FM Tx antenna options

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 17:32:22 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <DMsee.9054$Ka5.8476779@news.sisna.com>
Source record: 19048

Yes Bill.
It sounds like that is serving as a dipole.
I too would strongly suspect that is a 75 ohm BALANCED output.
You should be able to remove the wires which are serving as the "dipole" and run them to a 1:1 balun and the other side of the balun to a 50-75 ohm unbalanced antenna. Or, to the input of a FM power amp....

Warmest regards,
John

"erichmadison" <eric_harms@charter.net> wrote in message news:1115313534.359872.261130@z14g2000cwz.googlegroups.com...
| Bill,
|
| One of the wires is a ground, the other is the antenna. Would this
| still be a dipole? Thanks for your previous post!
|

2266. Re: Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 18:14:01 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1ce40236ca744de09896b6@news-central.giganews.com>
Source record: 19049
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

> > Or you can just bend all but the ground pins outward from the base of
> > the chip (e.g., www.speakeasy.net/
> > ~jmiles1/ke5fx/492ap/large/close1.jpg). The pins won't break if you
> > don't flex them more than once or twice.
>
> What's the board in? A receiver? What's it do?

It's a PLL that locks a Tek 492AP spectrum analyzer to an external 10 MHz GPS reference. The box contains an x100 prescaler, x10 prescaler, a phase/frequency detector made from two halves of a 74LS74, and a slow loop filter made from an LF356 opamp. There's also a relay that switches the correction signal in and out of the circuit based on whether the GPS reference is connected.

The 494 and 494A had the reflock assembly built in, but the 492A didn't. So I added it, along with a few other tweaks that bring it up to 494A-level functionality.

Lots of stuff in a very small box, without much room for component standoffs or other prototyping aids. I've built a ton of stuff that way, at frequencies up to and including 2 GHz. Wouldn't even consider any other assembly techniques for RF work at this point.

-- jm

---

http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

2267. Re: FM Tx antenna options

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 18:20:21 UTC
From: Bill <dontspamoleexray@coqui.net>
Message-ID: <117kov77fl38531@corp.supernews.com>
Source record: 19050

erichmadison wrote:

> Bill,
>
> One of the wires is a ground, the other is the antenna. Would this
> still be a dipole? Thanks for your previous post!
>

'Ground' has various implications when it comes to rf. If they tell you to attach it to a water pipe or ground rod then it may be a true dc ground. If they tell you to extend it just like the antenna side and not connect it to anything, then its an RF ground plane...which can be compared to rabbit ears, dipole, etc.

Is it balanced or not? Hard to guess.

-Bill

2268. Re: VHF TX/RX switch w/ pin diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 18:31:59 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <ccpk711vnit1isoqm4qcorpvgprss2mr2b@4ax.com>
Source record: 19052

On Thu, 5 May 2005 09:50:53 -0700, "Bernard"
<bernard.debbasch_removethis_@mail.com> wrote:

>Thanks this helps. I went into the wrong track because I ignored the shunt C
>at the antenna point. Looking at it as a pi network is definitly helping
>(not that I know the formula in top of my head, but I will find it !).
>
>Now, the next problem will be to test the efficiency/tuning of the network.
>I will need to correctly evaluate the value of the equivalent C's a the
>antenna point and at the grounded diode point...

Suggest that you visit here:

http://www.microsemi.com/brochures/pindiodes/chapter%202.pdf

in particular page 10.

>
>Thanks again,
>Bernard
>
>
>"Roy Lewallen" <w7el@eznec.com> wrote in message
>news:117jnq03o9nok21@corp.supernews.com...
>>I don't know what commercial designs use, but you can simulate a 50 ohm
>>quarter wavelength line with a lowpass pi network (shunt C, series L, shunt
>>C). The reactance of each component should be equal to the Z0 of the "line"
>>(e.g., 50 ohms). This will behave just like a quarter wavelength line at
>>the design frequency, and will be a good approximation over a typical
>>amateur band.
>>
>> Roy Lewallen, W7EL
>>
>> Bernard wrote:
>>> I am trying to design a solid state TX/RX switch for VHF (2-meter).
>>>
>>> DC (when TX)
>>> |
>>> | pin diode
>>> TX------->|---------- Antenna
>>> |
>>> delay line
>>> |
>>> |-------- RX
>>> V (pin diode)
>>> GND

>>>
>>> (I am not good at ASCII drwaings !)
>>>
>>> My problem is the design of the 1/4 wave line that allows the RX input to
>>> be grounded while showing an open circuit at the antenna. One possible
>>> implementation would be a length of coax but at VHF frequencies that will
>>> be messy. Commercial equipments just use an LC circuit. I am looking for
>>> a pointer to the design of this cicuit.
>>>
>>> Thanks,
>>> Bernard
>

2269. Re: Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 18:32:59 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <vFtee.2706$5o2.510@newssvr13.news.prodigy.com>
Source record: 19051
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

Hello Watson,

> Why is that? Lead? I thought that paint with lead in it was a lot
> worse.

I believe yes, plus other additives.

Regards, Joerg

http://www.analogconsultants.com

2270. Re: Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 18:37:35 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <PJtee.2708$5o2.2167@newssvr13.news.prodigy.com>
Source record: 19053
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

Hello Watson,

> BTW, you can go to Michaels or other hobby/crafts store and buy a whole
> handful of ice scream sticks for a couple bucks. You don't have to wash
> 'em, then. :-P

HD and Lowes have suitable hardwood strips, too. That is what I use when
it is a client's breadboard.

But these still don't come with vanilla almond chocolate crunch.
However, there is a trailer in front where they sell jumbo cajun links...

Regards, Joerg

http://www.analogconsultants.com

2271. Re: Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 18:50:29 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <VVtee.13269$J12.461@newssvr14.news.prodigy.com>
Source record: 19054
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

Hello Watson,

> Back in the early '70s I got some prototype boards from a company that
> made aircraft receivers. They used four push-in pins, one for each lead
> of the four corners of the IC. Two of these are usually power and
> ground, pins 7 or 8 and 14 or 16. These four hold the chip up off the
> board, and the other pins are wired spaghetti style, which I presume is
> the same as your sauerkraut style.

Neat. Yes, sauerkraut style is similar to spaghetti style. No meat sauce
though ;-)

> Speaking of this.. Last Sunday at our monthly compouter club meeting
> someone donated a homemade S-100 system to the consignment table, but no
> one bought it, so it ended up on the freebies table later, probably then
> into the trash later. It had a chassis and box pop riveted together,
> and the S-100 bus was all wire wrapped. A lotta love and time went into
> building that way back in the late '70s.

Oh, wire wrap. Most older computers were that way in the 70's when I was
at university. It caused a lot of grief but then I found out an upside.
As a student you are always short of money, looking for an opportunity
to make a buck. These old wire wrap graves still would have some life in
them but not enough for the institutes to warrant the huge service
contract expenses or $200/hour repairs. So they just sat there, dead.
Then I offered to repair them provided I could do it my way. Brought the
big solder iron and soldered the whole backplane which brought them back
to life. They actually ran more reliably then ever, some told me. Often
the pay wasn't money but a keg and pizza which was then immediately
consumed by me and some staff on the lawn in front of the place.

Regards, Joerg

http://www.analogconsultants.com

2272. Re: FM Tx antenna options

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 20:04:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <E%uee.11936$n7.8848474@news.sisna.com>
Source record: 19058

An "Unbalanced Dipole", interesting concept...

Regards,
John

"Bill" <dontspamoleexray@coqui.net> wrote in message
news:117kov77fl38531@corp.supernews.com...
| erichmadison wrote:
|
| > Bill,
| >
| > One of the wires is a ground, the other is the antenna. Would this
| > still be a dipole? Thanks for your previous post!
| >
| 'Ground' has various implications when it comes to rf. If they tell you
| to attach it to a water pipe or ground rod then it may be a true dc
| ground. If they tell you to extend it just like the antenna side and
| not connect it to anything, then its an RF ground plane...which can be
| compared to rabbit ears, dipole, etc.
|
| Is it balanced or not? Hard to guess.
|
| -Bill

2273. Re: Yig connector pinouts ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 20:10:01 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <xbESxbMZ2neCFw1U@g3ohx.demon.co.uk>
Source record: 19055

In message <sWcee.486$8g.301@news01.roc.ny>, Bill Janssen
<billj9@ieee.org> writes
>Ian Jackson wrote:
>
>> I can get to nothing to download from any of the links for any of the
>>manufacturers. All I get is the famous 'The page cannot be displayed'
>>message. Is it just me?
>> Ian.
>
>Don't know about "page cannot be displayed" message but when I checked
>the BAMA
>site recently they had removed all HP material.
>
>Bill K7NOM

With me, it's more than HP. Nothing seems to download.
It would be a wonderful source of information if it worked.
Ian.
--

2274. Re: DC-DC up converter 12v-->24v 500 mA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 20:19:46 UTC
From: Rightrik <gaggiorNOSPAM@tin.it>
Message-ID: <3dvdf3Fe9klU1@individual.net>
Source record: 19056

Thank you everyone for suggestions !!!

73 de Riccardo IK5WQO

2275. Re: VHF TX/RX switch w/ pin diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 21:27:36 UTC
From: Bernard <bernard.debbasch_removethis_@mail.com>
Message-ID: <idwee.11174$tQ.3444@fed1read06>
Source record: 19057

Very good article. My google search had a hard time with it because they
spell out Transmit, Receive, Quarter Wave (instead of TX, RX, 1/4.wave...)

Thanks,
Bernard

"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
news:ccpk711vnit1isoqm4qcorpvgprss2mr2b@4ax.com...
> On Thu, 5 May 2005 09:50:53 -0700, "Bernard"
> <bernard.debbasch_removethis_@mail.com> wrote:
>
>>Thanks this helps. I went into the wrong track because I ignored the shunt
>>C
>>at the antenna point. Looking at it as a pi network is definitly helping
>>(not that I know the formula in top of my head, but I will find it !).
>>
>>Now, the next problem will be to test the efficiency/tuning of the
>>network.
>>I will need to correctly evaluate the value of the equivalent C's a the
>>antenna point and at the grounded diode point...
>
> Suggest that you visit here:
>
> http://www.microsemi.com/brochures/pindiodes/chapter%202.pdf
>
> in particular page 10.
>
>
>>
>>Thanks again,
>>Bernard
>>
>>
>>"Roy Lewallen" <w7el@eznec.com> wrote in message
>>news:117jnq03o9nok21@corp.supernews.com...
>>>I don't know what commercial designs use, but you can simulate a 50 ohm
>>>quarter wavelength line with a lowpass pi network (shunt C, series L,
>>>shunt
>>>C). The reactance of each component should be equal to the Z0 of the
>>>"line"
>>>(e.g., 50 ohms). This will behave just like a quarter wavelength line at
>>>the design frequency, and will be a good approximation over a typical
>>>amateur band.
>>>
>>> Roy Lewallen, W7EL

>>>
>>> Bernard wrote:
>>>> I am trying to design a solid state TX/RX switch for VHF (2-meter).
>>>>
>>>> DC (when TX)
>>>> |
>>>> | pin diode
>>>> TX------->|---------- Antenna
>>>> |
>>>> delay line
>>>> |
>>>> |-------- RX
>>>> V (pin diode)
>>>> GND
>>>>
>>>> (I am not good at ASCII drwaings !)
>>>>
>>>> My problem is the design of the 1/4 wave line that allows the RX input
>>>> to
>>>> be grounded while showing an open circuit at the antenna. One possible
>>>> implementation would be a length of coax but at VHF frequencies that
>>>> will
>>>> be messy. Commercial equipments just use an LC circuit. I am looking
>>>> for
>>>> a pointer to the design of this cicuit.
>>>>
>>>> Thanks,
>>>> Bernard
>>
>

2276. Re: FM Tx antenna options

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 22:02:10 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <117l5v3iel6omad@corp.supernews.com>
Source record: 19060

What would happen if he didn't use a balun?

Roy Lewallen, W7EL

John Smith wrote:
> Yes Bill.
> It sounds like that is serving as a dipole.
> I too would strongly suspect that is a 75 ohm BALANCED output.
> You should be able to remove the wires which are serving as the "dipole" and
> run them to a 1:1 balun and the other side of the balun to a 50-75 ohm
> unbalanced antenna. Or, to the input of a FM power amp....
>
> Warmest regards,
> John
>
> "erichmadison" <eric_harms@charter.net> wrote in message
> news:1115313534.359872.261130@z14g2000cwz.googlegroups.com...
> | Bill,
> |
> | One of the wires is a ground, the other is the antenna. Would this
> | still be a dipole? Thanks for your previous post!
> |
>
>

2277. Re: FM Tx antenna options

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 22:02:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <117l5vk4ehdkb7@corp.supernews.com>
Source record: 19059

What exactly do you mean by "balanced"?

If you put a balun between a "balanced" radio and a "balanced" antenna, what would happen? What would happen if you put it between an "unbalanced" radio and an "unbalanced" antenna? What would happen if you connected an "unbalanced" radio to a "balanced" antenna without a balun?

Roy Lewallen, W7EL

John Smith wrote:
> An "Unbalanced Dipole", interesting concept...
>
> Regards,
> John
>
> "Bill" <dontspamoleexray@coqui.net> wrote in message
> news:117kov77fl38531@corp.supernews.com...
> | erichmadison wrote:
> |
> | > Bill,
> | >
> | > One of the wires is a ground, the other is the antenna. Would this
> | > still be a dipole? Thanks for your previous post!
> | >
> | 'Ground' has various implications when it comes to rf. If they tell you
> | to attach it to a water pipe or ground rod then it may be a true dc
> | ground. If they tell you to extend it just like the antenna side and
> | not connect it to anything, then its an RF ground plane...which can be
> | compared to rabbit ears, dipole, etc.
> |
> | Is it balanced or not? Hard to guess.
> |
> | -Bill
>
>

2278. Re: FM Tx antenna options

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 22:03:13 UTC
From: Bill <dontspamoleexray@coqui.net>
Message-ID: <117l613urmrgd4@corp.supernews.com>
Source record: 19061

John Smith wrote:

> An "Unbalanced Dipole", interesting concept...
>
> Regards,
> John

Yeah, then its a quarter-wave vertical w/ground plane laying on its side :-)

-Bill

2279. Re: Yig connector pinouts ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 22:08:47 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <427A996B.910FA058@earthlink.net>
Source record: 19062

Ian Jackson wrote:
>
> In message <sWcee.486$8g.301@news01.roc.ny>, Bill Janssen
> <billj9@ieee.org> writes
> >Ian Jackson wrote:
> >
> >> I can get to nothing to download from any of the links for any of the
> >>manufacturers. All I get is the famous 'The page cannot be displayed'
> >>message. Is it just me?
> >> Ian.
> >
> >Don't know about "page cannot be displayed" message but when I checked
> >the BAMA
> >site recently they had removed all HP material.
> >
> >Bill K7NOM
>
> With me, it's more than HP. Nothing seems to download.
> It would be a wonderful source of information if it worked.
> Ian.
> --

Have you tried the mirror site?

****
BAMA is now being mirrored! Through the generosity of Bob Duckworth,
AH7I and Ed Kujawski, a mirror of the BAMA ftp site is now available.
The mirror is a web site, so you will see the ftp archives when you
click on the mirror address below. You may find it helpful to look for
your manual using the BAMA site and then click on the mirror site,
navigate to the file that you want and download it. Please point your
browsers to http://bama.edebris.com

The main BAMA site is limited to ten simultaneous connections for
downloading. The new site allows 5 additional connections between 7AM
and 6PM Eastern, 15 between 6PM and 9PM and 50 between 9PM and 7AM.
That's right! Between 9PM and 7AM Eastern Time, there will be slots for
50 users on http:bama.edebris.com and 10 on http://bama.sbc.edu
****
--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

2280. Re: VHF TX/RX switch w/ pin diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 23:03:00 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1115334180.856032.322860@f14g2000cwb.googlegroups.com>
Source record: 19063

I'm gathering from what you've posted that you don't have many design/analysis tools available. Have a look for "RFSim99"--a Google search should find it for you. It's freeware. It will let you make a model of many linear RF circuits quite easily and get a decent feel for what to expect in the way of performance. You can model a PIN diode quite reasonably as a low-value resistance when "on" and as a capacitance when "off". The data sheet(s) for your diode(s) should list reasonable values to use.

Then you can easily see what sort of isolation you'll get versus frequency, for example, and get an idea about the losses. If you have any question about losses in inductors, estimate their Q at the operating frequency and put in a resistor to account for that. Capacitors, at least decent RF caps, have low enough loss that it can usually be ignored.

RFSim99, in addition to the simulation stuff, has some "tools" accessible from pulldown menus that will design simple filters for you, calculate inductance, capacitance, frequency or reactance--enter two of those and see the other two--and some other useful RF things.

Hope this helps some!

Cheers,
Tom

Bernard wrote:
> Thanks this helps. I went into the wrong track because I ignored the shunt C
> at the antenna point. Looking at it as a pi network is definitly helping
> (not that I know the formula in top of my head, but I will find it !).
>
> Now, the next problem will be to test the efficiency/tuning of the network.
> I will need to correctly evaluate the value of the equivalent C's a the
> antenna point and at the grounded diode point...
>
> Thanks again,
> Bernard
>
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:117jnq03o9nok21@corp.supernews.com...

> >I don't know what commercial designs use, but you can simulate a 50
ohm
> >quarter wavelength line with a lowpass pi network (shunt C, series
L, shunt
> >C). The reactance of each component should be equal to the Z0 of the
"line"
> >(e.g., 50 ohms). This will behave just like a quarter wavelength
line at
> >the design frequency, and will be a good approximation over a
typical
> >amateur band.
> >
> > Roy Lewallen, W7EL
> >
> > Bernard wrote:
> >> I am trying to design a solid state TX/RX switch for VHF
(2-meter).
> >>
> >> DC (when TX)
> >> |
> >> | pin diode
> >> TX------->|---------- Antenna
> >> |
> >> delay line
> >> |
> >> |-------- RX
> >> V (pin diode)
> >> GND
> >>
> >> (I am not good at ASCII drwaings !)
> >>
> >> My problem is the design of the 1/4 wave line that allows the RX
input to
> >> be grounded while showing an open circuit at the antenna. One
possible
> >> implementation would be a length of coax but at VHF frequencies
that will
> >> be messy. Commercial equipments just use an LC circuit. I am
looking for
> >> a pointer to the design of this cicuit.
> >>
> >> Thanks,
> >> Bernard

2281. Re: FM Tx antenna options

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 23:25:05 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gXxee.15365$Xa4.9349260@news.sisna.com>
Source record: 19064

If the output is really Unbalanced, and he fed an unbalanced ant of 50 ohms--nothing--as likely a 1.5:1 (75/50) match as not...

Or, depending on the type of ant he picks (75 ohm bal/unbal), and taking for granted the output of the rig is balanced--probably just a distortion of the radiation field of the ant (won't EXACTLY perform as modeled)...

Even if he feeds a bal ant of 200 ohms (folded dipole, and output is balanced, all he sees is a high (200/75) SWR, and distance is reduced...

But, hey, I am a newbie... that is only my best guess(s)...

Warmest regards,
John

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:117l5v3iel6omad@corp.supernews.com...
| What would happen if he didn't use a balun?
|
| Roy Lewallen, W7EL
|
| John Smith wrote:
| > Yes Bill.
| > It sounds like that is serving as a dipole.
| > I too would strongly suspect that is a 75 ohm BALANCED output.
| > You should be able to remove the wires which are serving as the "dipole"
and
| > run them to a 1:1 balun and the other side of the balun to a 50-75 ohm
| > unbalanced antenna. Or, to the input of a FM power amp....
| >
| > Warmest regards,
| > John
| >
| > "erichmadison" <eric_harms@charter.net> wrote in message
| > news:1115313534.359872.261130@z14g2000cwz.googlegroups.com...
| > | Bill,
| > |
| > | One of the wires is a ground, the other is the antenna. Would this
| > | still be a dipole? Thanks for your previous post!
| > |
| >
| >

2282. Re: FM Tx antenna options

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 23:28:42 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <E_xee.15438$%V4.9493536@news.sisna.com>
Source record: 19066

That is why I mentioned "UnUn." It is taken for granted he will ask, or use
the correct one (Balun/UnUn)...

A balanced "supplies its own ground." A ground or "counterpoise" is NOT
required for the ant to work against...

Warmest regards,
John

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:117l5vk4ehdkb7@corp.supernews.com...
| What exactly do you mean by "balanced"?
|
| If you put a balun between a "balanced" radio and a "balanced" antenna,
| what would happen? What would happen if you put it between an
| "unbalanced" radio and an "unbalanced" antenna? What would happen if you
| connected an "unbalanced" radio to a "balanced" antenna without a balun?
|
| Roy Lewallen, W7EL
|
| John Smith wrote:
| > An "Unbalanced Dipole", interesting concept...
| >
| > Regards,
| > John
| >
| > "Bill" <dontspamoleexray@coqui.net> wrote in message
| > news:117kov77fl38531@corp.supernews.com...
| > | erichmadison wrote:
| > |
| > | > Bill,
| > | >
| > | > One of the wires is a ground, the other is the antenna. Would this
| > | > still be a dipole? Thanks for your previous post!
| > | >
| > | 'Ground' has various implications when it comes to rf. If they tell
you
| > | to attach it to a water pipe or ground rod then it may be a true dc
| > | ground. If they tell you to extend it just like the antenna side and
| > | not connect it to anything, then its an RF ground plane...which can be
| > | compared to rabbit ears, dipole, etc.
| > |
| > | Is it balanced or not? Hard to guess.
| > |
| > | -Bill

| >
| >

2283. Re: FM Tx antenna options

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 23:32:32 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <f2yee.15516$P15.9525403@news.sisna.com>
Source record: 19065

ROFLOL!!!

Warmest regards,
John

"Bill" <dontspamoleexray@coqui.net> wrote in message
news:117l613urmrgd4@corp.supernews.com...
| John Smith wrote:
|
| > An "Unbalanced Dipole", interesting concept...
| >
| > Regards,
| > John
|
| Yeah, then its a quarter-wave vertical w/ground plane laying on its side
:-)
|
|
| -Bill

2284. Stacking Big Wheel Antennas???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-05 23:48:02 UTC
From: Dr Dave <wvdave1st@hotmail.com>
Message-ID: <Sgyee.31930$r81.29132@trnddc02>
Source record: 19067

Looking for some INFO on how to Stack Big Wheel Antennas ?

Operating Frequencies TX-421.250 to RX-439.250 ATV repeater.

Would like to feed with equal lengths of coax from one Power Splitters if possible.

I thing the stacking distance is around 16 inches.

And There is something about right hand circular and left hand circular For proper phase.

Thanks Dave

2285. Re: FM Tx antenna options

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-06 00:17:02 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <117ldrvbfg4su7b@corp.supernews.com>
Source record: 19068

So then a dipole with one leg 5 times as long as the other would be a "balanced" antenna. I see.

Tell me, how is this "ground" "supplied"? What exactly is a "ground", say 50 feet up in the air?

Roy Lewallen, W7EL

John Smith wrote:
> . . .
> A balanced "supplies its own ground." A ground or "counterpoise" is NOT
> required for the ant to work against...
>
> Warmest regards,
> John

2286. Re: FM Tx antenna options

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-06 02:22:20 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <sxAee.18716$ba1.11472013@news.sisna.com>
Source record: 19069

Well, "di" = two, so in that sense, "dipole" would not necessarly be balanced--however, that is not what I expect when someone tells me they have a "dipole."

Although, quite well granted, it qualifies (my groundplane ant is a "dipole", but I think I would mislead if I stated that in some circles! (as it does have a few extra "legs" on one side.) However, it (the radials) could be viewed as one single conductor, in the sense a tophat might be a sheet, or a set of multiple wires, or the bottom cone of a "discone" composed of many "legs" as compared to one solid sheet of conductor...

Semantics: retarded person = mentally disabled = special needs = handicapped, etc... don't ya just love it!

"Gound" at 1000 ft in the air is a counterpoise (body of an aircraft, most likely what the neg lead of the power source is hooked to), could be one long wire to ground too--most likely in need of "tuning" to function optimally....

If I someone stuck a 1K resistor (or diode-anode towards +) between my chasis of the radio and the negative lead (probably best to bypass it with a cap at rf in question), the top of that 1K resistor (or cathode of diode) is "real ground"--in the sense of "time" being real... they "ground" every telephone pole now and then, because across distances "earth ground" is not "equal ground."

If your point is that "ground" is relative--I know a guy who claimed that of the whole universe....

That guys ground could well be the chasis (even though a 1k resistor!), or the other side of coil with its center at "ground", or not... etc.

But, those two wires he described are two wires of equal length, so, suggest themselves as a "conventional dipole", with nothing else to go on--I am willing to accept that...

I have been wrong before, is so this time--I learn something...

Warmest regards,
John

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:117ldrvbfg4su7b@corp.supernews.com...
| So then a dipole with one leg 5 times as long as the other would be a
| "balanced" antenna. I see.
|
| Tell me, how is this "ground" "supplied"? What exactly is a "ground",

| say 50 feet up in the air?
|
| Roy Lewallen, W7EL
|
| John Smith wrote:
| > . . .
| > A balanced "supplies its own ground." A ground or "counterpoise" is NOT
| > required for the ant to work against...
| >
| > Warmest regards,
| > John

2287. Re: FM Tx antenna options

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-06 04:20:13 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <117ls3uir19ro0b@corp.supernews.com>
Source record: 19070

My intent was to spur some thought about the meaning of the terms you've
so liberally and seemingly authoritatively tossed about. These
"explanations" show that your understanding is, indeed, very muddled and
vague. I suggest you do a bit of study to gain a clearer grasp of these
concepts before you give too much advice about how to apply them.

Roy Lewallen, W7EL

John Smith wrote:
> Well, "di" = two, so in that sense, "dipole" would not necessarly be
> balanced--however, that is not what I expect when someone tells me they have
> a "dipole."
>
> Although, quite well granted, it qualifies (my groundplane ant is a
> "dipole", but I think I would mislead if I stated that in some circles! (as
> it does have a few extra "legs" on one side.) However, it (the radials)
> could be viewed as one single conductor, in the sense a tophat might be a
> sheet, or a set of multiple wires, or the bottom cone of a "discone"
> composed of many "legs" as compared to one solid sheet of conductor...
>
> Semantics: retarded person = mentally disabled = special needs =
> handicapped, etc... don't ya just love it!
>
> "Gound" at 1000 ft in the air is a counterpoise (body of an aircraft, most
> likely what the neg lead of the power source is hooked to), could be one
> long wire to ground too--most likely in need of "tuning" to function
> optimally....
>
> If I someone stuck a 1K resistor (or diode-anode towards +) between my
> chasis of the radio and the negative lead (probably best to bypass it with a
> cap at rf in question), the top of that 1K resistor (or cathode of diode) is
> "real ground"--in the sense of "time" being real... they "ground" every
> telephone pole now and then, because across distances "earth ground" is not
> "equal ground."
>
> If your point is that "ground" is relative--I know a guy who claimed that of
> the whole universe....
>
> That guys ground could well be the chasis (even though a 1k resistor!), or
> the other side of coil with its center at "ground", or not... etc.
>
> But, those two wires he described are two wires of equal length, so, suggest
> themselves as a "conventional dipole", with nothing else to go on--I am
> willing to accept that...
>

> I have been wrong before, is so this time--I learn something...
>
> Warmest regards,
> John
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:117ldrvbfg4su7b@corp.supernews.com...
> | So then a dipole with one leg 5 times as long as the other would be a
> | "balanced" antenna. I see.
> |
> | Tell me, how is this "ground" "supplied"? What exactly is a "ground",
> | say 50 feet up in the air?
> |
> | Roy Lewallen, W7EL
> |
> | John Smith wrote:
> | > . . .
> | > A balanced "supplies its own ground." A ground or "counterpoise" is NOT
> | > required for the ant to work against...
> | >
> | > Warmest regards,
> | > John
>
>

2288. Re: VHF TX/RX switch w/ pin diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-06 04:31:17 UTC
From: Bernard <bernard.debbasch_removethis_@mail.com>
Message-ID: <sqCee.11383$tQ.1994@fed1read06>
Source record: 19071

Very nice package. Thanks for the tip ! I agree that this is the right way
to do what I am trying to do but I was not willing to invest time an money
on this. Luckily the price is right and the package seems to be very easy to
use (from the 5 minutes I played with).

Bernard

"K7ITM" <k7itm@aol.com> wrote in message
news:1115334180.856032.322860@f14g2000cwb.googlegroups.com...
> I'm gathering from what you've posted that you don't have many
> design/analysis tools available. Have a look for "RFSim99"--a Google
> search should find it for you. It's freeware. It will let you make a
> model of many linear RF circuits quite easily and get a decent feel for
> what to expect in the way of performance. You can model a PIN diode
> quite reasonably as a low-value resistance when "on" and as a
> capacitance when "off". The data sheet(s) for your diode(s) should
> list reasonable values to use.
>
> Then you can easily see what sort of isolation you'll get versus
> frequency, for example, and get an idea about the losses. If you have
> any question about losses in inductors, estimate their Q at the
> operating frequency and put in a resistor to account for that.
> Capacitors, at least decent RF caps, have low enough loss that it can
> usually be ignored.
>
> RFSim99, in addition to the simulation stuff, has some "tools"
> accessible from pulldown menus that will design simple filters for you,
> calculate inductance, capacitance, frequency or reactance--enter two of
> those and see the other two--and some other useful RF things.
>
> Hope this helps some!
>
> Cheers,
> Tom
>
>
> Bernard wrote:
>> Thanks this helps. I went into the wrong track because I ignored the
> shunt C
>> at the antenna point. Looking at it as a pi network is definitly
> helping
>> (not that I know the formula in top of my head, but I will find it
> !).
>>
>> Now, the next problem will be to test the efficiency/tuning of the

> network.
>> I will need to correctly evaluate the value of the equivalent C's a
> the
>> antenna point and at the grounded diode point...
>>
>> Thanks again,
>> Bernard
>>
>>
>> "Roy Lewallen" <w7el@eznec.com> wrote in message
>> news:117jnq03o9nok21@corp.supernews.com...
>> >I don't know what commercial designs use, but you can simulate a 50
> ohm
>> >quarter wavelength line with a lowpass pi network (shunt C, series
> L, shunt
>> >C). The reactance of each component should be equal to the Z0 of the
> "line"
>> >(e.g., 50 ohms). This will behave just like a quarter wavelength
> line at
>> >the design frequency, and will be a good approximation over a
> typical
>> >amateur band.
>> >
>> > Roy Lewallen, W7EL
>> >
>> > Bernard wrote:
>> >> I am trying to design a solid state TX/RX switch for VHF
> (2-meter).
>> >>
>> >> DC (when TX)
>> >> |
>> >> | pin diode
>> >> TX------->|---------- Antenna
>> >> |
>> >> delay line
>> >> |
>> >> |-------- RX
>> >> V (pin diode)
>> >> GND
>> >>
>> >> (I am not good at ASCII drwaings !)
>> >>
>> >> My problem is the design of the 1/4 wave line that allows the RX
> input to
>> >> be grounded while showing an open circuit at the antenna. One
> possible
>> >> implementation would be a length of coax but at VHF frequencies
> that will
>> >> be messy. Commercial equipments just use an LC circuit. I am
> looking for

>> >> a pointer to the design of this cicuit.
>> >>
>> >> Thanks,
>> >> Bernard
>

2289. Re: FM Tx antenna options

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-06 04:50:44 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <BICee.21261$FE3.14241972@news.sisna.com>
Source record: 19072

Suck it up old man--that ego will heal!

John

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:117ls3uir19ro0b@corp.supernews.com...
| My intent was to spur some thought about the meaning of the terms you've
| so liberally and seemingly authoritatively tossed about. These
| "explanations" show that your understanding is, indeed, very muddled and
| vague. I suggest you do a bit of study to gain a clearer grasp of these
| concepts before you give too much advice about how to apply them.
|
| Roy Lewallen, W7EL
|
| John Smith wrote:
| > Well, "di" = two, so in that sense, "dipole" would not necessarly be
| > balanced--however, that is not what I expect when someone tells me they
have
| > a "dipole."
| >
| > Although, quite well granted, it qualifies (my groundplane ant is a
| > "dipole", but I think I would mislead if I stated that in some circles!
(as
| > it does have a few extra "legs" on one side.) However, it (the radials)
| > could be viewed as one single conductor, in the sense a tophat might be
a
| > sheet, or a set of multiple wires, or the bottom cone of a "discone"
| > composed of many "legs" as compared to one solid sheet of conductor...
| >
| > Semantics: retarded person = mentally disabled = special needs =
| > handicapped, etc... don't ya just love it!
| >
| > "Gound" at 1000 ft in the air is a counterpoise (body of an aircraft,
most
| > likely what the neg lead of the power source is hooked to), could be one
| > long wire to ground too--most likely in need of "tuning" to function
| > optimally....
| >
| > If I someone stuck a 1K resistor (or diode-anode towards +) between my
| > chasis of the radio and the negative lead (probably best to bypass it
with a
| > cap at rf in question), the top of that 1K resistor (or cathode of
diode) is
| > "real ground"--in the sense of "time" being real... they "ground" every
| > telephone pole now and then, because across distances "earth ground" is

not
| > "equal ground."
| >
| > If your point is that "ground" is relative--I know a guy who claimed
that of
| > the whole universe....
| >
| > That guys ground could well be the chasis (even though a 1k resistor!),
or
| > the other side of coil with its center at "ground", or not... etc.
| >
| > But, those two wires he described are two wires of equal length, so,
suggest
| > themselves as a "conventional dipole", with nothing else to go on--I am
| > willing to accept that...
| >
| > I have been wrong before, is so this time--I learn something...
| >
| > Warmest regards,
| > John
| >
| > "Roy Lewallen" <w7el@eznec.com> wrote in message
| > news:117ldrvbfg4su7b@corp.supernews.com...
| > | So then a dipole with one leg 5 times as long as the other would be a
| > | "balanced" antenna. I see.
| > |
| > | Tell me, how is this "ground" "supplied"? What exactly is a "ground",
| > | say 50 feet up in the air?
| > |
| > | Roy Lewallen, W7EL
| > |
| > | John Smith wrote:
| > | > . . .
| > | > A balanced "supplies its own ground." A ground or "counterpoise" is
NOT
| > | > required for the ant to work against...
| > | >
| > | > Warmest regards,
| > | > John
| >
| >

2290. Re: Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-06 10:11:35 UTC
From: Pipex News Server <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <jMydnTERPv0x3-bfRVnyuw@pipex.net>
Source record: 19073
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

> See if there is a PCB manufacturer within resonable driving distance and
> ask for scraps. That's how I got a huge stash decades ago. Single and
> double sided, the good stuff (FR4). But it has to be picked up, in my case
> they wouldn't have gone through the trouble of packaging and mailing it.
> Basically it had to be no more effort on their part than a walk to the
> dumpster would have been.
>
> Mine weren't tinned though. Also, I am not sure if constantly touching a
> pre-tinned board during experiments would be too healthy.
==========
Printed circuit board scraps up to large pieces ,be it usually double sided
, are always available at ham radio flea markets in the various european
countries. I think I have stocked up for life ! From the larger bits you
can make neat enclosures.

Frank GM0CSZ / KN6WH

2291. Re: Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-06 10:23:36 UTC
From: Pipex News Server <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <DNmdnaeq56Qc2ObfRVnytA@pipex.net>
Source record: 19074
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

"Watson A.Name - "Watt Sun, the Dark Remover"" <NOSPAM@dslextreme.com> wrote
in message news:117k676ohnq41fb@corp.supernews.com...
>
> <LenAnderson@ieee.org> wrote in message
> news:1115236668.490732.147080@f14g2000cwb.googlegroups.com...
> [snip]
>
>> Cleaning OLD PCB stock the "green" way -
>>
>> Sprinkle any kind of table salt on the PCB stock, then take
>> half a lemon and rub it on the salt. Most of the blackened
>> oxide will disappear!
>
> I've amazed a few people when we go out to eat lunch. I take a
> tarnished golden dollar and put it in the lemon from a drink, or catsup
> works just as well. Less than a minute later, it's nice and shiny
> again. The vinegar or citric acid reduces all that tarnish to
> invisible. Some say the carbonic acid in the fizz in cola will do it,
> too, but I haven't tried it. Check it out sometime when you're into
> impressing your friends.
>
>> I tried that late last year on some 4" x 8" double-sided
>> phenolic substrate PCB stock after seeing all those "green"
>> site remarks that I didn't really believe. It WORKS! :-)
>> Those pieces had been sitting in the back of the workshop
>> for about 35 years.
>>
>> I did "cheat" a bit. Have a year-round producing lemon
>> tree and my wife had some coarse salt left over from a
>> canning experiment. Zero cost trial...lemons at the
>> markets can run 50 cents each. The residue can easily
>> wash down the sink, don't need any gloves, nothing toxic.
>
> Just make sure you don't get any of it in a cut on your finger. The
> lemon will add a whole 'nother meaning to rubbing salt in your wounds!!
>
>> Result is easily solderable although for best appearance,
>> some cleaning with a bleach-containing kitchen cleanser
>> will make it shiny and spotless.
>>
>> LenAnderson@ieee.org
>>
>

>

2292. Re: Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-06 13:45:36 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <d5fse0$sh9$1@theodyn.ncf.ca>
Source record: 19075

"Pipex News Server" (abcgm0csz.kn6whxyz@dsl.pipex.com) writes:
>> See if there is a PCB manufacturer within resonable driving distance and
>> ask for scraps. That's how I got a huge stash decades ago. Single and
>> double sided, the good stuff (FR4). But it has to be picked up, in my case
>> they wouldn't have gone through the trouble of packaging and mailing it.
>> Basically it had to be no more effort on their part than a walk to the
>> dumpster would have been.
>>
>> Mine weren't tinned though. Also, I am not sure if constantly touching a
>> pre-tinned board during experiments would be too healthy.
> ==============================
> Printed circuit board scraps up to large pieces ,be it usually double sided
> , are always available at ham radio flea markets in the various european
> countries. I think I have stocked up for life ! From the larger bits you
> can make neat enclosures.
>
> Frank GM0CSZ / KN6WH
>
>
Yes, I've been able to get it at the local "surplus" outlet for
thirty years, though I suppose at this point many a location no
longer has such a store.

They often have board that has been drilled, or shaped in a certain
design, clearly overrun or projects that got scrapped. If you
aren't actually etching the board, or if you only need small pieces,
these work fine and cost even less.

Because it's cheap, I've done things like use it for panels on projects.
Circuit board is a easier to work with than metal, yet the copper
provides shielding.

I've even pulled the copper off boards when I need it gone, though
that tends to be tedious. If it's just a small piece, I grind it
off.

Michael VE2BVW

2293. No Kits To Build ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-06 14:22:01 UTC
From: Caveat Lector <Beware@reader.com>
Message-ID: <c4Lee.1433$eU.1029@fed1read07>
Source record: 19076

Not really -- hundreds at URL:
http://ac6v.com/kits.htm

Also Homebrew projects by the ton at URL:
http://ac6v.com/homebrew.htm

--
CL -- I doubt, therefore I might be !

2294. Re: DC-DC up converter 12v-->24v 500 mA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-06 19:37:23 UTC
From: fmmck@aol.com
Message-ID: <fmmck-0605051537230001@aca7e68b.ipt.aol.com>
Source record: 19077

In article <3dsss9F1uuoU1@individual.net>, "Rightrik" <gaggior@tin.it> wrote:

> Hello, i need a little, low power (about 500 mA) step up converter from 12 v
> dc to 24 v dc to operate correctly a 4 ways coaxial switch.
> I have found project on the net, but i wonder if there is a ready, little,
> not ott expensive kit or ready-to-go-module to obtain this 24-26 v dc
> voltage from 12 (13,8) dc volt input.

Riccardo-

If you have a 12 volt inverter of any kind, you might look at the primary side of its circuit. If the transformer center tap is connected to 12 volts and it uses switching transistors to alternately connect the ends of a transformer winding to ground, then you can connect rectifiers from the ends of the transformer winding, to a filter capacitor for a plus 24 volt supply.

When one end is grounded, the center is still plus 12 volts, so the opposite end of the winding becomes plus 24.

73, Fred, K4DII

2295. Re: VHF TX/RX switch w/ pin diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-06 19:54:14 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1115409254.665706.88900@o13g2000cwo.googlegroups.com>
Source record: 19078

One of the characteristics of the lowpass pi network Roy suggested is that it provides a DC path between input and output. (Well, it IS a lowpass, after all!) That characteristic can be a blessing at times, in that it lets you use the same DC bias current for both the TX path series PIN diode and the RX path shunt diode. But some other arrangement might benefit from DC isolation between the two nodes, and you can get that by changing to a highpass configuration. You have a choice of a couple of them using three parts: a PI configuration or a T configuration. In both, the shunt branches are inductors and the series branches are capacitors. So a PI gives you DC-grounded input and output nodes, and a T gives you DC-isolated nodes. And you can also use a T lowpass with series inductors and a shunt capacitor. In each case, all the Xls and Xcs are equal to the resistive reference impedance. In other words, for example, at 150MHz and in a 50 ohm system, C = 21.2pF and L = 53.1nH. Each of the four configurations (pi and T, lowpass and highpass) behaves at the design frequency essentially like a 1/4 wave transmission line.

Cheers,
Tom

2296. Re: Stacking Big Wheel Antennas???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-06 21:05:50 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <O_Qee.6135$V01.4270@newsread1.news.atl.earthlink.net>
Source record: 19079

"Dr Dave" <wvdave1st @hotmail.com> wrote in message
news:Sgyee.31930$r81.29132@trnddc02...
> Looking for some INFO on how to Stack Big Wheel Antennas ?
>
> Operating Frequencies TX-421.250 to RX-439.250 ATV repeater.
>
>
>
> Would like to feed with equal lengths of coax from one Power Splitters if
> possible.
>
> I thing the stacking distance is around 16 inches.
>
> And There is something about right hand circular and left hand circular
> For proper phase.
>
If you send me a place where I can send you about 3 meg of files I will send
you a scan of the stacking from an old VHF handbook for a 2 meter version.
They recommend a 5/8 wavelength spacing. Also there is no right or left
hand circular for the wheel. It is all just plane horizontal.

de KU4PT

2297. Re: Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-07 17:03:33 UTC
From: ogrowup@webtv.net
Message-ID: <27980-427CF4E5-49@storefull-3114.bay.webtv.net>
Source record: 19080

I work for a PCB manufacturer. All scrap has to be accounted for, and is then sent for recycling (copper is costly). I've managed, over the last couple of years, to get hold of some pieces of scrap, but these are few and far between.

For cleaning boards, we use a sulfuric acid and pumice scrub. That last part should be doable at home (I certainly won't be messing with reagent grade sulfuric at home!). Maybe using previously mentioned lemon juice?

"Only two things are infinite, the Universe and human stupidity, and I'm not sure about the former."
Albert Einstein

2298. Re: Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-07 17:50:17 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <hmvp71th8hc6psdscv78o1t80i7rsaccm9@4ax.com>
Source record: 19081

On Sat, 7 May 2005 13:03:33 -0400, ogrowup@webtv.net (Padraigh ProAmerica) wrote:

>I work for a PCB manufacturer. All scrap has to be accounted for, and is
>then sent for recycling (copper is costly). I've managed, over the last
>couple of years, to get hold of some pieces of scrap, but these are few
>and far between.
>
>For cleaning boards, we use a sulfuric acid and pumice scrub. That last
>part should be doable at home (I certainly won't be messing with reagent
>grade sulfuric at home!). Maybe using previously mentioned lemon juice?
>
Basic white vinegar from the grocery store is a reasonably safe acid to work with. Cheap to experiment with different concentrations, and probably stronger than the lemon juice, certainly less expensive.

Happy trails,
Gary (net.yogi.bear)
--
At the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

2299. Re: Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-07 18:38:24 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <d5j1v0lrm1@theodyn.ncf.ca>
Source record: 19082

Gary S. (Idontwantspam@net) writes:
> On Sat, 7 May 2005 13:03:33 -0400, ogrowup@webtv.net (Padraigh
> ProAmerica) wrote:
>
>>I work for a PCB manufacturer. All scrap has to be accounted for, and is
>>then sent for recycling (copper is costly). I've managed, over the last
>>couple of years, to get hold of some pieces of scrap, but these are few
>>and far between.
>>
>>For cleaning boards, we use a sulfuric acid and pumice scrub. That last
>>part should be doable at home (I certainly won't be messing with reagent
>>grade sulfuric at home!). Maybe using previously mentioned lemon juice?
>>
> Basic white vinegar from the grocery store is a reasonably safe acid
> to work with. Cheap to experiment with different concentrations, and
> probably stronger than the lemon juice, certainly less expensive.
>
I've never found anything on blank circuit board that couldn't come
off with just a good scrubbing, so obviously there is no need for
heavy chemicals. I seem to recall using soap at some point, which
worked, and I will try the vinegar.

The real issue is that no matter how shiny you get the boards, unless
you coat them with something they will tarnish with time.

Michael VE2BVW

2300. Re: DC-DC up converter 12v-->24v 500 mA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-07 19:10:36 UTC
From: mcalhoun@ksu.edu
Message-ID: <d5j3rc$lb7@unix1.cc.ksu.edu>
Source record: 19083

>Hello, i need a little, low power (about 500 mA) step up converter from 12 v
>dc to 24 v dc to operate correctly a 4 ways coaxial switch.

If "operate" does NOT mean "hold" (i.e., if you just need pulses of 24 volts)
then you can wire a capacitor to a switch such that the capacitor charges
to 12 volts and then ADDS to that same 12 volts to operate the relay.
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

2301. Re: Large PCB source for dead bug homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-07 22:42:59 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <gsgq71d7obtnbjnaiue8taaqmsd3h4mj8r@4ax.com>
Source record: 19084

On 7 May 2005 18:38:24 GMT, et472@FreeNet.Carleton.CA (Michael Black) wrote:

>Gary S. (Idontwantspam@net) writes:

>> Basic white vinegar from the grocery store is a reasonably safe acid
>> to work with. Cheap to experiment with different concentrations, and
>> probably stronger than the lemon juice, certainly less expensive.
>>
>I've never found anything on blank circuit board that couldn't come
>off with just a good scrubbing, so obviously there is no need for
>heavy chemicals. I seem to recall using soap at some point, which
>worked, and I will try the vinegar.
>
>The real issue is that no matter how shiny you get the boards, unless
>you coat them with something they will tarnish with time.
>
> Michael VE2BVW

True for most metals. Flux does a good job of removing the inevitable little bit of tarnish/oxidation.

I did not mention earlier that it is very important to throughly rinse off any acid, however mild, that you use.

There are ways to plate the copper with other metals less likely to tarnish or oxidize, such as silver, or even gold in critical applications.

Happy trails,
Gary (net.yogi.bear)
--
At the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

2302. Re: DC-DC up converter 12v-->24v 500 mA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-07 23:50:57 UTC
From: Rightrik <gaggiorNOSPAM@tin.it>
Message-ID: <3e52j2F18sc9U1@individual.net>
Source record: 19085

> If "operate" does NOT mean "hold" (i.e., if you just need pulses of 24
volts)
> then you can wire a capacitor to a switch such that the capacitor charges
> to 12 volts and then ADDS to that same 12 volts to operate the relay.

Well, i need a stable 24 v dc voltage, not just a voltage peak to 24 and
back to 12.

Thank you,
73 de Riccardo IK5WQO

2303. Re: DC-DC up converter 12v-->24v 500 mA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-07 23:52:22 UTC
From: Rightrik <gaggiorNOSPAM@tin.it>
Message-ID: <3e52lnF17l28U1@individual.net>
Source record: 19086

> Riccardo-
>
> If you have a 12 volt inverter of any kind, you might look at the primary
> side of its circuit. If the transformer center tap is connected to 12
> volts and it uses switching transistors to alternately connect the ends of
> a transformer winding to ground, then you can connect rectifiers from the
> ends of the transformer winding, to a filter capacitor for a plus 24 volt
> supply.
>
> When one end is grounded, the center is still plus 12 volts, so the
> opposite end of the winding becomes plus 24.

Thanks Fred, but i would like the dc-dc inverter solution to be able to
operate the switch from any 12/13,8 vdc source.

73 de Riccardo IK5WQO

2304. Re: DC-DC up converter 12v-->24v 500 mA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-07 23:53:26 UTC
From: Rightrik <gaggiorNOSPAM@tin.it>
Message-ID: <3e52nnF184kkU1@individual.net>
Source record: 19087

> KEMO Electronics (germany) make these items. They have an interesting
range of
> small modules with various functions. Have a look at their web page:
>
> http://www.kemo-electronic.com/en/module/m029/index.htm
>
> They are wholesale only, but have distributors around the planet.

This should be the best solution, but (up to now) they don't answer to my
email...

73 de Riccardo IK5WQO

2305. Re: DC-DC up converter 12v-->24v 500 mA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-07 23:55:20 UTC
From: Rightrik <gaggiorNOSPAM@tin.it>
Message-ID: <3e52r9F18m4dU1@individual.net>
Source record: 19088

> I think you might find a "wall-wart" power supply for a computer printer
> to do the job.
>
> You can find these in voltages like 24-28v @ 1 amp for maybe $10 new in
> the US. Of course ours are 120v but I imagine you have the 240v types
> available over there in I-land.
>
> -Bill

Thank you Bill, but i want to start from 12/13,8 vdc to reach the famous 24 vdc, and do not want to use a 120 or 220 vac supply...

73 de Riccardo IK5WQO

2306. Re: DC-DC up converter 12v-->24v 500 mA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-07 23:56:04 UTC
From: Rightrik <gaggiorNOSPAM@tin.it>
Message-ID: <3e52slF17it0U1@individual.net>
Source record: 19089

> This may be slight overkill (they claim it's good for 100W) but it's
> inexpensive:
>
> www.oatleyelectronics.com/kits/k168.html
>
> Alternatively, you could put together something quite simple using
> an MC34063A (try Google) - easy to use, readily available.
>
> Bill

Thank you Bill.

73 de Riccardo IK5WQO

2307. Re: DC-DC up converter 12v-->24v 500 mA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 00:42:14 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <xemdncjT3JjVwODfRVn-2w@adelphia.com>
Source record: 19090

Netgeek wrote:
> This may be slight overkill (they claim it's good for 100W) but it's
> inexpensive:
>
> www.oatleyelectronics.com/kits/k168.html
>
> Alternatively, you could put together something quite simple using
> an MC34063A (try Google) - easy to use, readily available.

That unit could run cooler or produce more output if the rectified secondary were stacked on the +12 input, so it had to produce only the additional voltage. Just cut the secondary turns almost in half.

2308. Re: DC-DC up converter 12v-->24v 500 mA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 00:57:42 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <xemdncvT3Jh1_eDfRVn-2w@adelphia.com>
Source record: 19091

John Popelish wrote:
> Netgeek wrote:
>
>> This may be slight overkill (they claim it's good for 100W) but it's
>> inexpensive:
>>
>> www.oatleyelectronics.com/kits/k168.html
>>
>> Alternatively, you could put together something quite simple using
>> an MC34063A (try Google) - easy to use, readily available.
>
>
> That unit could run cooler or produce more output if the rectified
> secondary were stacked on the +12 input, so it had to produce only the
> additional voltage. Just cut the secondary turns almost in half.

Or better yet, just add a few turns past the point where the drains connect (which go up to almost twice the input supply voltage), and connect those points to the output through one diode, each. Eliminate the secondary, all together and raise the efficiency a bit more. But there should be a filter choke between the rectifiers and the output filter capacitor to average the slightly over voltage pulses with the zero volt spaces between them.

2309. HB projects in London

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 05:21:44 UTC
From: Bill Meara <meara.london@virgin.net>
Message-ID: <427E048D.49DC@virgin.net>
Source record: 19092

In the interest of stirring up more discussion, I thought I'd give an update on projects here at M0HBR (HomeBrewRadio).

-- Yesterday I put a new (old) 17 meter receiver into operation. It is a Doug Demaw "Barbados" single conversion superhet. I built one from scratch for 20 meters many years ago (see my web site for details). Somewhere along the line Dale, W4OP, sold me his version. I used that one briefly on 20 meters, but then it spent a lot of time on the shelf. Lately I've been looking for a dedicated RX for my HB 17 meter SSB TX (sharing the Drake 2-B with other transmitters involves too much cable plugging and unplugging at bandswitch time!). So Dale's RX was pressed into service. I widened the 5 Mhz ladder filter for SSB service by changing the caps. And I got some 23 Mhz crystals from JAN to make a VXO that would cover 17 meter phone. I use 2 crystals and can switch betwen them from the front panel. I worked Estonnia with yesterday.

-- It may be that I'm getting lazy, but continuing with the "let's make band switching easier" theme... I was getting tired of having to retune my balanced antenna tuner each time I went from 40 to 17. The circuit was so simple, I just decided to build another one, and make it a dedicated tuner for 17. It is the classic balanced tuner circuit -- I think it dates from the thirties: tank circuit link coupled to the TX, with the parallel feeders connected to the coil via small alligator clips. Now I can just go from band to band with the push of a button.

Upcoming projects:

-- I need to put my HW-30 on 2 meter AM. There is a very active VHF-am group here in the UK and I need to get on the air. I plan on using the lunchbox with a converter-to- Drake 2B for receive.

-- I need to match up my old Mate for the Mighty Midget RX with my 40 meter DSB transmitter. I have a 455 khz SSB filter for it, but I haven't figured out yet how to match the impedances and get it into the RX. Filtering currently being done -- poorly -- by one 455 khz IF can.

73 from London
Bill M0HBR N2CQR CU2JL
http://planeta.clix.pt/n2cqr

2310. No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 06:47:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <MBife.21559$Or3.17382548@news.sisna.com>
Source record: 19093
Body handling: HTML body converted to readable text

Decades have brought us moon landing, mars landings,masers, lasers, lets, fets, mosfets, computers, etc...

But the shape of radio equip. has remained virtually stagnant.

One "innovation" would be to just copy what the IBM clone has taught us.

Build a radio of "cards." Just like the computer, a standard case which you can plugin various power supplies, frontend board "cards", intermediate board "cards", buffer amp board "cards", IF board "cards", audio board "cards", xmitter board "cards", final amp board "cards", etc....

One radio case can/could virtually be any radio you can imagine.... new design in a frontend? Plug in a new front end "card", new audio offering? Plug in a new audio board "card."

Someone really should get off a dead duff somewhere and DO IT!!!!

Kinda makes ya wonder why not? Doesn't it?

Warmest regards,
John

--
I AM ONE-IN-A-MILLION!!!!!
Too bad the other 999,999 got there first..

2311. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 08:31:16 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <117rjinatr0ke16@corp.supernews.com>
Source record: 19094

John Smith wrote:
> . . .
> Someone really should get off a dead duff somewhere and DO IT!!!!
>
> Kinda makes ya wonder why not? Doesn't it?

I sure seem to hear that a lot.

Some *other* lazy bum oughtta get off his duff and do it.

Why don't you do it? If the problem is that you don't have the technical know-how, well, how do you think those people who have it, got it? By being lazy?

Typing a few sentences and hitting <Send> sure is easier than studying, isn't it?

Roy Lewallen, W7EL

2312. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 08:39:36 UTC
From: atec <atec77@XXhotmail.com>
Message-ID: <427dd04b$1@dnews.tpgi.com.au>
Source record: 19095

Roy Lewallen wrote:
> John Smith wrote:
>
>> . . .
>> Someone really should get off a dead duff somewhere and DO IT!!!!
>>
>> Kinda makes ya wonder why not? Doesn't it?
>
>
> I sure seem to hear that a lot.
>
> Some *other* lazy bum oughtta get off his duff and do it.
>
> Why don't you do it? If the problem is that you don't have the technical
> know-how, well, how do you think those people who have it, got it? By
> being lazy?
>
> Typing a few sentences and hitting <Send> sure is easier than studying,
> isn't it?
So it would appear is attacking another's comment .
>
> Roy Lewallen, W7EL

2313. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 10:13:57 UTC
From: carlzomer@hotmail.com
Message-ID: <427de5b0.288699070@news.east.earthlink.net>
Source record: 19096
Body handling: HTML body converted to readable text

"John Smith" wrote:

>Decades have brought us moon landing, mars landings,masers, lasers, lets,
>fets, mosfets, computers, etc...
>
>But the shape of radio equip. has remained virtually stagnant.
>
>One "innovation" would be to just copy what the IBM clone has taught us.
>
>Build a radio of "cards." Just like the computer, a standard case which you
>can plugin various power supplies, frontend board "cards", intermediate
>board "cards", buffer amp board "cards", IF board "cards", audio board
>"cards", xmitter board "cards", final amp board "cards", etc.... you get the pic>
>
>One radio case can/could virtually be any radio you can imagine.... new
>design in a frontend? Plug in a new front end "card", new audio offering?
>Plug in a new audio board "card."
>
>Someone really should get off a dead duff somewhere and DO IT!!!!
>
>Kinda makes ya wonder why not? Doesn't it?
>
>Warmest regards,
>John
>
Sounds just like a Drake TR-7. Too bad there isn't enough money to be
made to the ham market to have allowed this to be developed.

Russ
--
Russ
"Two-fifteen, no ambulance needed!" (G. J. Golden, ECPD)
Subtract all nines to reply

2314. WTB Homebrew items

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 10:38:31 UTC
From: David J Windisch <davidjw@cinci.rr.com>
Message-ID: <H_lfe.19242$i1.8745@tornado.ohiordc.rr.com>
Source record: 19097

Hi, all concerned:

I'm trying to revive my flagging interest in hamming in general.

If you have a homebrew and/or kit project, sitting around, send me a picture, its weight (for ground shipping estimate to 45251), and what you'd like to get, and maybe we can shake hands and do business.

Tubes or transistors -- doesn't matter.

TIA and

73, Dave, N3HE
Cincinnati OH

2315. Re: WTB Homebrew items

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 11:23:17 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <FEmfe.57899$NU4.37319@attbi_s22>
Source record: 19098

> I'm trying to revive my flagging interest in hamming in general.
>
> If you have a homebrew and/or kit project, sitting around, send me a
> picture, its weight (for ground shipping estimate to 45251), and what
you'd
> like to get, and maybe we can shake hands and do business.
>
> Tubes or transistors -- doesn't matter.
>
> TIA and
>
> 73, Dave, N3HE

Jeez Dave, there's your problem staring you in the face. You've got too much money and are too lazy. Common instant gratification problem these days. If you want more pizazz in your hobby, do something different. Since we can't seem to get a good QSO going except for the one in a thousand, the "fun" lies in doing something else instead of buying a radio and talking. (Or worse, listening) Try melting some solder and getting some REAL enjoyment out of using a piece of gear you've brought to life yourself. The pleasure is never ending and the challenges are great.

For starters, there's the kit route, the Elecraft folks have a cool radio, and if you want a greater challenge, any of the homebrew sites from the CDG2000 to the PicaStar projects will do it (Google finds them both and more) and make you a radio that performs better than ANYTHING you can buy. Too bad the league didn't do either of them. Then too, you can make some homebrew test equipment that falls in the same category and honestly evaluate that new piece of gear. Might even interest you in a new hobby of real metrology. This "hobby" will carry you to the grave if you just give it half a chance. Line up a thousand "projects", and you can't die, there just isn't any time for it.

Regards
W4ZCB

2316. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 11:47:13 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <5%mfe.65603$WI3.54536@attbi_s71>
Source record: 19099

> >Someone really should get off a dead duff somewhere and DO IT!!!!
> >
> >Kinda makes ya wonder why not? Doesn't it?
> >
> >Warmest regards,
> >John
> >
> Sounds just like a Drake TR-7. Too bad there isn't enough money to be
> made to the ham market to have allowed this to be developed.
>
> Russ

Actually, sounds a lot more like the Elecraft K2. Nothing new with the approach. Better spent, would be the time and effort to improve the operational performance. In-band dynamic range could stand some improvement, and oscillator phase noise is an abomination both on RX and TX of most every radio out there. Someone COULD, if only he would. Too busy dreaming up defunct ideas.

W4ZCB

2317. 706 MK2G on 222 MHz?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 12:23:47 UTC
From: pdrunen@aol.com
Message-ID: <1115555027.369233.323700@o13g2000cwo.googlegroups.com>
Source record: 19100

Anyone experimented with putting the 706 models on 222 MHz?

Is there a group where 222 MHz is discussed?

Thanks!

de KJ4UO

2318. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 12:36:14 UTC
From: Dee Flint <deeflint01@comcast.net>
Message-ID: <kpidncJSSpBXmuPfRVn-oA@comcast.com>
Source record: 19101
Body handling: HTML body converted to readable text

wrote in message
news:427de5b0.288699070@news.east.earthlink.net...
> "John Smith" wrote:
>
>>Decades have brought us moon landing, mars landings,masers, lasers, lets,
>>fets, mosfets, computers, etc...
>>
>>But the shape of radio equip. has remained virtually stagnant.
>>
>>One "innovation" would be to just copy what the IBM clone has taught us.
>>
>>Build a radio of "cards." Just like the computer, a standard case which
>>you
>>can plugin various power supplies, frontend board "cards", intermediate
>>board "cards", buffer amp board "cards", IF board "cards", audio board
>>"cards", xmitter board "cards", final amp board "cards", etc.... >you get the pic>
>>
>>One radio case can/could virtually be any radio you can imagine.... new
>>design in a frontend? Plug in a new front end "card", new audio offering?
>>Plug in a new audio board "card."
>>
>>Someone really should get off a dead duff somewhere and DO IT!!!!
>>
>>Kinda makes ya wonder why not? Doesn't it?
>>
>>Warmest regards,
>>John
>>
> Sounds just like a Drake TR-7. Too bad there isn't enough money to be
> made to the ham market to have allowed this to be developed.
>
> Russ

I, too, suspect that it does indeed come down to market forces.

Dee D. Flint, N8UZE

2319. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 12:37:04 UTC
From: Mike Coslo <mremovethiscoslo@adelphia.net>
Message-ID: <McKdnUFvDNlxmuPfRVn-pQ@adelphia.com>
Source record: 19102

Roy Lewallen wrote:
> John Smith wrote:
>
>> . . .
>> Someone really should get off a dead duff somewhere and DO IT!!!!
>>
>> Kinda makes ya wonder why not? Doesn't it?
>
>
> I sure seem to hear that a lot.
>
> Some *other* lazy bum oughtta get off his duff and do it.
>
> Why don't you do it? If the problem is that you don't have the technical
> know-how, well, how do you think those people who have it, got it? By
> being lazy?
>
> Typing a few sentences and hitting <Send> sure is easier than studying,
> isn't it?

Yoiks, Roy! That was a little caustic wasn't it?

- Mike KB3EIA -

2320. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 13:18:35 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <Kkofe.272$ik1.404610@news.sisna.com>
Source record: 19103

Ahhhh, the *others* just don't understand you meant that in "the best possible way", I do...

Actually, I agree with you!!! Well, as long as you didn't include me in that "*other* lazy bum" of yours... <grin>

Warmest regards,
John
--
I AM ONE-IN-A-MILLION!!!!!
Too bad the other 999,999 got there first.. <frown>

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:117rjinatr0ke16@corp.supernews.com...
| John Smith wrote:
| > . . .
| > Someone really should get off a dead duff somewhere and DO IT!!!!
| >
| > Kinda makes ya wonder why not? Doesn't it?
|
| I sure seem to hear that a lot.
|
| Some *other* lazy bum oughtta get off his duff and do it.
|
| Why don't you do it? If the problem is that you don't have the technical
| know-how, well, how do you think those people who have it, got it? By
| being lazy?
|
| Typing a few sentences and hitting <Send> sure is easier than studying,
| isn't it?
|
| Roy Lewallen, W7EL

2321. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 13:25:45 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <urofe.284$X32.673920@news.sisna.com>
Source record: 19104
Body handling: HTML body converted to readable text

Russ:

That is my point! Too many look at ham radio as "special" and "separate."

What I suggested was gov't, commercial and, yes, even CB in that suggestion.
I am just guessing, but you market to that wide a group and you are just
bound to sell a dozen--or two!

And, having the design so others can purchase rights (reasonably charged!)
to use "your case", then the innovation brought to the market by "the many
manufacturers" (and thousands of minds) gives your product real "SEX
APPEAL!"

Warmest regards,

John

--
I AM ONE-IN-A-MILLION!!!!!
Too bad the other 999,999 got there first..

wrote in message
news:427de5b0.288699070@news.east.earthlink.net...
| "John Smith" wrote:
|
| >Decades have brought us moon landing, mars landings,masers, lasers, lets,
| >fets, mosfets, computers, etc...
| >
| >But the shape of radio equip. has remained virtually stagnant.
| >
| >One "innovation" would be to just copy what the IBM clone has taught us.
| >
| >Build a radio of "cards." Just like the computer, a standard case which
you
| >can plugin various power supplies, frontend board "cards", intermediate
| >board "cards", buffer amp board "cards", IF board "cards", audio board
| >"cards", xmitter board "cards", final amp board "cards", etc.... you get the pic>
| >
| >One radio case can/could virtually be any radio you can imagine.... new
| >design in a frontend? Plug in a new front end "card", new audio
offering?
| >Plug in a new audio board "card."
| >
| >Someone really should get off a dead duff somewhere and DO IT!!!!
| >

| >Kinda makes ya wonder why not? Doesn't it?
| >
| >Warmest regards,
| >John
| >
| Sounds just like a Drake TR-7. Too bad there isn't enough money to be
| made to the ham market to have allowed this to be developed.
|
| Russ
| --
| Russ
| "Two-fifteen, no ambulance needed!" (G. J. Golden, ECPD)
| Subtract all nines to reply

2322. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 13:33:40 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <Uyofe.65917$WI3.41925@attbi_s71>
Source record: 19106

> > Typing a few sentences and hitting <Send> sure is easier than studying,
> > isn't it?
>
> Yoiks, Roy! That was a little caustic wasn't it?
>
> - Mike KB3EIA -

Considering what has gone before, it's unduly tame.

W4ZCB

2323. Re: 706 MK2G on 222 MHz?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 13:34:39 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <427E156F.8020303@bloomer.net>
Source record: 19105

There is a group for people building Paul Wade's 222 transverter at
Yahoo Groups:
http://groups.yahoo.com/group/222Club/

See Paul's website at http://www.w1ghz.org/222xvtr/222.htm

The transverter is designed to mate with the Yaesu 817, but it will
interface with any rig as long as you're careful not to exceed the
maximum power input to the transverter. I wouldn't call the transverter
"super high end" so if you want to use it for EME, you might need to add
some stuff to make it work in such demanding applications. However, for
casual contesting and operating, it should be more than sufficient! I
have the circuit board for it (it's TINY!) and will be building it after
I finish up my 10 GHz transverter project (hopefully before Field Day!!)

Scott
N0EDV

pdrunen@aol.com wrote:
> Anyone experimented with putting the 706 models on 222 MHz?
>
> Is there a group where 222 MHz is discussed?
>
> Thanks!
>
> de KJ4UO
>

2324. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 13:40:05 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <427E16B5.6020805@bloomer.net>
Source record: 19107
Body handling: HTML body converted to readable text

This may be the answer to your dreams. A SOFTWARE DEFINED RADIO!

http://www.flex-radio.com/

This radio is basically controlled by software. Selectivity not good
enough? A new program is written and distributed (the programs are
free!)...

New band authorized? New software is written to include the new band...

A new digital mode invented? Yup, new software is written to give the
radio that capability...

Scott
N0EDV

John Smith wrote:

> Decades have brought us moon landing, mars landings,masers, lasers, lets,
> fets, mosfets, computers, etc...
>
> But the shape of radio equip. has remained virtually stagnant.
>
> One "innovation" would be to just copy what the IBM clone has taught us.
>
> Build a radio of "cards." Just like the computer, a standard case which you
> can plugin various power supplies, frontend board "cards", intermediate
> board "cards", buffer amp board "cards", IF board "cards", audio board
> "cards", xmitter board "cards", final amp board "cards", etc.... you get the pic>
>
> One radio case can/could virtually be any radio you can imagine.... new
> design in a frontend? Plug in a new front end "card", new audio offering?
> Plug in a new audio board "card."
>
> Someone really should get off a dead duff somewhere and DO IT!!!!
>
> Kinda makes ya wonder why not? Doesn't it?
>
> Warmest regards,
> John
>

2325. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 13:43:51 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <slofe.315$252.682113@news.sisna.com>
Source record: 19108
Body handling: HTML body converted to readable text

Well, if what I see coming on the horizon is what I think it is--American dominance in "innovation" is dying....

With China, India, etc. "coming online", even the American consumer will soon be of small importance... even our auto manufacturers will soon be selling more cars there, than to citizens here... as these countries continue to "harvest our bucks" and upgrade, soon we will not even be able to compete over the cost of oil--it will go where it is more important--manufacturing over-seas...

Tying the hands of ourselves with overly restrictive rules and regulations which hamper our ability to compete has been taxing too--some of these ideas can only be instituted over-seas--where they will soon see the idea of promoting innovation and forward progress is conductive to even their self-serving interests...

Not everyone sees salvation in a new regulation, law or restriction

But, we will see...

Warmest regards,

John

--
I AM ONE-IN-A-MILLION!!!!!
Too bad the other 999,999 got there first..

"John Smith" wrote in message
news:MBife.21559$Or3.17382548@news.sisna.com...
| Decades have brought us moon landing, mars landings,masers, lasers, lets,
| fets, mosfets, computers, etc...
|
| But the shape of radio equip. has remained virtually stagnant.
|
| One "innovation" would be to just copy what the IBM clone has taught us.
|
| Build a radio of "cards." Just like the computer, a standard case which
you
| can plugin various power supplies, frontend board "cards", intermediate
| board "cards", buffer amp board "cards", IF board "cards", audio board
| "cards", xmitter board "cards", final amp board "cards", etc....
|
| One radio case can/could virtually be any radio you can imagine.... new
| design in a frontend? Plug in a new front end "card", new audio offering?
| Plug in a new audio board "card."

|
| Someone really should get off a dead duff somewhere and DO IT!!!!
|
| Kinda makes ya wonder why not? Doesn't it?
|
| Warmest regards,
| John
|
| --
| I AM ONE-IN-A-MILLION!!!!!
| Too bad the other 999,999 got there first..
|
|

2326. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 13:51:34 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <dj5s71pnhi6r9v0v6pfl2ddnkd650mao9l@4ax.com>
Source record: 19109

On Sun, 8 May 2005 06:25:45 -0700, "John Smith"
<assemblywizard@gmail.com> wrote:

>Russ:
>
>That is my point! Too many look at ham radio as "special" and "separate."
>
>What I suggested was gov't, commercial and, yes, even CB in that suggestion.
>I am just guessing, but you market to that wide a group and you are just
>bound to sell a dozen--or two! <grin>
>
>And, having the design so others can purchase rights (reasonably charged!)
>to use "your case", then the innovation brought to the market by "the many
>manufacturers" (and thousands of minds) gives your product real "SEX
>APPEAL!"
>
Intriguing idea, but how would this work with varying licensing
requirements on some of your proposed bands, maximum power
differences, as well as the "type acceptance" or certification
required for operation?

Would changing cards within such a unit count as a mod, presently only
allowed for licensed amateurs transmitting on amateur frequencies?

You are on the right track as far as getting marketable numbers, but
the rules are so different for the various bands you mention, I am not
sure that can be resolved, even if all of the technical issues can be.

Happy trails,
Gary (net.yogi.bear)
--
At the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

2327. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 13:57:40 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <8k6s71tockvqjcnsi2h2u9nbu0rdou1kjs@4ax.com>
Source record: 19110

On Sun, 08 May 2005 18:39:36 +1000, atec <atec77@XXhotmail.com> wrote:

>Roy Lewallen wrote:
>> John Smith wrote:
>>
>>> . . .
>>> Someone really should get off a dead duff somewhere and DO IT!!!!
>>>
>>> Kinda makes ya wonder why not? Doesn't it?
>>
>>
>> I sure seem to hear that a lot.
>>
>> Some *other* lazy bum oughtta get off his duff and do it.
>>
>> Why don't you do it? If the problem is that you don't have the technical
>> know-how, well, how do you think those people who have it, got it? By
>> being lazy?
>>
>> Typing a few sentences and hitting <Send> sure is easier than studying,
>> isn't it?
> So it would appear is attacking another's comment .

Perhaps it is because Roy is, like your's truly, getting a bit tired
of seeing "John Smith's" conversations with himself. I don't use any
software filters on my newsreader but I've sure engaged a mental
filter.

2328. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 13:58:38 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <jWofe.339$bQ2.911467@news.sisna.com>
Source record: 19111

It would work like EVERYTHING else in the world works!!! <am I the only one realizing that>

You can buy a diesel truck if you want to--but can't drive it unless you are licenced. You can build/buy a car with a thousand-horsepower engine--but have to be careful how fast you go on highways... You can buy a handgun and use it to protect yourself--but suffer the wrath of "God" if you error... You can buy poison--but can't poison your neighbor... you can buy razor blades--but can't put them in the apples you handout at Halloween... you can buy gasoline--but can't use it to burn down anothers property... you can buy a car--but can't use it as a weapon and run down people on the street...

Yanno, they USED to teach this stuff in school!!!!

Warmest regards,
John
--
I AM ONE-IN-A-MILLION!!!!!
Too bad the other 999,999 got there first.. <frown>

"Gary S." <Idontwantspam@net> wrote in message
news:dj5s71pnhi6r9v0v6pfl2ddnkd650mao9l@4ax.com...
| On Sun, 8 May 2005 06:25:45 -0700, "John Smith"
| <assemblywizard@gmail.com> wrote:
|
| >Russ:
| >
| >That is my point! Too many look at ham radio as "special" and
"separate."
| >
| >What I suggested was gov't, commercial and, yes, even CB in that
suggestion.
| >I am just guessing, but you market to that wide a group and you are just
| >bound to sell a dozen--or two! <grin>
| >
| >And, having the design so others can purchase rights (reasonably
charged!)
| >to use "your case", then the innovation brought to the market by "the
many
| >manufacturers" (and thousands of minds) gives your product real "SEX
| >APPEAL!"
| >
| Intriguing idea, but how would this work with varying licensing
| requirements on some of your proposed bands, maximum power
| differences, as well as the "type acceptance" or certification

| required for operation?
|
| Would changing cards within such a unit count as a mod, presently only
| allowed for licensed amateurs transmitting on amateur frequencies?
|
| You are on the right track as far as getting marketable numbers, but
| the rules are so different for the various bands you mention, I am not
| sure that can be resolved, even if all of the technical issues can be.
|
| Happy trails,
| Gary (net.yogi.bear)
| --
| At the 51st percentile of ursine intelligence
|
| Gary D. Schwartz, Needham, MA, USA
| Please reply to: garyDOTschwartzATpoboxDOTcom

2329. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 14:01:16 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <MYofe.345$iO2.875548@news.sisna.com>
Source record: 19112

Well, I just hope you are not getting to the point of contemplating
"Un-American Activities", you still support free speech--don't you?

Warmest regards,
John
--
I AM ONE-IN-A-MILLION!!!!!
Too bad the other 999,999 got there first.. <frown>

"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
news:8k6s71tockvqjcnsi2h2u9nbu0rdou1kjs@4ax.com...
| On Sun, 08 May 2005 18:39:36 +1000, atec <atec77@XXhotmail.com> wrote:
|
| >Roy Lewallen wrote:
| >> John Smith wrote:
| >>
| >>> . . .
| >>> Someone really should get off a dead duff somewhere and DO IT!!!!
| >>>
| >>> Kinda makes ya wonder why not? Doesn't it?
| >>
| >>
| >> I sure seem to hear that a lot.
| >>
| >> Some *other* lazy bum oughtta get off his duff and do it.
| >>
| >> Why don't you do it? If the problem is that you don't have the
technical
| >> know-how, well, how do you think those people who have it, got it? By
| >> being lazy?
| >>
| >> Typing a few sentences and hitting <Send> sure is easier than studying,
| >> isn't it?
| > So it would appear is attacking another's comment .
|
| Perhaps it is because Roy is, like your's truly, getting a bit tired
| of seeing "John Smith's" conversations with himself. I don't use any
| software filters on my newsreader but I've sure engaged a mental
| filter.
|
|

2330. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 15:36:52 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <vYCdnXj8CtuKr-PfRVn-iw@comcast.com>
Source record: 19113
Body handling: HTML body converted to readable text

"John Smith" wrote in message
news:MBife.21559$Or3.17382548@news.sisna.com...
> Decades have brought us moon landing, mars landings,masers, lasers, lets,
> fets, mosfets, computers, etc...
>
> But the shape of radio equip. has remained virtually stagnant.
>
> One "innovation" would be to just copy what the IBM clone has taught us.
>
> Build a radio of "cards." Just like the computer, a standard case which
> you
> can plugin various power supplies, frontend board "cards", intermediate
> board "cards", buffer amp board "cards", IF board "cards", audio board
> "cards", xmitter board "cards", final amp board "cards", etc.... you get the pic>
>
> One radio case can/could virtually be any radio you can imagine.... new
> design in a frontend? Plug in a new front end "card", new audio offering?
> Plug in a new audio board "card."
>
> Someone really should get off a dead duff somewhere and DO IT!!!!

Your comments are interesting. In the late 1970s and early 1980s, the
amateur market did begin down this road.

Look at: The Heathkit SB-104(A) and the Yaesu FT-ONE. there were a number
of "lessons learned" from those experiences - but the "state of the art" has
also moved from "thru-hole" construction to surface mount.

This concept is not unique to amateur radio, network equipment manufacturers
have gone back and forth between "chassis based" equipment and "appliance"
at least 5 times over past 20 years. Each has their unique attributes,
advantages and disadvantages ....

w9gb

2331. Re: WTB Homebrew items

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 15:47:03 UTC
From: David J Windisch <davidjw@cinci.rr.com>
Message-ID: <Xvqfe.12571$9n1.1390@tornado.ohiordc.rr.com>
Source record: 19114

Shucks, Harold, it's nice to read from you again.

I should have mentioned that I have a K2/100, an R2Pro, T2, AA0ZZ DDS vfo ... and some other things you mentioned. Wish I had 10% of too much money ~ ;o)

I'm looking for serious detritus, from others, which needs completion, modification, and so forth.

One thing I'd like to find is a homebrew QSD board, to use with the R2Pro downconverter and DDS vfo, and the I2PHD software.

Kind regards,

73, Dave, N3HE
Cincinnati OH

"Harold E. Johnson" <W4ZCB@mchsi.com> wrote in message news:FEmfe.57899$NU4.37319@attbi_s22...
SNIP
> Jeez Dave, there's your problem staring you in the face. You've got too
> much
SNIP

2332. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 15:47:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <wwqfe.1233$_j4.1602702@news.sisna.com>
Source record: 19116
Body handling: HTML body converted to readable text

gb:

Well, we certainly need to examine the "bottle neck" and remove it... before
we are doomed...

If we can't institute this "radical" idea here, we need to look at Canada,
Mexico, So. America, China, India, etc...

When there are as many functional radios (or "cards") hitting the dumpster
as there are functional computers and related equip. (replaced with
upgrades) we will know the right idea has prevailed and radio has come
home...

I would think there must be some EXCELLENT argument/reasoning serving as a
road block, or else, others are simply going to pass us by...

John
--
When Viagra fails to work--you are DOOMED!!!

"gb" wrote in message
news:vYCdnXj8CtuKr-PfRVn-iw@comcast.com...
| "John Smith" wrote in message
| news:MBife.21559$Or3.17382548@news.sisna.com...
| > Decades have brought us moon landing, mars landings,masers, lasers,
lets,
| > fets, mosfets, computers, etc...
| >
| > But the shape of radio equip. has remained virtually stagnant.
| >
| > One "innovation" would be to just copy what the IBM clone has taught us.
| >
| > Build a radio of "cards." Just like the computer, a standard case which
| > you
| > can plugin various power supplies, frontend board "cards", intermediate
| > board "cards", buffer amp board "cards", IF board "cards", audio board
| > "cards", xmitter board "cards", final amp board "cards", etc.... you get the pic>
| >
| > One radio case can/could virtually be any radio you can imagine.... new
| > design in a frontend? Plug in a new front end "card", new audio
offering?
| > Plug in a new audio board "card."
| >
| > Someone really should get off a dead duff somewhere and DO IT!!!!
|

| Your comments are interesting. In the late 1970s and early 1980s, the
| amateur market did begin down this road.
|
| Look at: The Heathkit SB-104(A) and the Yaesu FT-ONE. there were a
number
| of "lessons learned" from those experiences - but the "state of the art"
has
| also moved from "thru-hole" construction to surface mount.
|
| This concept is not unique to amateur radio, network equipment
manufacturers
| have gone back and forth between "chassis based" equipment and "appliance"
| at least 5 times over past 20 years. Each has their unique attributes,
| advantages and disadvantages ....
|
| w9gb
|
|

2333. Re: DC-DC up converter 12v-->24v 500 mA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 15:48:19 UTC
From: budgie <me@privacy.net>
Message-ID: <c3ds71h0hbq2bj2qb7bfent3lg08sktcul@4ax.com>
Source record: 19115

On Sun, 8 May 2005 01:53:26 +0200, "Rightrik" <gaggiorNOSPAM@tin.it> wrote:

>> KEMO Electronics (germany) make these items. They have an interesting
>range of
>> small modules with various functions. Have a look at their web page:
>>
>> http://www.kemo-electronic.com/en/module/m029/index.htm
>>
>> They are wholesale only, but have distributors around the planet.
>
>This should be the best solution, but (up to now) they don't answer to my
>email...

Because they are strictly wholesale only, they may not reply. In the past I
have had a reply which directed me to the distributor here in Australia.

2334. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 17:44:27 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <117sjv4lip79563@corp.supernews.com>
Source record: 19117

John Smith wrote:

> gb:
>
> Well, we certainly need to examine the "bottle neck" and remove it... before
> we are doomed...
>
> If we can't institute this "radical" idea here, we need to look at Canada,
> Mexico, So. America, China, India, etc...
>
> When there are as many functional radios (or "cards") hitting the dumpster
> as there are functional computers and related equip. (replaced with
> upgrades) we will know the right idea has prevailed and radio has come
> home...
>
> I would think there must be some EXCELLENT argument/reasoning serving as a
> road block, or else, others are simply going to pass us by...
>
> John

I've considered this sort of a radio before. There are a few problems, however:

First, there is a fundamental difference between digital systems and analog systems that prevents this sort of thing working with the success of a PC.

The basic difference is that with a digital system you either end up with a clean signal or a useless signal. In an analog system the character and purity of the signal must be carefully guarded, at least until you manage to digitize it. This means that there will be a much greater chance that adding a new card to the radio will degrade not only the function of the new card, but the function of all the other cards.

Second, the PC market is a huge one, with great advantages to be derived from common equipment and software, and much smaller advantages to be derived from commonality. This is the exact obverse of the radio market, including homebrew radios. To make a "card" radio would be to define a basic radio architecture, probably down to the IF frequency (or at least to the point of forcing you to match your IF and front end). While improvements could be made within this structure an independent experimenter couldn't play around with such things as direct-conversion, different IF schemes, etc., without extensive modification.

In this way the radio market is more like the market for computing devices as a whole. The PC market doesn't account for the most

processors sold, or even the most dollars of all computing devices. The largest segment of the market is in embedded computing devices ranging from things as visible and obvious as your PDA, through cell phones, and down to burglar alarms and TV remotes. Take apart a new home thermostat or TV remote and there's a good chance that you'll find a processor that implements most of its functionality in software -- but a very slim chance indeed that its PC compatible!

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

2335. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 18:15:02 UTC
From: Mike Coslo <mremovethiscoslo@adelphia.net>
Message-ID: <XMWdnRb4Hra_yuPfRVn-uA@adelphia.com>
Source record: 19118
Body handling: HTML body converted to readable text

John Smith wrote:
> Decades have brought us moon landing, mars landings,masers, lasers, lets,
> fets, mosfets, computers, etc...
>
> But the shape of radio equip. has remained virtually stagnant.
>
> One "innovation" would be to just copy what the IBM clone has taught us.
>
> Build a radio of "cards." Just like the computer, a standard case which you
> can plugin various power supplies, frontend board "cards", intermediate
> board "cards", buffer amp board "cards", IF board "cards", audio board
> "cards", xmitter board "cards", final amp board "cards", etc.... you get the pic>
>
> One radio case can/could virtually be any radio you can imagine.... new
> design in a frontend? Plug in a new front end "card", new audio offering?
> Plug in a new audio board "card."
>
> Someone really should get off a dead duff somewhere and DO IT!!!!
>
> Kinda makes ya wonder why not? Doesn't it?

You can get a software defined radio. Front end, and pipe it into your computer, and there ya go! Ten Tec also manufactured the Pegasus a few years back, close to what you are thinking of.

Personally, I don't think that the PC computer paradigm is any way to go. It's just how PC's evolved. Despite years of progress, plug and play is not universal, and just another PC promise.

- Mike KB3EIA -

2336. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 18:23:22 UTC
From: Mike Coslo <mremovethiscoslo@adelphia.net>
Message-ID: <XMWdnRH4HraIxOPfRVn-uA@adelphia.com>
Source record: 19119

Wes Stewart wrote:
> On Sun, 08 May 2005 18:39:36 +1000, atec <atec77@XXhotmail.com> wrote:
>
>
>>Roy Lewallen wrote:
>>
>>>John Smith wrote:
>>>
>>>
>>>>. . .
>>>>Someone really should get off a dead duff somewhere and DO IT!!!!
>>>>
>>>>Kinda makes ya wonder why not? Doesn't it?
>>>
>>>
>>>I sure seem to hear that a lot.
>>>
>>>Some *other* lazy bum oughtta get off his duff and do it.
>>>
>>>Why don't you do it? If the problem is that you don't have the technical
>>>know-how, well, how do you think those people who have it, got it? By
>>>being lazy?
>>>
>>>Typing a few sentences and hitting <Send> sure is easier than studying,
>>>isn't it?
>>
>> So it would appear is attacking another's comment .
>
>
> Perhaps it is because Roy is, like your's truly, getting a bit tired
> of seeing "John Smith's" conversations with himself. I don't use any
> software filters on my newsreader but I've sure engaged a mental
> filter.

You might want to check out the idea of filtering. Cleans up the
newsgroups right fine.

- Mike KB3EIA -

2337. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 18:29:48 UTC
From: Mike Coslo <mremovethiscoslo@adelphia.net>
Message-ID: <T6mdnfMPX48Fx-PfRVn-uQ@adelphia.com>
Source record: 19120

John Smith wrote:
> gb:
>
> Well, we certainly need to examine the "bottle neck" and remove it... before
> we are doomed...
>
> If we can't institute this "radical" idea here, we need to look at Canada,
> Mexico, So. America, China, India, etc...
>
> When there are as many functional radios (or "cards") hitting the dumpster
> as there are functional computers and related equip. (replaced with
> upgrades) we will know the right idea has prevailed and radio has come
> home...

I hope you are kidding, John. That is the absolutely worst part of the PC paradigm. Thousands of perfectly good electronics thrown out, often made obsolete due to software that is bloated and poorly written (mostly OS software. At least old radios are still useable

> I would think there must be some EXCELLENT argument/reasoning serving as a
> road block, or else, others are simply going to pass us by...

The PC paradigm is a poor one, and not to be emulated. PC's will finally be mature when we don't have to replace them on almost a yearly basis. At that point, software writers will be able to write good software.

- Mike KB3EIA -

2338. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 18:51:15 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <vlns71h4oni3jl8c6sjf02uakbqcidsnsd@4ax.com>
Source record: 19121

On Sun, 08 May 2005 14:23:22 -0400, Mike Coslo
<mremovethiscoslo@adelphia.net> wrote:

>Wes Stewart wrote:
>> On Sun, 08 May 2005 18:39:36 +1000, atec <atec77@XXhotmail.com> wrote:

>> Perhaps it is because Roy is, like your's truly, getting a bit tired
>> of seeing "John Smith's" conversations with himself. I don't use any
>> software filters on my newsreader but I've sure engaged a mental
>> filter.
>
> You might want to check out the idea of filtering. Cleans up the
>newsgroups right fine.

I use Free Agent. It doesn't do filtering, but as I said, I turn on my
mental filter that says, "When you see a post by 'John Smith'", ignore
it. I used the same filter for "Fractenna." Works fine.

2339. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 19:00:13 UTC
From: Pipex News Server <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <d8Cdndjcc9YX_OPfRVnyiw@pipex.net>
Source record: 19122

> You can get a software defined radio. Front end, and pipe it into your
> computer, and there ya go! Ten Tec also manufactured the Pegasus a few
> years back, close to what you are thinking of.
==========
The Ten Tec Pegasus is very much alive . It is now called Jupiter (the
Pegasus with 'knobbed' front panel and a display and a nice enclosure like
other traditionally looking radios)

Frank GM0CSZ / KN6WH

2340. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 19:23:14 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <117spp6hnr79v3b@corp.supernews.com>
Source record: 19124

Mike Coslo wrote:
>
> Yoiks, Roy! That was a little caustic wasn't it?
>
> - Mike KB3EIA -

I do tend to be that way. And because of the couple of negative comments about my posting I've thought it over a fair amount to see if, on reflection, I think it was out of line.

But I don't think so, unless I mininterpreted what "John Smith" said. What he seemed to be saying is that he has this great idea, and the only reason it's not being impelemented is that *the other people* are too lazy to do it.

As one of the "other people", I find it kind of insulting. Do you really think his is a valid point of view, that everyone else should jump up and implement his great idea, while this anonymous person's job is to tell us what we should do?

I really do think that a caustic comment was appropriate.

Roy Lewallen, W7EL

2341. Re: WTB Homebrew items

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 19:25:08 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <oltfe.66714$c24.25757@attbi_s72>
Source record: 19123

> I should have mentioned that I have a K2/100, an R2Pro, T2, AA0ZZ DDS vfo
> ... and some other things you mentioned. Wish I had 10% of too much
money
> ~ ;o)

Prolly would have if you'd do something about that obsessive compulsive
streak.
>
> I'm looking for serious detritus, from others, which needs completion,
> modification, and so forth.
>

AHA! Well, the recommendation still goes. You obviously were not
sufficiently challenged by the kit route, time to tackle something more
complex. Suppose you could say in a QSO (with as much false modesty as
possible) "Rig here is homebrew" even with a kit, however, would suggest
that the pride that goes with it is proportional to the time and effort
involved in bringing the project to fruition .

Now what else you gonna do with these lengthening days that would bring as
much enjoyment? Surely not "Receiving you on a completely refurbished and
freshly oiled gear train on this R-388 and model 28". Particularly when in
all liklihood, the Frau, upon hearing the above would tie 2 and 2 together
and realize that was where the oil stains on the Persian had come from.

Regards
W4ZCB
Besides that, what would you do with the extra hernia?

>

2342. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 19:37:20 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <d5lppg$7lk$1@theodyn.ncf.ca>
Source record: 19125

Roy Lewallen (w7el@eznec.com) writes:
> Mike Coslo wrote:
>>
>> Yoiks, Roy! That was a little caustic wasn't it?
>>
>> - Mike KB3EIA -
>
> I do tend to be that way. And because of the couple of negative comments
> about my posting I've thought it over a fair amount to see if, on
> reflection, I think it was out of line.
>
> But I don't think so, unless I mininterpreted what "John Smith" said.
> What he seemed to be saying is that he has this great idea, and the only
> reason it's not being impelemented is that *the other people* are too
> lazy to do it.
>
> As one of the "other people", I find it kind of insulting. Do you really
> think his is a valid point of view, that everyone else should jump up
> and implement his great idea, while this anonymous person's job is to
> tell us what we should do?
>
> I really do think that a caustic comment was appropriate.
>
> Roy Lewallen, W7EL

He gave the impression of being someone who'd been here before,
though at least it wasn't cross-posted to the UK newsgroup.

It just struck me as "well what's it doing here?". This newsgroup
isn't about commercial equipment, though we seem to have a slow
slide to where such things do appear here. Yet the poster seemed
to be talking about commercial equipment, and whether or not
that was the point, making your own equipment shouldn't be quite
about building a copy of something someone else built.

Had he posted in rec.radio.amateur.equipment I think perhaps
the tone of the response should be different. But here, at
the very least it should be a discussion of modularization rather
than subject header that is bound to alienate, and an expectation
of how things should be.

The talk of modularization, which seems better fitted to radio
than "plug in boards", has been discussed quite a bit over the years.
But of course, rather than some universal system (which has had
some articles in the ham magazines) the focus has been on breaking

things down to smaller portions so you can experiment, or you can change things without having to change everything. And yes, solid state devices, because of their small size, low price and even function allows a better implementation. When you can switch with DC it is much easier to do modularization than if you have to have everything hanging off a bandswitch.

Michael VE2BVW

2343. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 19:37:43 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <bUtfe.66752$c24.56615@attbi_s72>
Source record: 19126

>
> I really do think that a caustic comment was appropriate.
>
> Roy Lewallen, W7EL

Quite agree, particularly since the "idea" was so poorly thought out to begin with. Personally, I'd be glad to own a box that was seriously better in performance that any current offering, even if it were spread all over the table and housed in a cardboard box. I'd then be wishing all my neighbors had one as well so I wouldn't be stuck with THEIR radios shortcomings. Even be willing to buy the things for the two closest ones.

W4ZCB

2344. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 19:47:07 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <117sr5vhc79vkcb@corp.supernews.com>
Source record: 19127

To make a positive posting about why the "board" receiver doesn't exist. . . First, I consider my PC. While my very first PC had a bunch of cards, my current one has none except the RAM. The video adapter, Ethernet capability, sound system, modem, serial, parallel, and USB ports are all on a single board, built in.

Why? Simple -- it's cheaper.

I worked at Tektronix for many years. During that time, Tek made both portable scopes and laboratory scopes, the latter having a mainframe and plug in modules. For a given configuration with the same features, the lab scope was always considerably more expensive than the equivalent portable. Why? Well, the lab scope was always overdesigned for any particular job. The bandwidth of the interface had to handle the highest frequency plugin. The power supplies had to handle the highest current plugins, in any combination -- enough current at 5 volts for a digital analyzer plugin, enough higher supply voltage current for a spectrum analyzer plugin, and so forth. There had to be enough connector pins and supporting circuitry to handle all possible controls on all possible plugins. No single configuration ever used more than a fraction of the built-in mainframe capability. While the portable scope's stages could have optimal gain, in the lab scopes, the signals always had to be normalized to the levels specified for the interface. This often required an extra stage or two for each of the signals being passed (vertical, Z axis, horizontal, and many controls). Power supplies had to be decoupled in each plugin at the interface. And finally, good quality, reliable connectors are much more difficult to find, much more expensive to buy than you'd think -- and even so, they can easily be the least reliable components in the system.

Then there's the problem of trying to predict what would be developed in the future when you design the mainframe, so you can build in the necessary interface circuitry. And every new plugin (I've designed them) has to be compatible with every tweak and trick used by all plugins in the past which it might be used with.

The fact is that hams, for sure, wouldn't pay all the extra money a well designed plug in system would cost. Of course, I might be wrong -- anyone who thinks so (one particular person comes to mind) should get busy designing and developing one. Perhaps there's a fortune to be made. Certainly there's a market for a much simpler plug in system with much less versatility than the oscilloscope system I described, as a few manufacturers have shown. The question is, how far can this be taken before the market dries up due to the increased cost?

Roy Lewallen, W7EL

2345. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 19:56:35 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <S9ufe.4030$wU7.2342936@news.sisna.com>
Source record: 19128

Yes, I use my filter too--and support and expect others to use them as they see fit... I certainly do mine!!! I can help if some are having difficulty; I support filtering and have an understanding how to apply them...

However, the very vocal ones--I am always left wondering if they really are remarking about filtering their own content--or their wish to filter the content of others (and, for what purpose would they do this?)... if that goes on too far (controlling others), yanno, it leads to attempted thought control--a guy wrote a book about that--George Orwell... Was that in 1984, or was that about 1984? .. anyway, if you ask me--he was more a prophet, some have already grown to accept what he (we?) feared...

Warmest regards,
John
--
When Viagra fails to work--you are DOOMED!!!

"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
news:vlns71h4oni3jl8c6sjf02uakbqcidsnsd@4ax.com...
| On Sun, 08 May 2005 14:23:22 -0400, Mike Coslo
| <mremovethiscoslo@adelphia.net> wrote:
|
| >Wes Stewart wrote:
| >> On Sun, 08 May 2005 18:39:36 +1000, atec <atec77@XXhotmail.com> wrote:
|
| >> Perhaps it is because Roy is, like your's truly, getting a bit tired
| >> of seeing "John Smith's" conversations with himself. I don't use any
| >> software filters on my newsreader but I've sure engaged a mental
| >> filter.
| >
| > You might want to check out the idea of filtering. Cleans up the
| >newsgroups right fine.
|
| I use Free Agent. It doesn't do filtering, but as I said, I turn on my
| mental filter that says, "When you see a post by 'John Smith'", ignore
| it. I used the same filter for "Fractenna." Works fine.
|
|

2346. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 20:04:20 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <9hufe.4117$1g.2468959@news.sisna.com>
Source record: 19129

Hmmm, I thought it "right in line."

If such equip. was adopted, then just as with computers, you could buy/cut/etch a "card" with the expectation it could be inserted right into the bus of that radio and function, taking on responsibilities--for say an audio amp (just as that EXACT capability exists with a computer bus)....

Indeed, this idea does NOT bypass homebrewers, it encourages them and provides them MUCH more opportunity to participate in constructing their own equip.... I see it as EMPOWERING homebrewers--far from the opposite!!!

Indeed, if some were as gifted as all that, they need only buy the case and some foil boards/components--when they emerged from the basement--I'd expect to see a radio of their OWN design in their hands!!!

Warmest regards,
John
--
When Viagra fails to work--you are DOOMED!!!

"Michael Black" <et472@FreeNet.Carleton.CA> wrote in message news:d5lppg$7lk$1@theodyn.ncf.ca...
|
| Roy Lewallen (w7el@eznec.com) writes:
| > Mike Coslo wrote:
| >>
| >> Yoiks, Roy! That was a little caustic wasn't it?
| >>
| >> - Mike KB3EIA -
| >
| > I do tend to be that way. And because of the couple of negative comments
| > about my posting I've thought it over a fair amount to see if, on
| > reflection, I think it was out of line.
| >
| > But I don't think so, unless I mininterpreted what "John Smith" said.
| > What he seemed to be saying is that he has this great idea, and the only
| > reason it's not being impelemented is that *the other people* are too
| > lazy to do it.
| >
| > As one of the "other people", I find it kind of insulting. Do you really
| > think his is a valid point of view, that everyone else should jump up
| > and implement his great idea, while this anonymous person's job is to
| > tell us what we should do?
| >
| > I really do think that a caustic comment was appropriate.
| >

| > Roy Lewallen, W7EL
|
| He gave the impression of being someone who'd been here before,
| though at least it wasn't cross-posted to the UK newsgroup.
|
| It just struck me as "well what's it doing here?". This newsgroup
| isn't about commercial equipment, though we seem to have a slow
| slide to where such things do appear here. Yet the poster seemed
| to be talking about commercial equipment, and whether or not
| that was the point, making your own equipment shouldn't be quite
| about building a copy of something someone else built.
|
| Had he posted in rec.radio.amateur.equipment I think perhaps
| the tone of the response should be different. But here, at
| the very least it should be a discussion of modularization rather
| than subject header that is bound to alienate, and an expectation
| of how things should be.
|
| The talk of modularization, which seems better fitted to radio
| than "plug in boards", has been discussed quite a bit over the years.
| But of course, rather than some universal system (which has had
| some articles in the ham magazines) the focus has been on breaking
| things down to smaller portions so you can experiment, or you
| can change things without having to change everything. And yes,
| solid state devices, because of their small size, low price and
| even function allows a better implementation. When you can
| switch with DC it is much easier to do modularization than if
| you have to have everything hanging off a bandswitch.
|
| Michael VE2BVW
|
|

2347. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 20:05:31 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <diufe.4131$5g.2472988@news.sisna.com>
Source record: 19138

... make sure you see my post, above, it points out what you missed...

Warmest regards,
John
--
When Viagra fails to work--you are DOOMED!!!

"Harold E. Johnson" <W4ZCB@mchsi.com> wrote in message
news:bUtfe.66752$c24.56615@attbi_s72...
|
| >
| > I really do think that a caustic comment was appropriate.
| >
| > Roy Lewallen, W7EL
|
| Quite agree, particularly since the "idea" was so poorly thought out to
| begin with. Personally, I'd be glad to own a box that was seriously better
| in performance that any current offering, even if it were spread all over
| the table and housed in a cardboard box. I'd then be wishing all my
| neighbors had one as well so I wouldn't be stuck with THEIR radios
| shortcomings. Even be willing to buy the things for the two closest ones.
|
| W4ZCB
|
|

2348. Re: Progress is dependent upon us ...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 20:06:57 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <sLCdnXQ8TfL57OPfRVn-iA@comcast.com>
Source record: 19130

"John Smith" <assemblywizard@gmail.com> wrote in message
news:wwqfe.1233$_j4.1602702@news.sisna.com...
> gb:
>
> Well, we certainly need to examine the "bottle neck" and remove it...
> before
> we are doomed...
>
> If we can't institute this "radical" idea here, we need to look at Canada,
> Mexico, So. America, China, India, etc...
>
JS -

"... before we are all doomed". The only way doom happens is if you don't do your part in averting that projection. Or are you saying the future is hopeless?

So, what are you doing to be part of the "solution" rather than being the "profit of bad things to come?"

How many hours over the past year have you worked with middle or high schools students volunteering your time? Donating materials, time or money for educational programs targeted for the audience that will make a difference?

As George S. Kaufman wrote about money and knowledge in the 1930s - "You Can't Take it with You".

gb

2349. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 20:32:44 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <JHufe.4429$5b.2440217@news.sisna.com>
Source record: 19136

Tim:

I agree, there is a "divergence" of most other devices, with radio in the "lag."

The technology of the 1920's-1930's has been bypassed--we are too late to halt progress at that point--the question is--do we wish to halt radio technology at this point--realizing--we will NOT halt those around us... in the end, leaving us, really, no choice anyway...

Name a large business still using calculators and slide rules, as opposed to the computer, and you will point out that what I am stating is a fallacy...

Warmest regards,

John

--
When Viagra fails to work--you are DOOMED!!!

"Tim Wescott" <tim@wescottnospamdesign.com> wrote in message news:117sjv4lip79563@corp.supernews.com...
| John Smith wrote:
|
| > gb:
| >
| > Well, we certainly need to examine the "bottle neck" and remove it... before
| > we are doomed...
| >
| > If we can't institute this "radical" idea here, we need to look at Canada,
| > Mexico, So. America, China, India, etc...
| >
| > When there are as many functional radios (or "cards") hitting the dumpster
| > as there are functional computers and related equip. (replaced with
| > upgrades) we will know the right idea has prevailed and radio has come
| > home...
| >
| > I would think there must be some EXCELLENT argument/reasoning serving as a
| > road block, or else, others are simply going to pass us by...
| >
| > John
|

| I've considered this sort of a radio before. There are a few problems,
| however:
|
| First, there is a fundamental difference between digital systems and
| analog systems that prevents this sort of thing working with the success
| of a PC.
|
| The basic difference is that with a digital system you either end up
| with a clean signal or a useless signal. In an analog system the
| character and purity of the signal must be carefully guarded, at least
| until you manage to digitize it. This means that there will be a much
| greater chance that adding a new card to the radio will degrade not only
| the function of the new card, but the function of all the other cards.
|
| Second, the PC market is a huge one, with great advantages to be derived
| from common equipment and software, and much smaller advantages to be
| derived from commonality. This is the exact obverse of the radio
| market, including homebrew radios. To make a "card" radio would be to
| define a basic radio architecture, probably down to the IF frequency (or
| at least to the point of forcing you to match your IF and front end).
| While improvements could be made within this structure an independent
| experimenter couldn't play around with such things as direct-conversion,
| different IF schemes, etc., without extensive modification.
|
| In this way the radio market is more like the market for computing
| devices as a whole. The PC market doesn't account for the most
| processors sold, or even the most dollars of all computing devices. The
| largest segment of the market is in embedded computing devices ranging
| from things as visible and obvious as your PDA, through cell phones, and
| down to burglar alarms and TV remotes. Take apart a new home thermostat
| or TV remote and there's a good chance that you'll find a processor that
| implements most of its functionality in software -- but a very slim
| chance indeed that its PC compatible!
|
| --
|
| Tim Wescott
| Wescott Design Services
| http://www.wescottdesign.com

2350. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 20:39:20 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <VNufe.4510$x5.2372653@news.sisna.com>
Source record: 19134

Exactly my point....

We break into two groups of thought here...

Halt at this point, and lay all plans on that halting (and, if ALL the
others don't agree--be bypassed anyway)...

Or, stay with the pack, realizing if that day ever comes (technology ceases
to innovate/obsolete)--we will regret it...

Progress, obsolete equip., is the most desirable thing I can imagine! It is
a given, not all will agree... Indeed, at 52 years of age, my place in the
"scope of the world" is becomming smaller--it only gets worse from now on--I
am not ready to quit and attempt to force others to that "quitting" with
me...

When the "Dick Tracy Wrist Radio" is finally designed and
implemented--perhaps there will be a "death of homebrewers" (I myself am NOT
much of a 'watchbuilder')--but until then we can have fun!

Warmest regards,
John
--
When Viagra fails to work--you are DOOMED!!!

"Mike Coslo" <mremovethiscoslo@adelphia.net> wrote in message
news:T6mdnfMPX48Fx-PfRVn-uQ@adelphia.com...
| John Smith wrote:
| > gb:
| >
| > Well, we certainly need to examine the "bottle neck" and remove it...
before
| > we are doomed...
| >
| > If we can't institute this "radical" idea here, we need to look at
Canada,
| > Mexico, So. America, China, India, etc...
| >
| > When there are as many functional radios (or "cards") hitting the
dumpster
| > as there are functional computers and related equip. (replaced with
| > upgrades) we will know the right idea has prevailed and radio has come
| > home...
|
| I hope you are kidding, John. That is the absolutely worst part of the
| PC paradigm. Thousands of perfectly good electronics thrown out, often

| made obsolete due to software that is bloated and poorly written (mostly
| OS software. At least old radios are still useable
|
| > I would think there must be some EXCELLENT argument/reasoning serving as
a
| > road block, or else, others are simply going to pass us by...
|
| The PC paradigm is a poor one, and not to be emulated. PC's will
| finally be mature when we don't have to replace them on almost a yearly
| basis. At that point, software writers will be able to write good
software.
|
| - Mike KB3EIA -

2351. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 20:45:42 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <TTufe.4596$Ei.2500648@news.sisna.com>
Source record: 19132
Body handling: HTML body converted to readable text

I can get a TV card for my computer, I can get software to make my computer
a cd/dvd player, I can get hardware/software to replace my stereo,
etc...--I, along with the rest of the world, have not gone this route
yet--perhaps in the future... I am open to this...

Warmest regards,
John
--
When Viagra fails to work--you are DOOMED!!!

"Mike Coslo" wrote in message
news:XMWdnRb4Hra_yuPfRVn-uA@adelphia.com...
| John Smith wrote:
| > Decades have brought us moon landing, mars landings,masers, lasers,
lets,
| > fets, mosfets, computers, etc...
| >
| > But the shape of radio equip. has remained virtually stagnant.
| >
| > One "innovation" would be to just copy what the IBM clone has taught us.
| >
| > Build a radio of "cards." Just like the computer, a standard case which
you
| > can plugin various power supplies, frontend board "cards", intermediate
| > board "cards", buffer amp board "cards", IF board "cards", audio board
| > "cards", xmitter board "cards", final amp board "cards", etc.... you get the pic>
| >
| > One radio case can/could virtually be any radio you can imagine.... new
| > design in a frontend? Plug in a new front end "card", new audio
offering?
| > Plug in a new audio board "card."
| >
| > Someone really should get off a dead duff somewhere and DO IT!!!!
| >
| > Kinda makes ya wonder why not? Doesn't it?
|
| You can get a software defined radio. Front end, and pipe it into your
| computer, and there ya go! Ten Tec also manufactured the Pegasus a few
| years back, close to what you are thinking of.
|
| Personally, I don't think that the PC computer paradigm is any way to
| go. It's just how PC's evolved. Despite years of progress, plug and play
| is not universal, and just another PC promise.
|

| - Mike KB3EIA -

2352. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 20:45:52 UTC
From: dplatt@radagast.org
Message-ID: <117suk09nregj11@corp.supernews.com>
Source record: 19131

In article <9hufe.4117$1g.2468959@news.sisna.com>,
John Smith <assemblywizard@gmail.com> wrote:

>Hmmm, I thought it "right in line."
>
>If such equip. was adopted, then just as with computers, you could
>buy/cut/etch a "card" with the expectation it could be inserted right into
>the bus of that radio and function, taking on responsibilities--for say an
>audio amp (just as that EXACT capability exists with a computer bus)....
>
>Indeed, this idea does NOT bypass homebrewers, it encourages them and
>provides them MUCH more opportunity to participate in constructing their own
>equip.... I see it as EMPOWERING homebrewers--far from the opposite!!!

As others have (I think) pointed out, there are some very valid
technical and regulatory problems which might make this approach less
than popular.

Here in the U.S., at least, transmitters in most of the radio services
have to be "certificated" (previously "type accepted") by their
manufacturer, demonstrating that they comply with the operational and
emissions rules for that service. In these services, almost any
physical modification of the radio will invalidate the certification,
and make it technically illegal to use it to transmit. Modifications
which don't violate the certification can only be made by technicians
or organizations with a specific license, and (I believe) may require
a significant amount of re-testing to demonstrate that the radio still
meets the requirements.

The FCC rules don't provide for the arbitrary swapping around of radio
cards in such transmitters.

Also, there's a tradeoff between modularity, and cost/performance.
The more modular a radio (or computer) is, the greater the number of
gozintas and comesoutas (i.e. signal connectors, busses, etc.). These
add cost, they decrease reliability (compared to a soldered
connection), and they limit the degree to which one can take advantage
of increasing degrees of device integration at the chip level.

The highly-modular PC infrastructure has gotten to where it is, in
terms of price and flexibility, because of the extremely large number
of units produced - there's a lot of "economy of scale". This is due
in large part to the fact that consumer, business, and industrial
applications can all use the same architectures. People have also
been extremely eager to take advantage of higher-performance
components and have been willing to accept relatively short product

lifetimes as a result... and this increases the demand for a "change out part of the system and keep the rest" solution which demands modularity.

I don't think that the same environment exists for radios. Commercial and public-safety radios have a long lifetime, they have the need for physical ruggedness which may discourage the use of a "plug-in" architecture with lots of connectors that can shake loose, they're rather cost-sensitive, and for regulatory reasons they probably cannot adopt a "Users may change out components" architecture.

In these radio services, a "You buy it, and it never changes" shrink-wrapped monolithic radio design simply makes more business and economic sense.

Things may become a bit more friendly in this regard, at least for base stations, with the newer "software defined radio" architectures. However, in commercial and business services, the FCC insists that the systems be designed and built in a way which prevents users from making arbitrary changes to the configuration which could violate regulations. One example of this is the Atheros 802.11a/b/c wireless radio cards... their behavior is very strongly defined by their firmware, and the vendor says that they *cannot* release the firmware or low-level drivers in source-code form for fear of violating the FCC's software-radio rules.

Frankly, I think that the amateur radio service is probably one of the few services (and perhaps the only one) in which a general-purpose "radio card plug-in" architecture or system could be generally useful, and the resulting radios would probably be significantly more expensive than monolithic-board or proprietary-bus radios of similar capabilities.

Due to the limited size of this market (compared to business and public safety) I doubt that you'll see the big manufacturers invest the time and money required to develop and promote and market such an architecture. No sense in their doing so. Without the leverage of being able to use the same technology in other radio services, it's be a big investment for no return.

>Indeed, if some were as gifted as all that, they need only buy the case and
>some foil boards/components--when they emerged from the basement--I'd expect
>to see a radio of their OWN design in their hands!!!

And there, I think, you've defined the only market to which such an architecture would be strongly attractive - hobbyists.

There might be enough of a community there to support the development of such an architecture, just as there are communities supporting the GNU software radio, the RockMite, and other specialized radios.

Feel free to propose a design, John Smith! If it's as overwhelmingly good an idea as you seem to think, maybe it'll take over the world by

storm!

In short, John, I don't think it's fair to say that there has been "no progress". Rather, I'd say that things haven't gone in the direction you suggest, because your solution is one which solves a problem which most people don't feel is worth solving, and comes with a cost that most people don't care to pay.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

2353. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 20:48:31 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <BXufe.4649$QT7.2332816@news.sisna.com>
Source record: 19135

Is it "open source" and do they encourage others to innovate off their
platform, if not, totally different idea then what I present/envision...
can you buy just a case and basic powersupply?

Warmest regards,
John
--
When Viagra fails to work--you are DOOMED!!!

"Pipex News Server" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:d8Cdndjcc9YX_OPfRVnyiw@pipex.net...
|> You can get a software defined radio. Front end, and pipe it into your
| > computer, and there ya go! Ten Tec also manufactured the Pegasus a few
| > years back, close to what you are thinking of.
| ========================
| The Ten Tec Pegasus is very much alive . It is now called Jupiter (the
| Pegasus with 'knobbed' front panel and a display and a nice enclosure like
| other traditionally looking radios)
|
| Frank GM0CSZ / KN6WH
|
|

2354. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 21:05:32 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <tavfe.4863$Js.2517045@news.sisna.com>
Source record: 19133

Well, things have not gone as one would expect...
And, they may well be due to rules, regulations, and mindsets... and,
specifically, ones generated from an "American mindset."
Now, there is the "rest of the world" as we move to "globalization" these
ideas here will hardly set the course--I have afraid our part will be more
of passenger, as opposed to a captain... the best I can see is, using our
"paddle" we are able to affect a slight course change in our favor...

If one of your arguments is, don't propose any ideas until you have a
complete working design--I see that as more an answer to my original
observation... progress remains slow-to-halted, that simply being one of
the contributing factors...

If you seek to give a list of "why it can't work", that is helpful, but,
bear in mind, I was looking more for a list of "why it can."

Warmest regards,
John
--
When Viagra fails to work--you are DOOMED!!!

"Dave Platt" <dplatt@radagast.org> wrote in message
news:117suk09nregj11@corp.supernews.com...
| In article <9hufe.4117$1g.2468959@news.sisna.com>,
| John Smith <assemblywizard@gmail.com> wrote:
|
| >Hmmm, I thought it "right in line."
| >
| >If such equip. was adopted, then just as with computers, you could
| >buy/cut/etch a "card" with the expectation it could be inserted right
into
| >the bus of that radio and function, taking on responsibilities--for say
an
| >audio amp (just as that EXACT capability exists with a computer bus)....
| >
| >Indeed, this idea does NOT bypass homebrewers, it encourages them and
| >provides them MUCH more opportunity to participate in constructing their
own
| >equip.... I see it as EMPOWERING homebrewers--far from the opposite!!!
|
| As others have (I think) pointed out, there are some very valid
| technical and regulatory problems which might make this approach less
| than popular.
|
| Here in the U.S., at least, transmitters in most of the radio services

| have to be "certificated" (previously "type accepted") by their
| manufacturer, demonstrating that they comply with the operational and
| emissions rules for that service. In these services, almost any
| physical modification of the radio will invalidate the certification,
| and make it technically illegal to use it to transmit. Modifications
| which don't violate the certification can only be made by technicians
| or organizations with a specific license, and (I believe) may require
| a significant amount of re-testing to demonstrate that the radio still
| meets the requirements.
|
| The FCC rules don't provide for the arbitrary swapping around of radio
| cards in such transmitters.
|
| Also, there's a tradeoff between modularity, and cost/performance.
| The more modular a radio (or computer) is, the greater the number of
| gozintas and comesoutas (i.e. signal connectors, busses, etc.). These
| add cost, they decrease reliability (compared to a soldered
| connection), and they limit the degree to which one can take advantage
| of increasing degrees of device integration at the chip level.
|
| The highly-modular PC infrastructure has gotten to where it is, in
| terms of price and flexibility, because of the extremely large number
| of units produced - there's a lot of "economy of scale". This is due
| in large part to the fact that consumer, business, and industrial
| applications can all use the same architectures. People have also
| been extremely eager to take advantage of higher-performance
| components and have been willing to accept relatively short product
| lifetimes as a result... and this increases the demand for a "change
| out part of the system and keep the rest" solution which demands
| modularity.
|
| I don't think that the same environment exists for radios. Commercial
| and public-safety radios have a long lifetime, they have the need for
| physical ruggedness which may discourage the use of a "plug-in"
| architecture with lots of connectors that can shake loose, they're
| rather cost-sensitive, and for regulatory reasons they probably cannot
| adopt a "Users may change out components" architecture.
|
| In these radio services, a "You buy it, and it never changes"
| shrink-wrapped monolithic radio design simply makes more business and
| economic sense.
|
| Things may become a bit more friendly in this regard, at least for
| base stations, with the newer "software defined radio" architectures.
| However, in commercial and business services, the FCC insists that the
| systems be designed and built in a way which prevents users from
| making arbitrary changes to the configuration which could violate
| regulations. One example of this is the Atheros 802.11a/b/c wireless
| radio cards... their behavior is very strongly defined by their
| firmware, and the vendor says that they *cannot* release the firmware

| or low-level drivers in source-code form for fear of violating the
| FCC's software-radio rules.
|
| Frankly, I think that the amateur radio service is probably one of the
| few services (and perhaps the only one) in which a general-purpose
| "radio card plug-in" architecture or system could be generally useful,
| and the resulting radios would probably be significantly more
| expensive than monolithic-board or proprietary-bus radios of similar
| capabilities.
|
| Due to the limited size of this market (compared to business and
| public safety) I doubt that you'll see the big manufacturers invest
| the time and money required to develop and promote and market such an
| architecture. No sense in their doing so. Without the leverage of
| being able to use the same technology in other radio services, it's be
| a big investment for no return.
|
| >Indeed, if some were as gifted as all that, they need only buy the case
and
| >some foil boards/components--when they emerged from the basement--I'd
expect
| >to see a radio of their OWN design in their hands!!!
|
| And there, I think, you've defined the only market to which such an
| architecture would be strongly attractive - hobbyists.
|
| There might be enough of a community there to support the development
| of such an architecture, just as there are communities supporting the
| GNU software radio, the RockMite, and other specialized radios.
|
| Feel free to propose a design, John Smith! If it's as overwhelmingly
| good an idea as you seem to think, maybe it'll take over the world by
| storm!
|
| In short, John, I don't think it's fair to say that there has been "no
| progress". Rather, I'd say that things haven't gone in the direction
| you suggest, because your solution is one which solves a problem which
| most people don't feel is worth solving, and comes with a cost that
| most people don't care to pay.
|
| --
| Dave Platt <dplatt@radagast.org> AE6EO
| Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
| I do _not_ wish to receive unsolicited commercial email, and I will
| boycott any company which has the gall to send me such ads!

2355. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 21:45:26 UTC
From: -exray- <exray@coqui.net>
Message-ID: <117t23s4se93jec@corp.supernews.com>
Source record: 19137

John Smith wrote:

> However, the very vocal ones--I am always left wondering if they really are
> remarking about filtering their own content--or their wish to filter the
> content of others (and, for what purpose would they do this?)... if that
> goes on too far (controlling others), yanno, it leads to attempted thought
> control-

I don't know you "Mr. Smith" or have any bone to pick with you but I use filters to avoid what I find as either offensive or provocative. I invoke enough cat-fights of my own on Usenet and don't need to be drawn into others. Some posters have a tendency to attract fire, and I have a weakness to jump in sometimes. I'd really rather just avoid it. My sanity and blood-pressure will be the better. So, thats why I filter out the provocateurs if I feel that strongly.

My filters don't prevent anyone from saying what they want to say. But historically, some posters can be counted upon to say what I'd rather not have to read and wind up being diverted from the topic or grappling to bite my tongue, etc. Its easier just to filter them away. Call me Ostrich-Man. Its my means of finding satisfaction with Usenet.

For my part, feel free to choose to speak. And respect my freedom to choose whether or not to listen.

-Bill M

2356. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 22:15:17 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <Sbwfe.5785$vP1.2810937@news.sisna.com>
Source record: 19140

Ohhh, well, you are correct. I am rather blind to "politics" and come from areas where new thought, conversation--indeed, even argument and debate are encouraged and viewed as "good things."

While not attempting to invoke "havoc", "discord" and "chaos", I view the manner in which topics are handled as being the deciding factor--foul language, character assassinations and promoting outwardly dangerous evils which threaten the moral fabric of society are as disgusting to me as the next guy...

If the material is just gauged on whether it provokes debate, argument and thought--and if the measure of this is simply how many posts are invoked as responses--with the desirable number set as one or NONE--then further delays in progress should be expected...

A silent discussion is beneficial to no one... and certainly don't view such as desirable!

Warmest regards,
John
--
When Viagra fails to work--you are DOOMED!!!

"-exray-" <exray@coqui.net> wrote in message
news:117t23s4se93jec@corp.supernews.com...
| John Smith wrote:
|
|
| > However, the very vocal ones--I am always left wondering if they really
are
| > remarking about filtering their own content--or their wish to filter the
| > content of others (and, for what purpose would they do this?)... if
that
| > goes on too far (controlling others), yanno, it leads to attempted
thought
| > control-
|
| I don't know you "Mr. Smith" or have any bone to pick with you but I use
| filters to avoid what I find as either offensive or provocative.
| I invoke enough cat-fights of my own on Usenet and don't need to be
| drawn into others. Some posters have a tendency to attract fire, and I
| have a weakness to jump in sometimes. I'd really rather just avoid it.
| My sanity and blood-pressure will be the better. So, thats why I
| filter out the provocateurs if I feel that strongly.
|
| My filters don't prevent anyone from saying what they want to say. But

| historically, some posters can be counted upon to say what I'd rather
| not have to read and wind up being diverted from the topic or grappling
| to bite my tongue, etc. Its easier just to filter them away. Call me
| Ostrich-Man. Its my means of finding satisfaction with Usenet.
|
| For my part, feel free to choose to speak. And respect my freedom to
| choose whether or not to listen.
|
| -Bill M

2357. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 23:28:52 UTC
From: Mike Coslo <mremovethiscoslo@adelphia.net>
Message-ID: <tN-dnYdsWv4tPePfRVn-2Q@adelphia.com>
Source record: 19139

Roy Lewallen wrote:
> Mike Coslo wrote:
>
>>
>> Yoiks, Roy! That was a little caustic wasn't it?
>>
>> - Mike KB3EIA -
>
>
> I do tend to be that way. And because of the couple of negative comments
> about my posting I've thought it over a fair amount to see if, on
> reflection, I think it was out of line.
>
> But I don't think so, unless I mininterpreted what "John Smith" said.
> What he seemed to be saying is that he has this great idea, and the only
> reason it's not being impelemented is that *the other people* are too
> lazy to do it.

wellllll, I think there is another reason that it hasn't been
implemented. It is one of those ideas that sound kinda good, but would
end up creating more problems than it would solve.

> As one of the "other people", I find it kind of insulting. Do you really
> think his is a valid point of view, that everyone else should jump up
> and implement his great idea, while this anonymous person's job is to
> tell us what we should do?

I dunno. In my fields I get a *lot* of commentary and
suggestions-sometimes things I've tried long ago and discarded because
they simply don't work, or is talking about.

Which reminds me of a story about FDR....

During WWII, FDR had an important meeting with Stalin. Eleanor
Roosevelt often sat in on these meetings. Stalin Told FDR "It is of
vital importance that America increase aid to Russia, and decrease aid
to Great Britain. It is with us that the most important battles are
being fought."

FDR stroked his chin thoughtfully and said, "Josef, you're absolutely
right!"

An hour later, Winston Churchill also had a meeting with FDR. Churchill
noted, " It is imperative that aid to Britain be increased, even if you
have to reduce aid to Stalin. Our front is the most critical of the war".

FDR took a drag from his famous cigarette in its holder, and said, "Winston, you're absolutely right!"

After Churchill left, Eleanor came over to him in a huff. "Franklin, those two men came to you with exact opposite demands, and you just told them both "You're absolutely right." That's wrong!"

FDR looked at her, smiled, and said, "Eleanor, you're absolutely right!"

Point is I could get irritated and angry with them, but there isn't much point.

> I really do think that a caustic comment was appropriate.

You're absolutely right! 8^)

Just kidding Roy!!!!!

I was just a little surprised, because it seemed out of character. No big deal

- Mike KB3EIA -

2358. Re: Progress is dependent upon us ...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-08 23:54:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <NExfe.7101$HT1.2822266@news.sisna.com>
Source record: 19141

gb:

Now, here you have a key. The youthful number in any group define its' likely-hood of survival... it will be "they" who free us from strangle-holds and limits now imposed...

It will be the vast numbers of youth who end up defining the real future... without youth--we are all DOOMED (Viagra won't even help!!! <grin>)

Me? I would like to think, "I am just a guy." In a generic sense, a "John Smith" of society...

Long time ago I was a boy scout leader, still teach an evening CS course at a Jr. college (but, have been at odds with admin., my department head, I think the kids like me (most important--and they are ok...), most women ditch other instructors/professors to take my course(s)--I like the idea of them in the field)... many "older" students in my class... this year it is Java (yuck)...

... work digital encryption/decryption methods/implementations here, just to keep out of the unemployment line...

...my first computer was a mainframe, my first desktop an apple--I recognized a "better idea" (IBM) when it came along... trust me, I am a "geeky type"...

I set up a network in my garage so I could keep up with youth and remember mine, but now I have little to offer them, they keep the net and it has inspired some into the field...

Everyone is aware of my fondness of radio, and I do make known what is available here--but placed besides IM and internet communications--radio is a pale color to the net...

I am best at surfing the net, email and newsgroups for "entertainment/hobby pursuits"... I tinker, now and then with antennas...

... sorry to bore you... I really am as interesting as a rock!

Warmest regards,
John
--
When Viagra fails to work--you are DOOMED!!!

"gb" <onw9mapsgb@no.arrl.spam.net> wrote in message
news:sLCdnXQ8TfL57OPfRVn-iA@comcast.com...
| "John Smith" <assemblywizard@gmail.com> wrote in message
| news:wwqfe.1233$_j4.1602702@news.sisna.com...

| > gb:
| >
| > Well, we certainly need to examine the "bottle neck" and remove it...
| > before
| > we are doomed...
| >
| > If we can't institute this "radical" idea here, we need to look at
Canada,
| > Mexico, So. America, China, India, etc...
| >
| JS -
|
| "... before we are all doomed". The only way doom happens is if you don't
| do your part in averting that projection. Or are you saying the future is
| hopeless?
|
| So, what are you doing to be part of the "solution" rather than being the
| "profit of bad things to come?"
|
| How many hours over the past year have you worked with middle or high
| schools students volunteering your time? Donating materials, time or
money
| for educational programs targeted for the audience that will make a
| difference?
|
| As George S. Kaufman wrote about money and knowledge in the 1930s - "You
| Can't Take it with You".
|
| gb
|
|

2359. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 00:23:44 UTC
From: -exray- <exray@coqui.net>
Message-ID: <117tbckdt72le40@corp.supernews.com>
Source record: 19142

John Smith wrote:

> Ohhh, well, you are correct.

Of course I am. I simply expressed an opinion of mine :)

> While not attempting to invoke "havoc", "discord" and "chaos", I view the
> manner in which topics are handled as being the deciding factor--foul
> language, character assassinations and promoting outwardly dangerous evils
> which threaten the moral fabric of society are as disgusting to me as the
> next guy...

And you are also correct on this aspect.

>
> If the material is just gauged on whether it provokes debate, argument and
> thought--and if the measure of this is simply how many posts are invoked as
> responses--with the desirable number set as one or NONE--then further delays
> in progress should be expected...

I don't think anybody filters because of this. If the presenter of such
debate has a reputation as in your first example...all bets are off.
That is for me to imply that mud-slinging, name-calling, goading or any
wild-eyed radical or raffish behaviour, in spite of the best intentions
of the poster, will cause his occasional good points to be overwhelmed
by the cacophony of kill-filters at work.

-Bill

2360. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 00:36:19 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <2gyfe.7657$0O5.3069086@news.sisna.com>
Source record: 19143

Bill:

Sounds like we have equal values, or close enough. I joke a lot, but do have a serious side...

I have been out of line and called upon it--and if my actions are of questionable nature--that can be put forward... I do all of this as a hobby... a guy wants to have a bit of fun... I make mistakes--too frequently...

But, I realize I have opinions not shared by all, and the opposite is true... if you can't say what you think/see/feel then what good is life in America...

Thanks for your input, never hurts for a guy to examine what he is about... I will keep your comments in mind... they are well taken here...

Warmest regards,
John
--
When Viagra fails to work--you are DOOMED!!!

"-exray-" <exray@coqui.net> wrote in message news:117tbckdt72le40@corp.supernews.com...
| John Smith wrote:
|
| > Ohhh, well, you are correct.
|
| Of course I am. I simply expressed an opinion of mine :)
|
| > While not attempting to invoke "havoc", "discord" and "chaos", I view the
| > manner in which topics are handled as being the deciding factor--foul
| > language, character assassinations and promoting outwardly dangerous evils
| > which threaten the moral fabric of society are as disgusting to me as the
| > next guy...
|
| And you are also correct on this aspect.
|
| >
| > If the material is just gauged on whether it provokes debate, argument and
| > thought--and if the measure of this is simply how many posts are invoked as

```
| > responses--with the desirable number set as one or NONE--then further
delays
| > in progress should be expected...
|
| I don't think anybody filters because of this. If the presenter of such
| debate has a reputation as in your first example...all bets are off.
| That is for me to imply that mud-slinging, name-calling, goading or any
| wild-eyed radical or raffish behaviour, in spite of the best intentions
| of the poster, will cause his occasional good points to be overwhelmed
| by the cacophony of kill-filters at work.
|
| -Bill
```

2361. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 03:20:40 UTC
From: -exray- <exray@coqui.net>
Message-ID: <117tloc95n9gr1a@corp.supernews.com>
Source record: 19144

Well, fwiw you aren't kill-filed at my end. I'm not opposed to a bit of
push and shove on the internet. That comes about as naturally as having
a cup of joe with guys at a radio meet and enjoying some horsing around.
If I took the internet community toilet seriously I might wind up like this.

http://publications.mediapost.com/index.cfm?fuseaction=Articles.showArticleHomePage&art_aid=29415

-Bill

2362. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 03:56:50 UTC
From: LenAnderson@ieee.org
Message-ID: <1115611010.036029.120270@z14g2000cwz.googlegroups.com>
Source record: 19145

From: "John Smith" on Sun,May 8 2005 1:39 pm

>Exactly my point....
>
>We break into two groups of thought here...

...which seems to be YOUR whole point... :-)

>Halt at this point, and lay all plans on that halting (and, if ALL the

>others don't agree--be bypassed anyway)...

Nihilism. Tsk, tsk...

>Or, stay with the pack, realizing if that day ever comes (technology
ceases
>to innovate/obsolete)--we will regret it...

What "pack?" What "regrets?" What "ceasing?!?"

>Progress, obsolete equip., is the most desirable thing I can imagine!
It is
>a given, not all will agree... Indeed, at 52 years of age, my place
in the
>"scope of the world" is becomming smaller--it only gets worse from now
on--I
>am not ready to quit and attempt to force others to that "quitting"
with
>me...

Tsk. Then your card doesn't seem to be plugged in to
the right slot. I have 20 years on you and began in
HF radio communications 52 years ago. What you have to
understand is that EVERYTHING can be made "obsolete"
in the marketplace...HF is NOT used nearly as much for
communications now as back a half century ago. So, you
are "suddenly realizing" your "place in the world" is
getting smaller? Pass me your TS card and I'll punch it.

>When the "Dick Tracy Wrist Radio" is finally designed and
>implemented--perhaps there will be a "death of homebrewers" (I myself
am NOT
>much of a 'watchbuilder')--but until then we can have fun!

I'm wearing one right now. Made by La Crosse. Cost all
of $30 with shipping. "Tunes in" every night to WWVB
and sets itself to the correct time from a kilomile away,
even adjusts for Daylight Savings time. <shrug>

I'm not sure what everyone is talking about in this thread but, like Roy and a few others, I've seen some innovative (and sometimes inventive) work in the many and various disciplines of "radio" and electronics in the past half century.

You want "modularity" a la a PC? WHY?!? Because it is "familiar?" Because it is "cheap?" Here's a clue: This newsgroup is NOT a "production design and marketing newsgroup." It isn't a political science discussion place to whine and moan over some middle-aged anguish angst attack.

MODULARITY has been going ON in electronics ALL OVER since the designers stopped trying to use transistors as if they were vacuum tubes. I have a nicely working Icom R-70. It is VERY modular, built NOTHING like what a PC is, NOR SHOULD IT BE. A cast frame and cover that has a rectangular box form...for convenience on a desk ...but everything inside is MODULAR, grouped to take different boards for different models, different functions. Those MODULES are mostly soldered together, those MODULES "sitting" in unlikely positions within that box. I have another receiver, a National NC-57, all tubes, all boat-anchor, purchased in 1948 with my own money (about $95) and it works, to be polite, like BADLY in comparison.

Icom has done the MODULAR thing, so has Yaesu, and Kenwood, and Collins Radio, and even Heathkit. All did it DIFFERENTLY than any IBM-clone PC. I think ALL the "radio" makers have done things differently AND done the MODULARLY...even those that had only ONE module.

On the other hand, I'm typing away at a "slow" PC which has a processor chugging away at 2.4 GIGAHertz with memory access rates up in the 100 MEGAHertz range. Now, from what I've learned and experienced, such frequencies ARE RADIO. With newer PCs the memory access rates go above 200 MHz...and the generated RFI is LESS than my first "powerful" PC with a 20 MHz clock. Why? Better IC transistor junctions taking LESS operating power. MUCH LESS. Less power in those state transitions, ergo less radiated stray RF. Three thousand cheers for that! I'm looking at an LCD flat screen monitor which is far better to watch than the old CRT "monitor" and has much less RFI than that CRT.

I passed 52 some time ago, had maybe 15 minutes of middle-age angst/worry/regret/etc., shrugged my shoulders and carried on. There's way TOO MUCH delight and wonder of all the new things coming out, the wonderful new (some marvelous improvements on the old) components, fantastic circuit and system simulation for

"breadboard" trials, all sorts of SOC (systems on a chip) by mail-order from dozens of vendors. It's a marvelous fairyland chock full of goodies to use in all kinds of hobby construction in new and different ways. Why sit around and contemplate radio navels and make noises of badness or arouse controversy to get your anonymous name "known" in a newsgroup?

A very long time ago I learned a truism: Electrons, fields, and waves don't give a @#$%!!! what humans think/feel/emote-about. They work by THEIR laws, NOT by some emotional advertising copy or glossy looking shelf items nor by the "reviews" in hobby publications nor by all the cussing at them by builders who don't know what they should be doing.

Having said that, I'm going to continue putting together an EPROM burner so that I can complete a MODULAR SW BC receiver that is single-conversion with a 21.4 MHz crystal-filtered IF and has a PLL for the LO. "Auto-bandswitching" just for those SW BC bands yet the LO tuning range is continuous. It's in a little BOX made of double-sided PCB stock, 4" x 8" x 8" in size. Not one microprocessor in it...done that way on purpose. Could have been done a decade ago with nearly the same parts.

There's PROGRESS all over the place. If one keeps one's eyes open. <shrug>

LenAnderson@ieee.org

2363. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 04:20:28 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <427EE504.728123EC@earthlink.net>
Source record: 19146

John Smith wrote:
>
> Well, things have not gone as one would expect...
> And, they may well be due to rules, regulations, and mindsets... and,
> specifically, ones generated from an "American mindset."
> Now, there is the "rest of the world" as we move to "globalization" these
> ideas here will hardly set the course--I have afraid our part will be more
> of passenger, as opposed to a captain... the best I can see is, using our
> "paddle" we are able to affect a slight course change in our favor...
>
> If one of your arguments is, don't propose any ideas until you have a
> complete working design--I see that as more an answer to my original
> observation... progress remains slow-to-halted, that simply being one of
> the contributing factors...
>
> If you seek to give a list of "why it can't work", that is helpful, but,
> bear in mind, I was looking more for a list of "why it can."
>
> Warmest regards,
> John

Microdyne (L-3Com) made telemetry receivers that plugged into EISA,
PCI and VME busses. They were very expensive due to the problems of
shielding the modules and having a wad of miniature coax cables and
connectors running between sections. The RCB-2000 (VME based) system
was $80,000. You got that kind of money laying around?

What happens when you have compatibility problems between third party
modules, or need support for a board and the company is out of
business? Who do you expect to put up the money to develop the first
units? Do you think the prototype will work so well that you can ship
it? How many man-years of development do you want to pay for? How many
do you expect to sell? What happens when they change the buss type or
speed, again? Have you ever done any PC or commercial RF design?

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

2364. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 04:33:22 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <nKBfe.10848$jP.4746362@news.sisna.com>
Source record: 19001

Yes, the young deserve a better future--one only has to hear the past to be reminded of that...

Cheaper is better? Yes and no. If it means a superior product and more affordable and provides the means of putting more radios into more hands--yes, quite an improvement I would say...

"Planned obsolescence", well, that is one way to look at it--the car replacing the horse and buggy is another....

Or, you mean we have the technology right now to build and market the processor we will be using in 10 years? 5 years? 3 years? I think not--this world is changing much faster than just a decade ago, before this year has ended--faster yet....

Somehow, the point is being missed, providing such a platform "empowers" many more minds to contribute... that is really what the IBM clone and standard case/power supply did--otherwise, there was/is the Mac... ten years ago I used a 486-100 Mhz, the Pentiums were still pretty new and I had not upgraded yet, today a 3+ Ghz machine--I think you give "them" far too much credit if you think that was "planned obsolescence", however, the faster machine was indeed planned...

If your argument is that I can open the case of my transceiver and start hacking away--well, I guess I could--but, much better if it were designed so that the changes were not permanent, could be revoked, or could be changed again, and back, and quickly...

But, I do keep getting a clearer and clearer answer to why there has been no progress...

How many here are younger than I? Younger than 40? Younger than 30? Younger than 20? How many here ask "Why not?" as opposed to "Why?" Etc...

You know, such an idea is NOT revolutionary, did you notice I really mocked "innovation" in the first reference?... it isn't innovation really, it is leaving the stone age after watching others drive by in cars, for years!

This article, over a year old even makes note of similar views...
http://www.arrl.org/news/stories/2004/05/17/1/?nc=1

What do the younger guys here think? Or, has he already spoken?

Regards,
John

--
When Viagra fails to work--you are DOOMED!!!

<LenAnderson@ieee.org> wrote in message
news:1115611010.036029.120270@z14g2000cwz.googlegroups.com...
| From: "John Smith" on Sun,May 8 2005 1:39 pm
|
| >Exactly my point....
| >
| >We break into two groups of thought here...
|
| ...which seems to be YOUR whole point... :-)
|
| >Halt at this point, and lay all plans on that halting (and, if ALL the
|
| >others don't agree--be bypassed anyway)...
|
| Nihilism. Tsk, tsk...
|
| >Or, stay with the pack, realizing if that day ever comes (technology
| ceases
| >to innovate/obsolete)--we will regret it...
|
| What "pack?" What "regrets?" What "ceasing?!?"
|
| >Progress, obsolete equip., is the most desirable thing I can imagine!
| It is
| >a given, not all will agree... Indeed, at 52 years of age, my place
| in the
| >"scope of the world" is becomming smaller--it only gets worse from now
| on--I
| >am not ready to quit and attempt to force others to that "quitting"
| with
| >me...
|
| Tsk. Then your card doesn't seem to be plugged in to
| the right slot. I have 20 years on you and began in
| HF radio communications 52 years ago. What you have to
| understand is that EVERYTHING can be made "obsolete"
| in the marketplace...HF is NOT used nearly as much for
| communications now as back a half century ago. So, you
| are "suddenly realizing" your "place in the world" is
| getting smaller? Pass me your TS card and I'll punch it.
|
| >When the "Dick Tracy Wrist Radio" is finally designed and
| >implemented--perhaps there will be a "death of homebrewers" (I myself
| am NOT
| >much of a 'watchbuilder')--but until then we can have fun!
|
| I'm wearing one right now. Made by La Crosse. Cost all
| of $30 with shipping. "Tunes in" every night to WWVB

| and sets itself to the correct time from a kilomile away,
| even adjusts for Daylight Savings time. <shrug>
|
| I'm not sure what everyone is talking about in this thread
| but, like Roy and a few others, I've seen some innovative
| (and sometimes inventive) work in the many and various
| disciplines of "radio" and electronics in the past half
| century.
|
| You want "modularity" a la a PC? WHY?!? Because it is
| "familiar?" Because it is "cheap?" Here's a clue: This
| newsgroup is NOT a "production design and marketing
| newsgroup." It isn't a political science discussion
| place to whine and moan over some middle-aged anguish
| angst attack.
|
| MODULARITY has been going ON in electronics ALL OVER
| since the designers stopped trying to use transistors as
| if they were vacuum tubes. I have a nicely working Icom
| R-70. It is VERY modular, built NOTHING like what a PC
| is, NOR SHOULD IT BE. A cast frame and cover that has
| a rectangular box form...for convenience on a desk ...but
| everything inside is MODULAR, grouped to take different
| boards for different models, different functions. Those
| MODULES are mostly soldered together, those MODULES
| "sitting" in unlikely positions within that box. I have
| another receiver, a National NC-57, all tubes, all boat-
| anchor, purchased in 1948 with my own money (about $95)
| and it works, to be polite, like BADLY in comparison.
|
| Icom has done the MODULAR thing, so has Yaesu, and
| Kenwood, and Collins Radio, and even Heathkit. All did
| it DIFFERENTLY than any IBM-clone PC. I think ALL the
| "radio" makers have done things differently AND done
| the MODULARLY...even those that had only ONE module.
|
| On the other hand, I'm typing away at a "slow" PC which
| has a processor chugging away at 2.4 GIGAHertz with
| memory access rates up in the 100 MEGAHertz range. Now,
| from what I've learned and experienced, such frequencies
| ARE RADIO. With newer PCs the memory access rates go
| above 200 MHz...and the generated RFI is LESS than my
| first "powerful" PC with a 20 MHz clock. Why? Better
| IC transistor junctions taking LESS operating power.
| MUCH LESS. Less power in those state transitions, ergo
| less radiated stray RF. Three thousand cheers for that!
| I'm looking at an LCD flat screen monitor which is far
| better to watch than the old CRT "monitor" and has much
| less RFI than that CRT.
|

| I passed 52 some time ago, had maybe 15 minutes of
| middle-age angst/worry/regret/etc., shrugged my
| shoulders and carried on. There's way TOO MUCH delight
| and wonder of all the new things coming out, the
| wonderful new (some marvelous improvements on the old)
| components, fantastic circuit and system simulation for
| "breadboard" trials, all sorts of SOC (systems on a
| chip) by mail-order from dozens of vendors. It's a
| marvelous fairyland chock full of goodies to use in
| all kinds of hobby construction in new and different
| ways. Why sit around and contemplate radio navels
| and make noises of badness or arouse controversy to
| get your anonymous name "known" in a newsgroup?
|
| A very long time ago I learned a truism: Electrons,
| fields, and waves don't give a @#$%!!! what humans
| think/feel/emote-about. They work by THEIR laws,
| NOT by some emotional advertising copy or glossy
| looking shelf items nor by the "reviews" in hobby
| publications nor by all the cussing at them by
| builders who don't know what they should be doing.
|
| Having said that, I'm going to continue putting
| together an EPROM burner so that I can complete a
| MODULAR SW BC receiver that is single-conversion
| with a 21.4 MHz crystal-filtered IF and has a PLL
| for the LO. "Auto-bandswitching" just for those
| SW BC bands yet the LO tuning range is continuous.
| It's in a little BOX made of double-sided PCB
| stock, 4" x 8" x 8" in size. Not one microprocessor
| in it...done that way on purpose. Could have been
| done a decade ago with nearly the same parts.
|
| There's PROGRESS all over the place. If one keeps
| one's eyes open. <shrug>
|
| LenAnderson@ieee.org
|

2365. Re: Progress is dependent upon us ...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 04:34:05 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <427EE835.BE8E8875@earthlink.net>
Source record: 19147

gb wrote:
>
> How many hours over the past year have you worked with middle or high
> schools students volunteering your time? Donating materials, time or money
> for educational programs targeted for the audience that will make a
> difference?

I was a volunteer advisor for the Lake county Florida Vo-Tec
electronics program, till it was shut down. Right now I am trying to
find the money to finish repairs to my four car garage and convert it
into a 1200 sq ft electronics shop to teach basic electronics to the
kids who are still interested. Its not easy when you're 100% disabled
and living on a tiny pension, but I don't give up too easy.

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

2366. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 04:37:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <kOBfe.10905$3K.4704402@news.sisna.com>
Source record: 18998

You miss the point, I expect the cards to cover the planet... our present way of thinking enslaves us to "our beloved componet" or, "our beloved manufacturer", time for a change...

I suspect, in the future problems will arise and be delt with--just recently I had to do a "kludge" and replace a 6cw4 with a fet... who knows what "fixes" will be forced on those of the future...

Warmest regards,
John
--
When Viagra fails to work--you are DOOMED!!!

"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message news:427EE504.728123EC@earthlink.net...
| John Smith wrote:
| >
| > Well, things have not gone as one would expect...
| > And, they may well be due to rules, regulations, and mindsets... and,
| > specifically, ones generated from an "American mindset."
| > Now, there is the "rest of the world" as we move to "globalization" these
| > ideas here will hardly set the course--I have afraid our part will be more
| > of passenger, as opposed to a captain... the best I can see is, using our
| > "paddle" we are able to affect a slight course change in our favor...
| >
| > If one of your arguments is, don't propose any ideas until you have a
| > complete working design--I see that as more an answer to my original
| > observation... progress remains slow-to-halted, that simply being one of
| > the contributing factors...
| >
| > If you seek to give a list of "why it can't work", that is helpful, but,
| > bear in mind, I was looking more for a list of "why it can."
| >
| > Warmest regards,
| > John
|
|
| Microdyne (L-3Com) made telemetry receivers that plugged into EISA,
| PCI and VME busses. They were very expensive due to the problems of
| shielding the modules and having a wad of miniature coax cables and
| connectors running between sections. The RCB-2000 (VME based) system

| was $80,000. You got that kind of money laying around?
|
| What happens when you have compatibility problems between third party
| modules, or need support for a board and the company is out of
| business? Who do you expect to put up the money to develop the first
| units? Do you think the prototype will work so well that you can ship
| it? How many man-years of development do you want to pay for? How many
| do you expect to sell? What happens when they change the buss type or
| speed, again? Have you ever done any PC or commercial RF design?
|
| --
| Former professional electron wrangler.
|
| Michael A. Terrell
| Central Florida

2367. Re: Progress is dependent upon us ...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 04:40:19 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <PQBfe.10938$ZE.4668553@news.sisna.com>
Source record: 18999

gb:

Nobel pursuit... in my case, I am more self-centered, I like the company
and people around...

Warmest regards,
John
--
When Viagra fails to work--you are DOOMED!!!

"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
news:427EE835.BE8E8875@earthlink.net...
| gb wrote:
| >
| > How many hours over the past year have you worked with middle or high
| > schools students volunteering your time? Donating materials, time or
money
| > for educational programs targeted for the audience that will make a
| > difference?
|
|
| I was a volunteer advisor for the Lake county Florida Vo-Tec
| electronics program, till it was shut down. Right now I am trying to
| find the money to finish repairs to my four car garage and convert it
| into a 1200 sq ft electronics shop to teach basic electronics to the
| kids who are still interested. Its not easy when you're 100% disabled
| and living on a tiny pension, but I don't give up too easy.
|
| --
| Former professional electron wrangler.
|
| Michael A. Terrell
| Central Florida

2368. Re: Progress is dependent upon us ...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 05:30:19 UTC
From: -exray- <exray@coqui.net>
Message-ID: <117ttbgno3dlf63@corp.supernews.com>
Source record: 19000

Michael A. Terrell wrote:

>
> I was a volunteer advisor for the Lake county Florida Vo-Tec
> electronics program, till it was shut down. Right now I am trying to
> find the money to finish repairs to my four car garage and convert it
> into a 1200 sq ft electronics shop to teach basic electronics to the
> kids who are still interested. Its not easy when you're 100% disabled
> and living on a tiny pension, but I don't give up too easy.
>
Good luck with finding money for your garage. Sorry about Vo-tech
shutting down and your your disability and tiny pension.
Was there anything positive you wanted to say?

-Bill

2369. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 06:54:41 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <q3ut71dth75mfje6bd0fmtbi9l4sr5b6cm@4ax.com>
Source record: 19002

On Sun, 08 May 2005 10:44:27 -0700, Tim Wescott
<tim@wescottnospamdesign.com> wrote:

>The basic difference is that with a digital system you either end up
>with a clean signal or a useless signal. In an analog system the
>character and purity of the signal must be carefully guarded, at least
>until you manage to digitize it. This means that there will be a much
>greater chance that adding a new card to the radio will degrade not only
>the function of the new card, but the function of all the other cards.
>
>Second, the PC market is a huge one, with great advantages to be derived
>from common equipment and software, and much smaller advantages to be
>derived from commonality. This is the exact obverse of the radio
>market, including homebrew radios. To make a "card" radio would be to
>define a basic radio architecture, probably down to the IF frequency (or
>at least to the point of forcing you to match your IF and front end).
>While improvements could be made within this structure an independent
>experimenter couldn't play around with such things as direct-conversion,
>different IF schemes, etc., without extensive modification.

I agree that it would be quite hard to make a good quality radio with
some common backplane structure. However, connecting various
functional modules with 50 ohm input and output impedance could be
used to make quite different radios with good specifications. For
instance Mini-Circuits also makes various diode ring mixers,
amplifiers and apparently also VCOs that are boxed and have BNC or SMA
connectors. With each functional module in a metallic enclosure,
controlling the spurious radiation between modules is much easier. I
don't know that anyone would make filter modules, which would be
required to build a complete radio. Also SSB-Electronics sold separate
amplifier, mixer, frequency multiplier and crystal oscillator modules
mainly intended for a 10 GHz transverter.

Unfortunately the cost of these modules is quite high, apparently due
to low production volumes and large amount of manual labour needed to
assemble them. If there would be a large demand for such modules, it
would make sense to design them to require less manual labour to
assemble them and hence get the price to more affordable levels.

While a backplane would not be suitable for running the RF signals, it
would be a good idea to have a common control interface standard. This
might be some sort of serial interface or perhaps a CANbus interface
as used on some AMSAT satellites.

Paul OH3LWR

2370. I cannot pick up WorldSpace satellite anymore !

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 09:45:35 UTC
From: 007 <spion910@my-deja.com>
Message-ID: <1115631935.960171.223120@f14g2000cwb.googlegroups.com>
Source record: 19003

Well not quite correct.

I have not used my receiver(DAR-WS2000) for a while since I can only point at the satellite from my garden and what with the English weather !!

It's tuned to AfriStar.

I tried yesterday and most of the stations I could pick up are now locked. Picked up a Worldspace station asking if I wanted to subscribe ?

Fuck-Off I only listen to RIFF ! I like jazz.

Get people interested and then charge.

I don't suppose there are any hack-codes ?

Anybody want to buy a barely used DAR-WS2000 ?

007

2371. A basic shielding question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 12:45:06 UTC
From: -exray- <exray@coqui.net>
Message-ID: <117umqmc4hbb70@corp.supernews.com>
Source record: 19004

On an example like a simple homebrew 2 tube regen set it is typically recommended to use a metal front panel to "shield" the ckt from hand effects. However, you can still notice some effect by touching the ground/panel.

Would one see any advantage by using double-sided PCB with the two sides not electrically connected?

-Bill

2372. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 13:17:19 UTC
From: Pipex News Server <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <NLqdnYZQus4z_-LfRVnygA@pipex.net>
Source record: 19005

> The fact is that hams, for sure, wouldn't pay all the extra money a well
> designed plug in system would cost. Of course, I might be wrong --
> anyone who thinks so (one particular person comes to mind) should get busy
> designing and developing one. Perhaps there's a fortune to be made.
> Certainly there's a market for a much simpler plug in system with much
> less versatility than the oscilloscope system I described, as a few
> manufacturers have shown. The question is, how far can this be taken
> before the market dries up due to the increased cost?
>
> Roy Lewallen, W7EL
==========

Would a relatively 'low cost ' plug in card system perhaps be possible by using standard PCI (computer) or similar card connections for the 'non RF' connections ,with standard 50 Ohms miniature connectors for all RF connections.
It would mean that all RF card modules would have a standard RF in- and output connector using 'miniature coax'.
It would of course mean that all the card modules involving RF would have a universal 50 Ohms in- and output impedance.
The latter is already promoted by looking at designs in the book 'Experimental Methods in RF Design'

The above referred type of PCI card connections (or any other agreed card standard)could then be standardised with specific 'edge connections' used for 'ground' , +5V , -5V , +12 to15 V ,-12 to 15 V , etc

The above would facilitate home brewing and make it possible to combine home brewed modules with specialised commercial modules. It also would enable testing modules with standardised (impedance wise) test equipment.
Ready made or blank (single or double sided) PCBs would have identical 'card fingers' also those supplied as part of a complete kit.

I feel that the amateur radio community would very much benefit of such a standardised card system.

Although the amateur radio market place is relatively small , with modules physically standardised , there would be an opportunity for a modest 'cottage industry' .

Frank GM0CSZ / KN6WH

2373. Re: A basic shielding question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 13:59:23 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1115647163.398219.65400@z14g2000cwz.googlegroups.com>
Source record: 19006

> [Hand capacitance detuning receiver]
> double-sided PCB with the two sides
> not electrically connected?

My gut feeling is that hand capacitance (maybe tens of pF) is small compared to the capacitance between the two layers of PCB (hundreds of pF) and that the shielding effect would be negligible.

Now, "guard ring" style shielding (as used in high-impedance PCB layout) might be worthwhile, but would be more difficult to implement.

Tim.

2374. RF/Microwave Design Software

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 14:18:01 UTC
From: Microwave Software <mwsoft@cox.net>
Message-ID: <c4su719pcarjjca96gvq2p1aitrsu3h1hn@4ax.com>
Source record: 19007

Professional Tools at Amateur Prices

http://www.microwavesoftware.com/

2375. ceramic transformers ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 14:34:51 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <fyKfe.239$ce6.152@newssvr30.news.prodigy.com>
Source record: 19008

Please see the pdf at:alt.binaries.schematics.electronic dated 5/8 8:08 PM.
Has anyone see this technology used used at RF or IF?
tnx

--

73
Hank WD5JFR

2376. Re: A basic shielding question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 15:04:03 UTC
From: -exray- <exray@coqui.net>
Message-ID: <117uuv74scuqs70@corp.supernews.com>
Source record: 19009

Tim Shoppa wrote:

>>[Hand capacitance detuning receiver]
>>double-sided PCB with the two sides
>>not electrically connected?
>
>
> My gut feeling is that hand capacitance (maybe tens of pF) is small
> compared to the capacitance between the two layers of PCB (hundreds of
> pF) and that the shielding effect would be negligible.

Thanks for the reply. Here's the logic that is making me ponder this.
The capacitance of the PCB would be in 'series' with the hand
capacitance resulting in a lower overall capacitance.

If I plug in numbers like 200pf for the board and 20pf for the hand I
see that the numerical improvement is minimal but I wonder if it can be
expected to work that way?

-Bill

2377. FS Teflon wire at Dayton

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 15:08:15 UTC
From: James Skalski <jskalski@yahoo.com>
Message-ID: <427F44DB.6030704@yahoo.com>
Source record: 19010
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

I will have some Teflon insulated, silver plated stranded 22AWG wire for sale. It is 5 fifty foot rolls (250 feet total)
At least five different colors. The wire is rated at 200C and 600V. Price at Dayton $7 per pack of 250 feet. I will be at Flea market space #320 I will be there at 8,10,12 and 2 pm on Friday and Saturday. (It is a flea market and I will be wandering about at the other times looking for stuff that I need) So I will try to be there at the "even hours" listed...

If you could use larger quantities you can reserve 1000' spools of 22 AWG teflon wire for $20 per spool. You must contact me in advance with your callsign. I will be limited by weight and space requirements.You can also stop by to "fine tune" the pickup. Maybe you can get it at Salem Mall parking lot to avoid carrying the spool/s.

Jim n2go

2378. Re: A basic shielding question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 15:53:05 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <117v1q893aecs5d@corp.supernews.com>
Source record: 19011

-exray- wrote:

> Tim Shoppa wrote:
>
>>> [Hand capacitance detuning receiver]
>>> double-sided PCB with the two sides
>>> not electrically connected?
>>
>>
>>
>> My gut feeling is that hand capacitance (maybe tens of pF) is small
>> compared to the capacitance between the two layers of PCB (hundreds of
>> pF) and that the shielding effect would be negligible.
>
>
> Thanks for the reply. Here's the logic that is making me ponder this.
> The capacitance of the PCB would be in 'series' with the hand
> capacitance resulting in a lower overall capacitance.
>
> If I plug in numbers like 200pf for the board and 20pf for the hand I
> see that the numerical improvement is minimal but I wonder if it can be
> expected to work that way?
>
> -Bill

Yes, but there's always an outside chance that it'll do some good.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

2379. Re: A basic shielding question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 15:56:13 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <117v20lg4k1hb29@corp.supernews.com>
Source record: 19012

-exray- wrote:

> On an example like a simple homebrew 2 tube regen set it is typically
> recommended to use a metal front panel to "shield" the ckt from hand
> effects. However, you can still notice some effect by touching the
> ground/panel.
>
> Would one see any advantage by using double-sided PCB with the two sides
> not electrically connected?
>
> -Bill

If the chassis of the set is not referenced to the same ground that you are then touching the chassis will change the effective capacitance of the tank circuit. This effect will probably be greater if the antenna is capacitively coupled rather than inductively. The two things that I'd do before experimenting with the PC board would be _first_ to make sure that the chassis of the receiver was brought to a good ground in the station, and second to consider putting the entire receiver into a shielded box.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

2380. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 16:18:51 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <117v3ateikqdsa9@corp.supernews.com>
Source record: 19013

All:

Please don't feed the troll.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

2381. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 16:26:01 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <saMfe.19$i87.646280@news.sisna.com>
Source record: 19014

I am afraid I view "Please don't feed the troll" as "Tim Wescott thinks
everyone not agreeing with him IS a troll"...

That is NOT the proper definition of a "Troll!"

Regards,
John
--
When Viagra fails to work--you are DOOMED!!!

"Tim Wescott" <tim@wescottnospamdesign.com> wrote in message
news:117v3ateikqdsa9@corp.supernews.com...
| All:
|
| Please don't feed the troll.
|
| --
|
| Tim Wescott
| Wescott Design Services
| http://www.wescottdesign.com

2382. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 16:59:19 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <HFMfe.39$yh7.699512@news.sisna.com>
Source record: 19015

So we might all get on the same page, here is a list of "troll definitions."

1) a newsgroup post that is deliberately incorrect, intended to provoke readers; or a person who makes such a post

2) From the fishing term. As a noun, synonymous with flamebait. As a verb, to post controversial or provocative messages in a deliberate attempt to provoke flames.

3) to fish with a bait or lure trailed on a line behind a slowly moving boat.

4) From the fishing term. As a noun, synonymous with flamebait. As a verb, to post controversial or provocative messages in a deliberate attempt to provoke flames.

5) This is the Scandanavian term for elf. Sometimes they are described as being hairy and ugly, although they are able to change their shape into anything they please. They are said to have lots of treasure, and live in beautiful palaces.

6) SCA term for gatekeeper or door warden at a feast or other event. This name has no historical basis. "Porter" was atypical medieval name for this job.

7) a race of giants. They appear in various Northern mythologies. In Norse mythology Trolls are represented as a type of goblin.

I assume you are meaning definition 1) as your definition of me being a "troll."

Do you feel anyone opening a discussion is a troll? Is there always a "troll" at the center of every discussion? Is the only discussion without a "troll" one where no one has made a statement to open it--and therefore--it is really a "silent discussion?"

Is a "troll'less discussion" one where everyone agrees with you?

Your accusing me of being a "troll" is, in my opinion, really "character assassination" on your part--although you cloak this knife in velvet, the gleem of its' blade is still seen...

Regards,
John
--
When Viagra fails to work--you are DOOMED!!!

"Tim Wescott" <tim@wescottnospamdesign.com> wrote in message
news:117v3ateikqdsa9@corp.supernews.com...
| All:
|
| Please don't feed the troll.
|
| --
|
| Tim Wescott
| Wescott Design Services
| http://www.wescottdesign.com

2383. Re: VHF TX/RX switch w/ pin diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 17:08:58 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1115658538.359773.190750@z14g2000cwz.googlegroups.com>
Source record: 19016

Roy pointed out to me in email that the highpass versions have a positive phase shift, which is different behavior than a transmission line. However, they do have the characteristic that they reflect an open circuit as a short, and a short as an open, and an Ro load as Ro, which is the behavior you want for the PIN switch. The phase shift in that application should not be important. In general, both the pi and T versions, and for both highpass and lowpass configuration, reflect a load Z as (Ro^2)/Z, I believe, where Ro is the reactance of each component.

Cheers,
Tom

2384. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 17:41:03 UTC
From: dplatt@radagast.org
Message-ID: <117v85f1r4o3j62@corp.supernews.com>
Source record: 19017

In article <HFMfe.39$yh7.699512@news.sisna.com>,
John Smith <assemblywizard@gmail.com> wrote:

>Do you feel anyone opening a discussion is a troll? Is there always a
>"troll" at the center of every discussion?

No, not all discussions are trolls.

Some of the things which tend to make me consider a posting to be a "troll" rather than a "discussion", are indications that the original poster isn't really interested in an honest discussion. Typical signs:

- Poster shows up with a big dose of attitude on his/her shoulder. Phrases like "You people are all laughable idiots" (fairly common among spammers posting in the anti-spam newsgroups), or "Obviously, anybody who has a brain will agree that xxxx is true" are red flags.

- Posters who respond to criticisms of their proposal by ignoring the technical validity of the criticisms, or by attacking the critic rather than the criticism (ad hominem responses), or by glossing over the criticisms without a serious response (hand-waving).

- Posters who seem to fail to "think through" the consequences, and costs, of their own proposals and ideas.

> Is the only discussion without a
>"troll" one where no one has made a statement to open it--and therefore--it
>is really a "silent discussion?"
>
>Is a "troll'less discussion" one where everyone agrees with you?

No. A troll-less discussion is where everyone involved engages in an intellectually honest debate about the merits, disadvantages, and costs of the suggested ideas(s). There are plenty of such troll-less discussions, on USENET and elsewhere, where the debaters disagree quite strongly!

>Your accusing me of being a "troll" is, in my opinion, really "character
>assassination" on your part--although you cloak this knife in velvet, the
>gleem of its' blade is still seen...

Well, here's a third-party opinion. It's free, take it for what it's worth to you.

From where I sit, it seems to me that your style of proposal and debate are somewhere in the middle. They are not blatantly "troll-ish" (in the sense of someone who is posting purely for the joy of stirring up a fracas), but neither do they seem to be a completely

serious attempt to discuss the actual merits of your ideas (as compared to the alternatives).

The somewhat troll-flavored signs I observe: well, there's the rather inflammatory and biased declaration you made in the subject of "No progress in decades." I call this trollish, because it *presumes* the validity of the very idea that you are proposing (i.e. that a modular, card-based radio architecture is the best one) and because it ignores all of the progress that radio systems have made in other areas of implementation. It seemed more inflammatory than communicative.

I also see your response to some of the criticisms posted (including my own) as somewhat trollish, because you seem to have responded to serious counters by either handwaving around them, or by condemning the poster's effort to respond to you (e.g. your comment that you "aren't looking for people who'll tell [you] why it won't work, you're looking for people who'll tell [you] why it will.")

One of the essentials in any scientist (and, I think, in any good researcher or proponent) is intellectual honesty, including the ability and willingness to figure out the weaknesses and limitations of any theory or proposal, as well as the strengths. I think you'd find your proposals received rather better, if you showed more clearly that you were willing to think them out to this degree in advance of posting them, and were open to receiving honest criticism.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

2385. Re: A basic shielding question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 17:41:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <117v86al6cvth89@corp.supernews.com>
Source record: 19018

No. A single side is adequate.

What causes the change to occur when you touch the panel is that oscillator current is flowing on the outside of the panel. The way to avoid this is to completely enclose the oscillator with a shield.

Roy Lewallen, W7EL

-exray- wrote:
> On an example like a simple homebrew 2 tube regen set it is typically
> recommended to use a metal front panel to "shield" the ckt from hand
> effects. However, you can still notice some effect by touching the
> ground/panel.
>
> Would one see any advantage by using double-sided PCB with the two sides
> not electrically connected?
>
> -Bill

2386. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 17:53:31 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <xsNfe.46$g57.610477@news.sisna.com>
Source record: 19019

Dave:

Surprisingly, we agree on most of ALL of this!!!

However, do not consider myself a troll if my methods are simply different than others are accustomed to either; neither do I think I am a troll if I do not wish to the "standard operating procedure" which some newsgroup of "good ole buddies" has adopted"secret handshakes, phrases, etc. I have outgrown"

Although common decency and respect for the right of another to hold an opinion, belief or view contrary to ones own is necessary"I don"t see these exchanges"when composed of overly narrow methods of exchange and interaction as being beneficial to any"

Warmest regards,

John

--
When Viagra fails to work--you are DOOMED!!!

"Dave Platt" <dplatt@radagast.org> wrote in message
news:117v85f1r4o3j62@corp.supernews.com...
| In article <HFMfe.39$yh7.699512@news.sisna.com>,
| John Smith <assemblywizard@gmail.com> wrote:
|
| >Do you feel anyone opening a discussion is a troll? Is there always a
| >"troll" at the center of every discussion?
|
| No, not all discussions are trolls.
|
| Some of the things which tend to make me consider a posting to be a
| "troll" rather than a "discussion", are indications that the original
| poster isn't really interested in an honest discussion. Typical signs:
|
| - Poster shows up with a big dose of attitude on his/her shoulder.
| Phrases like "You people are all laughable idiots" (fairly common
| among spammers posting in the anti-spam newsgroups), or "Obviously,
| anybody who has a brain will agree that xxxx is true" are red flags.
|
| - Posters who respond to criticisms of their proposal by ignoring the
| technical validity of the criticisms, or by attacking the critic
| rather than the criticism (ad hominem responses), or by glossing
| over the criticisms without a serious response (hand-waving).
|

| - Posters who seem to fail to "think through" the consequences, and
| costs, of their own proposals and ideas.
|
| > Is the only discussion without a
| >"troll" one where no one has made a statement to open it--and
therefore--it
| >is really a "silent discussion?"
| >
| >Is a "troll'less discussion" one where everyone agrees with you?
|
| No. A troll-less discussion is where everyone involved engages in an
| intellectually honest debate about the merits, disadvantages, and
| costs of the suggested ideas(s). There are plenty of such troll-less
| discussions, on USENET and elsewhere, where the debaters disagree
| quite strongly!
|
| >Your accusing me of being a "troll" is, in my opinion, really "character
| >assassination" on your part--although you cloak this knife in velvet, the
| >gleem of its' blade is still seen...
|
| Well, here's a third-party opinion. It's free, take it for what it's
| worth to you.
|
| From where I sit, it seems to me that your style of proposal and
| debate are somewhere in the middle. They are not blatantly
| "troll-ish" (in the sense of someone who is posting purely for the joy
| of stirring up a fracas), but neither do they seem to be a completely
| serious attempt to discuss the actual merits of your ideas (as
| compared to the alternatives).
|
| The somewhat troll-flavored signs I observe: well, there's the rather
| inflammatory and biased declaration you made in the subject of "No
| progress in decades." I call this trollish, because it *presumes* the
| validity of the very idea that you are proposing (i.e. that a modular,
| card-based radio architecture is the best one) and because it
| ignores all of the progress that radio systems have made in other
| areas of implementation. It seemed more inflammatory than
| communicative.
|
| I also see your response to some of the criticisms posted (including
| my own) as somewhat trollish, because you seem to have responded to
| serious counters by either handwaving around them, or by condemning
| the poster's effort to respond to you (e.g. your comment that you
| "aren't looking for people who'll tell [you] why it won't work, you're
| looking for people who'll tell [you] why it will.")
|
| One of the essentials in any scientist (and, I think, in any good
| researcher or proponent) is intellectual honesty, including the
| ability and willingness to figure out the weaknesses and limitations
| of any theory or proposal, as well as the strengths. I think you'd

| find your proposals received rather better, if you showed more clearly
| that you were willing to think them out to this degree in advance of
| posting them, and were open to receiving honest criticism.
|
| --
| Dave Platt <dplatt@radagast.org> AE6EO
| Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
| I do _not_ wish to receive unsolicited commercial email, and I will
| boycott any company which has the gall to send me such ads!

2387. Re: No Kits To Build ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 18:22:14 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <117vahtp0nib3e2@corp.supernews.com>
Source record: 19020

Caveat Lector wrote:

> Not really -- hundreds at URL:
> http://ac6v.com/kits.htm
>
> Also Homebrew projects by the ton at URL:
> http://ac6v.com/homebrew.htm
>
>
Cool list. I've bookmarked it -- thanks.

2388. Re: ceramic transformers ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 18:56:21 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <pnOfe.281$ce6.92@newssvr30.news.prodigy.com>
Source record: 19022

Hey Mebart, and a good day to you too. Mehank

On a more serious note, thanks for both posts. I took a look at the
Panasonic at Digikey and it looks like they're made for ~50:1 stepup to
light up displays. http://dkc3.digikey.com/PDF/T052/1522.pdf
Have you ever checked the passband of one?

--

73
Hank WD5JFR
<Mebart> wrote in message news:be5v715rgco9s3a18t5jqcds6lnppuijod@4ax.com...
>
> Good day
>
> I am the one who made the post. I've been involved in rf for 30 years
> and have actively followed piezotransformer technology since first
> reading about them in EDN Magazine in 1999.
>
> They are unusual beasts for sure.
>
> The resonant frequency can be controlled by the thickness of the
> material, as any piezomaterial can. For fine tuning, the size of the
> electrodes on the primary side can be trimmed. Q's are not nearly as
> high as quartz, so the ultimate frequency stability honors go to
> quartz.
>
> They can be useful for some rf aps, up to 3 Mhz, although the vast
> majority of presently made devices operate in the 200 Khz to 40 Khz
> range.
>
> The resonant frequency does shift slightly with varying load
> impedances however..
>
> As transformers however, they excel. Conventional magnetic/copper
> transformers cannot even start to deliver step up ratios anywhere near
> those of PZT's.
>
> Unknown to many is the fact that they can convert low impedance to
> high impedance OR visa versa.
>
> I have just located a source of piezotransformers that have totally
> isolated primary and secondary terminals instead of the common 3
> terminal types presently available.
>

> Digi-Key sells the Panasonic units in their current catalog.
>
> Hope this info helps.
>
> Mebart
>
>
>
>
> On Mon, 09 May 2005 14:34:51 GMT, "Henry Kolesnik"
> <kolesnik@sbcglobal.net> wrote:
>
>>Please see the pdf at:alt.binaries.schematics.electronic dated 5/8 8:08
>>PM.
>>Has anyone see this technology used used at RF or IF?
>>tnx
>

2389. Suggestions for VHF-AM Transmitter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 19:01:40 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <xMGdnfGbgcE8LuLfRVn-hw@comcast.com>
Source record: 19021

Quite a few weeks ago I posted looking for info on VHF-AM receivers and received a number of pointers to additional resources and study material. Thanks to all who responded and, in particular, to Pete-KE9OA who has been a tremendous help!

Since then, several protos/learning platforms have been built and I'm pleased with the results overall - great learning experience (which continues).

Now I'm interested in the transmit side of the equation and have been poring over the 'net and other materials/articles trying to get a grip on this part. So far I have a block diagram (or "blockhead" diagram more accurately 8-) of a two stage Mosfet widget using some VHF parts from Mitsubishi. Specifically, I'm thinking:

20 mW LO input -> RD00HVS1 Mosfet -> .5W -> RD06HVF1 Mosfet = ~6W output. Modulation either transformerless (or transformer) using something like an audio amp (e.g. LM384) after suitable compression/limiting. Net result that I'm after is approximately 6W output using a 12-18VDC supply. So.....

If anyone here can point out some worthwhile texts, articles, or similar designs that might apply I'd be grateful.

BTW, before this sets off a string of cautionary tales and admonishments about newbie nitwits playing with transmitters (especially at Airband frequencies) - I can tell you this is a "bench only" project intended to feed a well-grounded 10W/50ohm dummy load ONLY... Are you kidding? I live in Arlington, VA - within walking distance of some of the world's biggest paranoids. I already worry about the splatter created by the blender when the wife and I mix up a batch of Margueritas! (we try not to simulate any "modulation" by hitting the "pulse" button 8-).....

Thanks for any help,
Bill

2390. Re: RF/Microwave Design Software

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 19:58:59 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <gpfv71hu7d7h3s1l8bu7ts41r0nkqr3oep@4ax.com>
Source record: 19023

On Mon, 09 May 2005 07:18:01 -0700, Microwave Software
<mwsoft@cox.net> wrote:

>Professional Tools at Amateur Prices
>
>http://www.microwavesoftware.com/

Amateur prices would be FREE.

Like rfsim99

http://www.101science.com/RFSim99.exe

Ansoft's student programs

http://www.ansoft.com/ansoftdesignersv/

et.al.

http://www.sss-mag.com/swindex1.html#rf

2391. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 22:08:07 UTC
From: LenAnderson@ieee.org
Message-ID: <1115676487.532071.203200@o13g2000cwo.googlegroups.com>
Source record: 19024

From: Paul Keinanen on Sun,May 8 2005 11:54 pm

>On Sun, 08 May 2005 10:44:27 -0700, Tim Wescott
><tim@wescottnospamdesign.com> wrote:
>
>>The basic difference is that with a digital system you either end up
>>with a clean signal or a useless signal. In an analog system the
>>character and purity of the signal must be carefully guarded, at
least
>>until you manage to digitize it. This means that there will be a
much
>>greater chance that adding a new card to the radio will degrade not
only
>>the function of the new card, but the function of all the other
cards.
>>
>>Second, the PC market is a huge one, with great advantages to be
derived
>>from common equipment and software, and much smaller advantages to be

>>derived from commonality. This is the exact obverse of the radio
>>market, including homebrew radios. To make a "card" radio would be
to
>>define a basic radio architecture, probably down to the IF frequency
(or
>>at least to the point of forcing you to match your IF and front end).

>>While improvements could be made within this structure an independent

>>experimenter couldn't play around with such things as
direct-conversion,
>>different IF schemes, etc., without extensive modification.
>
>>I agree that it would be quite hard to make a good quality radio with
>>some common backplane structure. However, connecting various
>>functional modules with 50 ohm input and output impedance could be
>>used to make quite different radios with good specifications.

That's already been done in the RF industry for a half
century.

As one example, take the U.S.' AN/PRC-8, -9, -10 series
of manpack transceivers covering high-HF into low-VHF.
Still in the vacuum tube era, all of the IF modules
included the IF tuned circuits as well as the subminiature
tube. If the tube filament burned out, the entire module

was replaced. NO alignment tweaking was required. Design
was done back around 1950.

As for standards on control...start with the ATLAS (for
USAF test equipment) and continue on to the IEEE-488
interface. Those standards worked with "modular"
components capable of testing receiver sensitivity down
to noise level with KNOWN signal levels. By the way,
test equipment for RF has been standardized at 50 Ohms
since WW2 days.

>For
>instance Mini-Circuits also makes various diode ring mixers,
>amplifiers and apparently also VCOs that are boxed and have BNC or SMA
>connectors. With each functional module in a metallic enclosure,
>controlling the spurious radiation between modules is much easier. I
>don't know that anyone would make filter modules, which would be
>required to build a complete radio. Also SSB-Electronics sold separate
>amplifier, mixer, frequency multiplier and crystal oscillator modules
>mainly intended for a 10 GHz transverter.
>
>Unfortunately the cost of these modules is quite high, apparently due
>to low production volumes and large amount of manual labour needed to
>assemble them. If there would be a large demand for such modules, it
>would make sense to design them to require less manual labour to
>assemble them and hence get the price to more affordable levels.

Define "more affordable." :-)

"Filter modules" have and are built to order by dozens
(if not hundreds worldwide) of companies. The costs
ARE high because they are built TO specifications and
such have to be TESTED to meet those specifications.
Is there comparable KNOWN/calibrated test equipment
in the average homebrewer's hobby workshop that is
comparable...even at "low" frequencies of HF? Actually,
Kaylie's Mini-circuits DOES use calibrated, automatic
test equipment to check out each module, small
quantities to large quantities. Mini-Circuits doesn't
have the market demand to do production runs in the
10,000-lot quantities.

The mystique on L-C filters is largely that...mystique.
Without some good, calibrated test equipment, it is
very difficult to determine what a "filter module"
has for performance. Synthesis (design) of the values
for a particular filter type was arduous until folks
came out with computer-aided design. I have a working
freeware program for PCs on that...send a message in
private e-mail if you want one transmitted to you.

As to cost, just look at a cellular telephone handset. Those can cost around US$ 50 each, new. They work in a band roughly centered at 1.0 GHz. Microwaves. Complete microwave Rx-Tx with synthesized tuning. For half a hundred US dollars here. A mere 30 years ago that would be almost inconceivable. Three years ago the U.S. Census Bureau said that one in three Americans have a cell phone subscription. That's roughly 100 MILLION units either out there or waiting to be used. Market quantity and competition in that market are the key to bringing down costs. Radio hobbyists just cannot possibly get close to such market quantities.

>While a backplane would not be suitable for running the RF signals, it
>would be a good idea to have a common control interface standard. This
>might be some sort of serial interface or perhaps a CANbus interface
>as used on some AMSAT satellites.

Who says a "backplane would not be suitable?" :-) Those PC backplanes carry terribly broad spectra of RF...from (literally) DC on up to the low microwaves. No "perhaps" about it. Thing is, the layout can NOT be done as if it were wire-wrap; i.e., in random order of wire placement. With broadbanding anything, every single adjacent trace becomes a COUPLER and unwitting layouts can produce remarkable crosstalk effects. Designers have known that for decades and handle it...all kinds of Application Notes and info out in public access available for anyone...just too specialized for the "weekender" small-project assembler hobbyist.

The IEEE-488 is a mature standard for control and interface for computer-controlled, interconnected systems. Would be a bit TOO all-inclusive for a special-purpose new design. The "interface" does NOT have to be some kind of "new" thing used on the latest whatever out in space. It's just a control-and-response avenue carrying signals of a standardized kind...a few wires/traces perhaps...laid out properly if required to be broadbanded or broad in dynamic signal range. Not a big thing, but needs some THOUGHT before becoming hardware.

LenAnderson@ieee.org

2392. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 22:11:44 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <FeRfe.70$b64.1491008@news.sisna.com>
Source record: 19026

I have checked the local walmart shelves, nope, nothing like I have
mentioned...

Warmest regards,
John
--
When Viagra fails to work--you are DOOMED!!!

<LenAnderson@ieee.org> wrote in message
news:1115676487.532071.203200@o13g2000cwo.googlegroups.com...
| From: Paul Keinanen on Sun,May 8 2005 11:54 pm
|
| >On Sun, 08 May 2005 10:44:27 -0700, Tim Wescott
| ><tim@wescottnospamdesign.com> wrote:
| >
| >>The basic difference is that with a digital system you either end up
| >>with a clean signal or a useless signal. In an analog system the
| >>character and purity of the signal must be carefully guarded, at
| least
| >>until you manage to digitize it. This means that there will be a
| much
| >>greater chance that adding a new card to the radio will degrade not
| only
| >>the function of the new card, but the function of all the other
| cards.
| >>
| >>Second, the PC market is a huge one, with great advantages to be
| derived
| >>from common equipment and software, and much smaller advantages to be
|
| >>derived from commonality. This is the exact obverse of the radio
| >>market, including homebrew radios. To make a "card" radio would be
| to
| >>define a basic radio architecture, probably down to the IF frequency
| (or
| >>at least to the point of forcing you to match your IF and front end).
|
| >>While improvements could be made within this structure an independent
|
| >>experimenter couldn't play around with such things as
| direct-conversion,
| >>different IF schemes, etc., without extensive modification.
| >
| >>I agree that it would be quite hard to make a good quality radio with
| >>some common backplane structure. However, connecting various

| >>functional modules with 50 ohm input and output impedance could be
| >>used to make quite different radios with good specifications.
|
| That's already been done in the RF industry for a half
| century.
|
| As one example, take the U.S.' AN/PRC-8, -9, -10 series
| of manpack transceivers covering high-HF into low-VHF.
| Still in the vacuum tube era, all of the IF modules
| included the IF tuned circuits as well as the subminiature
| tube. If the tube filament burned out, the entire module
| was replaced. NO alignment tweaking was required. Design
| was done back around 1950.
|
| As for standards on control...start with the ATLAS (for
| USAF test equipment) and continue on to the IEEE-488
| interface. Those standards worked with "modular"
| components capable of testing receiver sensitivity down
| to noise level with KNOWN signal levels. By the way,
| test equipment for RF has been standardized at 50 Ohms
| since WW2 days.
|
| >For
| >instance Mini-Circuits also makes various diode ring mixers,
| >amplifiers and apparently also VCOs that are boxed and have BNC or SMA
| >connectors. With each functional module in a metallic enclosure,
| >controlling the spurious radiation between modules is much easier. I
| >don't know that anyone would make filter modules, which would be
| >required to build a complete radio. Also SSB-Electronics sold separate
| >amplifier, mixer, frequency multiplier and crystal oscillator modules
| >mainly intended for a 10 GHz transverter.
| >
| >Unfortunately the cost of these modules is quite high, apparently due
| >to low production volumes and large amount of manual labour needed to
| >assemble them. If there would be a large demand for such modules, it
| >would make sense to design them to require less manual labour to
| >assemble them and hence get the price to more affordable levels.
|
| Define "more affordable." :-)
|
| "Filter modules" have and are built to order by dozens
| (if not hundreds worldwide) of companies. The costs
| ARE high because they are built TO specifications and
| such have to be TESTED to meet those specifications.
| Is there comparable KNOWN/calibrated test equipment
| in the average homebrewer's hobby workshop that is
| comparable...even at "low" frequencies of HF? Actually,
| Kaylie's Mini-circuits DOES use calibrated, automatic
| test equipment to check out each module, small
| quantities to large quantities. Mini-Circuits doesn't

| have the market demand to do production runs in the
| 10,000-lot quantities.
|
| The mystique on L-C filters is largely that...mystique.
| Without some good, calibrated test equipment, it is
| very difficult to determine what a "filter module"
| has for performance. Synthesis (design) of the values
| for a particular filter type was arduous until folks
| came out with computer-aided design. I have a working
| freeware program for PCs on that...send a message in
| private e-mail if you want one transmitted to you.
|
| As to cost, just look at a cellular telephone handset.
| Those can cost around US$ 50 each, new. They work in
| a band roughly centered at 1.0 GHz. Microwaves.
| Complete microwave Rx-Tx with synthesized tuning.
| For half a hundred US dollars here. A mere 30 years
| ago that would be almost inconceivable. Three years
| ago the U.S. Census Bureau said that one in three
| Americans have a cell phone subscription. That's
| roughly 100 MILLION units either out there or waiting
| to be used. Market quantity and competition in that
| market are the key to bringing down costs. Radio
| hobbyists just cannot possibly get close to such
| market quantities.
|
| >While a backplane would not be suitable for running the RF signals, it
| >would be a good idea to have a common control interface standard. This
| >might be some sort of serial interface or perhaps a CANbus interface
| >as used on some AMSAT satellites.
|
| Who says a "backplane would not be suitable?" :-)
| Those PC backplanes carry terribly broad spectra of
| RF...from (literally) DC on up to the low microwaves.
| No "perhaps" about it. Thing is, the layout can NOT
| be done as if it were wire-wrap; i.e., in random
| order of wire placement. With broadbanding anything,
| every single adjacent trace becomes a COUPLER and
| unwitting layouts can produce remarkable crosstalk
| effects. Designers have known that for decades and
| handle it...all kinds of Application Notes and info
| out in public access available for anyone...just too
| specialized for the "weekender" small-project
| assembler hobbyist.
|
| The IEEE-488 is a mature standard for control and
| interface for computer-controlled, interconnected
| systems. Would be a bit TOO all-inclusive for a
| special-purpose new design. The "interface" does
| NOT have to be some kind of "new" thing used on the

| latest whatever out in space. It's just a control-
| and-response avenue carrying signals of a standardized
| kind...a few wires/traces perhaps...laid out properly
| if required to be broadbanded or broad in dynamic
| signal range. Not a big thing, but needs some
| THOUGHT before becoming hardware.
|
| LenAnderson@ieee.org
|

2393. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 23:17:59 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <117vrtch8oul0da@corp.supernews.com>
Source record: 19025

I don't think much of the discussion has looked very closely at what I think is envisioned here -- a mainframe which would accept various "cards" from numerous vendors. As I detailed in an earlier posting, it's tough enough (and costly) to make a robust interface when a single company has full control of the mainframe and plugins. But let's think a little about the problems of making a mainframe which could accommodate cards from various vendors -- cards which have different performance characteristics.

The first question is, who will define the interface? Who will dictate modifications as they become necessary?

Then let's consider a vendor who wants to make, say, an audio amplifier card. It has digital signal processing with a dozen different modes. Each mode has considerable adjustment range, for example the width of a bandpass filter. The interface would have to have pins dedicated to these functions, and the front panel would have to have switches and controls for them. How about an oscillator? One might be digitally tuned, another analog. There are bandspread and RIT to accommodate in addition. What do we do about T/R switching and timing if it's to be used in a transceiver? How about shielding specifications so it won't interfere with other cards?

The only possible way I can see something like this being even possible is for a virtual "front panel" being done in software and appearing on a PC screen; only in that way could each card be sure that the necessary controls would be present. Some sort of serial bus with expandable protocol would be used for all controls.

Then the question becomes, who will define, develop, and maintain the software? I can tell you from experience that it's no easy matter to keep any software working properly as new operating systems, protection software, and hardware appear. Add the necessary hardware interface to the equation and the job gets tougher yet. Oh, and what do you do when key components of the interface become obsolete and no longer available?

It's common for people who've never had to design something which will be reproducible by the thousands and operate without error, to say how easy something will be. As one of those people who spent a career designing just such equipment, I'd bet serious money that the cost of development and maintenance of the interface would never pay itself back in sales. Unless, of course, it's done by volunteers. My question is: Why don't folks like "John Smith" get off their duffs and do it?

Roy Lewallen, W7EL

2394. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-09 23:47:07 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <3ESfe.74$2q5.1838203@news.sisna.com>
Source record: 19027

Roy:

Like Linux, a superior operating system when compared to windows--it would mainly be done by "the community"... all the hardware guys would have to do is make known the ports, address, etc... they are really un-needed from there--but, it would speed the takeoff of the "system" if they did provide a beginning point... and, one can always run a de-compressor (if they have compressed the executable), then a disassembler to asm, then a converter to "C" and, if you can program, you can now "tweak" the code anyway you would like... you will have a copy of it!!!!

If the "hardware guys" didn't know how to provide a software interface, there are "linux hams" who would, most likely, if asked, "sponsor" such a effort on the Linux platform--hopefully--the interface to such a radio would bypass BOTH Mac and Windows, why these OS's are sufficient for home users, non-technical business and gov't--the technical mind deserves more, the power of linux (unix really) would serve them much better...

However, the "system" we are speaking of would ONLY require a software interface if you inserted that card/module which allowed computer control, otherwise it would be using the analog card/module and associated faceplate...

I think most here start right out trying to "limit" this "system" I have put forward--there would be no limits to it... if you can see a limit, that is only a bug which needs designed around...

The homebrew community might be the best place to design, develop and introduce this from... as, if you allow too greedy a manufacturer control--it will just end up dying from his/her attempts to squeeze too much blood from the turnip!!! That is what has happened in the past...

Warmest regards,
John
--
When Viagra fails to work--you are DOOMED!!!

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:117vrtch8oul0da@corp.supernews.com...
|I don't think much of the discussion has looked very closely at what I
| think is envisioned here -- a mainframe which would accept various
| "cards" from numerous vendors. As I detailed in an earlier posting, it's
| tough enough (and costly) to make a robust interface when a single
| company has full control of the mainframe and plugins. But let's think a
| little about the problems of making a mainframe which could accommodate
| cards from various vendors -- cards which have different performance

| characteristics.
|
| The first question is, who will define the interface? Who will dictate
| modifications as they become necessary?
|
| Then let's consider a vendor who wants to make, say, an audio amplifier
| card. It has digital signal processing with a dozen different modes.
| Each mode has considerable adjustment range, for example the width of a
| bandpass filter. The interface would have to have pins dedicated to
| these functions, and the front panel would have to have switches and
| controls for them. How about an oscillator? One might be digitally
| tuned, another analog. There are bandspread and RIT to accommodate in
| addition. What do we do about T/R switching and timing if it's to be
| used in a transceiver? How about shielding specifications so it won't
| interfere with other cards?
|
| The only possible way I can see something like this being even possible
| is for a virtual "front panel" being done in software and appearing on a
| PC screen; only in that way could each card be sure that the necessary
| controls would be present. Some sort of serial bus with expandable
| protocol would be used for all controls.
|
| Then the question becomes, who will define, develop, and maintain the
| software? I can tell you from experience that it's no easy matter to
| keep any software working properly as new operating systems, protection
| software, and hardware appear. Add the necessary hardware interface to
| the equation and the job gets tougher yet. Oh, and what do you do when
| key components of the interface become obsolete and no longer available?
|
| It's common for people who've never had to design something which will
| be reproducible by the thousands and operate without error, to say how
| easy something will be. As one of those people who spent a career
| designing just such equipment, I'd bet serious money that the cost of
| development and maintenance of the interface would never pay itself back
| in sales. Unless, of course, it's done by volunteers. My question is:
| Why don't folks like "John Smith" get off their duffs and do it?
|
| Roy Lewallen, W7EL

2395. Homebrew PSK interface

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-10 00:20:22 UTC
From: KU4YP <ku4yp@qsl.net>
Message-ID: <a7Tfe.6434$941.197@trnddc08>
Source record: 19028

hello all,

has anyone taken a heathkit HD-15 phonepatch and converted it as a computer interface for the digital modes? i have seen a couple of these but no one ever has the schematic or they are not wanting to take the time to explain.

any help and ideas would be appreciated.

73 mike ku4yp

2396. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-10 00:39:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <6pTfe.76$RI5.2013337@news.sisna.com>
Source record: 19030

... I forgot to mention, that while the minimal OS of the radio itself would be a minimal linux kernal--a USB, TCP, serial, parallel, etc hardware interface could be chosen so windows users would find it transparent--and they access the radio either through a GUI or commandline interface... when using the digital capabilities...

The most basic starter of this radio might be a regen receiver (or TRF) and a one watt xmitter board and analog of course... great for new "bootstrapping" hams...

Warmest regards,
John
--
When Viagra fails to work--you are DOOMED!!!

"John Smith" <assemblywizard@gmail.com> wrote in message news:3ESfe.74$2q5.1838203@news.sisna.com...
| Roy:
|
|
|
| Like Linux, a superior operating system when compared to windows--it would
| mainly be done by "the community"... all the hardware guys would have to do
| is make known the ports, address, etc... they are really un-needed from
| there--but, it would speed the takeoff of the "system" if they did provide a
| beginning point... and, one can always run a de-compressor (if they have
| compressed the executable), then a disassembler to asm, then a converter to
| "C" and, if you can program, you can now "tweak" the code anyway you would
| like... you will have a copy of it!!!!
|
|
|
| If the "hardware guys" didn't know how to provide a software interface,
| there are "linux hams" who would, most likely, if asked, "sponsor" such a
| effort on the Linux platform--hopefully--the interface to such a radio would
| bypass BOTH Mac and Windows, why these OS's are sufficient for home users,
| non-technical business and gov't--the technical mind deserves more, the
| power of linux (unix really) would serve them much better...
|
|
|

| However, the "system" we are speaking of would ONLY require a software
| interface if you inserted that card/module which allowed computer control,
| otherwise it would be using the analog card/module and associated
| faceplate...
|
|
|
| I think most here start right out trying to "limit" this "system" I have
put
| forward--there would be no limits to it... if you can see a limit, that
is
| only a bug which needs designed around...
|
|
|
| The homebrew community might be the best place to design, develop and
| introduce this from... as, if you allow too greedy a manufacturer
| control--it will just end up dying from his/her attempts to squeeze too
much
| blood from the turnip!!! That is what has happened in the past...
|
|
|
| Warmest regards,
| John
| --
| When Viagra fails to work--you are DOOMED!!!
|
| "Roy Lewallen" <w7el@eznec.com> wrote in message
| news:117vrtch8oul0da@corp.supernews.com...
||I don't think much of the discussion has looked very closely at what I
|| think is envisioned here -- a mainframe which would accept various
|| "cards" from numerous vendors. As I detailed in an earlier posting, it's
|| tough enough (and costly) to make a robust interface when a single
|| company has full control of the mainframe and plugins. But let's think a
|| little about the problems of making a mainframe which could accommodate
|| cards from various vendors -- cards which have different performance
|| characteristics.
||
|| The first question is, who will define the interface? Who will dictate
|| modifications as they become necessary?
||
|| Then let's consider a vendor who wants to make, say, an audio amplifier
|| card. It has digital signal processing with a dozen different modes.
|| Each mode has considerable adjustment range, for example the width of a
|| bandpass filter. The interface would have to have pins dedicated to
|| these functions, and the front panel would have to have switches and
|| controls for them. How about an oscillator? One might be digitally
|| tuned, another analog. There are bandspread and RIT to accommodate in
|| addition. What do we do about T/R switching and timing if it's to be

|| used in a transceiver? How about shielding specifications so it won't
|| interfere with other cards?
||
|| The only possible way I can see something like this being even possible
|| is for a virtual "front panel" being done in software and appearing on a
|| PC screen; only in that way could each card be sure that the necessary
|| controls would be present. Some sort of serial bus with expandable
|| protocol would be used for all controls.
||
|| Then the question becomes, who will define, develop, and maintain the
|| software? I can tell you from experience that it's no easy matter to
|| keep any software working properly as new operating systems, protection
|| software, and hardware appear. Add the necessary hardware interface to
|| the equation and the job gets tougher yet. Oh, and what do you do when
|| key components of the interface become obsolete and no longer available?
||
|| It's common for people who've never had to design something which will
|| be reproducible by the thousands and operate without error, to say how
|| easy something will be. As one of those people who spent a career
|| designing just such equipment, I'd bet serious money that the cost of
|| development and maintenance of the interface would never pay itself back
|| in sales. Unless, of course, it's done by volunteers. My question is:
|| Why don't folks like "John Smith" get off their duffs and do it?
||
|| Roy Lewallen, W7EL
|
|

2397. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-10 01:22:16 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <118036c7gv15b21@corp.supernews.com>
Source record: 19029

I'm eagerly awaiting the block diagram and system specification which I assume you'll be working on. I'm sure it won't take you long. Good luck!

Roy Lewallen, W7EL

John Smith wrote:
> Roy:
>
>
>
> Like Linux, a superior operating system when compared to windows--it would
> mainly be done by "the community"... all the hardware guys would have to do
> is make known the ports, address, etc... they are really un-needed from
> there--but, it would speed the takeoff of the "system" if they did provide a
> beginning point... and, one can always run a de-compressor (if they have
> compressed the executable), then a disassembler to asm, then a converter to
> "C" and, if you can program, you can now "tweak" the code anyway you would
> like... you will have a copy of it!!!!
>
>
>
> If the "hardware guys" didn't know how to provide a software interface,
> there are "linux hams" who would, most likely, if asked, "sponsor" such a
> effort on the Linux platform--hopefully--the interface to such a radio would
> bypass BOTH Mac and Windows, why these OS's are sufficient for home users,
> non-technical business and gov't--the technical mind deserves more, the
> power of linux (unix really) would serve them much better...
>
>
>
> However, the "system" we are speaking of would ONLY require a software
> interface if you inserted that card/module which allowed computer control,
> otherwise it would be using the analog card/module and associated
> faceplate...
>
>
>
> I think most here start right out trying to "limit" this "system" I have put
> forward--there would be no limits to it... if you can see a limit, that is
> only a bug which needs designed around...
>
>
>
> The homebrew community might be the best place to design, develop and
> introduce this from... as, if you allow too greedy a manufacturer

> control--it will just end up dying from his/her attempts to squeeze too much
> blood from the turnip!!! That is what has happened in the past...
>
>
>
> Warmest regards,
> John

2398. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-10 03:01:24 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <auVfe.89$ls7.2352255@news.sisna.com>
Source record: 19033

Hmmm, you know, basically just two guys built the first apple desktop computer--you think it is that much more difficult? Well, maybe!

I think one can begin with at least a mental pic...

...all the voltages which are to be used run on a common bus, the digital lines are there to, without the "motherboard card", these are pretty much unused... the audio lines can be hear for digital cards (on the bus for the audio amp card)--very low level rf might have access though a proper connector, of some sort (maybe on a shelf now, maybe need to do new specs for one), there is a bnc/so-239, etc... which "floats" in a slot, capable of sliding along to gain access to all cards (why limit where the PA will be inserted?)...an analog bus with connectors available to each card lays on a line which is also available to any cards requiring it, and provides connection to a plug which is accessible if an analog panel is used--on this analog panel are standard components (which may be all there, or added one at a time, as needed)--meter, vol, squelch, rf gain, tuning (variactor card, or old variables if room) lcd readout, etc...

Certainly one would just begin with the case, power supply, and the bus(s) providing everything one can imagine a "card designer/builder" would require in the future--and put some flexibility in it, just in case you want to do a case revision/upgrade in the future, maybe you start out with too big a case right now--looking forward to future times when it would be desirable to have it smaller, etc..... rf out, rf in?, audio, etc lines--duplicate most everything in both digital and analog-- ... then "analog panel"/"digital panel" connectors... maybe expect the case to house no larger than a 100-500 watt PA... larger power through an external unit...

You point is well taken that my bench, time and abilities are limited--I am trying to finish putting three boys through college...

... even my overpaid colleges at work just wanna sip beer on the weekends and watch the game or dvds, or plan the next cruise--could be a sign of my generations age or decline... my access to real "innovators" is limited... so is this countries...

... but, as has been pointed out--this newsgroup is read in other countries... countries where innovation is not dying but, rather just blooming...

And, placed beside the first apple desktop (built by, basically, two boys in a college lab and a garage)--I think most would say "IT IS DO-ABLE!"

Warmest regards,
John
--

When Viagra fails to work--you are DOOMED!!!

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:118036c7gv15b21@corp.supernews.com...
| I'm eagerly awaiting the block diagram and system specification which I
| assume you'll be working on. I'm sure it won't take you long. Good luck!
|
| Roy Lewallen, W7EL
|
| John Smith wrote:
| > Roy:
| >
| >
| >
| > Like Linux, a superior operating system when compared to windows--it
would
| > mainly be done by "the community"... all the hardware guys would have
to do
| > is make known the ports, address, etc... they are really un-needed from
| > there--but, it would speed the takeoff of the "system" if they did
provide a
| > beginning point... and, one can always run a de-compressor (if they have
| > compressed the executable), then a disassembler to asm, then a converter
to
| > "C" and, if you can program, you can now "tweak" the code anyway you
would
| > like... you will have a copy of it!!!!
| >
| >
| >
| > If the "hardware guys" didn't know how to provide a software interface,
| > there are "linux hams" who would, most likely, if asked, "sponsor" such
a
| > effort on the Linux platform--hopefully--the interface to such a radio
would
| > bypass BOTH Mac and Windows, why these OS's are sufficient for home
users,
| > non-technical business and gov't--the technical mind deserves more, the
| > power of linux (unix really) would serve them much better...
| >
| >
| >
| > However, the "system" we are speaking of would ONLY require a software
| > interface if you inserted that card/module which allowed computer
control,
| > otherwise it would be using the analog card/module and associated
| > faceplate...
| >
| >
| >

| > I think most here start right out trying to "limit" this "system" I have
put
| > forward--there would be no limits to it... if you can see a limit, that
is
| > only a bug which needs designed around...
| >
| >
| >
| > The homebrew community might be the best place to design, develop and
| > introduce this from... as, if you allow too greedy a manufacturer
| > control--it will just end up dying from his/her attempts to squeeze too
much
| > blood from the turnip!!! That is what has happened in the past...
| >
| >
| >
| > Warmest regards,
| > John

2399. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-10 03:30:51 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <MVVfe.91$Ks7.2354330@news.sisna.com>
Source record: 19031

Well, most of this requires VERY little innovation and only DUPLICATION...

Many manufacturers make motherboards, hd's, cd's, video cards, audio cards, tv cards, radio cards, network cards, port expansion cards, home security cards, security cams, credit card readers, security readers (finger print, eye retina, etc) etc, etc...

... That many manufactures share one case with great ease--is made obvious by the computer on your desktop--indeed--on excellent motherboards, they are NOT picky about even the processor!!! Intel, Cyrix, AMD, IBM, VIA, etc (even providing sockets with different pin configurations for different processors!)... (Some no longer available--they come and they go)

Don't go name brand junk: HP, Dell, Toshiba, Sony, etc--but go generic IBM case and the world of computer manufacturers is available to you... and look at the laptop--you know why EVERYONE in the world doesn't have one? BECAUSE THERE IS NO GENERIC CASE!!!! You are stuck with proprietary junk!!!

Both in rec.radio.amateur.antenna and here there are far more focused on why something can't be done, than why it can--I think if one ignores this--it can be done!... this is interesting... and is why I began a thread on progress.... especially since so many thought there was no reason to even mention it...

One more thing, just make a generic case for a laptop platform, make the platform available to support other manufacturers components--guess what...

Warmest regards,
John
--
When Viagra fails to work--you are DOOMED!!!

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:117vrtch8oul0da@corp.supernews.com...
|I don't think much of the discussion has looked very closely at what I
| think is envisioned here -- a mainframe which would accept various
| "cards" from numerous vendors. As I detailed in an earlier posting, it's
| tough enough (and costly) to make a robust interface when a single
| company has full control of the mainframe and plugins. But let's think a
| little about the problems of making a mainframe which could accommodate
| cards from various vendors -- cards which have different performance
| characteristics.
|
| The first question is, who will define the interface? Who will dictate
| modifications as they become necessary?
|

| Then let's consider a vendor who wants to make, say, an audio amplifier
| card. It has digital signal processing with a dozen different modes.
| Each mode has considerable adjustment range, for example the width of a
| bandpass filter. The interface would have to have pins dedicated to
| these functions, and the front panel would have to have switches and
| controls for them. How about an oscillator? One might be digitally
| tuned, another analog. There are bandspread and RIT to accommodate in
| addition. What do we do about T/R switching and timing if it's to be
| used in a transceiver? How about shielding specifications so it won't
| interfere with other cards?
|
| The only possible way I can see something like this being even possible
| is for a virtual "front panel" being done in software and appearing on a
| PC screen; only in that way could each card be sure that the necessary
| controls would be present. Some sort of serial bus with expandable
| protocol would be used for all controls.
|
| Then the question becomes, who will define, develop, and maintain the
| software? I can tell you from experience that it's no easy matter to
| keep any software working properly as new operating systems, protection
| software, and hardware appear. Add the necessary hardware interface to
| the equation and the job gets tougher yet. Oh, and what do you do when
| key components of the interface become obsolete and no longer available?
|
| It's common for people who've never had to design something which will
| be reproducible by the thousands and operate without error, to say how
| easy something will be. As one of those people who spent a career
| designing just such equipment, I'd bet serious money that the cost of
| development and maintenance of the interface would never pay itself back
| in sales. Unless, of course, it's done by volunteers. My question is:
| Why don't folks like "John Smith" get off their duffs and do it?
|
| Roy Lewallen, W7EL

2400. Re: Homebrew PSK interface

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-10 03:31:47 UTC
From: Steve <nospam@bit.bucket>
Message-ID: <d5pave$p33$1@grandcanyon.binc.net>
Source record: 19032

KU4YP wrote:

> hello all,
>
> has anyone taken a heathkit HD-15 phonepatch and converted it as a
> computer interface for the digital modes? i have seen a couple of these
> but no one ever has the schematic or they are not wanting to take the
> time to explain.
>
> any help and ideas would be appreciated.
>
> 73 mike ku4yp

BAMA (http://bama.sbc.edu/) has the heathkit HD-15 manual online here:

ftp://bama.sbc.edu/downloads/heath/hd15/

Don't know 'bout using it for digital modes. Got one myself... will have to
investigate.

Thanks, Steve

2401. 800,000's IC DataSheet Search Site !

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-10 04:06:06 UTC
From: DataSheet <jixjix@gmail.com>
Message-ID: <1115697965.986408.277190@f14g2000cwb.googlegroups.com>
Source record: 19034

800,000's IC DataSheet Search Site !

http://www.datasheet4u.com

http://jap.datasheet4u.com

http://nl.datasheet4u.com

http://it.datasheet4u.com

2402. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-10 07:16:47 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <91k0815t0udva93jue2d6ukuqg301c9pdp@4ax.com>
Source record: 19035

On 9 May 2005 15:08:07 -0700, LenAnderson@ieee.org wrote:

>From: Paul Keinanen on Sun,May 8 2005 11:54 pm

>>While a backplane would not be suitable for running the RF signals, it
>>would be a good idea to have a common control interface standard. This
>>might be some sort of serial interface or perhaps a CANbus interface
>>as used on some AMSAT satellites.
>
> Who says a "backplane would not be suitable?" :-)
> Those PC backplanes carry terribly broad spectra of
> RF...from (literally) DC on up to the low microwaves.
> No "perhaps" about it. Thing is, the layout can NOT
> be done as if it were wire-wrap; i.e., in random
> order of wire placement.

The PCI signals must run on transmission lines, since the receiver is not activated by the for forward wave, which is reflected by the mismatched end of transmission line and the receiver is only activated by the combination of the forward and reflected wave. So indeed, the layout is critical to get the signal through, even if no crosstalk problems would exist.

> With broadbanding anything,
> every single adjacent trace becomes a COUPLER and
> unwitting layouts can produce remarkable crosstalk
> effects. Designers have known that for decades and
> handle it...all kinds of Application Notes and info
> out in public access available for anyone...just too
> specialized for the "weekender" small-project
> assembler hobbyist.

In a PC, the signals are all around a few volts, thus the crosstalk problems are not so bad. In a radio receivers, the signal levels vary from less than a microvolt to several volts, so the crosstalk issues are much more demanding. Microstrip transmission lines would hardly be enough, at least striplanes with grounded traces between the signal conductors in the middle layer would be required, so the minimum would be a 3 layer PCB.

> The IEEE-488 is a mature standard for control and
> interface for computer-controlled, interconnected
> systems. Would be a bit TOO all-inclusive for a
> special-purpose new design. The "interface" does
> NOT have to be some kind of "new" thing used on the
> latest whatever out in space.

The IEEE-488 requires a lot of signals and a complex handshaking, so in practice, you would need an interface chip anyway.

The CANbus has been used in the automobile industry for more than a decade. The CANbus has a nondestructive collision system, so this makes it possible to have a true peer-to-peer communication system, without complex protocols (such as token passing).

The AMSAT thing I was referring to is a standard PCB, with a size about a D connector, with an interface chip on it and it has a few digital signals. It is included in every module on the bigger AMSAT birds. This bus structure greatly simplifies the wiring between modules.

Paul OH3LWR

2403. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-10 07:16:49 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <7qm081tlo2n75aojiqiqdaudjek9n83g2o@4ax.com>
Source record: 19036

On Mon, 09 May 2005 16:17:59 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>Then the question becomes, who will define, develop, and maintain the
>software? I can tell you from experience that it's no easy matter to
>keep any software working properly as new operating systems, protection
>software, and hardware appear. Add the necessary hardware interface to
>the equation and the job gets tougher yet. Oh, and what do you do when
>key components of the interface become obsolete and no longer available?

There are large, well established operating system created and
maintained by volunteers. The problem with some special hardware is
often that the hardware interface specification is not publicly
available (as with some 3D graphics cards).

Writing a device driver for some radio modules would not be that hard,
provided that the module control is designed in a somewhat sensible
way. As long as the hardware interface specs are available for these
modules, the software is not going to be the show stopper.

Paul OH3LWR

2404. Re: DC-DC up converter 12v-->24v 500 mA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-10 20:41:10 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <G%8ge.22235$vi2.648308@twister.southeast.rr.com>
Source record: 19037

"Rightrik" <gaggiorNOSPAM@tin.it> wrote in message
news:3dsss9F1uuoU1@individual.net...
> Hello, i need a little, low power (about 500 mA) step up converter from 12
> v
> dc to 24 v dc to operate correctly a 4 ways coaxial switch.
> I have found project on the net, but i wonder if there is a ready, little,
> not ott expensive kit or ready-to-go-module to obtain this 24-26 v dc
> voltage from 12 (13,8) dc volt input.
>
> Thank you,
> 73 de Riccardo IK5WQO
>
>
These relays will usually hold in fine on 12 VDC they may even work OK. If
they will not work there is a circuit that charges a capacitor to 12vdc and
when the relay is energized the cap is momentarily in series with the 12
volt supply. This will pull the relay in then the 12 volts should be enough
to hold it. Google on "operating 24 volt relays on 12 volts" Circuit is very
simple if you can find it.One advantge of using this circuit is that the
relay coils are not stressed as much. A coil that runs hot at 24 may be
cool to the touch on 12.

2405. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-10 20:59:13 UTC
From: LenAnderson@ieee.org
Message-ID: <1115758753.191717.39980@o13g2000cwo.googlegroups.com>
Source record: 19038

From: Paul Keinanen <keina...@sci.fi> on 10 May 2005 09:11:19 -0700

>>>While a backplane would not be suitable for running the RF signals,
it
>>>would be a good idea to have a common control interface standard.
This
>>>might be some sort of serial interface or perhaps a CANbus interface

>>>as used on some AMSAT satellites.
>
>> Who says a "backplane would not be suitable?" :-)
>> Those PC backplanes carry terribly broad spectra of
>> RF...from (literally) DC on up to the low microwaves.
>> No "perhaps" about it. Thing is, the layout can NOT
>> be done as if it were wire-wrap; i.e., in random
>> order of wire placement.
>
>The PCI signals must run on transmission lines, since the receiver is
>not activated by the for forward wave, which is reflected by the
>mismatched end of transmission line and the receiver is only activated

>by the combination of the forward and reflected wave. So indeed, the
>layout is critical to get the signal through, even if no crosstalk
>problems would exist.

But...there CAN be COUPLING there and that is, very
definitely, part of the layout. When mixed with
analog signals - as would be the case in a "radio" -
the layout can be critical.

>In a PC, the signals are all around a few volts, thus the crosstalk
>problems are not so bad.

Look again at the 3.3 V logic thresholds. :-)

>In a radio receivers, the signal levels vary
>from less than a microvolt to several volts, so the crosstalk issues
>are much more demanding.

I will disagree on radio receivers on such wide dynamic
ranges. "Several volts" INTO a receiver front end?
No. Such levels aren't encountered in practical
locations and would, definitely, cause enough IM
that would create much distortion and spur products.

In radio transmitters, YES, but those stages can be
individually shielded and thus isolated...do NOT

need to be close to the control lines...or even need
control lines (in the case of an amplifier block).

> Microstrip transmission lines would hardly be
>enough, at least striplanes with grounded traces between the signal
>conductors in the middle layer would be required, so the minimum would

>be a 3 layer PCB.

Not the case in practical RF structures done in
the last three decades. [been there, done that,
got lots of T-shirts] It is BETTER to have good
stripline and microstrip as opposed to "ordinary"
PC layout, but that isn't an absolute necessity.

>The IEEE-488 requires a lot of signals and a complex handshaking, so
>in practice, you would need an interface chip anyway.

That was cited solely as an example of something
that IS mature and used daily in radio-electronics
testing.

>The CANbus has been used in the automobile industry for more than a
>decade. The CANbus has a nondestructive collision system, so this
>makes it possible to have a true peer-to-peer communication system,
>without complex protocols (such as token passing).

IF and only if this SDR of the future NEEDS micro-
computer control...or even modular microcontroller
sub-systems.

Trying to use an EXISTING computer interface system
isn't always good because that system has worked for
a decade-plus. While automotive computer interface
system speeds are increasing with increasing control
demands, radios aren't quite vehicles. The control
needs aren't quite the same.

>The AMSAT thing I was referring to is a standard PCB, with a size
>about a D connector, with an interface chip on it and it has a few
>digital signals. It is included in every module on the bigger AMSAT
>birds. This bus structure greatly simplifies the wiring between
>modules.

I've had hands-in on earlier unmanned spacecraft but
understand the principles...which are similar to the
interface chips for things like USB adapters to work
with Serial or Parallel port peripherals with PCs.
One SOC (System On a Chip) that is essentially a
dedicated mircocontroler is all that is needed.
[FTDI makes those chips, Mouser sells them]

What you describe is more like an outgrowth of the
existing microcontroller adaptation to amateur

radio (and, more, to commercial radio) equipments. The front panel controls are coupled (mostly) via DC lines to the actual signal controls on PC boards to reduce the mechanical complexity...which allows greater freedom of layout and compactness. [positive attributes for spacecraft as well]

My "ancient" Icom R-70 receiver has a central microprocessor doing a great number of control tasks...and does have some external control capability through a rear connector. At about two decades old, that's just one example of what already existed - in radios - some time ago and still does. Modern amateur transceivers usually have two microcontrollers. Some of those allow external control and a few are entirely controlled externally. The basics have already been laid down for the SDR system on what CAN work.

What is lacking is STANDARDIZATION. That can't be worked out in newsgroups, but requires much more organization...and willingness to compromise (almost impossible in newsgroups, heh heh). See any of the industrial standards (EIA, AES, etc. in the USA) which are the first steps towards making ANYTHING "plug and play." Example: The Cannon "D" connector was on the market in the early 1950s. A combination of factors made it a practical connector line used in many electronic things. Eventually, it became so common in the USA that it was Standardized in shape, materials, dimensions, etc., despite the original company changing in corporate evolution. Wide use made it "standard." The 25-pin and 9-pin D connectors are on practically every PC today...as they were in the beginning of the PC in 1981.

Standardization isn't anywhere close to reality for SDR now. Nobody can seem to agree on WHAT range of control is needed, let alone details of the controlling interface signals. :-) That might work itself out later.

LenAnderson@ieee.org

2406. Re: DC-DC up converter 12v-->24v 500 mA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-10 21:01:56 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <2q728154m5i7l7u4b2ef8im5gsqvjct1um@4ax.com>
Source record: 19039

On Tue, 10 May 2005 20:41:10 GMT, "Jimmie" <Gfender@carolina.rr.com>
wrote:

>These relays will usually hold in fine on 12 VDC they may even work OK. If
>they will not work there is a circuit that charges a capacitor to 12vdc and
>when the relay is energized the cap is momentarily in series with the 12
>volt supply. This will pull the relay in then the 12 volts should be enough
>to hold it. Google on "operating 24 volt relays on 12 volts" Circuit is very
>simple if you can find it.One advantge of using this circuit is that the
>relay coils are not stressed as much. A coil that runs hot at 24 may be
>cool to the touch on 12.
>
You might want to check this.

I have dealt with circuits which "should have" worked, but enough
components pulled down the voltage to where relays would not stay
energized, and would rapidly cycle as they struggled to stay
energized.

Happy trails,
Gary (net.yogi.bear)
--
At the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

2407. Re: DC-DC up converter 12v-->24v 500 mA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-10 21:08:49 UTC
From: Rightrik <gaggiorNOSPAM@tin.it>
Message-ID: <3ecm72F28ougU1@individual.net>
Source record: 19040

> Because they are strictly wholesale only, they may not reply. In the past
I
> have had a reply which directed me to the distributor here in Australia.

They just replay me : "we don't have any distributor for Italy, sorry"...

:-(

2408. Re: DC-DC up converter 12v-->24v 500 mA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-10 21:11:54 UTC
From: Rightrik <gaggiorNOSPAM@tin.it>
Message-ID: <3ecmcqF2doboU1@individual.net>
Source record: 19041

Yes, i've seen this "pump-up" circuit but i would prefer a real 24 vdc to
make sure the rele is correctly energized.
My 26 vdc - 4 ways Dow-Key coax rele works also with 12 vdc, but the problem
is : "is it affordable at this coil voltage???"
A stronger 24 vdc would be better...

Thank you,
73 de Riccardo IK5WQO

2409. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 00:10:16 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1182jbd4rb6lq78@corp.supernews.com>
Source record: 19042

This reminds me of the Dilbert cartoon on my wall:

PHB (Pointy-Haired Boss), pointing to flip chart graph of declining sales: "Our sales are dropping like a rock."

PHB, pointing to flip chart graph labeled "Future" and steadily rising: "Our plan is to invent some sort of doohickey that everyone wants to buy."

PHB, to Dilbert: "The visionary leadership part is done. How long will your part take?"

Roy Lewallen, W7EL

2410. Re: DC-DC up converter 12v-->24v 500 mA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 00:59:47 UTC
From: budgie <me@privacy.net>
Message-ID: <n4m281he4bkncug9c5ul969lvmdo30n820@4ax.com>
Source record: 19043

On Tue, 10 May 2005 23:08:49 +0200, "Rightrik" <gaggiorNOSPAM@tin.it> wrote:

>
>> Because they are strictly wholesale only, they may not reply. In the past
>I
>> have had a reply which directed me to the distributor here in Australia.
>
>They just replay me : "we don't have any distributor for Italy, sorry"...

maybe you need to ask if they have one in some other EU country who does mail order. At least you can pay in a common currency.

2411. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 01:24:45 UTC
From: "Clair J. Robinson" <cjr@visi.OH-NO-SPAM-OH.com>
Message-ID: <1182nl0f6l6rd7e@corp.supernews.com>
Source record: 19044

Roy Lewallen wrote:

> This reminds me of the Dilbert cartoon on my wall:
>
> PHB (Pointy-Haired Boss), pointing to flip chart graph of declining
> sales: "Our sales are dropping like a rock."
>
> PHB, pointing to flip chart graph labeled "Future" and steadily rising:
> "Our plan is to invent some sort of doohickey that everyone wants to buy."
>
> PHB, to Dilbert: "The visionary leadership part is done. How long will
> your part take?"
>
> Roy Lewallen, W7EL

Wonderful! I missed that one somewhere.

73, CJ Kï¿½CJ

2412. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 02:31:11 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <48r28114edqnh5arvqv2dqe5r547svd2dc@4ax.com>
Source record: 19045

On Tue, 10 May 2005 20:24:45 -0500, "Clair J. Robinson"
<cjr@visi.OH-NO-SPAM-OH.com> wrote:

>Roy Lewallen wrote:
>
>> This reminds me of the Dilbert cartoon on my wall:
>>
>> PHB (Pointy-Haired Boss), pointing to flip chart graph of declining
>> sales: "Our sales are dropping like a rock."
>>
>> PHB, pointing to flip chart graph labeled "Future" and steadily rising:
>> "Our plan is to invent some sort of doohickey that everyone wants to buy."
>>
>> PHB, to Dilbert: "The visionary leadership part is done. How long will
>> your part take?"
>>
>> Roy Lewallen, W7EL
>
>Wonderful! I missed that one somewhere.
>
>73, CJ Kï¿½CJ

The really funny thing about Dilbert is that people who work in that
type of environment see only that the character names are wrong for
their office.

Reminds me of a Will Rogers quote, "I don't make jokes. I just watch
the government and report the facts."

Scott Adams worked in a high-tech office, and reports the facts.

Happy trails,
Gary (net.yogi.bear)
--
At the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

2413. Re: Progress is dependent upon us ...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 02:37:13 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <42816FCD.BBEDCCFE@earthlink.net>
Source record: 19046

-exray- wrote:
>
> Michael A. Terrell wrote:
>
> >
> > I was a volunteer advisor for the Lake county Florida Vo-Tec
> > electronics program, till it was shut down. Right now I am trying to
> > find the money to finish repairs to my four car garage and convert it
> > into a 1200 sq ft electronics shop to teach basic electronics to the
> > kids who are still interested. Its not easy when you're 100% disabled
> > and living on a tiny pension, but I don't give up too easy.
> >
> Good luck with finding money for your garage. Sorry about Vo-tech
> shutting down and your your disability and tiny pension.
> Was there anything positive you wanted to say?
>
> -Bill

In case you missed it, I was saying that I don't let these things get
me down. I find something to keep me busy. I could be like a lot of
people I've met recently who throw up their hands and give up on
everything, but I'm not like that.

The diabilty stops me from climbing ladders or carrying anything
heavy so I bought a large cart to move things around the shop and house.

The small pension makes me consider what I want to spend money on
rather than just write a check while knowing that I had a wad of money
in the bank to cover it, so it didn't matter.

Life goes on, if you let it. :-)

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

2414. Re: Progress is dependent upon us ...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 02:49:16 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <1182skss5nkm47a@corp.supernews.com>
Source record: 19047

Michael,

If you don't mind my asking, what sort of professional electron wrangling did you do prior to becoming disabled?

Good luck on converting your garage... I think there's a good chance you can get a decent amount of equipment and supplies donated once it's clear (to the outside world) that you're serious about what you're doing.

----Joel

2415. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 02:53:05 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <42817385.D475770A@earthlink.net>
Source record: 18948

John Smith wrote:
>
> You miss the point, I expect the cards to cover the planet... our present
> way of thinking enslaves us to "our beloved componet" or, "our beloved
> manufacturer", time for a change...

You can't see the forest for the trees. There isn't a big enough
market for what you want to EVER bring the price down to a reasonable
level. You can't do anything without some initial specifications. You
have to do research on available parts, cost to tool up the metalwork,
and liability for your design. You mention a "PA" implying a transmitter
module. You talk about "manufactures of the modules" This brings the
FCC, UL, and other testing costs and problems. You have no idea what you
are talking about, unless you have worked to design a modular system.
It can easily triple the cost of the design. Then there is software
compatibility. You have to set strict standards for each module, or one
"X" module won't work with someone else's "Y" module. How about the
GUI? who is going to write a new one for every combination of modules?
Or do you plan on having a couple dozen separate programs on screen at a
time for each function?

have you ever designed a complete radio system?

> I suspect, in the future problems will arise and be delt with--just recently
> I had to do a "kludge" and replace a 6cw4 with a fet... who knows what
> "fixes" will be forced on those of the future...

I'm all too familiar with finding replacements for obsolete parts.
Both in manufacturing and repair. There is a mature product on the
production line. Purchasing comes running to the production manager to
tell them that the last manufacturer of a line of components has just
dropped the whole line, and we missed the "Lifetime buy" option by a
couple days. Do you drop the product, or do you redesign it? DO you
spend days or weeks tracking down surplus parts through a broker that
may or may not be good, and risk bad PR when they have a high failure
rate in the field? Been there, done that. The tee shirt was NLA.

> Warmest regards,
> John
> --
> When Viagra fails to work--you are DOOMED!!!

There is your problem. You want a fast cure for every perceived
problem.

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

2416. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 03:12:43 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <KKege.192$ID6.16882753@news.sisna.com>
Source record: 18949

I don't think the "apple boys" had ever designed a complete computer before they did--indeed, don't remember anyone else (or team of engineers, techs, scientists, etc...) doing a desktop before then...

You mean, China, Russia, India, USA, Canada, So. American, Mexico, etc--and every gov't, business, private individual, ham and cb'er... is not a big enough market... these things would be manufactured in China yanno!!!

Kinda like Mac's and IBM's, yanno.

Lets face it, it is most difficult to buy American computer boards, memory, etc--these radios would be the same... the computers are already made there, we would just be giving them one more task...

Warmest regards,
John
--
When Viagra fails to work--you are DOOMED!!!

"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message news:42817385.D475770A@earthlink.net...
| John Smith wrote:
| >
| > You miss the point, I expect the cards to cover the planet... our present
| > way of thinking enslaves us to "our beloved componet" or, "our beloved
| > manufacturer", time for a change...
|
|
| You can't see the forest for the trees. There isn't a big enough
| market for what you want to EVER bring the price down to a reasonable
| level. You can't do anything without some initial specifications. You
| have to do research on available parts, cost to tool up the metalwork,
| and liability for your design. You mention a "PA" implying a transmitter
| module. You talk about "manufactures of the modules" This brings the
| FCC, UL, and other testing costs and problems. You have no idea what you
| are talking about, unless you have worked to design a modular system.
| It can easily triple the cost of the design. Then there is software
| compatibility. You have to set strict standards for each module, or one
| "X" module won't work with someone else's "Y" module. How about the
| GUI? who is going to write a new one for every combination of modules?
| Or do you plan on having a couple dozen separate programs on screen at a
| time for each function?
|
| have you ever designed a complete radio system?
|

| > I suspect, in the future problems will arise and be delt with--just
recently
| > I had to do a "kludge" and replace a 6cw4 with a fet... who knows what
| > "fixes" will be forced on those of the future...
|
|
| I'm all too familiar with finding replacements for obsolete parts.
| Both in manufacturing and repair. There is a mature product on the
| production line. Purchasing comes running to the production manager to
| tell them that the last manufacturer of a line of components has just
| dropped the whole line, and we missed the "Lifetime buy" option by a
| couple days. Do you drop the product, or do you redesign it? DO you
| spend days or weeks tracking down surplus parts through a broker that
| may or may not be good, and risk bad PR when they have a high failure
| rate in the field? Been there, done that. The tee shirt was NLA.
|
| > Warmest regards,
| > John
| > --
| > When Viagra fails to work--you are DOOMED!!!
|
|
| There is your problem. You want a fast cure for every perceived
| problem.
|
| --
| Former professional electron wrangler.
|
| Michael A. Terrell
| Central Florida

2417. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 06:56:30 UTC
From: Ian White GM3SEK <g3sek@ifwtech.co.uk>
Message-ID: <Ub0VoiEeyagCFAgV@ifwtech.co.uk>
Source record: 18950

Clair J. Robinson wrote:
>Roy Lewallen wrote:
>
>> This reminds me of the Dilbert cartoon on my wall:
>> PHB (Pointy-Haired Boss), pointing to flip chart graph of declining
>>sales: "Our sales are dropping like a rock."
>> PHB, pointing to flip chart graph labeled "Future" and steadily
>>rising: "Our plan is to invent some sort of doohickey that everyone
>>wants to buy."
>> PHB, to Dilbert: "The visionary leadership part is done. How long
>>will your part take?"
>> Roy Lewallen, W7EL
>
>Wonderful! I missed that one somewhere.

Then there's the Feature Creep character, who specifies user
requirements to people like Dilbert... and Roy.

Dilbert: "Your requirements list includes 400 features.
No human would be able to use a product with that level of complexity."

FC: "Good point. I'd better add 'Easy to use'."

--
73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)

http://www.ifwtech.co.uk/g3sek... temporarily offline while changing ISP

2418. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 07:13:25 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <s0a3811p2js275btelhrpm5ie006odca7k@4ax.com>
Source record: 18951

On 10 May 2005 13:59:13 -0700, LenAnderson@ieee.org wrote:

>From: Paul Keinanen <keina...@sci.fi> on 10 May 2005 09:11:19 -0700

>>In a radio receivers, the signal levels vary
>>from less than a microvolt to several volts, so the crosstalk issues
>>are much more demanding.
>
> I will disagree on radio receivers on such wide dynamic
> ranges. "Several volts" INTO a receiver front end?
> No. Such levels aren't encountered in practical
> locations and would, definitely, cause enough IM
> that would create much distortion and spur products.

Look at a multitransmitter contest site with one transmitter on each band, the voltage induced to the receiving antennas for other bands can be quite large. Of course, in a competent receiver design only the frequency band of interest is filtered out before processing. However, if the antenna is connected directly to the backplane and the modules do their own filtering, the large composite signal on the backplane will radiate all around the system.

In non-contest sites large wire or log-periodic antennas can collect a quite large signal voltage (in the order of 0 dBm, 220 mV or more).

Also if the final IF is within or below the receiver tuning range and a diode ring mixer is used as the SSB demodulator with +7 or +17 dBm, you must keep this BFO signal and harmonics from entering the front end.

>>The CANbus has been used in the automobile industry for more than a
>>decade. The CANbus has a nondestructive collision system, so this
>>makes it possible to have a true peer-to-peer communication system,
>>without complex protocols (such as token passing).
>
> IF and only if this SDR of the future NEEDS micro-
> computer control...or even modular microcontroller
> sub-systems.
>
> Trying to use an EXISTING computer interface system
> isn't always good because that system has worked for
> a decade-plus. While automotive computer interface
> system speeds are increasing with increasing control
> demands, radios aren't quite vehicles. The control
> needs aren't quite the same.

Even the SDR is going to need some switchable front end band pass filters in order to survive in the hostile RF environment these days with a lot of strong signals even in ordinary sites.

In transceivers, there would be several points that would need switching.

I used the CANbus as an example, since the cable can be tens or hundreds of meters long depending on speed and thus, it could be used to control some internal points in a transceiver as well as wire all devices in the ham shack as well as in the tower. For instance, the same controller could control the antenna rotator, command the antenna preamplifier to bypass mode, turn the transvertter into transmit mode, select the VFO frequency for transmit (in split operation) and finally turn the transmitter on.

<examples of previous control systems deleted>

> The basics have already been laid
> down for the SDR system on what CAN work.
>
> What is lacking is STANDARDIZATION.

This is definitely a big problem.

> That can't be worked out in newsgroups,

A newsgroup is a good place for open ended discussions between people with experience in quite different fields. This can generate quite different ideas (some useful, most less usable) than a "business as usual" attitude. It is a good idea to have a lot of new ideas to chose from than having no new ideas at all.

> but requires much more organization...

Writing a formal specification may require some formal organisation, but on the other hand quite a few successful RFCs in the IT sector are written by a single person or a small group.

> and willingness to compromise

That is the problem in formal committees, in which most delegates from various vendors have large commercial interests in the subject and in order to be able to produce even some kind of standard, all features from various vendors are included. This makes the final standard hard to implement properly or each manufacturer is implementing only a subset of the complex standard and thus, there is no real guarantee that two devices would actually communicate, even if both claim compatibility with xxxx standard (remember the RS-232 "standard" :-).

Paul OH3LWR

2419. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 08:55:33 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4281C880.6D022174@earthlink.net>
Source record: 18952

John Smith wrote:
>
> I don't think the "apple boys" had ever designed a complete computer before
> they did--indeed, don't remember anyone else (or team of engineers, techs,
> scientists, etc...) doing a desktop before then...

Have you ever looked at the schematic for the Apple II? It was bases
on the MOS technology 6502 processor and support chips. Its probably
the simplest "Computer" ever sold and most of the design was in the IC
data books, just like the original IBM PC was quite close to a sample
design published by Intel. The only real difference was that the design
was broken up into modules. Neither of the original designs were
anything to brag about. Monochrome displays, Apple's half assed
"custom" floppy disk interface that threw away most of the capacity to
keep it cheap. The PC was shipped with a cassette interface and no
floppy drive. It had BASIC in ROM, and was fairly useless until floppy
and hard drives were available to do any real work.

If you think this is an easy project its time to put up, or shut up.
Design your simple, "It'll sell billions" project and prove everyone
wrong, or just shut up.

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

2420. Re: Progress is dependent upon us ...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 09:09:28 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4281CBC3.A3C1DD5@earthlink.net>
Source record: 18953

Joel Kolstad wrote:
>
> Michael,
>
> If you don't mind my asking, what sort of professional electron wrangling did
> you do prior to becoming disabled?
>
> Good luck on converting your garage... I think there's a good chance you can
> get a decent amount of equipment and supplies donated once it's clear (to the
> outside world) that you're serious about what you're doing.
>
> ----Joel

I worked for L-3com/Microdyne at their Ocala plant as a production and engineering tech. I also worked with purchasing to find and qualify replacement sources for components, and the nasty job of removing long time vendors from our approved list. I worked in every area of the product line, built test fixtures, wrote test procedures and fought the apathy of a couple older engineers to fix old design problems. I knew more about our oldest products than anyone in engineering, so when a problem cropped up they came running to my bench to ask questions rather than take the time to research the old records. The last product I worked on was their RCB-2000, a dual DSP based telemetry receiver, to take it from the engineering prototypes to the production floor. I was laid off when my health no longer let me work overtime, even though I did more in an eight hour shift than any two other people on the line. Suddenly, I was deemed "Not a team player" because I could barely walk out the door after my shift. I was troubleshooting and testing the signal processing boards under a stereo microscope and I did most of my own rework rather than wait for it to go through the rework department. I hand soldered 288 pin SMD chips under the microscope. After the cleaning room was done, QC couldn't find my work on the PC boards. This radio was introduced to the market at about $80,000. One of the VME based boards in it cost about $8,000 to stuff, reflow and test. I miss the work, but I doubt that I'll be able to do that kind of work again, and the high tech companies have pretty well left this part of the country.

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

2421. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 10:11:05 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <ZSkge.71560$NU4.55508@attbi_s22>
Source record: 18954

You have no idea what you
> are talking about,

And there Michael, you have defined Johns problem. Richard fed him a question he couldn't answer and he crept off with a lame excuse of pressing work until he thought everyone had forgotten about it. I was just celebrating, when someone else fed him and he's back again in full force. If he's ignored, eventually, he'll go and bother someone else on someone elses newsgroup. You don't argue with children, don't feed the troll.

W4ZCB

2422. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 13:03:22 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <wonge.7$rq6.491545@news.sisna.com>
Source record: 18957

So, although your original argument was how difficult a bus and keeping analog seperate from digital which would share various signals--would be, then, when the argument was made that someone just picked up a bunch of on-the-shelf items and went ahead and done it... you flip-flop--to where now it was so obivious someone should have done such a simple thing LONG before them...

Yanno, you are pretty obivous here--you are like what has been "the standard method of operation." A long list of why it can't be done--but if someone can--its' easy!!!

Or, first it is impossible, then, once someone has done it--it is nothing...

Now, that is comming close to a "Troll!" And, that would be proven if once this is pointed out to you--you use that for a reason to spur more conflict...

Arguments and debates for the purpose of looking over what is available--of reaching a logical and organized ideas--are good--argument for conflict is not...

While some may take pride in finding all the reasons why something is difficult--or may end up to be "un-do-able" right at the immediate time... It is the guys who ignore all this and go ahead and do it which are remembered...

For every thing we have in this world today--there stands inventors, engineers, technicans, etc.. who could have easily decided it was either too hard or impossible and given up--thank gawd they were of a different breed...

Warmest regards,
John
--
When Viagra fails to work--you are DOOMED!!!

"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message news:4281C880.6D022174@earthlink.net...
| John Smith wrote:
| >
| > I don't think the "apple boys" had ever designed a complete computer before
| > they did--indeed, don't remember anyone else (or team of engineers, techs,
| > scientists, etc...) doing a desktop before then...
|
|

| Have you ever looked at the schematic for the Apple II? It was bases
| on the MOS technology 6502 processor and support chips. Its probably
| the simplest "Computer" ever sold and most of the design was in the IC
| data books, just like the original IBM PC was quite close to a sample
| design published by Intel. The only real difference was that the design
| was broken up into modules. Neither of the original designs were
| anything to brag about. Monochrome displays, Apple's half assed
| "custom" floppy disk interface that threw away most of the capacity to
| keep it cheap. The PC was shipped with a cassette interface and no
| floppy drive. It had BASIC in ROM, and was fairly useless until floppy
| and hard drives were available to do any real work.
|
| If you think this is an easy project its time to put up, or shut up.
| Design your simple, "It'll sell billions" project and prove everyone
| wrong, or just shut up.
|
| --
| Former professional electron wrangler.
|
| Michael A. Terrell
| Central Florida

2423. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 13:04:42 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <Kpnge.8$8L6.577682@news.sisna.com>
Source record: 18956

I do work, what the heck to you guys do where you are never pressured to get
anything done--

you know, this is reflected in your text!!! Go do something!

Warmest regards,
John
--
When Viagra fails to work--you are DOOMED!!!

"Harold E. Johnson" <W4ZCB@mchsi.com> wrote in message
news:ZSkge.71560$NU4.55508@attbi_s22...
|
| You have no idea what you
| > are talking about,
|
| And there Michael, you have defined Johns problem. Richard fed him a
| question he couldn't answer and he crept off with a lame excuse of
pressing
| work until he thought everyone had forgotten about it. I was just
| celebrating, when someone else fed him and he's back again in full force.
If
| he's ignored, eventually, he'll go and bother someone else on someone
elses
| newsgroup. You don't argue with children, don't feed the troll.
|
| W4ZCB
|
|

2424. Re: Progress is dependent upon us ...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 13:08:17 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <9tnge.9$NP6.599145@news.sisna.com>
Source record: 18958

Well, whatever you did before, great!!

Now what are you doing? Finding out why nothing else can be done? Perhaps this is why you are no longer working there...

Regards,
John
--
When Viagra fails to work--you are DOOMED!!!

"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message news:4281CBC3.A3C1DD5@earthlink.net...
| Joel Kolstad wrote:
| >
| > Michael,
| >
| > If you don't mind my asking, what sort of professional electron wrangling did
| > you do prior to becoming disabled?
| >
| > Good luck on converting your garage... I think there's a good chance you can
| > get a decent amount of equipment and supplies donated once it's clear (to the
| > outside world) that you're serious about what you're doing.
| >
| > ----Joel
|
| I worked for L-3com/Microdyne at their Ocala plant as a production
| and engineering tech. I also worked with purchasing to find and qualify
| replacement sources for components, and the nasty job of removing long
| time vendors from our approved list. I worked in every area of the
| product line, built test fixtures, wrote test procedures and fought the
| apathy of a couple older engineers to fix old design problems. I knew
| more about our oldest products than anyone in engineering, so when a
| problem cropped up they came running to my bench to ask questions rather
| than take the time to research the old records. The last product I
| worked on was their RCB-2000, a dual DSP based telemetry receiver, to
| take it from the engineering prototypes to the production floor. I was
| laid off when my health no longer let me work overtime, even though I
| did more in an eight hour shift than any two other people on the line.
| Suddenly, I was deemed "Not a team player" because I could barely walk
| out the door after my shift. I was troubleshooting and testing the
| signal processing boards under a stereo microscope and I did most of my
| own rework rather than wait for it to go through the rework department.

| I hand soldered 288 pin SMD chips under the microscope. After the
| cleaning room was done, QC couldn't find my work on the PC boards. This
| radio was introduced to the market at about $80,000. One of the VME
| based boards in it cost about $8,000 to stuff, reflow and test. I miss
| the work, but I doubt that I'll be able to do that kind of work again,
| and the high tech companies have pretty well left this part of the
| country.
|
|
| --
| Former professional electron wrangler.
|
| Michael A. Terrell
| Central Florida

2425. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 13:53:45 UTC
From: mikea@mikea.ath.cx
Message-ID: <d5t2p9idu1@puck.litech.org>
Source record: 18955

Gary S. <Idontwantspam@net> wrote:
> On Tue, 10 May 2005 20:24:45 -0500, "Clair J. Robinson"
> <cjr@visi.OH-NO-SPAM-OH.com> wrote:

> >Roy Lewallen wrote:
> >
> >> This reminds me of the Dilbert cartoon on my wall:
> >>
> >> PHB (Pointy-Haired Boss), pointing to flip chart graph of declining
> >> sales: "Our sales are dropping like a rock."
> >>
> >> PHB, pointing to flip chart graph labeled "Future" and steadily rising:
> >> "Our plan is to invent some sort of doohickey that everyone wants to buy."
> >>
> >> PHB, to Dilbert: "The visionary leadership part is done. How long will
> >> your part take?"
> >>
> >> Roy Lewallen, W7EL
> >
> >Wonderful! I missed that one somewhere.
> >
> >73, CJ K?CJ

> The really funny thing about Dilbert is that people who work in that
> type of environment see only that the character names are wrong for
> their office.

> Reminds me of a Will Rogers quote, "I don't make jokes. I just watch
> the government and report the facts."

> Scott Adams worked in a high-tech office, and reports the facts.

It gives me rather considerable pleasure to report that Scott Adams also
appears to monitor, or participate pseudonomously in, some of the other
newsgroups and mailing lists I frequent. Incidents from more than one of
those groups/lists have appeared in Dilbert essentially unchanged within a
few days of being posted to the group/list.

Sometimes I think Scott works for WeBuildHighways, where I'm employed.

--
Mike Andrews W5EGO 5WPM
mikea@mikea.ath.cx Extra
Tired old sysadmin working on his code speed

2426. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 16:18:48 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <1184c2r5pnc85b4@corp.supernews.com>
Source record: 18959

"John Smith" <assemblywizard@gmail.com> wrote in message
news:KKege.192$lD6.16882753@news.sisna.com...
> I don't think the "apple boys" had ever designed a complete computer before
> they did--indeed, don't remember anyone else (or team of engineers, techs,
> scientists, etc...) doing a desktop before then...

Which Apple computer do you mean? The Apple II? Steve & Steve built the Apple I before then (you can do see one down at the Computer History Museum in the bay area if you'd like) and I'd bet a nickel they had built other folks' designs prior to that (e.g., the old Rockwell KIM, perhaps some of the popular S-100 machines available at the time, etc.). It was "revolutionary" in a sense, but much more evolutionary from a dry, engineering perspective... but then again, almost everything is if you look closely enough!

2427. Re: Progress is dependent upon us ...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 16:27:21 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <1184ciqfc0k8b9a@corp.supernews.com>
Source record: 18960

Thanks Michael, that's a very colorful career you've had.

> I was
> laid off when my health no longer let me work overtime, even though I
> did more in an eight hour shift than any two other people on the line.

If you still had some supervisors "on your side" who were willing to go to bat for you, you might have had very good prospects with a lawsuit based on the ADA? I'm sorry to hear your company ended up being run by folks who couldn't see the forest for the trees (or even the broad side of a barn for their sitting in the outhouse); it's an unfortunate trend in many companies (especially as they become larger), and I tend to agree with people who suggest it's often due to technical companies being run by business school majors (without any engineering experience whatsoever).

---Joel

2428. Re: Progress is dependent upon us ...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 16:43:13 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4282361B.630901F4@earthlink.net>
Source record: 18962

Joel Kolstad wrote:
>
> Thanks Michael, that's a very colorful career you've had.
>
> > I was
> > laid off when my health no longer let me work overtime, even though I
> > did more in an eight hour shift than any two other people on the line.
>
> If you still had some supervisors "on your side" who were willing to go to bat
> for you, you might have had very good prospects with a lawsuit based on the
> ADA? I'm sorry to hear your company ended up being run by folks who couldn't
> see the forest for the trees (or even the broad side of a barn for their
> sitting in the outhouse); it's an unfortunate trend in many companies
> (especially as they become larger), and I tend to agree with people who
> suggest it's often due to technical companies being run by business school
> majors (without any engineering experience whatsoever).
>
> ---Joel

I wasn't legally declared disabled until January of this year, so I couldn't sue under the ADA. It doesn't matter now, because the company doesn't exist. It was adsorbed wholly by L-3Com. Several hundred people lot their jobs, they dropped all but the RCB from the product line and took less than a dozen people to their new plant up north.

I've also worked as a broadcast engineer, CATV engineering, and owned an industrial electronics company that did commercial sound, CCTV, MATV, and oddball systems used by local schools and factories. I built Ch 58 TV in Destin Florida from scratch, starting with a 1952 built TTU-25B UHF transmitter. I'm in my 50s, and I never planned to retire, but its being forced on me in several ways.

Still, I find ways to keep busy. I have a couple hundred databooks in my library. I repair oddball equipment that strike my fancy. Two current projects are a TS-382 audio generator and a National NC-183R rack mount receiver. You can check out my personal web site from time to time to see what I'm working on, and maybe find a manual or oddball part you need. The link is on the "Organization" line of the message headers. I am designing a receiver from scratch, but its slow going because I have to budget carefully for the parts I don't have in stock. The VA service office told me I'm allowed to make a little money from a hobby, but they haven't been able to give me a dollar amount, so I'm holding off trying to make a little extra money till I get their answer in written form.

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

2429. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 16:43:23 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <NCqge.36$xz1.1599557@news.sisna.com>
Source record: 18961

Well, I am not even ready to argue that point...

You missed the point... what I propose is simpler... it is a radio--not a computer... and still can be done by those who ignore the nay sayers, no matter how loudly these nay sayers attempt to shout down progress...

I feel like a pimp in an old age home with hookers, no takers and everyone there wonders why I am there proposing the ideas I am... <grin>

Warmest regards,
John
--
Sit down the six-pack!!! STEP AWAY!!! ...and go do something...

"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> wrote in message news:1184c2r5pnc85b4@corp.supernews.com...
| "John Smith" <assemblywizard@gmail.com> wrote in message
| news:KKege.192$lD6.16882753@news.sisna.com...
| > I don't think the "apple boys" had ever designed a complete computer before
| > they did--indeed, don't remember anyone else (or team of engineers, techs,
| > scientists, etc...) doing a desktop before then...
|
| Which Apple computer do you mean? The Apple II? Steve & Steve built the
| Apple I before then (you can do see one down at the Computer History Museum in
| the bay area if you'd like) and I'd bet a nickel they had built other folks'
| designs prior to that (e.g., the old Rockwell KIM, perhaps some of the popular
| S-100 machines available at the time, etc.). It was "revolutionary" in a
| sense, but much more evolutionary from a dry, engineering perspective... but
| then again, almost everything is if you look closely enough!
|
|
|

2430. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 16:50:31 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <428237D1.D3E6A0B2@earthlink.net>
Source record: 18963

John Smith wrote:
>
> So, although your original argument was how difficult a bus and keeping
> analog seperate from digital which would share various signals--would be,
> then, when the argument was made that someone just picked up a bunch of
> on-the-shelf items and went ahead and done it... you flip-flop--to where now
> it was so obivious someone should have done such a simple thing LONG before
> them...

I didn't "Flip-Flop" I know what's involved, including the million
dollar plus expense involved in designing one configuration of a modular
radio.

> Yanno, you are pretty obivous here--you are like what has been "the standard
> method of operation." A long list of why it can't be done--but if someone
> can--its' easy!!!
>
> Or, first it is impossible, then, once someone has done it--it is nothing...

Are you trying to misdirect things again?

> Now, that is comming close to a "Troll!" And, that would be proven if once
> this is pointed out to you--you use that for a reason to spur more
> conflict...

Close to a troll? No, I've never met you.

> Arguments and debates for the purpose of looking over what is available--of
> reaching a logical and organized ideas--are good--argument for conflict is
> not...
>
> While some may take pride in finding all the reasons why something is
> difficult--or may end up to be "un-do-able" right at the immediate time...
> It is the guys who ignore all this and go ahead and do it which are
> remembered...
>
> For every thing we have in this world today--there stands inventors,
> engineers, technicans, etc.. who could have easily decided it was either too
> hard or impossible and given up--thank gawd they were of a different
> breed...
>
> Warmest regards,
> John
> --
> When Viagra fails to work--you are DOOMED!!!

You need to think with the other head, troll.

You have your head up your sorry ass, and I'm through wasting time with your nonsense. Its obvious that you don't know a dam thing about design when you compare the Apple II to a real design project. You need to get an education in design and stop trying to blow smoke up everyone's ass.

PLONK

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

2431. Re: Progress is dependent upon us ...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 16:52:51 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4282385D.C48F4C1F@earthlink.net>
Source record: 18964

John Smith wrote:
>
> Well, whatever you did before, great!!
>
> Now what are you doing? Finding out why nothing else can be done? Perhaps
> this is why you are no longer working there...
>
> Regards,
> John

Its obvious that you can not read as well as not understand
anything. R.I.P. your last live brain cell.

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

2432. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 16:55:06 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <428238E4.40D48C85@earthlink.net>
Source record: 18965

"Harold E. Johnson" wrote:
>
> You have no idea what you
> > are talking about,
>
> And there Michael, you have defined Johns problem. Richard fed him a
> question he couldn't answer and he crept off with a lame excuse of pressing
> work until he thought everyone had forgotten about it. I was just
> celebrating, when someone else fed him and he's back again in full force. If
> he's ignored, eventually, he'll go and bother someone else on someone elses
> newsgroup. You don't argue with children, don't feed the troll.
>
> W4ZCB

No problem, He is now the one and only twit I have had to filter in
this newsgroup. I hate to filter someone out, but he's hopeless.
--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

2433. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 16:55:36 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fOqge.39$QI1.1729643@news.sisna.com>
Source record: 18966

You my friend, are crude, rude--most likely blued and tattooed... I am sure other more "intellectual types" will benefit from your form and method of words and exchange more... goodday!

John
--
Sit down the six-pack!!! STEP AWAY!!! ...and go do something...

"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message news:428237D1.D3E6A0B2@earthlink.net...
| John Smith wrote:
| >
| > So, although your original argument was how difficult a bus and keeping
| > analog seperate from digital which would share various signals--would be,
| > then, when the argument was made that someone just picked up a bunch of
| > on-the-shelf items and went ahead and done it... you flip-flop--to where now
| > it was so obivious someone should have done such a simple thing LONG before
| > them...
|
|
| I didn't "Flip-Flop" I know what's involved, including the million
| dollar plus expense involved in designing one configuration of a modular
| radio.
|
| > Yanno, you are pretty obivous here--you are like what has been "the standard
| > method of operation." A long list of why it can't be done--but if someone
| > can--its' easy!!!
| >
| > Or, first it is impossible, then, once someone has done it--it is nothing...
|
|
| Are you trying to misdirect things again?
|
| > Now, that is comming close to a "Troll!" And, that would be proven if once
| > this is pointed out to you--you use that for a reason to spur more
| > conflict...
|
|

| Close to a troll? No, I've never met you.
|
| > Arguments and debates for the purpose of looking over what is
available--of
| > reaching a logical and organized ideas--are good--argument for conflict
is
| > not...
| >
| > While some may take pride in finding all the reasons why something is
| > difficult--or may end up to be "un-do-able" right at the immediate
time...
| > It is the guys who ignore all this and go ahead and do it which are
| > remembered...
| >
| > For every thing we have in this world today--there stands inventors,
| > engineers, technicans, etc.. who could have easily decided it was either
too
| > hard or impossible and given up--thank gawd they were of a different
| > breed...
| >
| > Warmest regards,
| > John
| > --
| > When Viagra fails to work--you are DOOMED!!!
|
|
| You need to think with the other head, troll.
|
| You have your head up your sorry ass, and I'm through wasting time
| with your nonsense. Its obvious that you don't know a dam thing about
| design when you compare the Apple II to a real design project. You need
| to get an education in design and stop trying to blow smoke up
| everyone's ass.
|
| PLONK
|
|
| --
| Former professional electron wrangler.
|
| Michael A. Terrell
| Central Florida

2434. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 17:24:02 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <1184ft32djn4c66@corp.supernews.com>
Source record: 18967

John,

"John Smith" <assemblywizard@gmail.com> wrote in message
news:NCqge.36$xz1.1599557@news.sisna.com...
> You missed the point... what I propose is simpler... it is a radio--not a
> computer... and still can be done by those who ignore the nay sayers, no
> matter how loudly these nay sayers attempt to shout down progress...

Have you ever heard the saying to the effect that the beginner sees only one option, which the experienced designer sees many? It really is something of a curse. :-)

By all means do keep pursuing your interests, but by the same token you might want to start learning more about RF design and understand where some of the other posters are coming from. Addressing your original idea, there ARE "modular" radios out there -- I know I've seen some guy's web site where he takes this approach -- but the idea that a modular radio can somehow offer the same performance as a more integrated one is about the same as claiming that you can build a CPU with the same performance and price of a 3GHz Pentium by using discrete modules for the ALU, memory controller, cache controller, instruction decoder, etc. -- it just isn't going to happen. On the other hand, you certainly COULD build some "many MHz" sort of microcontroller with this approach, and the sames of microcontrollers today swamps that of Pentiums anyway. Hence, I think there would be a market for your modular radio design -- especially within the amateur radio community -- but I doubt you'll be getting calls from Nokia any time soon.

Software defined radios accomplish a significant amount of the "reconfigurability" that I think you're looking for, and with ever-increasing ADC/DAC speeds and DSP horsepower, it probably won't be too long before most radios digitize directly at RF or IF and the rest is software (oftentimes highly non-trivial software, however). Even so, you'll always need someone who understands traditional RF engineering to get the signal from the antenna to the DAC while preserving the best SNR possible.

---Joel

2435. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 17:28:26 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <1hrge.44$Ko2.2283645@news.sisna.com>
Source record: 18970

I have watched a hundred intellectuals fail where one brave man succeeds...

Einstein said, to the effect--genius is 1% inspiration and 99%
perspiration...

Difficulty is expected, only cowards refrain...

In the end, such a radio is not only desirable, it is exactly what is
needed... no argument will change that...

Warmest regards,
John
--
Sit down the six-pack!!! STEP AWAY!!! ...and go do something...

"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> wrote in message
news:1184ft32djn4c66@corp.supernews.com...
| John,
|
| "John Smith" <assemblywizard@gmail.com> wrote in message
| news:NCqge.36$xz1.1599557@news.sisna.com...
| > You missed the point... what I propose is simpler... it is a radio--not
a
| > computer... and still can be done by those who ignore the nay sayers, no
| > matter how loudly these nay sayers attempt to shout down progress...
|
| Have you ever heard the saying to the effect that the beginner sees only
one
| option, which the experienced designer sees many? It really is something
of a
| curse. :-)
|
| By all means do keep pursuing your interests, but by the same token you
might
| want to start learning more about RF design and understand where some of
the
| other posters are coming from. Addressing your original idea, there ARE
| "modular" radios out there -- I know I've seen some guy's web site where
he
| takes this approach -- but the idea that a modular radio can somehow offer
the
| same performance as a more integrated one is about the same as claiming
that
| you can build a CPU with the same performance and price of a 3GHz Pentium
by
| using discrete modules for the ALU, memory controller, cache controller,

| instruction decoder, etc. -- it just isn't going to happen. On the other
| hand, you certainly COULD build some "many MHz" sort of microcontroller
with
| this approach, and the sames of microcontrollers today swamps that of
Pentiums
| anyway. Hence, I think there would be a market for your modular radio
| design -- especially within the amateur radio community -- but I doubt
you'll
| be getting calls from Nokia any time soon.
|
| Software defined radios accomplish a significant amount of the
| "reconfigurability" that I think you're looking for, and with
ever-increasing
| ADC/DAC speeds and DSP horsepower, it probably won't be too long before
most
| radios digitize directly at RF or IF and the rest is software (oftentimes
| highly non-trivial software, however). Even so, you'll always need
someone
| who understands traditional RF engineering to get the signal from the
antenna
| to the DAC while preserving the best SNR possible.
|
| ---Joel
|
|

2436. Joe Dixon's speread spectrum books

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 17:36:16 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <1184gk1fg1lf1c1@corp.supernews.com>
Source record: 18968

Say, does anyone have a copy of Joe Dixon's books, "Spread Specturm Systems" from 1976 and "Spread Spectrum Systems with Commercial Applications" from 1994? I'm curious how the content compares between the two.

I'd also be curious to hear the impressions of anyone who might have chosen to shell out the $190 (ouch!) for his "Radio Receiver Design" book?

Thanks,
---Joel Kolstad

2437. Re: Joe Dixon's speread spectrum books

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 18:18:24 UTC
From: mikea@mikea.ath.cx
Message-ID: <d5ti9g$sn6$1@puck.litech.org>
Source record: 18969

Joel Kolstad <JKolstad71HatesSpam@yahoo.com> wrote:
> Say, does anyone have a copy of Joe Dixon's books, "Spread Specturm Systems"
> from 1976 and "Spread Spectrum Systems with Commercial Applications" from
> 1994? I'm curious how the content compares between the two.

> I'd also be curious to hear the impressions of anyone who might have chosen to
> shell out the $190 (ouch!) for his "Radio Receiver Design" book?

I've got the former, but not the latter, and so can't compare them. If the later book is anything like as good as the earlier one, only with additional matter, I'll have to put it on my must-buy list. And now I need to investigate the "Radio Receiver Design" book. My bookseller thanks you, but my wallet doesn't.

--
"Usenet is like a herd of performing elephants with diarrhea -- massive, difficult to redirect, awe-inspiring, entertaining, and a source of mind-boggling amounts of excrement when you least expect it."
-- Gene "spaf" Spafford (1992)

2438. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 19:38:13 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <18mdne8XlJSjwh_fRVn-oQ@comcast.com>
Source record: 18971

Nearly ten years ago I had a project to design an ISDN terminal
adapter/router for "home" use. Once the design was completed I
(and several beta testers) had to install ISDN to our homes in order
to evaluate the product. We all lived in SoCal - with PacBell as the
provider.

We spent *months* going around and around with the PacBell
installers, CO technicians and the general bureacracy and so-called
"tech support" folks.

Eventually we gave up and decided to abandon the product and the
project - 'cause we realized that if *we* couldn't get things going with
PacBell there was NO chance for any potential end-user/customer.
The product worked great - we just couldn't get past the install phase
when working with PacBell!!!

A few weeks later I read a bio on Scott Adams and learned that he had
been employed by.....PacBell - in the ISDN engineering group!!!!!
Suddenly it all became clear - and I never laughed so hard...8-).....

Bill

"Mike Andrews" <mikea@mikea.ath.cx> wrote in message
news:d5t2p9idu1@puck.litech.org...
> Gary S. <Idontwantspam@net> wrote:
> > On Tue, 10 May 2005 20:24:45 -0500, "Clair J. Robinson"
> > <cjr@visi.OH-NO-SPAM-OH.com> wrote:
>
> > >Roy Lewallen wrote:
> > >
> > >> This reminds me of the Dilbert cartoon on my wall:
> > >>
> > >> PHB (Pointy-Haired Boss), pointing to flip chart graph of declining
> > >> sales: "Our sales are dropping like a rock."
> > >>
> > >> PHB, pointing to flip chart graph labeled "Future" and steadily
rising:
> > >> "Our plan is to invent some sort of doohickey that everyone wants to
buy."
> > >>
> > >> PHB, to Dilbert: "The visionary leadership part is done. How long
will
> > >> your part take?"
> > >>
> > >> Roy Lewallen, W7EL
> > >

> > >Wonderful! I missed that one somewhere.
> > >
> > >73, CJ K?CJ
>
> > The really funny thing about Dilbert is that people who work in that
> > type of environment see only that the character names are wrong for
> > their office.
>
> > Reminds me of a Will Rogers quote, "I don't make jokes. I just watch
> > the government and report the facts."
>
> > Scott Adams worked in a high-tech office, and reports the facts.
>
> It gives me rather considerable pleasure to report that Scott Adams also
> appears to monitor, or participate pseudonomously in, some of the other
> newsgroups and mailing lists I frequent. Incidents from more than one of
> those groups/lists have appeared in Dilbert essentially unchanged within a
> few days of being posted to the group/list.
>
> Sometimes I think Scott works for WeBuildHighways, where I'm employed.
>
> --
> Mike Andrews W5EGO 5WPM
> mikea@mikea.ath.cx Extra
> Tired old sysadmin working on his code speed

2439. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 19:59:26 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <1184p0esmk12ra0@corp.supernews.com>
Source record: 18972

"John Smith" <assemblywizard@gmail.com> wrote in message
news:1hrge.44$Ko2.2283645@news.sisna.com...
> I have watched a hundred intellectuals fail where one brave man succeeds...

Yeah, but for every brave man's successs, there are thousands of failures too.
:-)

> Einstein said, to the effect--genius is 1% inspiration and 99%
> perspiration...

I think that was Edison? Einstein said something like, "Creativity is more important than knowledge," which unfortunately a lot of people seem to want to interpret as "Hence, knowledge is unimportant," which is not at all what he meant.

> In the end, such a radio is not only desirable, it is exactly what is
> needed... no argument will change that...

Well John, there's nothing stopping you from desgining and building the thing. Even in the post-Internet boom era here, though, you'll probably have a much easier time finding venture capital from a bunch of businessmen than from a bunch of engineers.

I do think it's true that, in various areas, amateur radio now plays technological "catch up" to commercial technologies. IMO, this is a reflection of the fact that (unlike 40 years ago) designing a "modern radio" (such as a cell phone) costs literally tens to hundreds of millions of dollars and hundreds of man years. There's just no way companies like Icom, Yaesu, etc. can invest that sort of effort when you look at the sales volumes of their radios (and the fact that -- unlike cell phones -- amateur radio usage doesn't provide them with any revenue!). A lot of the most interesting advancements in amateur radio in the past couple of decades have come from the likes of Doug DeMaw, Bob Larkin, Rick Campbell, Roy Lewallen, Wes Hayward, etc. -- all of whom, insofar as I'm aware, spent some of their professional lives performing RF design for well-funded companies. I don't think that's a coincidence.

---Joel

2440. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 21:17:18 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <DDuge.85$fW6.6233228@news.sisna.com>
Source record: 18973

Joel:

Well, great men have come and gone, what are some younger names which will be taking on these challenges of the future? A history lesson does not serve as innovation or chat about new ideas which are needed...

I don't expect people in their 50's on up to be the innovators, it is the younger crowd who has been educated in universities, with access to the newest state of the art labs available which will be taking on these projects--that is a given, I never though different... if you didn't have access to a computer by jr. college, you are probably not in this group of new engineers...

The men in their 20s to 30s are the ones with the access to industry and design labs where these ideas can be taken to... the ones on the cutting edge--the ones able to introduce new ideas and get them looked at... the ones to build one and take it around to demonstrate...

I was just hoping there were some here, maybe not...

Warmest regards,
John
--
Sit down the six-pack!!! STEP AWAY!!! ...and go do something...

"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> wrote in message news:1184p0esmk12ra0@corp.supernews.com...
| "John Smith" <assemblywizard@gmail.com> wrote in message
| news:1hrge.44$Ko2.2283645@news.sisna.com...
| > I have watched a hundred intellectuals fail where one brave man succeeds...
|
| Yeah, but for every brave man's successs, there are thousands of failures too.
| :-)
|
| > Einstein said, to the effect--genius is 1% inspiration and 99%
| > perspiration...
|
| I think that was Edison? Einstein said something like, "Creativity is more
| important than knowledge," which unfortunately a lot of people seem to want to
| interpret as "Hence, knowledge is unimportant," which is not at all what he
| meant.

|
| > In the end, such a radio is not only desirable, it is exactly what is
| > needed... no argument will change that...
|
| Well John, there's nothing stopping you from desgining and building the
thing.
| Even in the post-Internet boom era here, though, you'll probably have a
much
| easier time finding venture capital from a bunch of businessmen than from
a
| bunch of engineers.
|
| I do think it's true that, in various areas, amateur radio now plays
| technological "catch up" to commercial technologies. IMO, this is a
| reflection of the fact that (unlike 40 years ago) designing a "modern
radio"
| (such as a cell phone) costs literally tens to hundreds of millions of
dollars
| and hundreds of man years. There's just no way companies like Icom,
Yaesu,
| etc. can invest that sort of effort when you look at the sales volumes of
| their radios (and the fact that -- unlike cell phones -- amateur radio
usage
| doesn't provide them with any revenue!). A lot of the most interesting
| advancements in amateur radio in the past couple of decades have come from
the
| likes of Doug DeMaw, Bob Larkin, Rick Campbell, Roy Lewallen, Wes Hayward,
| etc. -- all of whom, insofar as I'm aware, spent some of their
professional
| lives performing RF design for well-funded companies. I don't think
that's a
| coincidence.
|
| ---Joel
|
|

2441. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 22:14:19 UTC
From: Dee Flint <deeflint01@comcast.net>
Message-ID: <g9WdndG_kZNGHh_fRVn-oQ@comcast.com>
Source record: 18974

"John Smith" <assemblywizard@gmail.com> wrote in message
news:KKege.192$lD6.16882753@news.sisna.com...
>I don't think the "apple boys" had ever designed a complete computer before
> they did--indeed, don't remember anyone else (or team of engineers, techs,
> scientists, etc...) doing a desktop before then...
>
> You mean, China, Russia, India, USA, Canada, So. American, Mexico,
> etc--and
> every gov't, business, private individual, ham and cb'er... is not a big
> enough market... these things would be manufactured in China yanno!!!
>

Nope the entire world wide population of hams is NOT enough. The US has just under 700,000. Japan has somewhere around 1 million (there numbers are hard to determine due to their licensing system). The remainder of the world combined has right around the same total of the US. This gives a worldwide ham population of under 2.5 million. So starting from that rough estimate, let's look at some figures. Very, very few people buy a new HF rig annually. Just using the people I know, it's more like every 5 to 10 years. So let's use an average of 7.5 years. That means a total of 333,000 new radios (rounding off the answer) sold in any given year. Now split that between 3 makers, yielding 111,000 units per maker. That's pretty low volume to undertake radical development. We're probably lucky that we get any new features.

Dee D. Flint, N8UZE

2442. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 22:32:11 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <IJvge.89$LF7.6680699@news.sisna.com>
Source record: 18976

Dee:

That certainly brings things to perspecive--doesn't it?, there are roughly 33 million (and uncounted illegals) here in calif alone... (I think canada is much less than Calif's population--so is australia)

The whole world of hams is only a small minority here in calif (more illegal aliens here!!!!)

But, I see your point, there is much more of a market in most any other area of communications, marine communications alone would be a larger market share... police/ambulance/fire radios probably are a larger share!!! Aircraft radios?

But, it would be better to market to gov't, industry, military, public service, etc... your point is well taken...

Warmest regards,
John
--
Sit down the six-pack!!! STEP AWAY!!! ...and go do something...

"Dee Flint" <deeflint01@comcast.net> wrote in message news:g9WdndG_kZNGHh_fRVn-oQ@comcast.com...
|
| "John Smith" <assemblywizard@gmail.com> wrote in message
| news:KKege.192$lD6.16882753@news.sisna.com...
| >I don't think the "apple boys" had ever designed a complete computer before
| > they did--indeed, don't remember anyone else (or team of engineers, techs,
| > scientists, etc...) doing a desktop before then...
| >
| > You mean, China, Russia, India, USA, Canada, So. American, Mexico,
| > etc--and
| > every gov't, business, private individual, ham and cb'er... is not a big
| > enough market... these things would be manufactured in China yanno!!!
| >
|
| Nope the entire world wide population of hams is NOT enough. The US has
| just under 700,000. Japan has somewhere around 1 million (there numbers are
| hard to determine due to their licensing system). The remainder of the
| world combined has right around the same total of the US. This gives a
| worldwide ham population of under 2.5 million. So starting from that
| rough estimate, let's look at some figures. Very, very few people buy a

new
| HF rig annually. Just using the people I know, it's more like every 5 to
10
| years. So let's use an average of 7.5 years. That means a total of
333,000
| new radios (rounding off the answer) sold in any given year. Now split
that
| between 3 makers, yielding 111,000 units per maker. That's pretty low
| volume to undertake radical development. We're probably lucky that we get
| any new features.
|
| Dee D. Flint, N8UZE
|
|

2443. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 23:09:10 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <118544namf2926c@corp.supernews.com>
Source record: 18975

I think that's wildly optimistic. First, many, many licensed amateurs aren't active and don't own a rig at all. Another very large fraction buy only VHF/UHF gear. And, I don't know whether your figure of 700k hams with U.S. licenses includes the large number who are residents of other countries and also have licenses in those countries. Many of the foreign hams I hear from give a U.S. callsign along with their native one.

I think the only reason we get the radios we do is that the manufacturers can combine the design with equipment for other markets, such as public safety for HTs. I've read that the lack of 220 MHz HTs is because of the absence of a nearby public service band, so the manufacturers can't use the same design for both services. I find that believable. I don't know how important additional markets are to HF equipment development, or what they would be these days. My guess is that the manufacturers don't make an awful lot on their HF equipment lines.

In any case, the total market, particularly for HF gear, is surely much less than this estimate.

Roy Lewallen, W7EL

Dee Flint wrote:
>
> Nope the entire world wide population of hams is NOT enough. The US has
> just under 700,000. Japan has somewhere around 1 million (there numbers are
> hard to determine due to their licensing system). The remainder of the
> world combined has right around the same total of the US. This gives a
> worldwide ham population of under 2.5 million. So starting from that
> rough estimate, let's look at some figures. Very, very few people buy a new
> HF rig annually. Just using the people I know, it's more like every 5 to 10
> years. So let's use an average of 7.5 years. That means a total of 333,000
> new radios (rounding off the answer) sold in any given year. Now split that
> between 3 makers, yielding 111,000 units per maker. That's pretty low
> volume to undertake radical development. We're probably lucky that we get
> any new features.
>
> Dee D. Flint, N8UZE
>
>

2444. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 23:38:14 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11855qnb84duc6c@corp.supernews.com>
Source record: 18977

Hi John,

> Well, great men have come and gone, what are some younger names which will
> be taking on these challenges of the future?

I think Rick Campbell has gotta be 30-something or 40-something? I know one of his former professors, and that professor has only been a teacher for something like a decade now...

To some degree, younger folks are out there working at their day jobs. Not that I'll know for another few decades, but I expect that retirement gives one a lot of time to 'catch up' on their favorite ham persuits. Bob Larkin designed the DSP-10 software defined radio back in 1999 and -- while I'm making a lot of guesses here -- I believe that was not too long after Celwave (now defunct) bought his small company where he was designing and producing cell phone base station equipment and thereby allowed him a little more free time to design and publish for the amateur community.

> I don't expect people in their 50's on up to be the innovators, it is the
> younger crowd who has been educated in universities, with access to the
> newest state of the art labs available which will be taking on these
> projects--that is a given, I never though different...

Colleges today are a very different place than they were, say, 30 or more years ago. At least here in the US, it's pretty much "expected" that everyone at least attempts to receive a higher education, and this has caused a large change in college curriculum. To put it bluntly, it's become dumbed down and a shockingly large percentage of the students there really don't _want_ a highly challenging, rigorous five years -- they want a decent income in a reasonably secure industry (computers and electronics). Industry goes along with this because, realistically, what they need are predominently technician level employees and not true innovators or researchers.

Of course, for people truly interested in learning and innovating, there are probably more opportunities now than ever before (think of what Einstein could have done if he had been born in 1980...). What I'm arguing here is that it shouldn't be surprising that an increase in the number of college students and the availability of high quality test equipment doesn't translate into some phenomenally large spike in the innovation seen in amateur radio.

There is plenty of innovation going on in amateur radio right now. Winlink 2000 is a good example: many of the people who support it are the younger set, and many of the people who oppose it are the 'geriatric' crowd! Some of the true technical problems with WL2K -- such as the lack of busy detectors, best performance being obtained only with the proprietary PACTOR 3 modems, etc. -- have spurred additional innovation with results such as SCAMP. I actually

find it quite surprising that the most "digital radio" innovation seems to occur on the HF bands rather than VHF or above, but I expect this will change in the not so distant future. (I've mentioned before that personally I'm eyeing the 220MHz band -- very much neglected for many years now -- as prime territory for digital experimentation...)

---Joel

2445. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 23:39:00 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <d5u52k$r9f$1@theodyn.ncf.ca>
Source record: 18978

"Joel Kolstad" (JKolstad71HatesSpam@yahoo.com) writes:

> I think that was Edison? Einstein said something like, "Creativity is more
> important than knowledge," which unfortunately a lot of people seem to want to
> interpret as "Hence, knowledge is unimportant," which is not at all what he
> meant.
>
You can't really be creative unless you understand the situation. On the
other hand, people can spout things but be unable to do anything with
it because they aren't extracting from the situation.

Creativity is an extrapolation. A good example is Charles Kitchin's
work with regen and superregen receivers. He went back, looked at early
material, understood it, and then implemented solid state versions.

Michael VE2BVW

2446. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 23:41:27 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <118560o44blsic3@corp.supernews.com>
Source record: 18979

Roy,

You make a lot of good points. I would like to see the return of 220MHz HTs! I am heartened to see that the stereotype of hams as tightwads has softened to some degree... perhaps it is all the boomers retiring and finding that buying a new rig every year or two really doesn't put too much of a dent in their annual vacation plans.

How many of those 2.5 million hams possess a copy of EZNEC, I wonder? :-)

---Joel

2447. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-11 23:54:01 UTC
From: dplatt@radagast.org
Message-ID: <11856op7k3nt01c@corp.supernews.com>
Source record: 18980

In article <IJvge.89$LF7.6680699@news.sisna.com>,
John Smith <assemblywizard@gmail.com> wrote:

>Dee:
>
>That certainly brings things to perspecive--doesn't it?, there are roughly
>33 million (and uncounted illegals) here in calif alone... (I think canada
>is much less than Calif's population--so is australia)
>
>The whole world of hams is only a small minority here in calif (more illegal
>aliens here!!!!)
>
>But, I see your point, there is much more of a market in most any other area
>of communications, marine communications alone would be a larger market
>share... police/ambulance/fire radios probably are a larger share!!!
>Aircraft radios?
>
>But, it would be better to market to gov't, industry, military, public
>service, etc... your point is well taken...

Right... and this design approach might or might not be attractive to
them, given their specific needs.

You wrote earlier today of the new generation of youngsters, with
access to better equipment, at today's colleges. That might be a good
next place for you to consider floating this idea... you might find an
EE professor who would consider it to be an attractive design project
for a graduate-level (or high-undergrad) class in RF and electronic
design.

While you're there, you might also want to see if you could persuade
somebody in the business school tackle the other aspects of such a
venture... a market analysis, and a business-case justification.

For any such design to fly, it's going to have to make both technical
sense, and economic sense... as defined by the people you expect to
have buy/use it.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2448. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 00:15:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <118581karvttb40@corp.supernews.com>
Source record: 18981

Joel Kolstad wrote:
> . . .
> How many of those 2.5 million hams possess a copy of EZNEC, I wonder? :-)

A miniscule fraction.

I get many requests to contribute EZNEC for a door prize and gladly did so, quite a few times. Not a single one of the stamped, self-addressed post cards enclosed with the programs was ever returned, which I've interpreted to mean that the recipients most likely never used the program. I belive that the vast majority of amateurs not only don't have EZNEC, but wouldn't have any use for it if given one. I no longer contribute EZNEC, since there's no point in giving as a prize something there's high probability that the recipient doesn't want. On the positive side, there are enough EZNEC users to have allowed me to stay out of the cube farm for ten years now. And they're a great bunch of folks.

Roy Lewallen, W7EL

2449. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 01:01:02 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <1185am0d0c8jje7@corp.supernews.com>
Source record: 18982

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:118581karvttb40@corp.supernews.com...
> I get many requests to contribute EZNEC for a door prize and gladly did
> so, quite a few times. Not a single one of the stamped, self-addressed
> post cards enclosed with the programs was ever returned, which I've
> interpreted to mean that the recipients most likely never used the
> program.

Hmm... I suppose that, instead of the way it's usually done where every one is eligible for every prize, hamfests could perform raffles where people have checked off what prize they really want (give them so many "raffle points" that they can spend on various "priced" prizes they win if their ticket is drawn).

You could ask at FDIM how many of the people there have actually used EZNEC or a similar program. Besides L. B. Cebik, of course... :-)

---Joel

2450. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 01:15:34 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <V6yge.101$et2.8541308@news.sisna.com>
Source record: 18983

Dave:

I am at loggerheads with admin. and my department head as I type...

There are many reasons that may not happen... the college knows them ALL...
if you think anyone suggesting something new is "shark-food" here, you
should see the entrenched lines of thought there...

...no one likes change--except a wet baby...

Warmest regards,
John
--
Sit down the six-pack!!! STEP AWAY!!! ...and go do something...

"Dave Platt" <dplatt@radagast.org> wrote in message
news:11856op7k3nt01c@corp.supernews.com...
| In article <IJvge.89$LF7.6680699@news.sisna.com>,
| John Smith <assemblywizard@gmail.com> wrote:
|
| >Dee:
| >
| >That certainly brings things to perspecive--doesn't it?, there are
roughly
| >33 million (and uncounted illegals) here in calif alone... (I think
canada
| >is much less than Calif's population--so is australia)
| >
| >The whole world of hams is only a small minority here in calif (more
illegal
| >aliens here!!!!)
| >
| >But, I see your point, there is much more of a market in most any other
area
| >of communications, marine communications alone would be a larger market
| >share... police/ambulance/fire radios probably are a larger share!!!
| >Aircraft radios?
| >
| >But, it would be better to market to gov't, industry, military, public
| >service, etc... your point is well taken...
|
| Right... and this design approach might or might not be attractive to
| them, given their specific needs.
|
| You wrote earlier today of the new generation of youngsters, with
| access to better equipment, at today's colleges. That might be a good

| next place for you to consider floating this idea... you might find an
| EE professor who would consider it to be an attractive design project
| for a graduate-level (or high-undergrad) class in RF and electronic
| design.
|
| While you're there, you might also want to see if you could persuade
| somebody in the business school tackle the other aspects of such a
| venture... a market analysis, and a business-case justification.
|
| For any such design to fly, it's going to have to make both technical
| sense, and economic sense... as defined by the people you expect to
| have buy/use it.
|
| --
| Dave Platt <dplatt@radagast.org> AE6EO
| Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
| I do _not_ wish to receive unsolicited commercial email, and I will
| boycott any company which has the gall to send me such ads!

2451. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 01:42:26 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <5wyge.103$yR2.8919069@news.sisna.com>
Source record: 18984

Roy:

I have pointed out your EZNEC to the Ghz "Wireless WAN/LAN
Raiders"--"Wireless Cam Raiders"-- here...

Trust me, there are young minds attempting to design new antennas for
routers and tapping into wireless cams here....

I have seen some thought provoking ideas they are building... now the big
thing is "passive repeaters".... antennas to bend signals around houses
and down blocks... around sound walls, etc. But some are of even active
design... they sqeeze miles out of wireless router signal!!!!

These young guys can put some strange designs to work out of threaded rods,
washers, coffee cans, sheet metal, stovepipe, old 18"--6 foot aluminum
dishes, coathangers and bbq grills, short bits of copper wire soldered along
yardlong+ copper tubing, etc... EZNEC is there!!!

Farthest guy stays tapped in to the garage net here from his home 2+ miles
away... on a router/switch meant for home use!!!

My first antenna was a 120 ft long wire for sw--theirs is usually of a 2100
Mhz design!!!

Only thing I caution them of is high rf levels at these freqs--they have
little fear of microwaves until the dangers are made clear... they
constantly search ebay for microwave mosfets... when they mention ideas of a
PA out of a microwave oven--one does do some worry...

I built a crystal radio as my first project, didn't everyone back then? I
stand in awe....

Warmest regards,
John
--
Sit down the six-pack!!! STEP AWAY!!! ...and go do something...

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:118581karvttb40@corp.supernews.com...
| Joel Kolstad wrote:
| > . . .
| > How many of those 2.5 million hams possess a copy of EZNEC, I wonder?
:-)
|
| A miniscule fraction.
|
| I get many requests to contribute EZNEC for a door prize and gladly did

| so, quite a few times. Not a single one of the stamped, self-addressed
| post cards enclosed with the programs was ever returned, which I've
| interpreted to mean that the recipients most likely never used the
| program. I belive that the vast majority of amateurs not only don't have
| EZNEC, but wouldn't have any use for it if given one. I no longer
| contribute EZNEC, since there's no point in giving as a prize something
| there's high probability that the recipient doesn't want. On the
| positive side, there are enough EZNEC users to have allowed me to stay
| out of the cube farm for ten years now. And they're a great bunch of
folks.
|
| Roy Lewallen, W7EL

2452. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 01:49:08 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <1185dg4h54lmdde@corp.supernews.com>
Source record: 18985

"John Smith" <assemblywizard@gmail.com> wrote in message
news:5wyge.103$yR2.8919069@news.sisna.com...
> Only thing I caution them of is high rf levels at these freqs--they have
> little fear of microwaves until the dangers are made clear... they
> constantly search ebay for microwave mosfets... when they mention ideas of a
> PA out of a microwave oven--one does do some worry...

I'd worry aout someone who starts suggesting disassembling a microwave oven
too...

On the other hand, if they get themselves a bunch of microwave 'FETs from
eBay, by the time they actually manage to make a working power amplifier
they'll have had to absorb so much knowledge that they'll undoubtedly already
appreciate how much power they're playing around with!

2453. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 01:54:51 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <JHyge.104$D%2.9046110@news.sisna.com>
Source record: 18986

"You can't really be creative unless you understand the situation."

Ohh, now I see--we are all just waiting for "that guy/gal"....

Warmest regards,
John
--
Sit down the six-pack!!! STEP AWAY!!! ...and go do something...

"Michael Black" <et472@FreeNet.Carleton.CA> wrote in message
news:d5u52k$r9f$1@theodyn.ncf.ca...
|
| "Joel Kolstad" (JKolstad71HatesSpam@yahoo.com) writes:
|
| > I think that was Edison? Einstein said something like, "Creativity is
more
| > important than knowledge," which unfortunately a lot of people seem to
want to
| > interpret as "Hence, knowledge is unimportant," which is not at all what
he
| > meant.
| >
| You can't really be creative unless you understand the situation. On the
| other hand, people can spout things but be unable to do anything with
| it because they aren't extracting from the situation.
|
| Creativity is an extrapolation. A good example is Charles Kitchin's
| work with regen and superregen receivers. He went back, looked at early
| material, understood it, and then implemented solid state versions.
|
| Michael VE2BVW

2454. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 02:01:54 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <kOyge.105$Nu2.8592512@news.sisna.com>
Source record: 18988

Joel:

Do a search of the net, you will see some of the designs, circuits, boards there...
These kids are a real network of hobbyists... takes 'em about a week to pick it up (well, that might be exaggerating)...

... and while they mention the microwave oven--I don't think anyone is attempting it!!! Think of the poor birds landing on that antenna and trying to keep warm in the winter!!! <frown>

Warmest regards,
John
--
Sit down the six-pack!!! STEP AWAY!!! ...and go do something...

"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> wrote in message news:1185dg4h54lmdde@corp.supernews.com...
| "John Smith" <assemblywizard@gmail.com> wrote in message
| news:5wyge.103$yR2.8919069@news.sisna.com...
| > Only thing I caution them of is high rf levels at these freqs--they have
| > little fear of microwaves until the dangers are made clear... they
| > constantly search ebay for microwave mosfets... when they mention ideas of a
| > PA out of a microwave oven--one does do some worry...
|
| I'd worry aout someone who starts suggesting disassembling a microwave oven
| too...
|
| On the other hand, if they get themselves a bunch of microwave 'FETs from
| eBay, by the time they actually manage to make a working power amplifier
| they'll have had to absorb so much knowledge that they'll undoubtedly already
| appreciate how much power they're playing around with!
|
|

2455. Re: Joe Dixon's speread spectrum books

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 02:22:41 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <S5zge.33148$XX1.650094@news20.bellglobal.com>
Source record: 18987

"Mike Andrews" <mikea@mikea.ath.cx> wrote in message
news:d5ti9g$sn6$1@puck.litech.org...
> Joel Kolstad <JKolstad71HatesSpam@yahoo.com> wrote:
>> Say, does anyone have a copy of Joe Dixon's books, "Spread Specturm
>> Systems"
>> from 1976 and "Spread Spectrum Systems with Commercial Applications" from
>> 1994? I'm curious how the content compares between the two.
>
>> I'd also be curious to hear the impressions of anyone who might have
>> chosen to
>> shell out the $190 (ouch!) for his "Radio Receiver Design" book?
>
> I've got the former, but not the latter, and so can't compare them. If the
> later book is anything like as good as the earlier one, only with
> additional matter, I'll have to put it on my must-buy list. And now I need
> to investigate the "Radio Receiver Design" book. My bookseller thanks you,
> but my wallet doesn't.

That's Robert C. Dixon - both books listed and reviewed at Amazon.com.

2456. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 03:54:36 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <1185krct81snmb0@corp.supernews.com>
Source record: 18989

Hi John,

"John Smith" <assemblywizard@gmail.com> wrote in message
news:kOyge.105$Nu2.8592512@news.sisna.com...
> Do a search of the net, you will see some of the designs, circuits, boards
> there...

Any pointers to 802.11b/g amplifiers? Most of the results I get Googling are for the more "traditional" designs (from RF component vendors, booksellers, etc.) -- I didn't see any homebrew 2.4GHz amp schematics aimed at the casusal WiFi enthusiast.

> ... and while they mention the microwave oven--I don't think anyone is
> attempting it!!!

Someone claiming they can take a magnetron from a $59 Wal*Mart microwave oven and turn it into a reasonably linear power amplifier has a pretty poor understanding just what it is that (1) amplifiers and (2) magnetrons from cheap microwave ovens are meant to do. :-)

2457. Re: No progress in decades... NOT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 05:23:08 UTC
From: LenAnderson@ieee.org
Message-ID: <1115875388.076338.310170@g49g2000cwa.googlegroups.com>
Source record: 18990

From: Paul Keinanen on Wed,May 11 2005 12:13 am

>On 10 May 2005 13:59:13 -0700, LenAnderson@ieee.org wrote:
>
>>From: Paul Keinanen <keina...@sci.fi> on 10 May 2005 09:11:19 -0700
>
>>>In a radio receivers, the signal levels vary
>>>from less than a microvolt to several volts, so the crosstalk issues
>>>are much more demanding.
>>
>> I will disagree on radio receivers on such wide dynamic
>> ranges. "Several volts" INTO a receiver front end?
>> No. Such levels aren't encountered in practical
>> locations and would, definitely, cause enough IM
>> that would create much distortion and spur products.
>
>Look at a multitransmitter contest site with one transmitter on each
>band, the voltage induced to the receiving antennas for other bands
>can be quite large.

In a production model receiver? Mais non. That's
not a design prerequisite, never was, not even with
the Rhode & Schwarz designs featuring very high
3rd IP specifications.

I've been IN such situations on aircraft installations
where the potential RFI was much stronger than in ham
DXpedition or Field Day setups. The work-arounds to
make the receivers operate is NOT a design criteria,
not in avionics-oriented design plans.

> Of course, in a competent receiver design only the
>frequency band of interest is filtered out before processing. However,
>if the antenna is connected directly to the backplane and the modules
>do their own filtering, the large composite signal on the backplane
>will radiate all around the system.

Possibly, IF and only IF the antenna IS connected
to the "backplane" (or motherboard). Why must it be
so? Look at the PC. Sound cards have their audio
input (at microphone levels) on a separate connection).
No interference doing that.

>In non-contest sites large wire or log-periodic antennas can collect a
>quite large signal voltage (in the order of 0 dBm, 220 mV or more).

Perhaps, but that still isn't a design criterion for
present-day ham receivers.

>Also if the final IF is within or below the receiver tuning range and
>a diode ring mixer is used as the SSB demodulator with +7 or +17 dBm,
>you must keep this BFO signal and harmonics from entering the front
>end.

Yes...but that was a problem a half century ago, too! :-)

>Even the SDR is going to need some switchable front end band pass
>filters in order to survive in the hostile RF environment these days
>with a lot of strong signals even in ordinary sites.

Diode switching. My two-decade old Icom R-70 has that
to select approximate octave-bandwidth bandpass filters
to cover 50 KHz to 30 MHz. Has its own little PCB,
probably because every single L, C, diode, and resistor
is included on that board...no shielding except from
the side wall of the cabinet and part of the cast frame.

I've had that little receiver within a city block from
AM BC station KMPC running 50 KW into its towers. Worked
fine with a temporary long-wire antenna despite the RF
around that station.

>In transceivers, there would be several points that would need
>switching.

Of course. That's what was done two decades ago.

>I used the CANbus as an example, since the cable can be tens or
>hundreds of meters long depending on speed and thus, it could be used
>to control some internal points in a transceiver as well as wire all
>devices in the ham shack as well as in the tower. For instance, the
>same controller could control the antenna rotator, command the antenna
>preamplifier to bypass mode, turn the transvertter into transmit mode,
>select the VFO frequency for transmit (in split operation) and finally
>turn the transmitter on.

Right, no problem...except for the individual ham
installer who then has to set up the "program" to
do all those things. Can they? :-)

I think a better approach is something like SGC does
in their automatic antenna tuners. They add a
frequency meter function to their tuner micro-
controller, a small section of Flash memory to
hold data, measure an RF input, adjust the coupler
switches to compensate for VSWR, then record that
data in memory. Any future frequency close to the
recorded memory can use the same settings.

Near-ultimate in modularity is thus achieved. Needs
only DC power to operate and doesn't care what kind

of transmitter is connected to it...as long as its in
specification for power and frequency. Absolutely
"plug-and-play!" :-)

>> What is lacking is STANDARDIZATION.
>
>This is definitely a big problem.

Yes and no. :-) It's like a recipe for "tiger
soup:" "First, you have to catch a tiger..."

In a similar way, there must be SOME idea of
what kind of control range, modulation, etc.,
etc. would be expected...and for what radio
service. The FCC in the USA can't yet come to
grips on that, nor has industry made much
progress outside of their own product lines.

Right now, it is more like Pandora's Box.

>> That can't be worked out in newsgroups,
>
>A newsgroup is a good place for open ended discussions between people
>with experience in quite different fields.

I agree. But, like the infamous "John Smith,"
it can be infiltrated with someone who doesn't
have either the experience or the courage to
use his/her real name. Raises the noise
level enough to make some go QRT for a while.

>Writing a formal specification may require some formal organisation,
>but on the other hand quite a few successful RFCs in the IT sector are
>written by a single person or a small group.

Ahem...that INDUSTRY specification is going to
range considerably farther than some small group
within one company. As to IT (Information
Technology), I've not seen ANY industry-wide
softwares which extend beyond corporate levels
and that's been for the last three decades.
LANGUAGES not counted there.

>> and willingness to compromise
>
>That is the problem in formal committees, in which most delegates from
>various vendors have large commercial interests in the subject and in
>order to be able to produce even some kind of standard, all features
>from various vendors are included.

I'll just cite the ARINC standards which are
generally used internationally for all civil
avionics, from radio to radar, radionavigation

systems. ALL the interfaces to every avionics
box and the physical shape and mountings. NOT
a big commercial venture in terms of profit.
If you've been able to read the verbatim minutes
of ARINC meetings (I have), then you would see
that it can be done.

ARINC = Aeronautical Radio INCorporated, once a
radio communications provider for airlines,
later evolving into a combined industry-government
central standards organization for civil avionics.
[they have a website, BTW, but the documents are
horribly expensive now...]

LenAnderson@ieee.org

2458. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 05:25:17 UTC
From: LenAnderson@ieee.org
Message-ID: <1115875517.467204.308970@z14g2000cwz.googlegroups.com>
Source record: 18991

From: "Dee Flint" on Wed,May 11 2005 3:14 pm

>"John Smith" <assemblywizard@gmail.com> wrote in message
>news:KKege.192$lD6.16882753@news.sisna.com...
>>I don't think the "apple boys" had ever designed a complete computer
before
>> they did--indeed, don't remember anyone else (or team of engineers,
techs,
>> scientists, etc...) doing a desktop before then...
>>
>> You mean, China, Russia, India, USA, Canada, So. American, Mexico,
>> etc--and
>> every gov't, business, private individual, ham and cb'er... is not a
big
>> enough market... these things would be manufactured in China
yanno!!!
>
>Nope the entire world wide population of hams is NOT enough. The US
has
>just under 700,000.

As of 11 May 2005, www.hamdata.com reports 723,737 total
U.S. amateur radio licensees.

> Japan has somewhere around 1 million (there numbers are
>hard to determine due to their licensing system). The remainder of
the
>world combined has right around the same total of the US. This gives
a
>worldwide ham population of under 2.5 million. So starting from
that
>rough estimate, let's look at some figures. Very, very few people buy
a new
>HF rig annually. Just using the people I know, it's more like every 5
to 10
>years. So let's use an average of 7.5 years. That means a total of
333,000
>new radios (rounding off the answer) sold in any given year. Now
split that
>between 3 makers, yielding 111,000 units per maker.

Only "three?" :-)

>That's pretty low
>volume to undertake radical development. We're probably lucky that we
get

>any new features.

Tsk, tsk. Having first started to legally transmit RF (on HF) in 1953, I've been watching the progress of most ALL radio technology for a mere half century. ...and seen the DESIGN as well as manufacturing shift to Asia. In Japan alone, there are at least FOUR corporations doing HF radio design, not just three. USA designers and manufacturers ARE there NOW, but none of them are Collins, National Radio, RME, or Hallicrafters. [only Collins Radio is left of all of them and they do NOT make ham equipment]

Take FREQUENCY CONTROL, an essential thing for stable SSB work on HF. The PLL took care of that nicely with - perhaps - Icom leading the way to get 10 Hz increments at quartz crystal control. To save some costs, the three major players (Icom, Yaesu, Kenwood) switched over to DDS (Direct Digital Syntheses) after trying out 'fractional-N' PLL synthesizers.

Asian DESIGNERS and manufacturers were there first with the LCD screens to show analog information in digital form. They may also have been the first to include microprocessors and microcontrollers to act as control-display interfaces, saving hundreds of store dollars per unit and eliminating mechanical couplings almost entirely.

Try DSP (Digital Signal Processing). That's in the ham gear of TODAY. Not a "first" in amateur rigs since it was first introduced on consumer electronics. But, it is THERE. Today. [I could go on...:-)]

100K production lots are "low volume to undertake radical development?!?!?" Oh, my. Let's look at that in more detail...say at 10K production runs. Try, for example, with an average price of $1000 per HF ham transceiver. Sell price dollar flow would be $10 MILLION. Designer-manuafcturer dollar flow is roughly half that, $5 MILLION to split off many ways: component costs, burden, advertising, profit, losses on defects, to name the major items. Perhaps $500K can be the amount amortized for the actual R&D. At $50/hour in estimated engineering salaries-plus-burden of Japanese companies, that's 10,000 man-hours for the design-development budget. A team of 10 then has 1000 hours average to do one task. At 50 hours per week, that's 20 weeks to get what is largely (in practice) the production side of the house going, at least a third of a year.

But, very very few designs are "brand-new" in ANY catalog. The majority are revisions of the older models, perhaps using the same "universal" cast framework-support and cabinet but needing only the front-panel face-lift. The time - at 10K run lots - is plenty long enough to come up with the "new improved state-of-the-art" things that glow triumphantly (in purple prose) from the ads in QST. :-)

Do the big makers have "single model" catalogs? No. Not even the medium-sized ones. All have MANY models and branches...such as the Handheld transceivers. The HTs plus VHF/UHF base stations tend to be the company bread-and-butter items, sold - in almost the same features as for hams - to industry, business, and government. With some revisions of the basic structure those become "amateur radios."

On the down side, the HF bands are NOT a big-ticket item for communications as they once were. Today the RF world is deep into cellular telephony for sites and providers, and some for users (at companies with large production lines and consumer marketing structures). The world of communications has moved UP and over that mythical, artificial dividing line of 30 MHz.

LenAnderson@ieee.org

2459. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 05:27:38 UTC
From: LenAnderson@ieee.org
Message-ID: <1115875658.534597.237590@g14g2000cwa.googlegroups.com>
Source record: 18992

From: "Michael A. Terrell" on Wed,May 11 2005 9:50 am

>John Smith wrote:
>>
>> So, although your original argument was how difficult a bus and
keeping
>> analog seperate from digital which would share various
signals--would be,
>> then, when the argument was made that someone just picked up a bunch
of
>> on-the-shelf items and went ahead and done it... you flip-flop--to
where now
>> it was so obivious someone should have done such a simple thing LONG
before
>> them...
>
> I didn't "Flip-Flop" I know what's involved, including the million
>dollar plus expense involved in designing one configuration of a
modular
>radio.

Michael, don't let this POSEUR bother you. That
anony-mouse "John Smith" hasn't been there, hasn't
done it. He wants to be "Instant Guru" and wants
a "rep" without doing any work for it. From what
he states - all in generalities, no specifics -
he can't think things out close to necessary detail.

You were right to "plonk" him.

> You have your head up your sorry ass, and I'm through wasting time
>with your nonsense. Its obvious that you don't know a dam thing about
>design when you compare the Apple II to a real design project. You
need
>to get an education in design and stop trying to blow smoke up
>everyone's ass.

Way to go! :-)

At some other time I wouldn't mind having a friendly
argument with you on the Apple][...but not with this
anony-mouse hanging around trying to intrude and
smoke up the place. I still have my 1980-purchase
Apple][+ and had a lot of fun with it...including
lots of calculations (Applesoft had 10-digit
accuracy with 5-byte FP variables, muy better than

4-byte single precision). I've gone into the hard-
ware and analyzed it thoroughly, scoped it, written
it up...submitted it as a manuscript only to find out
Howard W. Sams was already in production on a similar
book! :-)

In many ways, the PRODUCTION version of the Apple][
was the forerunner of the IBM PC out of Boca Raton.
But designed (or rather re-designed) about two years
prior to the IBM PC. Uncanny similarity between the
two in basic structure, expansion slots, and - yes -
"open architecture." PRODUCTION planning went into
the][and it wasn't much like the original board-
only Apple.

But, the][on up to the Apple //gs were terrific RF
generators! :-) By contrast, a similar structure
using only three main chips (CPU from Western Design,
64K EPROM, 64K/128K Static RAM) can be very nice and
quiet RF wise because of the internal transistor
structures in those chips. [I've already done a
preliminary breadboard setup to verify that] Such a
controller system can adapt itself to many kinds of
"radio controller" applications without any of the
RF coupling problems. It's been done before by the
big three in Japan using older microcontrollers in
many different transceivers, all without disturbing
the receiver or the transmitter specifications.

Too many of the older hams are oriented towards a
"legacy radio" structure...mostly analog. That
just doesn't adapt to "plug-and-play" ease of adding
or modifying an SDR. Trying to use a common PC as
a "model" for an SDR is a bunch of nonsense. The
"bus" and "interface structure" is an analogue only
the broadest sense of the term. Doesn't apply,
either technically or organizationally.

LenAnderson@ieee.org

2460. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 10:16:10 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <42832CD3.63DFB943@earthlink.net>
Source record: 18993

LenAnderson@ieee.org wrote:
>
> From: "Michael A. Terrell" on Wed,May 11 2005 9:50 am
>
> >John Smith wrote:
> >>
> >> So, although your original argument was how difficult a bus and
> keeping
> >> analog seperate from digital which would share various
> signals--would be,
> >> then, when the argument was made that someone just picked up a bunch
> of
> >> on-the-shelf items and went ahead and done it... you flip-flop--to
> where now
> >> it was so obivious someone should have done such a simple thing LONG
> before
> >> them...
> >>
> > I didn't "Flip-Flop" I know what's involved, including the million
> >dollar plus expense involved in designing one configuration of a
> modular
> >radio.
>
> Michael, don't let this POSEUR bother you. That
> anony-mouse "John Smith" hasn't been there, hasn't
> done it. He wants to be "Instant Guru" and wants
> a "rep" without doing any work for it. From what
> he states - all in generalities, no specifics -
> he can't think things out close to necessary detail.
>
> You were right to "plonk" him.
>
> > You have your head up your sorry ass, and I'm through wasting time
> >with your nonsense. Its obvious that you don't know a dam thing about
> >design when you compare the Apple II to a real design project. You
> need
> >to get an education in design and stop trying to blow smoke up
> >everyone's ass.
>
> Way to go! :-)
>
> At some other time I wouldn't mind having a friendly
> argument with you on the Apple][...but not with this
> anony-mouse hanging around trying to intrude and

> smoke up the place. I still have my 1980-purchase
> Apple][+ and had a lot of fun with it...including
> lots of calculations (Applesoft had 10-digit
> accuracy with 5-byte FP variables, muy better than
> 4-byte single precision). I've gone into the hard-
> ware and analyzed it thoroughly, scoped it, written
> it up...submitted it as a manuscript only to find out
> Howard W. Sams was already in production on a similar
> book! :-)
>
> In many ways, the PRODUCTION version of the Apple][
> was the forerunner of the IBM PC out of Boca Raton.
> But designed (or rather re-designed) about two years
> prior to the IBM PC. Uncanny similarity between the
> two in basic structure, expansion slots, and - yes -
> "open architecture." PRODUCTION planning went into
> the][and it wasn't much like the original board-
> only Apple.
>
> But, the][on up to the Apple //gs were terrific RF
> generators! :-) By contrast, a similar structure
> using only three main chips (CPU from Western Design,
> 64K EPROM, 64K/128K Static RAM) can be very nice and
> quiet RF wise because of the internal transistor
> structures in those chips. [I've already done a
> preliminary breadboard setup to verify that] Such a
> controller system can adapt itself to many kinds of
> "radio controller" applications without any of the
> RF coupling problems. It's been done before by the
> big three in Japan using older microcontrollers in
> many different transceivers, all without disturbing
> the receiver or the transmitter specifications.
>
> Too many of the older hams are oriented towards a
> "legacy radio" structure...mostly analog. That
> just doesn't adapt to "plug-and-play" ease of adding
> or modifying an SDR. Trying to use a common PC as
> a "model" for an SDR is a bunch of nonsense. The
> "bus" and "interface structure" is an analogue only
> the broadest sense of the term. Doesn't apply,
> either technically or organizationally.
>
> LenAnderson@ieee.org

As far as "John Smith" goes, he's gone. He is just another hopeless
wanabee who doesn't understand anything about the real world.

Len, I have worked from DC to 11 GHz on commercial designs and anyone
that thinks any design is easy just doesn't have any idea what's
involved. Its one thing to hack together an almost working prototype,
but its a whole different animal to design from the bottom up to meet

set specifications, make sure the components will be available, and if the unit is to be sold, to make sure that it will clear the FCC, UL and other requirements. If you decide to manufacture the equipment for sale outside of the US you have the CE certification, and ISO 900X to deal with.

If i had the money I would put together a nice kit to sell, but other needs come first.

I designed my first receiver in the late '60s while I was still in high school. It was mostly tubes, and a modular design so I could replace sections to update the design. I had it almost done when I was drafted. When I got out of the service my family had torn down my workshop and the prototype and all my paperwork was gone. I learned a lot about receiver design at Microdyne, and their telemetry receivers were all modular. They had to be, because a customer would need something special, so we would charge them to redesign a module or two to adapt a standard product, rather than to design a complete receiver.

It would be interesting to set up a group to develop a modular system, but getting people to agree on the specs can be more work than the actual design.

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

2461. GDO sensitivity

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 10:17:40 UTC
From: Markus L <uo9oew@lnubb.pbz>
Message-ID: <w3Gge.12$ae.3960@ns2.gip.net>
Source record: 18994

Am planning to build the GDO described by SM0VPO at
http://web.telia.com/~u85920178/use/gdo.htm using a BF245 FET (BC245
mentioned is a typo). What parameters determine the sensitivity of a GDO?
Will the sensitivity go up or down when increasing the gain in the
oscillator stage? Intuitively I would say the gain has to be just high
enough to guarantee a steady oscillation, but maybe I'm totally wrong.

Markus HB9BRJ

2462. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 11:12:35 UTC
From: Dee Flint <deeflint01@comcast.net>
Message-ID: <ScGdnbIn4rrYpx7fRVn-qg@comcast.com>
Source record: 18995

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:118544namf2926c@corp.supernews.com...
>I think that's wildly optimistic. First, many, many licensed amateurs
>aren't active and don't own a rig at all. Another very large fraction buy
>only VHF/UHF gear. And, I don't know whether your figure of 700k hams with
>U.S. licenses includes the large number who are residents of other
>countries and also have licenses in those countries. Many of the foreign
>hams I hear from give a U.S. callsign along with their native one.
>
> I think the only reason we get the radios we do is that the manufacturers
> can combine the design with equipment for other markets, such as public
> safety for HTs. I've read that the lack of 220 MHz HTs is because of the
> absence of a nearby public service band, so the manufacturers can't use
> the same design for both services. I find that believable. I don't know
> how important additional markets are to HF equipment development, or what
> they would be these days. My guess is that the manufacturers don't make an
> awful lot on their HF equipment lines.
>
> In any case, the total market, particularly for HF gear, is surely much
> less than this estimate.
>
> Roy Lewallen, W7EL
>

Actually I agree. I was thinking of cutting that in half due to inactive
hams and got in a rush and forgot to do that.

Dee D. Flint, N8UZE

2463. New program - 1/2-wave vertical antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 14:53:17 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d5vqkt$i4n$4@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 18997

NEW PROGRAM

Program VERTUNE.exe analyses performance of half-wave, end-fed,
vertical and similar antennas. See how power losses are distributed.

A parallel L and C tuned circuit Z-matches the high impedance
feedpoint to a coaxial line. Coil design, (dimensions, wire gauge,
turns) is included.

High radiating efficiency can be acheived with a poor ground electrode
system.

Download VERTUNE (41 kilobytes) in a few seconds, no un-zipping
inconvenience, and run immediately.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

2464. New program - 1/2-wave vertical antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 14:53:19 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d5vqku$i4n$9@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 18996

NEW PROGRAM

Program VERTUNE.exe analyses performance of half-wave, end-fed,
vertical and similar antennas. See how power losses are distributed.

A parallel L and C tuned circuit Z-matches the high impedance
feedpoint to a coaxial line. Coil design, (dimensions, wire gauge,
turns) is included.

High radiating efficiency can be acheived with a poor ground electrode
system.

Download VERTUNE (41 kilobytes) in a few seconds, no un-zipping
inconvenience, and run immediately.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

2465. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 15:42:01 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <hPKge.146$L25.13530206@news.sisna.com>
Source record: 18898

Well, I don't respond well to personal attacks, character assassinations, juvenile exchanges--I really just don't have time--nothing to be gained really--but, if you must, proceed at your desire...

rec.radio.cb has made me aware of such exchanges on newsgroups--and thickened my skin... <grin>

John
--
Sit down the six-pack!!! STEP AWAY!!! ...and go do something...

<LenAnderson@ieee.org> wrote in message news:1115875658.534597.237590@g14g2000cwa.googlegroups.com...
| From: "Michael A. Terrell" on Wed,May 11 2005 9:50 am
|
| >John Smith wrote:
| >>
| >> So, although your original argument was how difficult a bus and
| keeping
| >> analog seperate from digital which would share various
| signals--would be,
| >> then, when the argument was made that someone just picked up a bunch
| of
| >> on-the-shelf items and went ahead and done it... you flip-flop--to
| where now
| >> it was so obivious someone should have done such a simple thing LONG
| before
| >> them...
| >
| > I didn't "Flip-Flop" I know what's involved, including the million
| >dollar plus expense involved in designing one configuration of a
| modular
| >radio.
|
| Michael, don't let this POSEUR bother you. That
| anony-mouse "John Smith" hasn't been there, hasn't
| done it. He wants to be "Instant Guru" and wants
| a "rep" without doing any work for it. From what
| he states - all in generalities, no specifics -
| he can't think things out close to necessary detail.
|
| You were right to "plonk" him.
|
|
| > You have your head up your sorry ass, and I'm through wasting time

| >with your nonsense. Its obvious that you don't know a dam thing about
| >design when you compare the Apple II to a real design project. You
| need
| >to get an education in design and stop trying to blow smoke up
| >everyone's ass.
|
| Way to go! :-)
|
| At some other time I wouldn't mind having a friendly
| argument with you on the Apple][...but not with this
| anony-mouse hanging around trying to intrude and
| smoke up the place. I still have my 1980-purchase
| Apple][+ and had a lot of fun with it...including
| lots of calculations (Applesoft had 10-digit
| accuracy with 5-byte FP variables, muy better than
| 4-byte single precision). I've gone into the hard-
| ware and analyzed it thoroughly, scoped it, written
| it up...submitted it as a manuscript only to find out
| Howard W. Sams was already in production on a similar
| book! :-)
|
| In many ways, the PRODUCTION version of the Apple][
| was the forerunner of the IBM PC out of Boca Raton.
| But designed (or rather re-designed) about two years
| prior to the IBM PC. Uncanny similarity between the
| two in basic structure, expansion slots, and - yes -
| "open architecture." PRODUCTION planning went into
| the][and it wasn't much like the original board-
| only Apple.
|
| But, the][on up to the Apple //gs were terrific RF
| generators! :-) By contrast, a similar structure
| using only three main chips (CPU from Western Design,
| 64K EPROM, 64K/128K Static RAM) can be very nice and
| quiet RF wise because of the internal transistor
| structures in those chips. [I've already done a
| preliminary breadboard setup to verify that] Such a
| controller system can adapt itself to many kinds of
| "radio controller" applications without any of the
| RF coupling problems. It's been done before by the
| big three in Japan using older microcontrollers in
| many different transceivers, all without disturbing
| the receiver or the transmitter specifications.
|
| Too many of the older hams are oriented towards a
| "legacy radio" structure...mostly analog. That
| just doesn't adapt to "plug-and-play" ease of adding
| or modifying an SDR. Trying to use a common PC as
| a "model" for an SDR is a bunch of nonsense. The
| "bus" and "interface structure" is an analogue only

| the broadest sense of the term. Doesn't apply,
| either technically or organizationally.
|
| LenAnderson@ieee.org
|

2466. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 15:45:45 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <HSKge.147$rs5.13792304@news.sisna.com>
Source record: 18899

That guy was calling me a "Troll", NOT encouraging you to become one!

John
--
Sit down the six-pack!!! STEP AWAY!!! ...and go do something...

"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> wrote in message
news:1185krct81snmb0@corp.supernews.com...
| Hi John,
|
| "John Smith" <assemblywizard@gmail.com> wrote in message
| news:kOyge.105$Nu2.8592512@news.sisna.com...
| > Do a search of the net, you will see some of the designs, circuits,
boards
| > there...
|
| Any pointers to 802.11b/g amplifiers? Most of the results I get Googling
are
| for the more "traditional" designs (from RF component vendors,
booksellers,
| etc.) -- I didn't see any homebrew 2.4GHz amp schematics aimed at the
casusal
| WiFi enthusiast.
|
| > ... and while they mention the microwave oven--I don't think anyone is
| > attempting it!!!
|
| Someone claiming they can take a magnetron from a $59 Wal*Mart microwave
oven
| and turn it into a reasonably linear power amplifier has a pretty poor
| understanding just what it is that (1) amplifiers and (2) magnetrons from
| cheap microwave ovens are meant to do. :-)
|
|

2467. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 15:53:59 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <p_Kge.148$Fw5.13818904@news.sisna.com>
Source record: 18900
Body handling: HTML body converted to readable text

Let us reset to reality here--before real myths are generated... actually the system, in digital form--already exists in my home--and even most of yours (unless you are webtv.)

A sw receiver card (order it off ebay) and a xmitter card (might have to construct your own here) slapped into a PCI bus--appropiate connections to antennas--and I am off into the ether.... the soundcard is my audio, both xmit and recv, recv software is provided with the card--software for a homebrew xmit card would need to be constructed and problems would exist in interfacing software between the recv card and xmit card--all DO-ABLE...

The fact that it can be done easily has already been demonstrated--if you choose to deny this, do this at the risk of having others doubt your sanity...

Warmest regards,
John
--
Sit down the six-pack!!! STEP AWAY!!! ...and go do something...

"John Smith" wrote in message
news:MBife.21559$Or3.17382548@news.sisna.com...
| Decades have brought us moon landing, mars landings,masers, lasers, lets,
| fets, mosfets, computers, etc...
|
| But the shape of radio equip. has remained virtually stagnant.
|
| One "innovation" would be to just copy what the IBM clone has taught us.
|
| Build a radio of "cards." Just like the computer, a standard case which
you
| can plugin various power supplies, frontend board "cards", intermediate
| board "cards", buffer amp board "cards", IF board "cards", audio board
| "cards", xmitter board "cards", final amp board "cards", etc....
|
| One radio case can/could virtually be any radio you can imagine.... new
| design in a frontend? Plug in a new front end "card", new audio offering?
| Plug in a new audio board "card."
|
| Someone really should get off a dead duff somewhere and DO IT!!!!
|
| Kinda makes ya wonder why not? Doesn't it?
|
| Warmest regards,

| John
|
| --
| I AM ONE-IN-A-MILLION!!!!!
| Too bad the other 999,999 got there first..
|
|

2468. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 16:28:29 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <KuLge.151$Bc5.13589636@news.sisna.com>
Source record: 18901
Body handling: HTML body converted to readable text

```
Well, a quick check of ebay turned up NO SW RCVR cards, naturally--here is a
like which describes the one I use...
http://www.thiecom.de/english/g313i/

Regards,
John
--
Sit down the six-pack!!! STEP AWAY!!! ...and go do something...

"John Smith" wrote in message
news:p_Kge.148$Fw5.13818904@news.sisna.com...
| Let us reset to reality here--before real myths are generated... actually
| the system, in digital form--already exists in my home--and even most of
| yours (unless you are webtv.)
|
| A sw receiver card (order it off ebay) and a xmitter card (might have to
| construct your own here) slapped into a PCI bus--appropiate connections to
| antennas--and I am off into the ether.... the soundcard is my audio, both
| xmit and recv, recv software is provided with the card--software for a
| homebrew xmit card would need to be constructed and problems would exist
in
| interfacing software between the recv card and xmit card--all DO-ABLE...
|
| The fact that it can be done easily has already been demonstrated--if you
| choose to deny this, do this at the risk of having others doubt your
| sanity...
|
|
| Warmest regards,
| John
| --
| Sit down the six-pack!!! STEP AWAY!!! ...and go do something...
|
| "John Smith" wrote in message
| news:MBife.21559$Or3.17382548@news.sisna.com...
|| Decades have brought us moon landing, mars landings,masers, lasers, lets,
|| fets, mosfets, computers, etc...
||
|| But the shape of radio equip. has remained virtually stagnant.
||
|| One "innovation" would be to just copy what the IBM clone has taught us.
||
|| Build a radio of "cards." Just like the computer, a standard case which
| you
```

|| can plugin various power supplies, frontend board "cards", intermediate
|| board "cards", buffer amp board "cards", IF board "cards", audio board
|| "cards", xmitter board "cards", final amp board "cards", etc....
||
|| One radio case can/could virtually be any radio you can imagine.... new
|| design in a frontend? Plug in a new front end "card", new audio
offering?
|| Plug in a new audio board "card."
||
|| Someone really should get off a dead duff somewhere and DO IT!!!!
||
|| Kinda makes ya wonder why not? Doesn't it?
||
|| Warmest regards,
|| John
||
|| --
|| I AM ONE-IN-A-MILLION!!!!!
|| Too bad the other 999,999 got there first..
||
||
|
|

2469. Need Murata CFJ455 K12 filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 19:18:00 UTC
From: KC0HH <kc0hh@yahoo.com>
Message-ID: <jta7811e1uim927vccjet1mb6itudhnmf3@4ax.com>
Source record: 18902

Hello,

I need a Murata CFJ455 K12 or CFJ455 K5 ceramic filter. These are
455khz filters you would pull out of a transeiver to upgrade filters
such as with Inrad filters etc.

Thanks,

Rick KC0HH

2470. Re: Need Murata CFJ455 K12 filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 21:05:34 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <PbCdnTr9W668WB7fRVn-hA@comcast.com>
Source record: 18903

"KC0HH" <kc0hh@yahoo.com> wrote in message
news:jta7811e1uim927vccjet1mb6itudhnmf3@4ax.com...
> Hello,
>
> I need a Murata CFJ455 K12 or CFJ455 K5 ceramic filter. These are
> 455khz filters you would pull out of a transeiver to upgrade filters
> such as with Inrad filters etc.
>
> Thanks,
>
> Rick KC0HH
>

Rick -

The Yaesu FT-817 and Icom IC-703 use the MuRata CFJ455K ceramic filter. So a Collins mechanical or Inrad upgrade like shown at W4RT would qualify
http://www.w4rt.com/obf/OBF_IC-703_Manual.pdf

w9gb

2471. Re: Need Murata CFJ455 K12 filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 21:54:40 UTC
From: KC0HH <kc0hh@yahoo.com>
Message-ID: <hlj7819v8tcj9dui57jj5vscl4ciiq3k3h@4ax.com>
Source record: 18904

On Thu, 12 May 2005 16:05:34 -0500, "gb" <onw9mapsgb@no.arrl.spam.net>
wrote:

Thanks,
I looked at that. It is the CFJ455K 15... The K12 and K5 need to
see a 2k input and output. I am not sure what the K15 filter uses. I
am trying to resurrect a TS-830S. I received it sans any filters.
These are the stock 455 filters. I need to get a filter in there to
see if it still works. I really did not want to sink a bunch of cash
in a Collins or Inrad filter and then find out the radio is not
worth fixing.

Rick KC0HH

>"KC0HH" <kc0hh@yahoo.com> wrote in message
>news:jta7811e1uim927vccjet1mb6itudhnmf3@4ax.com...
>> Hello,
>>
>> I need a Murata CFJ455 K12 or CFJ455 K5 ceramic filter. These are
>> 455khz filters you would pull out of a transeiver to upgrade filters
>> such as with Inrad filters etc.
>>
>> Thanks,
>>
>> Rick KC0HH
>>
>
>Rick -
>
>The Yaesu FT-817 and Icom IC-703 use the MuRata CFJ455K ceramic filter. So
>a Collins mechanical or Inrad upgrade like shown at W4RT would qualify
> http://www.w4rt.com/obf/OBF_IC-703_Manual.pdf
>
>w9gb
>

2472. FS: Coax Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 21:56:35 UTC
From: Murray Pasternack <w6krc@arrl.net>
Message-ID: <QhQge.5858$eU.2056@fed1read07>
Source record: 18905
Cross-posted to: alt.ham-radio.marketplace,misc.industry.electronics.marketplace,rec.radio.amateur.homebrew

FOR SALE: RG 223/U , 50 Ohm, COAXIAL CABLE BY ALPHA, Alpha #9223. Meets MIL-C-17D. Double Silver Coated Copper Shielded. Outer jacket is non-contaminating polyvinylchloride - type 2. Very large quantity available.

0 to 999 feet----------$.75/ft

1000 feet------ $.60/ft

All prices FOB San Clemente, CA

Other types of Coax Cable & Connectors available, email your requirements to info@AAARFProducts.com . Free catalog available upon request.

AAA RF Products
946 Calle Amanecer
San Clemente, CA 92673

Phone: 949 481 3154
Fax: 949 388 5448
email: info@AAARFProducts.com
web: www.aaarfproducts.com

2473. Re: GDO sensitivity

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 22:32:20 UTC
From: Alfred Green <nu8i@cox.net>
Message-ID: <%PQge.25037$tQ.20896@fed1read06>
Source record: 18907

Markus L enscribed:
> Am planning to build the GDO described by SM0VPO at
> http://web.telia.com/~u85920178/use/gdo.htm using a BF245 FET (BC245
> mentioned is a typo). What parameters determine the sensitivity of a GDO?
> Will the sensitivity go up or down when increasing the gain in the
> oscillator stage? Intuitively I would say the gain has to be just high
> enough to guarantee a steady oscillation, but maybe I'm totally wrong.
>
> Markus HB9BRJ
>
>

You are on the right track. As you probably know, the "grid" dip is a result of the resonant circuit drawing energy from the oscillator. The closer the oscillator is to stalling the more sensitive it will be to dropping out when the dip occurs. The problem is that other factors, such as proximity to metal objects, other spurious resonances, etc, can also stop the oscillation. In practice the trick is starting with the unit near the target circuit and keeping a high enough oscillator gain to be well above the threshold and sweep the unit to see a small dip. Then move the coil away from the circuit while reducing the gain and sweeping to see that the dip frequency stays approximately the same. The dip should become deeper. At some point the gain will be at the limit of oscillation and this is the lightest coupling to the circuit, and the most accurate.
Once you have it built you will find that it is really easy to get a feel for the operation, more so than a few sentences can convey.
This reminds me that I haven't used a GDO for a few years, having accumulated a bunch of nice test equipment, but somewhere in my shed is an old Lafayette 6CW4-based GDO which over the years has helped me get a load of homebrew gear on the air. That's a lot of QSOs thanks to a simple piece of equipment!

73 Alf NU8I
Scottsdale AZ DM43an
(G4ABB/ON8KL/VK6GA/PZ5AG/etc 160-10Gigs)

2474. Re: Need Murata CFJ455 K12 filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 22:34:49 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <_9SdnR6H5Yd5Sx7fRVn-pg@adelphia.com>
Source record: 18906

KC0HH wrote:
> On Thu, 12 May 2005 16:05:34 -0500, "gb" <onw9mapsgb@no.arrl.spam.net>
> wrote:
>
> Thanks,
> I looked at that. It is the CFJ455K 15... The K12 and K5 need to
> see a 2k input and output. I am not sure what the K15 filter uses. I
> am trying to resurrect a TS-830S. I received it sans any filters.
> These are the stock 455 filters. I need to get a filter in there to
> see if it still works. I really did not want to sink a bunch of cash
> in a Collins or Inrad filter and then find out the radio is not
> worth fixing.

If you can cobble a way to patch in the Murata CSBLA455KEC8-B0, just
to see if the rest of the radio works, Digikey sells them for less
than a dollar.

The specs are on page 41 of this catalog:
http://www.murata.com/catalog/p17e14.pdf

2475. Re: A basic shielding question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 22:41:28 UTC
From: SpamHog <n1jpr@hotmail.com>
Message-ID: <1115937688.927130.202990@o13g2000cwo.googlegroups.com>
Source record: 18908

Sorry Tim, I beg to differ....

True, the tank circuit frequency gets dragged around by "hand" capacitance, but the place where ths effect is felt is almost invariably the capacitance between ANTENNA, CHASSIS, BODY and GROUND rather than direct hand-to-LC.

Better grounding is nearly useless, unless you bolt the chassis to a very good, high capacitance ground - e.g. you bolt it to a steel bridge on a ship. But even then, your hand and body may introduce a change in antenna-to-ground capacitance -> back to square one!

An extremely loose coupling will reduce this effect, but it's very hard to pull off while keeping an efficient energy transfer.

It's better if you use an active buffer stage. Nowadays you rarely see solid state regens without a buffer, and the reason is not signal levels - it's that capacitance decoupling through an active device can be very effective, making both frequency and regeneration more controllable.

Another trick, less practical, is to move the antenna far away, and feed it via coax. In this case, grounding the coax somewhere along the run (at zero impedance if you route the coax by a good RF ground point) is very effective at stabilizing antenna capacitance to ground. In this case you will indeed see almost exclusively the effect of hand-to-LC, which won't amount to much and can indeed be fully killed by a shielded enclosure.

2476. Re: Need Murata CFJ455 K12 filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 23:06:50 UTC
From: KC0HH <kc0hh@yahoo.com>
Message-ID: <i2o781h2r3sssd86oe4ss5epvvvkcco8gf@4ax.com>
Source record: 18909

On Thu, 12 May 2005 18:34:49 -0400, John Popelish <jpopelish@rica.net>
wrote:

Hi,

Thanks for the info. The problem with these 455 ceramic filters is
that they are also in the Kenwood's transmit chain. If I was just
dealing with a receiver, it would be much easier to do. For receive
only I could just solder a 20pf capacitor across where the filter goes
to test things.

>If you can cobble a way to patch in the Murata CSBLA455KEC8-B0, just
>to see if the rest of the radio works, Digikey sells them for less
>than a dollar.
>
>The specs are on page 41 of this catalog:
>http://www.murata.com/catalog/p17e14.pdf

2477. Re: Need Murata CFJ455 K12 filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 23:22:10 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <d60of2blj1@theodyn.ncf.ca>
Source record: 18910

KC0HH (kc0hh@yahoo.com) writes:
> On Thu, 12 May 2005 18:34:49 -0400, John Popelish <jpopelish@rica.net>
> wrote:
>
> Hi,
>
> Thanks for the info. The problem with these 455 ceramic filters is
> that they are also in the Kenwood's transmit chain. If I was just
> dealing with a receiver, it would be much easier to do. For receive
> only I could just solder a 20pf capacitor across where the filter goes
> to test things.
>
But that will work on transmit, too. The only difference is that
you will have a DSB signal rather than an SSB signal.

If you can hear things, and you can transmit a signal, surely
the rig is in good enough state to warrant tracking down a suitable
filter.

Michael VE2BVW

>
>>If you can cobble a way to patch in the Murata CSBLA455KEC8-B0, just
>>to see if the rest of the radio works, Digikey sells them for less
>>than a dollar.
>>
>>The specs are on page 41 of this catalog:
>>http://www.murata.com/catalog/p17e14.pdf
>

2478. Re: Need Murata CFJ455 K12 filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-12 23:47:37 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <9qudnbj358OBdh7fRVn-1g@comcast.com>
Source record: 18911

"KC0HH" <kc0hh@yahoo.com> wrote in message
news:hlj7819v8tcj9dui57jj5vscl4ciiq3k3h@4ax.com...
> On Thu, 12 May 2005 16:05:34 -0500, "gb" <onw9mapsgb@no.arrl.spam.net>
> wrote:
>
> Thanks,
> I looked at that. It is the CFJ455K 15... The K12 and K5 need to
> see a 2k input and output. I am not sure what the K15 filter uses. I
> am trying to resurrect a TS-830S. I received it sans any filters.
> These are the stock 455 filters. I need to get a filter in there to
> see if it still works. I really did not want to sink a bunch of cash
> in a Collins or Inrad filter and then find out the radio is not
> worth fixing.
>
> Rick KC0HH
>
>> Rick -
>>
>>The Yaesu FT-817 and Icom IC-703 use the MuRata CFJ455K ceramic filter.
>>So
>>a Collins mechanical or Inrad upgrade like shown at W4RT would qualify
>> http://www.w4rt.com/obf/OBF_IC-703_Manual.pdf
>>
>>w9gb
>>
>
Unless it is an ugly duckling .. TS-830 repair should be straight forward

I think most of the Murata filters are either 1.5K or 2K input and output

In the second RX of the Yaesu FT-1000(D) and the FT-1000MP you will find a
Murata 455 kHz ceramic filter.
This will be the Murata CFJ455K '15', '13' or '5' filter.
http://www.remeeus.nl/english/hamradio/ft1000subrxfiltering.htm

gb

2479. Re: A basic shielding question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-13 00:27:59 UTC
From: drwxr-xr-x <bit-bucket@config.com>
Message-ID: <slrnd87t4f.85k.bit-bucket@shell.config.com>
Source record: 18912

On 12 May 2005 15:41:28 -0700, SpamHog wrote:
> Sorry Tim, I beg to differ....

About WHAT!?!? We see no quoted text here.

Oh, we understand: X-Trace: posting.google.com......
Just another sloppy groups.google posting.

2480. ** FLEA at MIT ** Sunday May 15th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-13 02:14:45 UTC
From: w1gsl@mit.edu
Message-ID: <42840d95$0$575$b45e6eb0@senator-bedfellow.mit.edu>
Source record: 18913
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

This coming Sunday....

+++ Now even more Buyers Parking !!!
Thanks to TKT we have use of their new parking lot
across Albany St from the SWAPFEST !!!

!! ** More Buyers PARKING is available ** for details see
http://web.mit.edu/w1gsl/Public/flyer

*** !!!! In our Traditional GARAGE and the adjacent lot !!!! ****
so come rain or shine or super heat the Flea is on !!!

********* $1 buyers discount with hardcopy of this notice ********

COMPUTERS - ELECTRONICS - HAM RADIO - COMPUTERS - ELECTRONICS - HAM RADIO

FLEA all SUMMER at MIT
Sunday May 15th 2005
9AM-2PM

Come to the city for a great flea - plenty of free parking.

MIT's electronics and ham radio flea will take
place on the third Sunday of each month this summer,
April thru October.

There is tailgate space for over 600 sellers and
free, off-street parking for >2000 cars!

Buyers admission is $5 (you get $1 off if
you're lucky enough to have a copy of our ad)
and sellers spaces are $20 for the first and
$15 for each additional at the gate.

The flea will be held at the corner of Albany and
Main streets in Cambridge; right in the Kendall
Square area from 9AM to 2PM, with sellers set-up
time starting at 7AM.

SEASON PASS + Advance Seller Discount

A sellers discount season pass is available which
offers a 30% discount. By prepaying you get a
discount and earlier admission. See the registration form.

*** Attention Sellers ***
Prepaid vendors.. Season Pass or monthly,

will be admitted FIRST.
Separate lines will form prior to gate opening
for prepaid and nonprepaid vendors

!! RAIN or SHINE !! Have no fear of rain, a covered
well illuminated tailgate area is available for all
sellers (6'8" clearance).

Talk-in: 145.23- (PL 88.5) W1BOS/R and
W1XM/R-449.725/444.725 (PL 114.8/2A).

Sponsors: MIT Electronics Research Society
MIT UHF Repeater Association (W1XM)
MIT Radio Society (W1MX)
Harvard Wireless Club (W1AF)

For more info / advanced reservations 617 253 3776

********** $1 buyers discount with hard copy of this notice ***********

<<<<<<<<<<<<<<<<<<<<<<< cut here >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

Mail the coupon below by the 5th of the month to be a Prepaid Vendor.

FLEA at MIT 2005 Rates

SELLERS

To use your prepaid spaces the named vendor MUST be present.
Rates include one admission per space.

Season Pass Sellers admission to all seven meets this year
$99 First Space
$70 Each Additional space
Must be received by April 17th.

Advance $17 First space - includes $10 Cambridge Vendor License
$12 Additional Spaces
Must be received by the 5th of the month.

Gate Admission $20 First Space - includes $10 Cambridge Vendor License
$15 Additional Spaces
Admission is after the prepaid vendors

Early Bird Buyer -Admission after the prepaid vendor line is admitted. ~ 7:15AM
** You may not sell. **
$15 per person at the gate.

****************************** cut here ******************************

FLEA at MIT 2005 Advance Space Application

____April ____May ____June ____ July ____Aug ___Sept ____Oct
@ $17 for the first each month + $12 each additional
____ Season Pass $99 first space $70 each additional

Name _____ Call _____ $ Included_____

Address _____ Phone _____ Make Check to
The MIT Radio Society
City _____ State _____ Zip _____ PO Box 397082
Cambridge MA 02139
E-mail _____

****
Steve Finberg W1GSL w1gsl@mit.edu
PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754
****

2481. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-13 02:24:58 UTC
From: Dave Holford <holford@sympatico.ca>
Message-ID: <42840FFA.2645458F@sympatico.ca>
Source record: 18914
Body handling: HTML body converted to readable text

Decades have brought us moon landing, mars landings,masers, lasers, lets, fets, mosfets, computers, etc...

But the shape of radio equip. has remained virtually stagnant.

One "innovation" would be to just copy what the IBM clone has taught us.

Build a radio of "cards." Just like the computer, a standard case which you can plugin various power supplies, frontend board "cards", intermediate board "cards", buffer amp board "cards", IF board "cards", audio board "cards", xmitter board "cards", final amp board "cards", etc....

One radio case can/could virtually be any radio you can imagine.... new design in a frontend? Plug in a new front end "card", new audio offering? Plug in a new audio board "card."

Someone really should get off a dead duff somewhere and DO IT!!!!

Kinda makes ya wonder why not? Doesn't it?

Warmest regards,
John

Not sure how restrictive your idea is, but it ain't new.

You can even find the odd receiver on e-bay with cards for each function plugging into a bus - try Plessey for example. Even the ancient Davco DR-30 and the first solid-state heath transceiver (SB401 IIRC) used plug in RF, IF etc cards.

Several modern scanners, especially portable ones have a selection of optional plug in cards for things like, extra channels, digital decoders, tone squelch etc. etc.

I had an early Yaesu VHF/UHF receiver which had an optional plug in card video decoder. My Kenwood R-5000 has provision for a plug in VHF front end.

I used to have a RACAL receiver, old enough to be antique now, which used plug in front ends for various coverage options, and I seem to recall it was a fairly common idea in those days.

Dave

2482. Re: Need Murata CFJ455 K12 filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-13 04:32:48 UTC
From: KC0HH <kc0hh@yahoo.com>
Message-ID: <4ka881tbvssbs28dbslp7tf39lc7i4tdme@4ax.com>
Source record: 18915

On Thu, 12 May 2005 18:47:37 -0500, "gb" <onw9mapsgb@no.arrl.spam.net>
wrote:

This 830S is evidently a European model. There is a 12 pin
cinch-jones type plug for power and it is badged for 220/240 and
13.8vdc. Whoever had it here in the states had the primary jumpered
wrong and it wouldn't have worked on any power mains - 110 or 220v.
I received it without any tubes, all the filters have been removed
and some wire harnesses cut up. I don't know what else has been
messed with. Spliced the wires. replaced the tubes and HV is ~850v and
I can set the idle at 60ma but I want to get some filters in there to
able to test it. Any of the CFJ455K filters would be nice to find.

Rick

>>>
>>
>Unless it is an ugly duckling .. TS-830 repair should be straight forward
>
>I think most of the Murata filters are either 1.5K or 2K input and output
>
>In the second RX of the Yaesu FT-1000(D) and the FT-1000MP you will find a
>Murata 455 kHz ceramic filter.
>This will be the Murata CFJ455K '15', '13' or '5' filter.
>http://www.remeeus.nl/english/hamradio/ft1000subrxfiltering.htm
>
>gb
>
>

2483. Re: A basic shielding question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-13 05:33:57 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <1188f23blid3o73@corp.supernews.com>
Source record: 18916

SpamHog wrote:

> Sorry Tim, I beg to differ....
>
> True, the tank circuit frequency gets dragged around by "hand"
> capacitance, but the place where ths effect is felt is almost
> invariably the capacitance between ANTENNA, CHASSIS, BODY and GROUND
> rather than direct hand-to-LC.
>
> Better grounding is nearly useless, unless you bolt the chassis to a
> very good, high capacitance ground - e.g. you bolt it to a steel bridge
> on a ship. But even then, your hand and body may introduce a change
> in antenna-to-ground capacitance -> back to square one!
>
> An extremely loose coupling will reduce this effect, but it's very
> hard to pull off while keeping an efficient energy transfer.
>
> It's better if you use an active buffer stage. Nowadays you rarely see
> solid state regens without a buffer, and the reason is not signal
> levels - it's that capacitance decoupling through an active device can
> be very effective, making both frequency and regeneration more
> controllable.
>
> Another trick, less practical, is to move the antenna far away, and
> feed it via coax. In this case, grounding the coax somewhere along the
> run (at zero impedance if you route the coax by a good RF ground point)
> is very effective at stabilizing antenna capacitance to ground. In
> this case you will indeed see almost exclusively the effect of
> hand-to-LC, which won't amount to much and can indeed be fully killed
> by a shielded enclosure.
>
Goodness knows why, but I was assuming a nice coax feed from the
antenna. While that normally makes sense it can't be assumed with a
regen, I suppose.

If you're using the regen to receive CW or SSB you should be using an
amplifier anyway.

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

2484. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-13 07:09:29 UTC
From: Roger Conroy <rogerconroy@nospam.hotmail.com>
Message-ID: <d61kkgleu1@ctb-nnrp2.saix.net>
Source record: 18917

Snip.....
>
> On the down side, the HF bands are NOT a big-
> ticket item for communications as they once were.
> Today the RF world is deep into cellular
> telephony for sites and providers, and some
> for users (at companies with large production
> lines and consumer marketing structures). The
> world of communications has moved UP and over
> that mythical, artificial dividing line of
> 30 MHz.
>
> LenAnderson@ieee.org
>

Just a quick thumbsuck...

The only "significant" HF users these days are:
Shortwave broadcasting - except for being HF, their equipment has nothing in common with ham rigs.
Military - "Black box" rigs with a minimum of knobs&buttons - most also feature secure spread spectrum - so not much commonality with Ham equipment here either
Then there's Hams - most of us want the maximum possible bells, whistles, knobs and buttons. Hi tech features with everything" user adjustable/selectable.

Maritime and Aviation users are moving / have already moved to satellite for "longer than VHF range" comms.
Other commercial HF users are very few and far between.

So it really is quite amazing that we get the rigs we do.

My experience of "professional" 2-way radio users: I'm a member of the Police Reserve here in South Africa (quite similar to military reserves).Not a single one of them (30-40 people) has a clear understanding of the concept of frequency. All they (need to) know is how to select channel number and adjust the volume - their radios only have those 2 knobs. They also know not to start talking before the beeps have stopped. That is the sum total of their "technical" radio knowlege. (No wait! - Some of them also know how to swap a HT battery pack.) Everything else: channel programming, CTCSS, repeater offset, etc. (internal controls) is done by the techies at the provincial headquarters.

73
Roger ZR3RC

2485. Re: New program - 1/2-wave vertical antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-13 07:32:43 UTC
From: PaoloC <ollollo@hotpop.com>
Message-ID: <428458cf$1_1@x-privat.org>
Source record: 18918

Reg Edwards wrote:

Reg,

> Program VERTUNE.exe analyses performance of half-wave, end-fed,
> vertical and similar antennas. See how power losses are distributed.

once again thanks for these GREAT antenna design aids!

FYI, they do work in a "dosemu" environment under Linux (tried on
dosemu 1.2.2.0).

73,
Paolo IK1ZYW

2486. Re: New program - 1/2-wave vertical antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-13 09:25:49 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d61rqsnbv1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 18919

"PaoloC" <ollollo@hotpop.com> wrote in message
news:428458cf$1_1@x-privat.org...
> Reg Edwards wrote:
>
> Reg,
>
> > Program VERTUNE.exe analyses performance of half-wave, end-fed,
> > vertical and similar antennas. See how power losses are
distributed.
>
> once again thanks for these GREAT antenna design aids!
>
> FYI, they do work in a "dosemu" environment under Linux (tried on
> dosemu 1.2.2.0).
>
> 73,
> Paolo IK1ZYW

==========

Dear Paola,

Thanks very much for the information.
I was not aware of it.
I must take steps to publicise it.

Reg, G4FGQ

2487. WTB: Homebrew items

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-13 09:31:01 UTC
From: David J Windisch <davidjw@cinci.rr.com>
Message-ID: <pt_ge.27751$Ib4.4633@tornado.ohiordc.rr.com>
Source record: 18920

Hi, all concerned:

If you have a homebrew and/or kit project, gathering dust, send me its original intention, a
picture if possible, its weight (for ground shipping estimate to 45251), and what you'd
like to get for it, and maybe we can shake hands and do business.

Tubes or transistors -- doesn't matter.

TIA and

73, Dave, N3HE
Cincinnati OH

2488. My programs, Linux, dosemu

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-13 09:50:17 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d61t8p$r0l$1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 18921

Paolo, IK1ZYW, informs me my programs will run in a LINUX, DOSEMU
environment. I was not aware of this.

He has tried it with Dosemu 1.2.2.0

Thanks very much Paolo.

Reg, G4FGQ

2489. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-13 13:53:42 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <1189ca25fflqpfd@corp.supernews.com>
Source record: 18922

Len Anderson gets it right. Roy gets it right. Several others show that they understand. He is an anonymous provocateur who has nothing but free time and spends it on causing foam.

Can not give any credence to someone who does not give their real name.
Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net

<LenAnderson@ieee.org> wrote in message
news:1115875658.534597.237590@g14g2000cwa.googlegroups.com...
<snip>
>
> Michael, don't let this POSEUR bother you. That
> anony-mouse "John Smith" hasn't been there, hasn't
> done it. He wants to be "Instant Guru" and wants
> a "rep" without doing any work for it. From what
> he states - all in generalities, no specifics -
> he can't think things out close to necessary detail.
>
> You were right to "plonk" him.
>
>
> > You have your head up your sorry ass, and I'm through wasting time
> >with your nonsense. Its obvious that you don't know a dam thing about
> >design when you compare the Apple II to a real design project. You
> need
> >to get an education in design and stop trying to blow smoke up
> >everyone's ass.
>
> Way to go! :-)
>
<snip>
>
> LenAnderson@ieee.org
>

2490. Re: WTB Homebrew items

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-13 14:27:28 UTC
From: Mike Burch <mburch46@mchsi.com>
Message-ID: <kP2he.76332$NU4.5434@attbi_s22>
Source record: 18923

Hi Dave,

I have always liked doing that also. Its a great way of coming up with
some very interesting parts.

Mike K8MB

David J Windisch wrote:
> Hi, all concerned:
>
> I'm trying to revive my flagging interest in hamming in general.
>
> If you have a homebrew and/or kit project, sitting around, send me a
> picture, its weight (for ground shipping estimate to 45251), and what you'd
> like to get, and maybe we can shake hands and do business.
>
> Tubes or transistors -- doesn't matter.
>
> TIA and
>
> 73, Dave, N3HE
> Cincinnati OH
>
>

2491. Re: New program - 1/2-wave vertical antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-13 14:45:59 UTC
From: Adelphia <dboley@adelphia.net>
Message-ID: <zMGdnSZIZLZ-IBnfRVn-hg@adelphia.com>
Source record: 18924

Thanks for the VerTune program. I almost bought an auto-tuner to match a 10 meter high vertical until I saw that the calculated impedance was beyond the capabilities of the tuner. Saved money!
Dick N3HKN

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:d5vqkt$i4n$4@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com...
> NEW PROGRAM
>
> Program VERTUNE.exe analyses performance of half-wave, end-fed,
> vertical and similar antennas. See how power losses are distributed.
>
> A parallel L and C tuned circuit Z-matches the high impedance
> feedpoint to a coaxial line. Coil design, (dimensions, wire gauge,
> turns) is included.
>
> High radiating efficiency can be acheived with a poor ground electrode
> system.
>
> Download VERTUNE (41 kilobytes) in a few seconds, no un-zipping
> inconvenience, and run immediately.
> ----
> ....
> Regards from Reg, G4FGQ
> For Free Radio Design Software go to
> http://www.btinternet.com/~g4fgq.regp
> ....
>
>
>

2492. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-13 20:06:42 UTC
From: LenAnderson@ieee.org
Message-ID: <1116014802.684563.69950@z14g2000cwz.googlegroups.com>
Source record: 18925

From: "Michael A. Terrell" on Thurs,May 12 2005 10:16 am

>LenAnderson@ieee.org wrote:
>>
>> From: "Michael A. Terrell" on Wed,May 11 2005 9:50 am

> Way to go! :-)

> As far as "John Smith" goes, he's gone. He is just another
hopeless
>wanabee who doesn't understand anything about the real world.

Tsk, he's a poseur, an imitator, a wannabe who needs a
"rep." :-)

> Len, I have worked from DC to 11 GHz on commercial designs and
anyone
>that thinks any design is easy just doesn't have any idea what's
>involved.

A problem in discussing things in diverse groups is
that the vast majority does NOT have such experience.

[there's a short pause while a few regulars become
overheated with indignation... :-)]

The vast majority get their "experience" from READING
about it - AFTER all the development fuss and fury has
been done. If the writers and editors are good at words,
they create the fantasy that the reader has been there
"too." [there's a whole lot of 20-20 hindsight going
on with those readers]

> Its one thing to hack together an almost working prototype,
>but its a whole different animal to design from the bottom up to meet
>set specifications, make sure the components will be available, and if
>the unit is to be sold, to make sure that it will clear the FCC, UL
and
>other requirements. If you decide to manufacture the equipment for
sale
>outside of the US you have the CE certification, and ISO 900X to deal
>with.

You said it, brother! :-) The PR splashes and articles
in QST just do NOT go into days, weeks, months, week-
ends, deferred days off, sweaty times on the bench
with "stubborn" things (finding out little annoying

things one might have forgotten to include) or finding
that a component is NOT in tolerance, "fix" days in
having to work around a problem caused by someone ELSE
not doing their job quite correctly and being stuck
with finding the cure. Neither does it include some
total fascination in seeing a creation come to LIFE,
bit by bit and working AS designed, the pride in one's
self for having done so (a quite kind, most
satisfactory, adding one more mark on self-confidence).
It is a satisfaction in having been given an arduous
responsibility and achieving success in meeting it.
Besides, it can be fun! :-)

> It would be interesting to set up a group to develop a modular
>system, but getting people to agree on the specs can be more work than
>the actual design.

Actually, in this rather lengthy thread, which has no
real consequence to hobby electronics, there really
wasn't any "need" to "develop a radio specification."
It was a mild rant by an anony-mouse who hasn't been
there in real life and wanted to become some kind of
newsgroup age Keroac a la four decade old "protest"
movement.

"Putting together specifications" has been done for
centuries. It is never easy because too many chafe
at "being told what to do" or expect that every spec
is "perfect, something that must be adhered to at all
costs!" Those kinds of critics haven't had to BE
there, working it out daily, weekly, monthly in a
sea of contentious differing-opinion souls all of
whom consider themselves "right." :-)

I doubt (sincerely) that there's any NEED to have
"a radio" modular. The 'radio" already has been a
system built of modular circuit blocks for decades.
All those blocks have to work together to make the
"radio" work and the "radio" designer's task is to
integrate those modules, make them work together.
[replace "radio" with "any electronics" and the
same thing is true]

What seems to be operative in this thread is that
some look at a PC and its very-mass production
"module" pricing and the "plug-and-play" concept
and sales phrase popularized by Microsoft and think
it applies to all electronics. It doesn't. Those
same imaginerers probably would get totally lost
in trying to figure out how a "simple" plug-in card
on a PC works; all such cards nowadays are little
subsystems, complex, a few being little "computers"

all by themselves (if using a microcontroller).
They only look at the overall card specifications
and THINK they "know all about it." [all they've
done is to memorize some data items about the
product...well after the development tasks' end]

Three decades ago, radio amateurs got a taste of
"radio modules" in the burgeoning use of handheld
transceivers. A single Tx-Rx that could be held
in one hand, complete with antenna. A full radio.
(first done about 1940 for the U.S. Army and
dubbed "the handie-talkie") One "module."
A stand-alone communications tool. "Integration"
of that module didn't need other electronics.

Now with Software-Defined Radios, non-thinkers
want to make those like the millions of cheap
personal computers. Most don't know the basics
of either receiving or transmitting radio signals
or how to handle modulation, yet they want to talk
AS IF they did. :-)

[more righteous indignation by some readers here
as they chafe at the bit wanting to vent against
the statement above...heh heh]

SDR is a terrible problem for the FCC in its task
of regulating technical characteristics of civil
radios...and will be for all other radio regulating
agencies internationally in the immediate future.
A very different problem.

The thing is that SDR is ALREADY HERE and has been
for decades...BEFORE the advent of the micro-
processor and microcontroller. [that's a whole
new area of discussion whose birth might have
been in the transition of the regnerative receiver
with audio amplifier into Ed Armstrong's "super-
heterodyne" right after World War One] That the
modern "radios" use "software" (actually digital
control signals) instead of hard-wired manual
control operation lines doesn't matter to the
"radio's" circuit blocks. Those circuit blocks
still have to be integrated to make the whole
"radio" system. Their theory of operation has
NOT changed.

>--
>Former professional electron wrangler.

I'm still doing that...but not at regular office
hours...and prefer my own lab/workshop area. :-)

LenAnderson@ieee.org

2493. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-13 21:03:33 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <JC8he.50$_c2.8790168@news.sisna.com>
Source record: 18927

Funny, I think I am a guy looking for sources of info./ideas/exchange which are worth my time--too bad I am so ignorant I can't recognize 'em when I see 'em--well, according to some...

Warmest regards,
John
--
Marbles can be used in models with excellent results! However, if forced to keep using all of mine up... I may end up at a disadvantage... I seem to have misplaced some!!!

<LenAnderson@ieee.org> wrote in message news:1116014802.684563.69950@z14g2000cwz.googlegroups.com...
| From: "Michael A. Terrell" on Thurs,May 12 2005 10:16 am
|
| >LenAnderson@ieee.org wrote:
| >>
| >> From: "Michael A. Terrell" on Wed,May 11 2005 9:50 am
|
| > Way to go! :-)
|
| > As far as "John Smith" goes, he's gone. He is just another
| hopeless
| >wanabee who doesn't understand anything about the real world.
|
| Tsk, he's a poseur, an imitator, a wannabe who needs a
| "rep." :-)
|
|
| > Len, I have worked from DC to 11 GHz on commercial designs and
| anyone
| >that thinks any design is easy just doesn't have any idea what's
| >involved.
|
| A problem in discussing things in diverse groups is
| that the vast majority does NOT have such experience.
|
| [there's a short pause while a few regulars become
| overheated with indignation... :-)]
|
| The vast majority get their "experience" from READING
| about it - AFTER all the development fuss and fury has
| been done. If the writers and editors are good at words,
| they create the fantasy that the reader has been there
| "too." [there's a whole lot of 20-20 hindsight going

| on with those readers]
|
| > Its one thing to hack together an almost working prototype,
| >but its a whole different animal to design from the bottom up to meet
| >set specifications, make sure the components will be available, and if
| >the unit is to be sold, to make sure that it will clear the FCC, UL
| and
| >other requirements. If you decide to manufacture the equipment for
| sale
| >outside of the US you have the CE certification, and ISO 900X to deal
| >with.
|
| You said it, brother! :-) The PR splashes and articles
| in QST just do NOT go into days, weeks, months, week-
| ends, deferred days off, sweaty times on the bench
| with "stubborn" things (finding out little annoying
| things one might have forgotten to include) or finding
| that a component is NOT in tolerance, "fix" days in
| having to work around a problem caused by someone ELSE
| not doing their job quite correctly and being stuck
| with finding the cure. Neither does it include some
| total fascination in seeing a creation come to LIFE,
| bit by bit and working AS designed, the pride in one's
| self for having done so (a quite kind, most
| satisfactory, adding one more mark on self-confidence).
| It is a satisfaction in having been given an arduous
| responsibility and achieving success in meeting it.
| Besides, it can be fun! :-)
|
|
| > It would be interesting to set up a group to develop a modular
| >system, but getting people to agree on the specs can be more work than
| >the actual design.
|
| Actually, in this rather lengthy thread, which has no
| real consequence to hobby electronics, there really
| wasn't any "need" to "develop a radio specification."
| It was a mild rant by an anony-mouse who hasn't been
| there in real life and wanted to become some kind of
| newsgroup age Keroac a la four decade old "protest"
| movement.
|
| "Putting together specifications" has been done for
| centuries. It is never easy because too many chafe
| at "being told what to do" or expect that every spec
| is "perfect, something that must be adhered to at all
| costs!" Those kinds of critics haven't had to BE
| there, working it out daily, weekly, monthly in a
| sea of contentious differing-opinion souls all of
| whom consider themselves "right." :-)

|
| I doubt (sincerely) that there's any NEED to have
| "a radio" modular. The 'radio" already has been a
| system built of modular circuit blocks for decades.
| All those blocks have to work together to make the
| "radio" work and the "radio" designer's task is to
| integrate those modules, make them work together.
| [replace "radio" with "any electronics" and the
| same thing is true]
|
| What seems to be operative in this thread is that
| some look at a PC and its very-mass production
| "module" pricing and the "plug-and-play" concept
| and sales phrase popularized by Microsoft and think
| it applies to all electronics. It doesn't. Those
| same imaginerers probably would get totally lost
| in trying to figure out how a "simple" plug-in card
| on a PC works; all such cards nowadays are little
| subsystems, complex, a few being little "computers"
| all by themselves (if using a microcontroller).
| They only look at the overall card specifications
| and THINK they "know all about it." [all they've
| done is to memorize some data items about the
| product...well after the development tasks' end]
|
| Three decades ago, radio amateurs got a taste of
| "radio modules" in the burgeoning use of handheld
| transceivers. A single Tx-Rx that could be held
| in one hand, complete with antenna. A full radio.
| (first done about 1940 for the U.S. Army and
| dubbed "the handie-talkie") One "module."
| A stand-alone communications tool. "Integration"
| of that module didn't need other electronics.
|
| Now with Software-Defined Radios, non-thinkers
| want to make those like the millions of cheap
| personal computers. Most don't know the basics
| of either receiving or transmitting radio signals
| or how to handle modulation, yet they want to talk
| AS IF they did. :-)
|
| [more righteous indignation by some readers here
| as they chafe at the bit wanting to vent against
| the statement above...heh heh]
|
| SDR is a terrible problem for the FCC in its task
| of regulating technical characteristics of civil
| radios...and will be for all other radio regulating
| agencies internationally in the immediate future.
| A very different problem.

|
| The thing is that SDR is ALREADY HERE and has been
| for decades...BEFORE the advent of the micro-
| processor and microcontroller. [that's a whole
| new area of discussion whose birth might have
| been in the transition of the regnerative receiver
| with audio amplifier into Ed Armstrong's "super-
| heterodyne" right after World War One] That the
| modern "radios" use "software" (actually digital
| control signals) instead of hard-wired manual
| control operation lines doesn't matter to the
| "radio's" circuit blocks. Those circuit blocks
| still have to be integrated to make the whole
| "radio" system. Their theory of operation has
| NOT changed.
|
| >--
| >Former professional electron wrangler.
|
| I'm still doing that...but not at regular office
| hours...and prefer my own lab/workshop area. :-)
|
| LenAnderson@ieee.org
|

2494. Re: Homebrew items A 30 year old Homebrew In Line Watt meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-13 21:38:28 UTC
From: Mr Fed UP <mrfedup@bellsouth.net>
Message-ID: <s59he.9626$7A2.8409@bignews6.bellsouth.net>
Source record: 18926

Well my 30 year old project isn't for sale, but you can build one for
yourself if your really wanting to have a useful project.
I have posted on my web page a
http://personal.atl.bellsouth.net/m/e/metacalv/Directionalcoupler.html
Directional Coupler.
What is really a homebrew Watt meter like a Bird watt meter only the slug is
not changeable for my set up.
I would guess some changes could be made for changeable slugs. I built
mine just for 2 meters and has served me well
and is still in good working condition. A useful 30 year meter might even
be hard to have for a commercial meter.
This would seem to be as inexpensive and challenging a project as one might
reasonably ask for.

Good luck. 73 WB9SMX Gary

"David J Windisch" <davidjw@cinci.rr.com> wrote in message
news:pt_ge.27751$Ib4.4633@tornado.ohiordc.rr.com...
> Hi, all concerned:
>
> If you have a homebrew and/or kit project, gathering dust, send me its
> original intention, a
> picture if possible, its weight (for ground shipping estimate to 45251),
> and what you'd
> like to get for it, and maybe we can shake hands and do business.
>
> Tubes or transistors -- doesn't matter.
>
> TIA and
>
> 73, Dave, N3HE
> Cincinnati OH
>
>

2495. Re: Homebrew items A 30 year old Homebrew In Line Watt meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-13 22:40:13 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <h1ahe.649$5m1.615@trnddc06>
Source record: 18928

Gary,
I remember this article like it was yesterday. Thanks for showing us that
great ideas are timeless.

Nice work!

Joe
W3JDR

"Mr Fed UP" <mrfedup@bellsouth.net> wrote in message
news:s59he.9626$7A2.8409@bignews6.bellsouth.net...
> Well my 30 year old project isn't for sale, but you can build one for
> yourself if your really wanting to have a useful project.
> I have posted on my web page a
> http://personal.atl.bellsouth.net/m/e/metacalv/Directionalcoupler.html
> Directional Coupler.
> What is really a homebrew Watt meter like a Bird watt meter only the slug
> is not changeable for my set up.
> I would guess some changes could be made for changeable slugs. I built
> mine just for 2 meters and has served me well
> and is still in good working condition. A useful 30 year meter might even
> be hard to have for a commercial meter.
> This would seem to be as inexpensive and challenging a project as one
> might reasonably ask for.
>
> Good luck. 73 WB9SMX Gary
>
>
>
>
> "David J Windisch" <davidjw@cinci.rr.com> wrote in message
> news:pt_ge.27751$Ib4.4633@tornado.ohiordc.rr.com...
>> Hi, all concerned:
>>
>> If you have a homebrew and/or kit project, gathering dust, send me its
>> original intention, a
>> picture if possible, its weight (for ground shipping estimate to 45251),
>> and what you'd
>> like to get for it, and maybe we can shake hands and do business.
>>
>> Tubes or transistors -- doesn't matter.
>>
>> TIA and
>>
>> 73, Dave, N3HE

>> Cincinnati OH
>>
>>
>
>

2496. Re: Homebrew items A 30 year old Homebrew In Line Watt meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-13 22:58:07 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <5iahe.64$gS6.20987977@news.sisna.com>
Source record: 18929

Wow, nice work with tubing... I will make one... thanks! Excellent
design...

Warmest regards,
John
--
Marbles can be used in models with excellent results! However, if forced
to keep using all of mine up... I may end up at a disadvantage... I seem
to have misplaced some!!!

"Mr Fed UP" <mrfedup@bellsouth.net> wrote in message
news:s59he.9626$7A2.8409@bignews6.bellsouth.net...
| Well my 30 year old project isn't for sale, but you can build one for
| yourself if your really wanting to have a useful project.
| I have posted on my web page a
| http://personal.atl.bellsouth.net/m/e/metacalv/Directionalcoupler.html
| Directional Coupler.
| What is really a homebrew Watt meter like a Bird watt meter only the slug
is
| not changeable for my set up.
| I would guess some changes could be made for changeable slugs. I built
| mine just for 2 meters and has served me well
| and is still in good working condition. A useful 30 year meter might even
| be hard to have for a commercial meter.
| This would seem to be as inexpensive and challenging a project as one
might
| reasonably ask for.
|
| Good luck. 73 WB9SMX Gary
|
|
|
|
| "David J Windisch" <davidjw@cinci.rr.com> wrote in message
| news:pt_ge.27751$Ib4.4633@tornado.ohiordc.rr.com...
| > Hi, all concerned:
| >
| > If you have a homebrew and/or kit project, gathering dust, send me its
| > original intention, a
| > picture if possible, its weight (for ground shipping estimate to 45251),
| > and what you'd
| > like to get for it, and maybe we can shake hands and do business.
| >
| > Tubes or transistors -- doesn't matter.
| >

```
| > TIA and
| >
| > 73, Dave, N3HE
| > Cincinnati OH
| >
| >
|
|
```

2497. Re: Suggestions for VHF-AM Transmitter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-14 00:15:10 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <Hcqdnbn94NmR3hjfRVn-pA@comcast.com>
Source record: 18930

Still looking for some pointers and/or advice on current AM transmitter design. There doesn't seem to be much out there apart from the "pirates" who are building SW transmitters around 5W or so...(e.g. the "Grenade" QRP transmitters and similar designs)...

Is AM ("Ancient Modulation") considered dead and therefore there are no links/publications worth reading?

Bill

2498. Re: Suggestions for VHF-AM Transmitter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-14 00:55:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <70che.86$An3.33040559@news.sisna.com>
Source record: 18931

Just run the output of any audio source of ~5 watts into a "modulation transformer" and have the B+ to the transmitter pass through its secondary...

You can also construct an audio amplifier whose output power final "modulates" (perhaps the B+ from the audio amps final transistor/tube) the B+ to the xmitter... etc... ssb is by nature 2X-plus more efficient... fm supports greater sound quality...

I think detail about it is skipped simply because it is so easy to affect....

Warmest regards,
John
--
Marbles can be used in models with excellent results! However, if forced to keep using all of mine up... I may end up at a disadvantage... I seem to have misplaced some!!!

"Netgeek" <no_spam@comcast.net> wrote in message news:Hcqdnbn94NmR3hjfRVn-pA@comcast.com...
| Still looking for some pointers and/or advice on current AM
| transmitter design. There doesn't seem to be much out there
| apart from the "pirates" who are building SW transmitters
| around 5W or so...(e.g. the "Grenade" QRP transmitters and
| similar designs)...
|
| Is AM ("Ancient Modulation") considered dead and therefore
| there are no links/publications worth reading?
|
| Bill
|
|

2499. VHF homebrew transceiver design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-14 06:00:35 UTC
From: rkrishnan <mrkrishnan@gmail.com>
Message-ID: <1116050435.014108.212800@o13g2000cwo.googlegroups.com>
Source record: 18932

I had been looking for a VHF SSB/FM homebrew design to build. Can someone point to a good design to build?

Thanks
Ramakrishnan, VU3RDD

2500. FCC BUST IN TEXAS

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-14 08:57:57 UTC
From: willfull_buck@yahoo.com
Message-ID: <1116061077.163644.153230@g47g2000cwa.googlegroups.com>
Source record: 18933

Hey Folks,
Kinda down at the moment, our college radio station got busted by the FCC. Here a list of the stuff that was hauled off:

NRG PLL-PRO 3 20W TRANSMITTER
NRG 220 WATT RF LINEAR AMPLIFIER
NRG PRO III STEREO CODER
NRG PRO III STEREO LIMITER COMPRESSOR
DAIWA CN-101L SWR+POWER METER
COMET CFM-95SL 5/8 WAVE ANTENNA
50 FEET OF LMR 400 COAX
KENWOOD R-1000 SW RECEIVER (my fathers old short-wave radio?)

The really weird part is that we WERE NOT transmitting at the time of the raid. One of the agents tolds us that they traced us through a purchase order from Broadcast-Warehouse! It's true that we bought a 150w amp from broadcastwarehouse.com a few weeks ago. How did the FCC know about that?

Anyways, we will rebuild the station and continue to fight the globle interests of the MEGA-MACHINE.

DEATH TO THE MEGA-MACHINE!

2501. Re: FCC BUST IN TEXAS

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-14 09:56:10 UTC
From: Leon Heller <leon.heller@dsl.pipex.com>
Message-ID: <4285cb39$0$294$cc9e4d1f@news-text.dial.pipex.com>
Source record: 18934

<willfull_buck@yahoo.com> wrote in message
news:1116061077.163644.153230@g47g2000cwa.googlegroups.com...
> Hey Folks,
> Kinda down at the moment, our college radio station got busted by the
> FCC. Here a list of the stuff that was hauled off:
>
> NRG PLL-PRO 3 20W TRANSMITTER
> NRG 220 WATT RF LINEAR AMPLIFIER
> NRG PRO III STEREO CODER
> NRG PRO III STEREO LIMITER COMPRESSOR
> DAIWA CN-101L SWR+POWER METER
> COMET CFM-95SL 5/8 WAVE ANTENNA
> 50 FEET OF LMR 400 COAX
> KENWOOD R-1000 SW RECEIVER (my fathers old short-wave radio?)
>
> The really weird part is that we WERE NOT transmitting at the time of
> the raid. One of the agents tolds us that they traced us through a
> purchase order from Broadcast-Warehouse! It's true that we bought a
> 150w amp from broadcastwarehouse.com a few weeks ago. How did the FCC
> know about that?
>
> Anyways, we will rebuild the station and continue to fight the globle
> interests of the MEGA-MACHINE.
>
> DEATH TO THE MEGA-MACHINE!
>

How is this relevant to amateur radio?

Leon
--
Leon Heller
http://www.geocities.com/leon_heller

2502. Re: FCC BUST IN TEXAS

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-14 11:24:32 UTC
From: Adelphia <dboley@adelphia.net>
Message-ID: <0PednYD8ndGZfRjfRVn-vQ@adelphia.com>
Source record: 18935

Sounds like a candidate for one of the mentally impaired neo-Nazi groups.
The station was either unlicensed or not authorized for the power they were
running. Given the immature post I also assume that the content wasn't very
nice.
Dick
"Leon Heller" <leon.heller@dsl.pipex.com> wrote in message
news:4285cb39$0$294$cc9e4d1f@news-text.dial.pipex.com...
> <willfull_buck@yahoo.com> wrote in message
> news:1116061077.163644.153230@g47g2000cwa.googlegroups.com...
>> Hey Folks,
>> Kinda down at the moment, our college radio station got busted by the
>> FCC. Here a list of the stuff that was hauled off:
>>
>> NRG PLL-PRO 3 20W TRANSMITTER
>> NRG 220 WATT RF LINEAR AMPLIFIER
>> NRG PRO III STEREO CODER
>> NRG PRO III STEREO LIMITER COMPRESSOR
>> DAIWA CN-101L SWR+POWER METER
>> COMET CFM-95SL 5/8 WAVE ANTENNA
>> 50 FEET OF LMR 400 COAX
>> KENWOOD R-1000 SW RECEIVER (my fathers old short-wave radio?)
>>
>> The really weird part is that we WERE NOT transmitting at the time of
>> the raid. One of the agents tolds us that they traced us through a
>> purchase order from Broadcast-Warehouse! It's true that we bought a
>> 150w amp from broadcastwarehouse.com a few weeks ago. How did the FCC
>> know about that?
>>
>> Anyways, we will rebuild the station and continue to fight the globle
>> interests of the MEGA-MACHINE.
>>
>> DEATH TO THE MEGA-MACHINE!
>>
>
> How is this relevant to amateur radio?
>
> Leon
> --
> Leon Heller
> http://www.geocities.com/leon_heller
>

2503. LIFETIME COLLECTION ANTIQUE RADIO AUCTION Sunday May 15, 2005

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-14 13:45:03 UTC
From: americana <markblondy@yahoo.com>
Message-ID: <1116078303.530278.123820@g47g2000cwa.googlegroups.com>
Source record: 18936

LIFETIME COLLECTION ANTIQUE RADIO AUCTION Sunday May 15, 2005
Warren Michigan

Sunday May 15, 2005 11AM
(3) 10x 20 UNITS! (3) 10x 20 UNITS!

The Lifetime Collection of a John Cottec Local Collector and Repair Technician to be auctioned off to the highest bidder!

Highlights include Vintage Antique Tube Radios. Floor Models as well as Tabletop. Antique Speakers, Stereo Equipment, Tuners, Over 1,000 Tubes in
original boxes, Tube Testing Equipment, Oscilloscopes, Tube Amplifiers,
Troubleshooting guides, (5) File Cabinets of Sam's Photo Facts Schematic books,
Many Boxes of Parts, knobs, Caps, Resistors, Controls and other parts of many
kinds, Turntables and Record Players, Record Albums, 8-Track & Reel to Reel
Tapes. Some radios are in working condition and some are in need of restoration.

Some of the brand names include... Sparton Blue Mirror Tabletop, Fada Bullet, Lafayette, Scott, Fisher, Hickok, Kenwood, Heathkit, Stewart Warner, Delco, Capehart, Motorola, Bogen Presto, Acoustic Research, Zenith, Harman Kardan, Recordio, Jans Zen, Stromberg Carlson, Detrola, Dewald, Marantz, Goplana, Philco, Eico, Bic, Atwater Kent, General Electric, Roberts, Superior, Telefunken, Kingston, Dual,
Blonder Tongue and Air King to name a few!

The auction will be held at the Safety Mini Storage facility located at 2420 E. 14 Mile Rd. in Warren, Michigan.

Preview the auction from 9AM. Auction will begin promptly at 11!

The Records will be sold 2 for a Buck during the pre-view!
markblondy.com for more details and photos!

2504. Re: FCC BUST IN TEXAS

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-14 14:07:41 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <dOSdnZ7806SsmxvfRVn-pA@comcast.com>
Source record: 18937

<willfull_buck@yahoo.com> wrote in message
news:1116061077.163644.153230@g47g2000cwa.googlegroups.com...
> Hey Folks,
> Kinda down at the moment, our college radio station got busted by the
> FCC.
>
> The really weird part is that we WERE NOT transmitting at the time of
> the raid. One of the agents tolds us that they traced us through a
> purchase order from Broadcast-Warehouse! It's true that we bought a
> 150w amp from broadcastwarehouse.com a few weeks ago. How did the FCC
> know about that?
>
> Anyways, we will rebuild the station and continue to fight the globle
> interests of the MEGA-MACHINE.
>
> DEATH TO THE MEGA-MACHINE!
>

Poor soul does not know that traditional radio is dead
(Wall Street proclamation by analysts and investors earlier this week -
go read TheStreet.com).

Why?

Internet Radio stations (streaming audio), XM and Sirius Radio (Howard Stern
and others) and new digital "HD" format for over-air stations
Infinity Broadcasting announced earlier this week that WUSN-FM 99.5 HD-2 in
Chicago will be the first continuously programmed HD Radio multicast channel
by a commercial broadcaster..

and technology marches on .... like demise of end of 8-track and cassette
tapes.

gb

2505. Re: VHF homebrew transceiver design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-14 14:14:35 UTC
From: fsixawn@free_.fr
Message-ID: <42860591.5847510@news.free.fr>
Source record: 18938

Hello,

If SSB only may be a beginning ...
if French text may be understood ...
if a very good description, with good schematics can agree ...
then go to :
http://perso.wanadoo.fr/f5cau/xver144/page_xver.htm

and download pdf :
<xver9hx.pdf> 1.6 Mb

This VHF SSB transceiver was design for substitute of IC202 for down conversion in a SHF station. The author, Andre Jamet, F9HX, is known in France for his good job and papers about it.

73,
F6AWN

Le 13 May 2005 23:00:35 -0700, "rkrishnan" <mrkrishnan@gmail.com> a
�crit :

>I had been looking for a VHF SSB/FM homebrew design to build. Can
>someone point to a good design to build?
>
>Thanks
>Ramakrishnan, VU3RDD

2506. Re: VHF homebrew transceiver design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-14 14:17:40 UTC
From: Jim <mwsoft@cox.net>
Message-ID: <kg1c81pi15buaftodab5aq6puddcpcvupc@4ax.com>
Source record: 18939

On 13 May 2005 23:00:35 -0700, "rkrishnan" <mrkrishnan@gmail.com>
wrote:

>I had been looking for a VHF SSB/FM homebrew design to build. Can
>someone point to a good design to build?
>
>Thanks
>Ramakrishnan, VU3RDD

Hi Rama,

I've not seen a complete design listed anywhere, but, if you find one, or want to ADD (say) an LNA, or some such, a high power PA?, to it or what you have now, I will try to help you with a design. I don't charge hams for help, BUT, if I were to drive thru your city, and you were to offer me "lunch" or a pizza at a local pub, well - that's different! <g> I can be "had." <lol>

Take a peek at my "commercial" site. I hate to use that name as I built it all myself. To me "commercial" is something like Bill Gates & Microsoft. I prefer to refer to my site as a "personal" site that happens to sell good RF tools, (at LOW cost), that I've created, over the enjoyable years I was active in ham radio starting in 1953.

Jim ex K6DGX / W6FHF
http://www.microwavesoftware.com/

2507. Re: FCC BUST IN TEXAS

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-14 14:59:35 UTC
From: -exray- <exray@coqui.net>
Message-ID: <118c4ip954jk339@corp.supernews.com>
Source record: 18940

willfull_buck@yahoo.com wrote:

> Anyways, we will rebuild the station and continue to fight the globle
> interests of the MEGA-MACHINE.
>
> DEATH TO THE MEGA-MACHINE!
>

Grow up, willya. You'd think a college kid knew how to spell global.

-Bill

2508. harris rf-3200

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-14 17:52:42 UTC
From: user@domain.invalid
Message-ID: <JVqhe.13340$sV7.506@fe02.lga>
Source record: 18941

I'm looking for a service manual for the Harris rf-3200.

2509. Re: FCC BUST IN TEXAS

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-14 18:11:33 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <rbrhe.151$YH5.49540267@news.sisna.com>
Source record: 18943

I guess if the equip would have been homebrew it would have been more
difficult to trace--got any friends in the electronics lab?

Cheaper to lose homebrew equip too...

Warmest regards,
John
--
Marbles can be used in models with excellent results! However, if forced
to keep using all of mine up... I may end up at a disadvantage... I seem
to have misplaced some already!!!

<willfull_buck@yahoo.com> wrote in message
news:1116061077.163644.153230@g47g2000cwa.googlegroups.com...
| Hey Folks,
| Kinda down at the moment, our college radio station got busted by the
| FCC. Here a list of the stuff that was hauled off:
|
| NRG PLL-PRO 3 20W TRANSMITTER
| NRG 220 WATT RF LINEAR AMPLIFIER
| NRG PRO III STEREO CODER
| NRG PRO III STEREO LIMITER COMPRESSOR
| DAIWA CN-101L SWR+POWER METER
| COMET CFM-95SL 5/8 WAVE ANTENNA
| 50 FEET OF LMR 400 COAX
| KENWOOD R-1000 SW RECEIVER (my fathers old short-wave radio?)
|
| The really weird part is that we WERE NOT transmitting at the time of
| the raid. One of the agents tolds us that they traced us through a
| purchase order from Broadcast-Warehouse! It's true that we bought a
| 150w amp from broadcastwarehouse.com a few weeks ago. How did the FCC
| know about that?
|
| Anyways, we will rebuild the station and continue to fight the globle
| interests of the MEGA-MACHINE.
|
| DEATH TO THE MEGA-MACHINE!
|

2510. harris rf-3200

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-14 18:14:35 UTC
From: user@domain.invalid
Message-ID: <derhe.13494$sV7.2666@fe02.lga>
Source record: 18942
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.radio.amateur.homebrew

I'm looking for a service manual for the Harris rf-3200

Thanks / k8ibe@chartermi.net

2511. Re: FCC BUST IN TEXAS

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-14 20:51:42 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <ytthe.21512$0i3.17559@bignews3.bellsouth.net>
Source record: 18944

John Smith wrote:
> I guess if the equip would have been homebrew it would have been more
> difficult to trace--got any friends in the electronics lab?
>
> Cheaper to lose homebrew equip too...
>
> Warmest regards,
> John
Anybody ever hear of a bootleg radio station called WCPR? (aka WFAT).
They were on from Brooklyn NYC in the 70's.
They hung out on the upper end of the AM BCB (1650 ish).
Their equipment was an old Collins transmitter. I don't
remember the model, but it had plug in coils to change bands,
a slug tuned vfo (actually wasn't a vfo, but could be set
via a screwdriver to frequency, no crystal used), and used
a pair of 807's in the final modulated by 4 6L6's in push-pull
parallel. Using a long wire flat top about 200 feet long between
two 23 story high apartment buildings they were heard across the pond.

A friend of mine gave the equipment to two college kids that
put the station on the air using their stereo as a mixer
panel. They also used phone loop-line numbers to take over
the air phone calls without giving out their own phone numbers.

2512. Re: FCC BUST IN TEXAS

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-14 21:16:43 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <1Vthe.158$M97.50968649@news.sisna.com>
Source record: 18945

While I don't support illegal activity (but do support revising the law--and the publics right to access expanded spectrum), as a teenager I loved to search the SW bands for pirate stations--I still hope the youth find as much pleasure as I did in that pursuit--somewhere...

Especially interesting were the "Pirate ships", ones with xmitters onboard... I would listen late into the wee hours... still managing to get to school the next morning...

Warmest regards,
John
--
Marbles can be used in models with excellent results! However, if forced to keep using all of mine up... I may end up at a disadvantage... I seem to have misplaced some already!!!

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message news:ytthe.21512$0i3.17559@bignews3.bellsouth.net...
| John Smith wrote:
| > I guess if the equip would have been homebrew it would have been more
| > difficult to trace--got any friends in the electronics lab?
| >
| > Cheaper to lose homebrew equip too...
| >
| > Warmest regards,
| > John
| Anybody ever hear of a bootleg radio station called WCPR? (aka WFAT).
| They were on from Brooklyn NYC in the 70's.
| They hung out on the upper end of the AM BCB (1650 ish).
| Their equipment was an old Collins transmitter. I don't
| remember the model, but it had plug in coils to change bands,
| a slug tuned vfo (actually wasn't a vfo, but could be set
| via a screwdriver to frequency, no crystal used), and used
| a pair of 807's in the final modulated by 4 6L6's in push-pull
| parallel. Using a long wire flat top about 200 feet long between
| two 23 story high apartment buildings they were heard across the pond.
|
| A friend of mine gave the equipment to two college kids that
| put the station on the air using their stereo as a mixer
| panel. They also used phone loop-line numbers to take over
| the air phone calls without giving out their own phone numbers.

2513. Re: Suggestions for VHF-AM Transmitter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 00:23:38 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <XOednbRSEbriCxvfRVn-oQ@comcast.com>
Source record: 18946

So you're saying that there's no info because it's far too simple - so why bother to write it up in a text or app note?

Surely there is some small amount of "finesse" involved - whether it be in the implementation of the modulation transformer or in trying to get the optimum modulation levels in general. Nobody has covered this in a text?

I'm sure I could come up with some brute-force approach in doing the high-level modulation using a kludge transformer (the "grenade" guys are using simple line level transformers run "backwards")...

Either there's a more "scientific" approach to this or, as you suggest, it's always done empirically??? Just wondering......

Bill

"John Smith" <assemblywizard@gmail.com> wrote in message news:70che.86$An3.33040559@news.sisna.com...
> Just run the output of any audio source of ~5 watts into a "modulation
> transformer" and have the B+ to the transmitter pass through its
> secondary...
>
> You can also construct an audio amplifier whose output power final
> "modulates" (perhaps the B+ from the audio amps final transistor/tube) the
> B+ to the xmitter... etc... ssb is by nature 2X-plus more efficient...
fm
> supports greater sound quality...
>
> I think detail about it is skipped simply because it is so easy to
> affect....
>
> Warmest regards,
> John

2514. Re: Suggestions for VHF-AM Transmitter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 00:33:53 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <TNwhe.174$2n3.52299897@news.sisna.com>
Source record: 18947

Did you google for "plate modulation" or "grid modulation"... you should
turn something up there... even if you come across info for tube equip.,
the info is still just as accurate for transistor equip....

How about a trip to a used book store in your area to see what is available?

I see your point, I didn't say that correctly...

You are right, the information should be more available--its missing may
just be a lack of interest or anyone building am equip these days...

The pirate group and "freebanders" have groups, but you have to know someone
to be allowed into their discussions... I know "hidden chat rooms" exist on
IRC... but I have never been invited...

Warmest regards,
John
--
Marbles can be used in models with excellent results! However, if forced
to keep using all of mine up... I may end up at a disadvantage... I seem
to have misplaced some already!!!

"Netgeek" <no_spam@comcast.net> wrote in message
news:XOednbRSEbriCxvfRVn-oQ@comcast.com...
| So you're saying that there's no info because it's far too simple - so why
| bother to write it up in a text or app note?
|
| Surely there is some small amount of "finesse" involved - whether it be in
| the implementation of the modulation transformer or in trying to get the
| optimum modulation levels in general. Nobody has covered this in a text?
|
| I'm sure I could come up with some brute-force approach in doing the
| high-level modulation using a kludge transformer (the "grenade" guys
| are using simple line level transformers run "backwards")...
|
| Either there's a more "scientific" approach to this or, as you suggest,
| it's always done empirically??? Just wondering......
|
| Bill
|
| "John Smith" <assemblywizard@gmail.com> wrote in message
| news:70che.86$An3.33040559@news.sisna.com...
| > Just run the output of any audio source of ~5 watts into a "modulation
| > transformer" and have the B+ to the transmitter pass through its
| > secondary...
| >

```
| > You can also construct an audio amplifier whose output power final
| > "modulates" (perhaps the B+ from the audio amps final transistor/tube)
the
| > B+ to the xmitter... etc... ssb is by nature 2X-plus more efficient...
| fm
| > supports greater sound quality...
| >
| > I think detail about it is skipped simply because it is so easy to
| > affect....
| >
| > Warmest regards,
| > John
|
|
```

2515. Re: Suggestions for VHF-AM Transmitter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 00:41:56 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <uVwhe.19586$rt1.15992@fe04.lga>
Source record: 18848

"Netgeek" <no_spam@comcast.net> wrote in message
news:XOednbRSEbriCxvfRVn-oQ@comcast.com...
> So you're saying that there's no info because it's far too simple - so why
> bother to write it up in a text or app note?

I suspect there's just not much interest in VHF AM. At least the HF AMers have a world to find contacts in. Contacts on VHF are pretty much local, and the probablility of finding a fellow AMer on VHF locally are vanishingly small.

Indeed, why would someone use AM on VHF? If you don't like the sound of sideband, use FM. If you simply want to get the message through, use packet. If you want to operate under adverse conditions, use CW. AM has precious few advantages in this day and age.

If you look in old issues of the Handbook, you will find designs for VHF AM gear. If you hang around hamfests, you might uncover a twoer or sixer that might still be coaxed into working. But mostly you will find tube gear from an age when FM was complex and finicky.

But today, VHF FM is ubiquitous and cheap, so any AM equipment is playing to a tiny niche.

..

2516. Re: RF/Microwave Design Software

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 02:57:07 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <7Uyhe.762916$w62.351908@bgtnsc05-news.ops.worldnet.att.net>
Source record: 18849

That RFSim99 is a great program. Thank you for mentioning it.

Pete

"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
news:gpfv71hu7d7h3s1l8bu7ts41r0nkqr3oep@4ax.com...
> On Mon, 09 May 2005 07:18:01 -0700, Microwave Software
> <mwsoft@cox.net> wrote:
>
>>Professional Tools at Amateur Prices
>>
>>http://www.microwavesoftware.com/
>
> Amateur prices would be FREE.
>
> Like rfsim99
>
> http://www.101science.com/RFSim99.exe
>
> Ansoft's student programs
>
> http://www.ansoft.com/ansoftdesignersv/
>
> et.al.
>
> http://www.sss-mag.com/swindex1.html#rf
>
>
>

2517. Re: RF/Microwave Design Software

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 04:15:57 UTC
From: Alfred Green <nu8i@cox.net>
Message-ID: <80Ahe.26148$tQ.13732@fed1read06>
Source record: 18850

> "Wes Stewart" enscribed:

>>Amateur prices would be FREE.
>>
>>Like rfsim99
>>
>>http://www.101science.com/RFSim99.exe
>>
>>Ansoft's student programs
>>
>>http://www.ansoft.com/ansoftdesignersv/
>>
>>et.al.
>>
>>http://www.sss-mag.com/swindex1.html#rf
>>

And dont forget Aplac:
http://www.aplac.com/

Yes, you have to register, but its quick and free. The free version is crippled, but certainly good enough for Ham use. Lots of really nice stuff, but don't bother trying to get the manuals unless you have a high-speed Internet connection.

73 Alf NU8I
Scottsdale AZ DM43an
160m - 10Gigs

2518. Re: Suggestions for VHF-AM Transmitter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 15:43:46 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <118erhu668f2r0d@corp.supernews.com>
Source record: 18851

The last bastion of VHF-AM is aircraft, both civilian and military. The civilian aircraft com band goes from 118-137 MHz. and the military from somewhere around 225 to 400. Those of us who have spent our lives in this little corner of the design world are few and far between.

As to those who say that AM is so simple that anybody could do it, I respectfully disagree. I even DISrespectfully disagree. Trying to amplitude modulate a synthesized AM radio without having as much FM in the output as AM is no mean feat. In the old vacuum tube days with crystals for the synthesizer it isn't all that difficult. However, with digital synthesis and VCOs that will FM at the drop of a hat, it is far from trivial. Shielding to the center of the earth and power supplies bypassed from DC to daylight are the order of the day.

Jim

"Netgeek" <no_spam@comcast.net> wrote in message
news:Hcqdnbn94NmR3hjfRVn-pA@comcast.com...
> Still looking for some pointers and/or advice on current AM
> transmitter design. There doesn't seem to be much out there
> apart from the "pirates" who are building SW transmitters
> around 5W or so...(e.g. the "Grenade" QRP transmitters and
> similar designs)...
>
> Is AM ("Ancient Modulation") considered dead and therefore
> there are no links/publications worth reading?
>
> Bill
>
>

2519. Re: Suggestions for VHF-AM Transmitter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 15:55:12 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <UsKhe.4415$A_5.1725528@news.sisna.com>
Source record: 18853

This page shows a modulation xfrmr from an audio amp modulating a PA final xistor--if that is difficult it is, if not--it is not... this is only a simple drawing--but yeah, it is pretty much like that...

Warmest regards,
John
--
If "God"--expecting an angel... if evolution--expecting an alien... just wondering if I will be able to tell the difference!

"Netgeek" <no_spam@comcast.net> wrote in message
news:XOednbRSEbriCxvfRVn-oQ@comcast.com...
| So you're saying that there's no info because it's far too simple - so why
| bother to write it up in a text or app note?
|
| Surely there is some small amount of "finesse" involved - whether it be in
| the implementation of the modulation transformer or in trying to get the
| optimum modulation levels in general. Nobody has covered this in a text?
|
| I'm sure I could come up with some brute-force approach in doing the
| high-level modulation using a kludge transformer (the "grenade" guys
| are using simple line level transformers run "backwards")...
|
| Either there's a more "scientific" approach to this or, as you suggest,
| it's always done empirically??? Just wondering......
|
| Bill
|
| "John Smith" <assemblywizard@gmail.com> wrote in message
| news:70che.86$An3.33040559@news.sisna.com...
| > Just run the output of any audio source of ~5 watts into a "modulation
| > transformer" and have the B+ to the transmitter pass through its
| > secondary...
| >
| > You can also construct an audio amplifier whose output power final
| > "modulates" (perhaps the B+ from the audio amps final transistor/tube)
the
| > B+ to the xmitter... etc... ssb is by nature 2X-plus more efficient...
| fm
| > supports greater sound quality...
| >
| > I think detail about it is skipped simply because it is so easy to
| > affect....
| >
| > Warmest regards,

```
| > John
|
|
```

2520. Re: harris rf-3200

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 16:03:31 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1cf112ad8019cb9f98972f@localhost>
Source record: 18852
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.radio.amateur.homebrew

In article <derhe.13494$sV7.2666@fe02.lga>, user@domain.invalid says...

> I'm looking for a service manual for the Harris rf-3200
>
> Thanks / k8ibe@chartermi.net

Repeated identical requests to the same Usenet newsgroup(s) are
very likely to piss people off enough so that they WON'T try to help
you.

Have patience. Once someone who can help notices your first post,
they probably will. HOWEVER -- Don't expect an E-mail reply. Keep an eye
on the newsgroup instead.

Happy hunting.

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped
with surreal ports?"

2521. Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 18:00:57 UTC
From: shoppa@trailing-edge.com
Message-ID: <1116180057.598783.160160@g14g2000cwa.googlegroups.com>
Source record: 18854
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

I'm looking for a solid desktop (either pizza-box or mini-tower)
computer case that has an all-metal exterior for shielding RFI. This
is for use around radios etc. I realize that SVGA monitors, mice, and
keyboard leak too, but right now I'm looking mainly at the PC box.

Most of the cheaper cases come pretty close to good shielding, but they
have these plastic filler panels in the drive bays that offer no
shielding and let a lot of RF leak out.

Most of the fancier cases in the computer stores around here have
humongous plastic pieces on the side. I'm looking for all-metal.

Rack-mount server cases seem to be pretty good in terms of metal
shielding all around but I need something for desktop use.

Any suggestions? If all else fails I can just put some perforated
metal over the holes in a cheap case, but I'd rather just buy a good
case to begin with.

Tim.

2522. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 18:20:43 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <0qMhe.5426$A%7.2456684@news.sisna.com>
Source record: 18856
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

They make 'em:
http://www.directron.com/pc75.html

I have even seen an all stainless steel case which is used around food production plants... can't find anything close with google though...

Son has an all aluminum case, $175.00 is what he paid for it!--OUCH!!!!

Warmest regards,
John
--
If "God"--expecting an angel... if evolution--expecting an alien... just wondering if I will be able to tell the difference!

<shoppa@trailing-edge.com> wrote in message
news:1116180057.598783.160160@g14g2000cwa.googlegroups.com...
| I'm looking for a solid desktop (either pizza-box or mini-tower)
| computer case that has an all-metal exterior for shielding RFI. This
| is for use around radios etc. I realize that SVGA monitors, mice, and
| keyboard leak too, but right now I'm looking mainly at the PC box.
|
| Most of the cheaper cases come pretty close to good shielding, but they
| have these plastic filler panels in the drive bays that offer no
| shielding and let a lot of RF leak out.
|
| Most of the fancier cases in the computer stores around here have
| humongous plastic pieces on the side. I'm looking for all-metal.
|
| Rack-mount server cases seem to be pretty good in terms of metal
| shielding all around but I need something for desktop use.
|
| Any suggestions? If all else fails I can just put some perforated
| metal over the holes in a cheap case, but I'd rather just buy a good
| case to begin with.
|
| Tim.
|

2523. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 18:23:05 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gsMhe.5427$p6.2514985@news.sisna.com>
Source record: 18855
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

You could always shield the plastic panels with copper or aluminum foil or screen--etc... (on the inside--out of sight)

Warmest regards,
John
--
If "God"--expecting an angel... if evolution--expecting an alien... just wondering if I will be able to tell the difference!

"John Smith" <assemblywizard@gmail.com> wrote in message news:0qMhe.5426$A%7.2456684@news.sisna.com...
| They make 'em:
| http://www.directron.com/pc75.html
|
| I have even seen an all stainless steel case which is used around food
| production plants... can't find anything close with google though...
|
| Son has an all aluminum case, $175.00 is what he paid for it!--OUCH!!!!
|
| Warmest regards,
| John
| --
| If "God"--expecting an angel... if evolution--expecting an alien... just
| wondering if I will be able to tell the difference!
|
| <shoppa@trailing-edge.com> wrote in message
| news:1116180057.598783.160160@g14g2000cwa.googlegroups.com...
|| I'm looking for a solid desktop (either pizza-box or mini-tower)
|| computer case that has an all-metal exterior for shielding RFI. This
|| is for use around radios etc. I realize that SVGA monitors, mice, and
|| keyboard leak too, but right now I'm looking mainly at the PC box.
||
|| Most of the cheaper cases come pretty close to good shielding, but they
|| have these plastic filler panels in the drive bays that offer no
|| shielding and let a lot of RF leak out.
||
|| Most of the fancier cases in the computer stores around here have
|| humongous plastic pieces on the side. I'm looking for all-metal.
||
|| Rack-mount server cases seem to be pretty good in terms of metal
|| shielding all around but I need something for desktop use.
||
|| Any suggestions? If all else fails I can just put some perforated
|| metal over the holes in a cheap case, but I'd rather just buy a good

|| case to begin with.
||
|| Tim.
||
|
|

2524. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 19:08:27 UTC
From: Jeremy Boden <jeremy@jboden.demon.co.uk>
Message-ID: <jhwiCrAr45hCFwth@jboden.demon.co.uk>
Source record: 18857
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

In message <1116180057.598783.160160@g14g2000cwa.googlegroups.com>,
shoppa@trailing-edge.com writes
>I'm looking for a solid desktop (either pizza-box or mini-tower)
>computer case that has an all-metal exterior for shielding RFI. This
>is for use around radios etc. I realize that SVGA monitors, mice, and
>keyboard leak too, but right now I'm looking mainly at the PC box.
>
>Most of the cheaper cases come pretty close to good shielding, but they
>have these plastic filler panels in the drive bays that offer no
>shielding and let a lot of RF leak out.
>
>Most of the fancier cases in the computer stores around here have
>humongous plastic pieces on the side. I'm looking for all-metal.
>
>Rack-mount server cases seem to be pretty good in terms of metal
>shielding all around but I need something for desktop use.
>
>Any suggestions? If all else fails I can just put some perforated
>metal over the holes in a cheap case, but I'd rather just buy a good
>case to begin with.
>
>Tim.
>
What band does a PC broadcast on?

--
Jeremy Boden

2525. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 19:11:43 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1116184303.713085.108950@z14g2000cwz.googlegroups.com>
Source record: 18858
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

> They make 'em: http://www.directron.com/pc75.html

What about that gaping big square-foot hole in the side?

> I have even seen an all stainless steel case which is used around
> food

The old "PC Power and Cooling" all-metal-tower used to be good (I think it was available in chrome!), but they don't sell them anymore (probably because they cost several hundred $).

I'm not looking for anything particularly stylish. Just a case without big holes covered by plastic.

Tim.

2526. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 19:17:40 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4287A04D.BC8AD6A9@earthlink.net>
Source record: 18859
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

```
Jeremy Boden wrote:
>
> In message <1116180057.598783.160160@g14g2000cwa.googlegroups.com>,
> shoppa@trailing-edge.com writes
> >I'm looking for a solid desktop (either pizza-box or mini-tower)
> >computer case that has an all-metal exterior for shielding RFI. This
> >is for use around radios etc. I realize that SVGA monitors, mice, and
> >keyboard leak too, but right now I'm looking mainly at the PC box.
> >
> >Most of the cheaper cases come pretty close to good shielding, but they
> >have these plastic filler panels in the drive bays that offer no
> >shielding and let a lot of RF leak out.
> >
> >Most of the fancier cases in the computer stores around here have
> >humongous plastic pieces on the side. I'm looking for all-metal.
> >
> >Rack-mount server cases seem to be pretty good in terms of metal
> >shielding all around but I need something for desktop use.
> >
> >Any suggestions? If all else fails I can just put some perforated
> >metal over the holes in a cheap case, but I'd rather just buy a good
> >case to begin with.
> >
> >Tim.
> >
> What band does a PC broadcast on?
>
> --
> Jeremy Boden

It depends on the computer.

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida
```

2527. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 19:28:21 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <qpNhe.5432$FK.3029097@news.sisna.com>
Source record: 18864
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

Personally, I'd place a sheet of aluminum window screen between the acrylic sheet and the case--that way I could still get the effect of looking into the case, and still be shielded...

Other than that, I'd pick the one from their catalog which DOESN'T have the "big gaping hole" in the side... <grin>

Warmest regards,
John
--
If "God"--expecting an angel... if evolution--expecting an alien... just wondering if I will be able to tell the difference!

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message news:1116184303.713085.108950@z14g2000cwz.googlegroups.com...
|> They make 'em: http://www.directron.com/pc75.html
|
| What about that gaping big square-foot hole in the side?
|
| > I have even seen an all stainless steel case which is used around
| > food
|
| The old "PC Power and Cooling" all-metal-tower used to be good (I think
| it was available in chrome!), but they don't sell them anymore
| (probably because they cost several hundred $).
|
| I'm not looking for anything particularly stylish. Just a case without
| big holes covered by plastic.
|
| Tim.
|

2528. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 19:30:22 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4287A347.4AE8B6F3@earthlink.net>
Source record: 18860
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

shoppa@trailing-edge.com wrote:
>
> I'm looking for a solid desktop (either pizza-box or mini-tower)
> computer case that has an all-metal exterior for shielding RFI. This
> is for use around radios etc. I realize that SVGA monitors, mice, and
> keyboard leak too, but right now I'm looking mainly at the PC box.
>
> Most of the cheaper cases come pretty close to good shielding, but they
> have these plastic filler panels in the drive bays that offer no
> shielding and let a lot of RF leak out.
>
> Most of the fancier cases in the computer stores around here have
> humongous plastic pieces on the side. I'm looking for all-metal.
>
> Rack-mount server cases seem to be pretty good in terms of metal
> shielding all around but I need something for desktop use.
>
> Any suggestions? If all else fails I can just put some perforated
> metal over the holes in a cheap case, but I'd rather just buy a good
> case to begin with.
>
> Tim.

Take a look at these barebones systems:

<http://www.tigerdirect.com/applications/category/category_slc.asp?MfrId=1106&CatId=31>

If the link doesn't work click on "Barebones", then select "Shuttle"
from the brands menu.
--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

2529. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 19:30:43 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <DrNhe.5433$BP.3086397@news.sisna.com>
Source record: 18865
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

My 3.3Ghz seems to broadcast on most frequencies--from rfi in the am radio, fm radio, sw bands, etc... toroid chokes on the phone/modem/net card cables helps a lot...

Warmest regards,
John
--
If "God"--expecting an angel... if evolution--expecting an alien... just wondering if I will be able to tell the difference!

"Jeremy Boden" <jeremy@jboden.demon.co.uk> wrote in message news:jhwiCrAr45hCFwth@jboden.demon.co.uk...
| In message <1116180057.598783.160160@g14g2000cwa.googlegroups.com>,
| shoppa@trailing-edge.com writes
| >I'm looking for a solid desktop (either pizza-box or mini-tower)
| >computer case that has an all-metal exterior for shielding RFI. This
| >is for use around radios etc. I realize that SVGA monitors, mice, and
| >keyboard leak too, but right now I'm looking mainly at the PC box.
| >
| >Most of the cheaper cases come pretty close to good shielding, but they
| >have these plastic filler panels in the drive bays that offer no
| >shielding and let a lot of RF leak out.
| >
| >Most of the fancier cases in the computer stores around here have
| >humongous plastic pieces on the side. I'm looking for all-metal.
| >
| >Rack-mount server cases seem to be pretty good in terms of metal
| >shielding all around but I need something for desktop use.
| >
| >Any suggestions? If all else fails I can just put some perforated
| >metal over the holes in a cheap case, but I'd rather just buy a good
| >case to begin with.
| >
| >Tim.
| >
| What band does a PC broadcast on?
|
| --
| Jeremy Boden

2530. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 19:42:49 UTC
From: mikea@mikea.ath.cx
Message-ID: <d688np$tb7$1@puck.litech.org>
Source record: 18861
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

In <4287A04D.BC8AD6A9@earthlink.net> (rec.radio.amateur.homebrew), Michael A. Terrell wrote:
> Jeremy Boden wrote:
> >
> > In message <1116180057.598783.160160@g14g2000cwa.googlegroups.com>,
> > shoppa@trailing-edge.com writes
> > >I'm looking for a solid desktop (either pizza-box or mini-tower)
> > >computer case that has an all-metal exterior for shielding RFI. This
> > >is for use around radios etc. I realize that SVGA monitors, mice, and
> > >keyboard leak too, but right now I'm looking mainly at the PC box.
> > >
> > >Most of the cheaper cases come pretty close to good shielding, but they
> > >have these plastic filler panels in the drive bays that offer no
> > >shielding and let a lot of RF leak out.
> > >
> > >Most of the fancier cases in the computer stores around here have
> > >humongous plastic pieces on the side. I'm looking for all-metal.
> > >
> > >Rack-mount server cases seem to be pretty good in terms of metal
> > >shielding all around but I need something for desktop use.
> > >
> > >Any suggestions? If all else fails I can just put some perforated
> > >metal over the holes in a cheap case, but I'd rather just buy a good
> > >case to begin with.
> > >
> > >Tim.
> > >
> > What band does a PC broadcast on?
> >
> > --
> > Jeremy Boden

> It depends on the computer.

What he said. Usually on all harmonics of each clock in the box, from ~1.8 MHz on up to near daylight -- or at least well past 70 cm., in the case of the boxes here at home and at work. Add in all their cross-modulation products as well, and it starts to look pretty gross. One of these days I'll borrow a spectrum analyzer and see what's coming from where. I know that the bedroom TV puts out a lot of stuff around 3.5-4.0 MHz. and the cable box is pretty noisy, too. Hard to hear DX over all the in-house QRM.

--
Mike Andrews W5EGO 5WPM

mikea@mikea.ath.cx Extra
Tired old sysadmin working on his code speed

2531. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 19:59:20 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <ySNhe.1874$cP2.1480@fe06.lga>
Source record: 18862
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

Take a closer look at some of the higher quality cases.

All the cases I have purchased within the past few years have plastic, as you say, over the drive bays, but there is metal behind that plastic. If you want to use the bay you need to pop out the metal. Except for floppies, the drives generally have metal behind their plastic faces, too.

More important is the scheme for attaching the sides. Those little drive holes will let some RF out, but long, narrow gaps in the side let out a lot more. Most recent cases seem to have fairly elaborate schemes to be sure that the sides don't leak.

I can't believe many of the mass marketed cases actually make it to manufacturers who need to be certified, but the lengths they go to ensuring RF shielding lately would indicate to me they are getting pressure from somewhere.

As best I can tell, the case isn't nearly the problem the wires are, but even there, it seems like the newer stuff is pretty well behaved. My radios are pracically surrounded by computers and no noise anymore. Used to be a real problem but as the computer equipment has gotten newer, the interference problems have faded. I can still hear my Ethernet on some bands, but I have a pretty ancient hub. Once that gets replaced I suspect the ethernet problem will disappear, too.

..

2532. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 20:11:18 UTC
From: Part 15 QRP <qrp@timpauly.com>
Message-ID: <118fb606d1ejs7f@corp.supernews.com>
Source record: 18863
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

xpyttl wrote:

Don't forget to throw some toroids on your cabling. I have a whole bunch of 2" cores I keep around just this purpose. My wifes machine threw out a lot of QRM. Cheap case and power supply (though all-metal). Wrapped the cord twice around a core and poof! QRM gone.

--
Visit the new Unlicensed QRP website and forums: http://www.qrp.timpauly.com
The site and forums are geared toward legal, unlicensed (non-ham) radio operation for low-power hobbyists around the world.

2533. Re: harris rf-3200

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 21:06:10 UTC
From: user@domain.invalid
Message-ID: <4ROhe.16134$sV7.13118@fe02.lga>
Source record: 18866
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.radio.amateur.homebrew

Dr. Anton T. Squeegee wrote:
> In article <derhe.13494$sV7.2666@fe02.lga>, user@domain.invalid says...
>
>
>>I'm looking for a service manual for the Harris rf-3200
>>
>>Thanks / k8ibe@chartermi.net
>
>
> Repeated identical requests to the same Usenet newsgroup(s) are
> very likely to piss people off enough so that they WON'T try to help
> you.
>
> Have patience. Once someone who can help notices your first post,
> they probably will. HOWEVER -- Don't expect an E-mail reply. Keep an eye
> on the newsgroup instead.
>
> Happy hunting.
>
>
Oh thank you, thank you, I have been mostly misguided all my life and of
course, really admire someone who takes the time to straighten the path
for me.
Thanks Again

2534. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 21:48:23 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <kngf81ljeg07a1gm4hnfmuh0eunn7b9n2m@4ax.com>
Source record: 18867
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

On Sun, 15 May 2005 12:28:21 -0700, "John Smith"
<assemblywizard@gmail.com> wrote:

>Personally, I'd place a sheet of aluminum window screen between the acrylic
>sheet and the case--that way I could still get the effect of looking into
>the case, and still be shielded...
>
>Other than that, I'd pick the one from their catalog which DOESN'T have the
>"big gaping hole" in the side... <grin>
>
FYI:

Some plastic used in cases has a "flash" coating of aluminum
(sputtered in a vacuum chamber). While the metal is extremely thin,
just a few microns, it is enough to provide RFI shielding.

Obviously not as good as solid metal for shielding, but good enough
for many uses. Check out what sort of plastic before assuming it will
not shield.

Happy trails,
Gary (net.yogi.bear)
--
At the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

2535. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 21:54:04 UTC
From: adykes@panix.com
Message-ID: <d68gds$cn7$1@panix5.panix.com>
Source record: 18868
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

In article <1116184303.713085.108950@z14g2000cwz.googlegroups.com>,
Tim Shoppa <shoppa@trailing-edge.com> wrote:
>> They make 'em: http://www.directron.com/pc75.html
>
>What about that gaping big square-foot hole in the side?
>
>> I have even seen an all stainless steel case which is used around
>> food
>
>The old "PC Power and Cooling" all-metal-tower used to be good (I think
>it was available in chrome!), but they don't sell them anymore
>(probably because they cost several hundred $).
>
>I'm not looking for anything particularly stylish. Just a case without
>big holes covered by plastic.
>
>Tim.
>

If you buy a brand name computer it meets some prety good FCC specs
for emission. IMO if you are carefull any good all-metal case will
produce an EMI-tight case.

--
a d y k e s @ p a n i x . c o m

Don't blame me. I voted for Gore.

2536. Re: VHF homebrew transceiver design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-15 22:15:53 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2005.05.15.21.33.57.655527@oceanfree.net>
Source record: 18869

On Fri, 13 May 2005 23:00:35 -0700, rkrishnan wrote:

> I had been looking for a VHF SSB/FM homebrew design to build. Can someone
> point to a good design to build?
>
> Thanks
> Ramakrishnan, VU3RDD

Have you got a HF rig? A lot of homebrewers use 10m-2M
transverters. I use my homebrew HF rig to drive a homebrew
transverter and 4CX250B linear.

73, C U on 2M.

Ed. EI9GQ.

--
Linux 2.6.11

2537. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-16 01:13:01 UTC
From: bg998@FreeNet.Carleton.CA
Message-ID: <d68s2trvk1@theodyn.ncf.ca>
Source record: 18870

(shoppa@trailing-edge.com) writes:
> I'm looking for a solid desktop (either pizza-box or mini-tower)
> computer case that has an all-metal exterior for shielding RFI. This
> is for use around radios etc. I realize that SVGA monitors, mice, and
> keyboard leak too, but right now I'm looking mainly at the PC box.
>

Have you considered trying an old used HP computer case, one that was used by government? My Linux box is an HP Kayak XA (Pentium II 350 MHz) that has a Tempest-certified case. It was used by the Canadian government for classified work and it was part of a lot that I bought from Crown Assets Disposal. I expect that anything similar would satisfy your needs. (My Linux box does't need all that shielding but why bother changing it?!)

... Martin VE3OAT

2538. Re: harris rf-3200

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-16 04:52:04 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1cf1c6ce8446c02f989734@localhost>
Source record: 18871
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.radio.amateur.homebrew

In article <4ROhe.16134$sV7.13118@fe02.lga>, user@domain.invalid says...
> Dr. Anton T. Squeegee wrote:

<snippety>

> Oh thank you, thank you, I have been mostly misguided all my life and of
> course, really admire someone who takes the time to straighten the path
> for me.
> Thanks Again

Your sarcasm is noted. I was merely trying to help you avoid
ticking others off.

I can tell, however, that you do not take advice well. Fair
enough... You're on your own from here on out.

PLONK!

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped
with surreal ports?"

2539. Re: VHF homebrew transceiver design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-16 05:12:17 UTC
From: vu3rdd@gmail.com
Message-ID: <1116220337.942277.176410@o13g2000cwo.googlegroups.com>
Source record: 18872

Eamon Skelton wrote:
> On Fri, 13 May 2005 23:00:35 -0700, rkrishnan wrote:
>
> > I had been looking for a VHF SSB/FM homebrew design to build. Can someone
> > point to a good design to build?
> >
> > Thanks
> > Ramakrishnan, VU3RDD
>
> Have you got a HF rig? A lot of homebrewers use 10m-2M
> transverters. I use my homebrew HF rig to drive a homebrew
> transverter and 4CX250B linear.

Thanks for all the suggestions, Folks. I think, Ed's suggestions is probably the easiest route for me. I will look for a 2m-10m transverter design.

Thanks again. More innovative sugegstions are welcome.

73
Ramakrishnan, VU3RDD

2540. Re: VHF homebrew transceiver design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-16 07:07:15 UTC
From: fsixawn@free_.fr
Message-ID: <42883f26.2194733@news.free.fr>
Source record: 18873

Good morning,

EI9GQ gave you an excellent suggestion :

>> Have you got a HF rig? A lot of homebrewers use 10m-2M
>> transverters. I use my homebrew HF rig to drive a homebrew
>> transverter and 4CX250B linear.

perhaps some idea/help there :

http://www.df9ic.de/tech/trxtest/trxtest.html
http://www.sm5bsz.com/dynrange/vhf2004/vhf2004.htm

http://members.fortunecity.com/xe1bef/transverters.htm

http://lea.hamradio.si/~s53ww/4xbf998/4xbf998.htm
http://lea.hamradio.si/%7Es53ww/xvrt/xvrt.htm

http://perso.wanadoo.fr/f1bzg/trvt/trvt144pdf.zip
http://perso.wanadoo.fr/f1bzg/trvt/trvt5028.zip
(un-zip, then it's a pdf)

Good luck !
Francis, F6AWN

2541. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-16 11:53:02 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1116244382.550097.162950@g43g2000cwa.googlegroups.com>
Source record: 18874
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

xpyttl wrote:

> [Good hints about where to look for shielded cases,
> esp. related to FCC standards]
> [...]
> the case isn't nearly the problem the wires are

This is very true. A typical SVGA copper cable puts out all sorts of hash (as well as the monitor!). And lotsa junk is radiated and conducted out by the power supply cable, even for the "best of the best" PC clone supplies.

I've discovered and/or engineered some workarounds, consisting of going to optical fiber instead of metal whenever possible. But my converters are usually outside the PC case so this doesn't completely eliminate the radiation from copper cabling.

I'm starting to think I should just sit inside the Faraday cage with my computer, and put all the radios outside!

Tim.

2542. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-16 12:07:59 UTC
From: adykes@panix.com
Message-ID: <d6a2evocj1@panix5.panix.com>
Source record: 18875
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

In article <1116244382.550097.162950@g43g2000cwa.googlegroups.com>,
Tim Shoppa <shoppa@trailing-edge.com> wrote:
>xpyttl wrote:
>
>> [Good hints about where to look for shielded cases,
>> esp. related to FCC standards]
>> [...]
>> the case isn't nearly the problem the wires are
>
>This is very true. A typical SVGA copper cable puts out all sorts of
>hash (as well as the monitor!). And lotsa junk is radiated and
>conducted out by the power supply cable, even for the "best of the
>best" PC clone supplies.
>
>I've discovered and/or engineered some workarounds, consisting of going
>to optical fiber instead of metal whenever possible. But my converters
>are usually outside the PC case so this doesn't completely eliminate
>the radiation from copper cabling.
>
>I'm starting to think I should just sit inside the Faraday cage with my
>computer, and put all the radios outside!
>
>Tim.
>

They "lumps" found on many power and data cables are ferrite cores
that attenuate the RF hash that leakes out on the conductors.
Building an RF-proof case is trivial if you don't need any
peripherals. RF comes out on the wires.

Look at a copy of the Ham Radio _The ARRL Handbook for Radio
Communications_, in any decent library or bookstore. They cover RFI
solutions.

Do you have an EMI problem ?

--
a d y k e s @ p a n i x . c o m

Don't blame me. I voted for Gore.

2543. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-16 12:42:16 UTC
From: Jeremy Boden <jeremy@jboden.demon.co.uk>
Message-ID: <WhjvyPBoUJiCFwza@jboden.demon.co.uk>
Source record: 18876
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

In message <1116244382.550097.162950@g43g2000cwa.googlegroups.com>, Tim Shoppa <shoppa@trailing-edge.com> writes
>xpyttl wrote:
>
>> [Good hints about where to look for shielded cases,
>> esp. related to FCC standards]
>> [...]
>> the case isn't nearly the problem the wires are
>
>This is very true. A typical SVGA copper cable puts out all sorts of
>hash (as well as the monitor!). And lotsa junk is radiated and
>conducted out by the power supply cable, even for the "best of the
>best" PC clone supplies.
>
>I've discovered and/or engineered some workarounds, consisting of going
>to optical fiber instead of metal whenever possible. But my converters
>are usually outside the PC case so this doesn't completely eliminate
>the radiation from copper cabling.
>
>I'm starting to think I should just sit inside the Faraday cage with my
>computer, and put all the radios outside!
>
>Tim.
>
Have you tried unplugging the PC from the mains?

--
Jeremy Boden

2544. Need specs on PHI transistor RF2212

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-16 13:17:53 UTC
From: Photoman <photoman28@hotmail.com>
Message-ID: <5oCdncMNuuDrABXfRVn-gA@adelphia.com>
Source record: 18877

I have an amp with 4 PHI transistors in it. The markings are as follows:
PHI
RF2212
0570
067

If anyone has any info I would appreciate it. It looks like the freq. is
around 500-800 mhz.

Thanks,
KC4IH
photoman28(nospam)@hotmail.com

To reply remove the (nospam) from my email address.

--
Have your doctor check your blood sugar at least once a year.

2545. Re: Suggestions for VHF-AM Transmitter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-16 13:39:41 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <0tednV59i-UDPxXfRVn-sQ@comcast.com>
Source record: 18878

"xpyttl" <xpyttl_NOSPAM@earthling.net> wrote in message

> I suspect there's just not much interest in VHF AM. At least the HF AMers
> have a world to find contacts in. Contacts on VHF are pretty much local,
> and the probablility of finding a fellow AMer on VHF locally are
vanishingly
> small.

<snip>

I can certainly see your point and I agree completely - insofar as it applies to general applications. My interest is in the aviation bands where AM is very much alive and well (and required). There's probably about zip-nada-squat of interest happening in amateur VHF-AM for the reasons you mention. But there was certainly some interesting traffic on the airband frequencies here in Washington the other day when that nitwit in the Cessna came breezing in....!!! 8-)

Bill

2546. Re: Suggestions for VHF-AM Transmitter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-16 14:07:01 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <I7GdnVfZtvKfNBXfRVn-iA@comcast.com>
Source record: 18879

"RST Engineering" <jim@rstengineering.com> wrote in message:

> The last bastion of VHF-AM is aircraft, both civilian and military. The
> civilian aircraft com band goes from 118-137 MHz. and the military from
> somewhere around 225 to 400. Those of us who have spent our lives in this
> little corner of the design world are few and far between.

This is what I'm discovering. Not only are the people involved few and
far between but so is much of the documented background material
anyone new to the scene might rely on for help....8-(I hope some of
the old-timers will scribble some of this stuff down while they're still
around!

As for the "simplicity" theory - you've hit it spot on with your following
comments. For example, roll-your-own VCOs are only a few bucks
and pretty easy. Off-the-shelf Minicircuits types (e.g. POS-200) are
only a few bucks more. But it sure is interesting to note that Minicircuits
has a new line of VCOs *specifically* for "aircraft communications"
with an asking price of nearly $50 (yipes!)... The difference - VERY
low phase noise.

Apparently there are quite a few variables in implementation of these
"simple" designs - and what you can hear out there on the band is all
over the map. The difference in perceived quality between the "good"
radios and the really "rat-s**t" radios is amazing - and that's listening to
aircraft under identical conditions (for example over the same VOR
checkpoint). Sure leads me to believe that there isn't a set "formula" for
this stuff.......8-)

Bill

> As to those who say that AM is so simple that anybody could do it, I
> respectfully disagree. I even DISrespectfully disagree. Trying to
> amplitude modulate a synthesized AM radio without having as much FM in the
> output as AM is no mean feat. In the old vacuum tube days with crystals
for
> the synthesizer it isn't all that difficult. However, with digital
> synthesis and VCOs that will FM at the drop of a hat, it is far from
> trivial. Shielding to the center of the earth and power supplies bypassed
> from DC to daylight are the order of the day.
>
> Jim
>
>
> "Netgeek" <no_spam@comcast.net> wrote in message
> news:Hcqdnbn94NmR3hjfRVn-pA@comcast.com...

> > Still looking for some pointers and/or advice on current AM
> > transmitter design. There doesn't seem to be much out there
> > apart from the "pirates" who are building SW transmitters
> > around 5W or so...(e.g. the "Grenade" QRP transmitters and
> > similar designs)...
> >
> > Is AM ("Ancient Modulation") considered dead and therefore
> > there are no links/publications worth reading?
> >
> > Bill
> >
> >
>
>

2547. Help identify RF Power Transistors/PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-16 18:03:04 UTC
From: "owen.home" <owen.home@ntlworld.com>
Message-ID: <sf5ie.8364$yY4.5589@newsfe5-win.ntli.net>
Source record: 18880

Help
I've just picked up an HF Power amplifier module, it's still bolted to it's heatsink and looks as though it may be from an amateur or commercial transceiver. the output pair are in a big (0.5"pill) 211-xx package and are marked as ST devices with the numbers 3 100 2 2 on one line and 286M beneath, the driver transistor is in a smaller 211 type package, has no maker's mark but has 31-0021 with 9005 beneath. I've tried searching some combinations but haven't come up with any likely part numbers - I'd appreciate any help in identifying the devices before I apply power and do some tests. The only markings on the board are "BM-1" where the B is slightly above the M and there's a Motorola TIP31 bias regulator - I'm guessing it's not out of a Japanese set because of the device types? The seller didn't know anything about it's background but reckoned a friend had run a test and got 100W out for 250mw in and quoted it as capable of 250W. Any help appreciated.
Thanks
John
MW1FGQ

2548. Re: Suggestions for VHF-AM Transmitter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-16 20:27:12 UTC
From: Roger Conroy <rogerconroy@nospam.hotmail.com>
Message-ID: <d6avmo$g95$1@ctb-nnrp2.saix.net>
Source record: 18881

"Netgeek" <no_spam@comcast.net> wrote in message
news:0tednV59i-UDPxXfRVn-sQ@comcast.com...
>
> "xpyttl" <xpyttl_NOSPAM@earthling.net> wrote in message
>
> > I suspect there's just not much interest in VHF AM. At least the HF
AMers
> > have a world to find contacts in. Contacts on VHF are pretty much
local,
> > and the probablility of finding a fellow AMer on VHF locally are
> vanishingly
> > small.
>
> <snip>
>
> I can certainly see your point and I agree completely - insofar as it
> applies to general applications. My interest is in the aviation bands
where
> AM is very much alive and well (and required). There's probably about
> zip-nada-squat of interest happening in amateur VHF-AM for the reasons
> you mention. But there was certainly some interesting traffic on the
> airband frequencies here in Washington the other day when that nitwit in
> the Cessna came breezing in....!!! 8-)
>
> Bill
>

Got bad news for you... A homebrew an aviation band transmitter is illegal.
And also you have to be a pilot or air traffic controller to operate an
aviation band transmitter - such transmitter must also pass specified
standards to be legal for use.

A reciever is a different matter of course.
There are quite a few manufacturers that make aviation band reciever kits.

73
Roger ZR3RC

2549. Re: Suggestions for VHF-AM Transmitter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-16 20:55:41 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <IPqdnfj81-ZRIRTfRVn-oA@comcast.com>
Source record: 18882

"Roger Conroy" <rogerconroy@nospam.hotmail.com> wrote in message

> Got bad news for you... A homebrew an aviation band transmitter is
illegal.

Of course it is - and well it should be!!! I'm interested in the design problems involved. If the results showed that something new, novel or at least in the "better bang for the buck" category could be constructed *and* it appeared to be of some interest to others I'd seriously consider going to the trouble of FCC, FAA, TSO, RTCA, NMEA, STC and whatever other relevant "LMNOP" alphabet drills may be required. But that's quite a ways off and for now this is more of an academic exercise than anything else, mostly because I'm stunned at how little information is actually available. It's a challenge.

> And also you have to be a pilot or air traffic controller to operate an
> aviation band transmitter - such transmitter must also pass specified
> standards to be legal for use.

As noted above.......

I can appreciate you advising caution - but as I previously mentioned (in the original post) I'm well aware of the potential "problems".

> A reciever is a different matter of course.
> There are quite a few manufacturers that make aviation band reciever kits.

But a real shortage of truly well-executed examples - or kits that happen to satisfy my desired set of performance/features.......8-) I've already built a 'couple - and then shredded them one functional block at a time so that, eventually, the result is virtually a clean-sheet design. Sure, it's a lot
of trouble - but entertaining...........8-)

Bill

2550. Re: Help identify RF Power Transistors/PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-16 20:58:25 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <3uednYlJbIDulBTfRVn-gw@comcast.com>
Source record: 18883

"owen.home" <owen.home@ntlworld.com> wrote in message
news:sf5ie.8364$yY4.5589@newsfe5-win.ntli.net...
> Help
> I've just picked up an HF Power amplifier module, it's still bolted to
> it's
> heatsink and looks as though it may be from an amateur or commercial
> transceiver. the output pair are in a big (0.5"pill) 211-xx package and
> are
> marked as ST devices with the numbers 3 100 2 2 on one line and 286M
> beneath, the driver transistor is in a smaller 211 type package, has no
> maker's mark but has 31-0021 with 9005 beneath. I've tried searching some
> combinations but haven't come up with any likely part numbers - I'd
> appreciate any help in identifying the devices before I apply power and do
> some tests. The only markings on the board are "BM-1" where the B is
> slightly above the M and there's a Motorola TIP31 bias regulator - I'm
> guessing it's not out of a Japanese set because of the device types? The
> seller didn't know anything about it's background but reckoned a friend
> had
> run a test and got 100W out for 250mw in and quoted it as capable of 250W.
> Any help appreciated.
> Thanks
> John
> MW1FGQ
>
>
The usage of word "pill" is a "slang" word for RF transistors (bi-polar or
MOSFET) originated in US by non-technical radio operators.

Popular MRF/SRF RF transistors
http://www.rfparts.com/mototran.html

The 211 case style was very popular for bi-polar devices
http://www.rfparts.com/trancase.html

If you are aware of the voltage required (12/13.8; 24/28 or 48/50 VDC),that
would be useful in reducing your search candidates. Specifications:
http://www.rfparts.com/transistorspecs.html

You can inquire with RF Parts if you desire a cross reference - for future
replacement.
http://www.rfparts.com/product.html

Handling RF Transistors
http://www.rfparts.com/install.html

w9gb

2551. Re: Suggestions for VHF-AM Transmitter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-16 21:28:03 UTC
From: Bob Lombardi <boblombardi@cfl42.cfl.rr.com>
Message-ID: <Df8ie.23680$VH2.11036@tornado.tampabay.rr.com>
Source record: 18884

"Netgeek" <no_spam@comcast.net> wrote in message
news:l7GdnVfZtvKfNBXfRVn-iA@comcast.com...
>> This is what I'm discovering. Not only are the people involved few and
> far between but so is much of the documented background material
> anyone new to the scene might rely on for help....8-(I hope some of
> the old-timers will scribble some of this stuff down while they're still
> around!
>
> As for the "simplicity" theory - you've hit it spot on with your following
> comments. For example, roll-your-own VCOs are only a few bucks
> and pretty easy. Off-the-shelf Minicircuits types (e.g. POS-200) are
> only a few bucks more. But it sure is interesting to note that
> Minicircuits
> has a new line of VCOs *specifically* for "aircraft communications"
> with an asking price of nearly $50 (yipes!)... The difference - VERY
> low phase noise.
>
> Apparently there are quite a few variables in implementation of these
> "simple" designs - and what you can hear out there on the band is all
> over the map. The difference in perceived quality between the "good"
> radios and the really "rat-s**t" radios is amazing - and that's listening
> to
> aircraft under identical conditions (for example over the same VOR
> checkpoint). Sure leads me to believe that there isn't a set "formula" for
> this stuff.......8-)
>
> Bill
>

Bill,

You won't find much of this information without buying the tech manuals on these aviation band radios and reading about them.

You'll find that the better sounding VHF-AM transceivers do not use simple open loop modulation as has been described ("just hook up a modulation transformer"). That's 1970s technology. We use control loops to linearize the transmitters and reduce distortion. That's one part of the "how do you AM modulate a synthesizer without FM'ing even more" question - the other part is good layout/bypassing practices as someone pointed out.

We modulate at low level (pre-driver - milliwatt levels) with either simple mixers or complex I/Q modulators. The feedback is either envelope ALC, polar or Cartesian.

73,
Bob
W4ATM

2552. Re: Suggestions for VHF-AM Transmitter (back on-topic)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-16 21:53:12 UTC
From: Geert Jan de Groot <nobody@nodomain.com>
Message-ID: <42891648$0$64595$e4fe514c@news.xs4all.nl>
Source record: 18885

> Still looking for some pointers and/or advice on current AM
> transmitter design.

One place where VHF AM is still alive is radio foxhunting (RDF).
The comments I've seen in the group so far are filament-based,
hardly usable for a portable transmitter to be hidden under the trees.

A lot of ex-PMR equipment has a closed control loop to reduce the
RF output to what the communication plan allows for (so PMR folk
can use the same kit for customers who need 0.3 watts or customers
who need 25 watts; all that's needed is a twist of the pot inside).

This circuit makes AM easy: just inject your audio in this control
circuit and with some luck you get reasonably-quality AM.
It won't be hi-fi but superreg receivers never notice;
similary there may be some FM but again superregs never notice
(and it's a nice way to be able to verify a transmitter w/o
the need to carry AM kit!)

Oh, since AM PEP power is 4 times the AM idle power, pls reduce
the idle output power to at most 25% of the max, or things will clip.

Ex-PMR equipment in many places is dime-a-dozen and this gives one
an easy way to build a transmitter for some RDF bootstrap activity,
or during a JOTA or thereabouts.

[I have one transmitter where I can fluently adjust the power from
50mW to 10W PEP, to adjust for the distance and the difficulty
of the RDF. This means that one can make a small hunt for the
young scouts and a larger hunt, with longer distances,
for the older folk, all with the same equipment.
Just a point for inspiration].

Hope this helps,

Geert Jan PE1HZG

2553. Re: Suggestions for VHF-AM Transmitter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-16 23:53:23 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <cuKdnYaZlK3urxTfRVn-pA@comcast.com>
Source record: 18886

"Bob Lombardi" <boblombardi@cfl42.cfl.rr.com> wrote in message

> You won't find much of this information without buying the tech manuals on
> these aviation band radios and reading about them.

I was hoping to avoid the "overt plagiarism" approach - but I guess I
could reserve the option of "covert plagiarism"??? 8-)

> You'll find that the better sounding VHF-AM transceivers do not use simple
> open loop modulation as has been described ("just hook up a modulation
> transformer"). That's 1970s technology. We use control loops to
linearize
> the transmitters and reduce distortion. That's one part of the "how do
you
> AM modulate a synthesizer without FM'ing even more" question - the other
> part is good layout/bypassing practices as someone pointed out.

I suppose I've been pursuing the path of open loop because that's what
most of the literature describes - mostly for reasons of efficiency I
suppose (as in the case of continuous broadcast/commercial AM) but -
now that you mention it - much of that doesn't apply here. The duty
cycle for transmissions is *really* low and short duration, and the output
levels are fairly modest (a few watts or so) - so the difference between
using some high-level modulation (e.g. transformer) on a Class C
final or doing series modulation through linear stages isn't really all
that significant. Guess I'll go re-think it... It makes sense to, as you
suggest, close the loop and govern the modulation where the "rubber
hits the road" (or airwaves).

The high-level mod scheme counts on doing a good job of
compression and limiting at the source - and then setting the final PA
to fall within a certain range. I assume that the closed-loop scheme
you suggest involves some "tastefully designed" VCAs somewhere
in that loop???

Thanks for the input! Lots to think about........

> We modulate at low level (pre-driver - milliwatt levels) with either
simple
> mixers or complex I/Q modulators. The feedback is either envelope ALC,
> polar or Cartesian.

"Simple stuff", right??????????? 8-) Just kidding -

Thanks again,

Bill

2554. Re: Suggestions for VHF-AM Transmitter (back on-topic)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-17 00:01:43 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <F8idndOlCv36qRTfRVn-tA@comcast.com>
Source record: 18887

"Geert Jan de Groot" <nobody@nodomain.com> wrote in message

> One place where VHF AM is still alive is radio foxhunting (RDF).
> The comments I've seen in the group so far are filament-based,
> hardly usable for a portable transmitter to be hidden under the trees.
>
> A lot of ex-PMR equipment has a closed control loop to reduce the
> RF output to what the communication plan allows for (so PMR folk
> can use the same kit for customers who need 0.3 watts or customers
> who need 25 watts; all that's needed is a twist of the pot inside).

<snip>

> Hope this helps,
> Geert Jan PE1HZG

Thanks Geert - Yes, it does help because it's another strategy to consider. Your input is appreciated!

Regards,
Bill

2555. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-17 00:36:31 UTC
From: "B. Williams" <blugrn6@msn.com>
Message-ID: <1116290191.075779.199550@g44g2000cwa.googlegroups.com>
Source record: 18888
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

Tim Shoppa wrote:
> xpyttl wrote:
>
> > [Good hints about where to look for shielded cases,
> > esp. related to FCC standards]
> > [...]
> > the case isn't nearly the problem the wires are
>
> This is very true. A typical SVGA copper cable puts out all sorts of
> hash (as well as the monitor!). And lotsa junk is radiated and
> conducted out by the power supply cable, even for the "best of the
> best" PC clone supplies.
>
> I've discovered and/or engineered some workarounds, consisting of
going
> to optical fiber instead of metal whenever possible. But my
converters
> are usually outside the PC case so this doesn't completely eliminate
> the radiation from copper cabling.
>
> I'm starting to think I should just sit inside the Faraday cage with
my
> computer, and put all the radios outside!
>
> Tim.

Tim,

You are really close to your own answer. I built a Faraday cage area
around my laptop. And also plugged into a surge/noise filter for
the AC and use metal hood cables to hook up to the radios.
I hardly experience any noise at all.

The reason is most manufacturer are turning to plastics and putting
less and less shielding in them. Keep in mind the OEM's are building
for the general public.

Bruce

2556. Re: Suggestions for VHF-AM Transmitter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-17 02:37:07 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <118im6vec228b97@corp.supernews.com>
Source record: 18889

> Got bad news for you... A homebrew an aviation band transmitter is
> illegal.

Bull$#!t.

> And also you have to be a pilot or air traffic controller to operate an
> aviation band transmitter

Bull$#!t.

- such transmitter must also pass specified
> standards to be legal for use.

True.

>
> A reciever is a different matter of course.
> There are quite a few manufacturers that make aviation band reciever kits.

Learn to spell receiver.

Jim

2557. Re: Suggestions for VHF-AM Transmitter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-17 04:08:02 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <F6eie.6409$ZB2.5474410@news.sisna.com>
Source record: 18890

Yes, well, why this is sure handy for manufacturers--it is not good for me
and the one I am building for my ultralight... <grin>

Warmest regards,
John

"RST Engineering" <jim@rstengineering.com> wrote in message
news:118im6vec228b97@corp.supernews.com...
>
>
>> Got bad news for you... A homebrew an aviation band transmitter is
>> illegal.
>
> Bull$#!t.
>
>
>> And also you have to be a pilot or air traffic controller to operate an
>> aviation band transmitter
>
> Bull$#!t.
>
>
> - such transmitter must also pass specified
>> standards to be legal for use.
>
> True.
>
>
>>
>> A reciever is a different matter of course.
>> There are quite a few manufacturers that make aviation band reciever
>> kits.
>
> Learn to spell receiver.
>
> Jim
>

2558. Re: Suggestions for VHF-AM Transmitter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-17 06:22:21 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <da1j81ts52cqsavf2b4pabaacclbkhkhq0@4ax.com>
Source record: 18891

On Mon, 16 May 2005 19:53:23 -0400, "Netgeek" <no_spam@comcast.net>
wrote:

>"Bob Lombardi" <boblombardi@cfl42.cfl.rr.com> wrote in message
>
>> You won't find much of this information without buying the tech manuals on
>> these aviation band radios and reading about them.
>
>I was hoping to avoid the "overt plagiarism" approach - but I guess I
>could reserve the option of "covert plagiarism"??? 8-)

High power VHF/UHF AM transmitters are also used as audio subcarrier
transmitters in System-L television, which is used at least in France.
These require "full" audio bandwidth and good linearity for low audio
distortion in normal TV receivers. The audio exciters used in low
power relays might be in your power range, so try to find some info
about these transmitters, most likely only in French.

Paul

2559. white rose receiver project

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-17 16:09:14 UTC
From: Bob G0KYF <bobstevensonREMOVETHIS@hotmail.com>
Message-ID: <428a1733$0$299$cc9e4d1f@news-text.dial.pipex.com>
Source record: 18892

Hi and thanks for reading this,
has anyone out there got a copy of the building instructions for the white rose multiband receiver project?
This was featured in radcom (and i think Practical Wireless too) around early to mid 90's.
I have found a 1/2 bulit kit and band boards that I started years ago but true to form I have lost the article.
I was going to try to finish it as I have all the bits in bags (think they came from badger boards).
If anyone can help please let me know either here or via my email address bobstevensonREMOVETHIS@hotmail.com

Bob

2560. Re: white rose receiver project

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-17 16:42:05 UTC
From: -exray- <exray@coqui.net>
Message-ID: <118k7n42c1qui30@corp.supernews.com>
Source record: 18893

Bob G0KYF wrote:

> Hi and thanks for reading this,
> has anyone out there got a copy of the building instructions for the white
> rose multiband receiver project?
> This was featured in radcom (and i think Practical Wireless too) around
> early to mid 90's.
> I have found a 1/2 bulit kit and band boards that I started years ago but
> true to form I have lost the article.
> I was going to try to finish it as I have all the bits in bags (think they
> came from badger boards).
> If anyone can help please let me know either here or via my email address
> bobstevensonREMOVETHIS@hotmail.com
>
> Bob
>
>

You can get back issues of SPRAT where I recall it was also published
but I think that requires membership in the G-QRP Club.
The receiver is also featured in the "Low Power Scrapbook" if you're
willing to pony up US$20 for what seems to be a very good book.

HTH,
Bill

2561. Re: white rose receiver project

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-17 18:28:14 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <118kdu3kjfftt24@corp.supernews.com>
Source record: 18894

You can get many years of SPRAT on a CD for a very modest price, and it's not necessary to be a member. Go to http://www.gqrp.com/ and click "Club Sales". You can also buy the CD and some recent paper back issues at Dayton at the G-QRP booth.

Roy Lewallen, W7EL

-exray- wrote:
>
> You can get back issues of SPRAT where I recall it was also published
> but I think that requires membership in the G-QRP Club.
> The receiver is also featured in the "Low Power Scrapbook" if you're
> willing to pony up US$20 for what seems to be a very good book.
>
> HTH,
> Bill
>

2562. FT980 PLL Problem help pse

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-17 18:50:17 UTC
From: rrah@pencoys.org.uk
Message-ID: <428a3963.292526124@news.madasafish.com>
Source record: 18895

Hi folks, help needed I'm afraid.

I appear to have a problem with my FT980's PLL. I'm hoping its a stock fault and someone can point to the fault, but knowing my luck...

Its hard to describe what its doing, but it seems to be either going out of lock every 1Khz or so, or its getting something in the loop div/N wrong in some way. It currently appears to be heat sensitive and intermittant but I hope to get further and more useful description of the symptoms later. As far as I can tell, the CPU is functioning correctly and is driving the display etc ok.

Anyone care to describe how the thing works in simple terms? or know of a fairly straightforward test to determine the source of the problem.
I have the users manual and the technical manual from http:\\www.mods.dk in PDF form but nothing there seems to be all that useful at present.
I hope someone can help, all the best, Mike W
--

2563. Re: Help identify RF Power Transistors/PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-17 21:21:03 UTC
From: Gary Morton <gary@alma.demon.co.uk>
Message-ID: <3ftie.34123$G8.28786@text.news.blueyonder.co.uk>
Source record: 18896

>>
>
> The usage of word "pill" is a "slang" word for RF transistors (bi-polar or
> MOSFET) originated in US by non-technical radio operators.
>
> Popular MRF/SRF RF transistors
> http://www.rfparts.com/mototran.html
>
> The 211 case style was very popular for bi-polar devices
> http://www.rfparts.com/trancase.html
>
> If you are aware of the voltage required (12/13.8; 24/28 or 48/50 VDC),that
> would be useful in reducing your search candidates. Specifications:
> http://www.rfparts.com/transistorspecs.html
>
> You can inquire with RF Parts if you desire a cross reference - for future
> replacement.
> http://www.rfparts.com/product.html
>
> Handling RF Transistors
> http://www.rfparts.com/install.html
>
> w9gb
>
>

These are useful pointers.
I am in the same situation as the original poster.
I have been given a bunch of RF power transistors (316-01 and 244-04 type packages). I have been unable to identify them. The giver tried to find the information where he works (they were being thrown away) but he can't find any information.

Transistor 1 markings: C / M2519 / 185 / 9014 / RR15
the bag is labelled RF 10W UHF

Transistor 2 markings: C / 185 / 4340P3 / 8817 / MALAYSIA
the bag is labelled RF 12W VHF

Transistor 3 markings: C / (Motorola Wing) / 8133P1 / 8919 / MALAYSIA
the bag is labelled RF PA 28W VHF

Transistor 4 markings: C / 4340P1 / 8824 M52 / (logo)
the bag is labelled RF 4W VHF
these have logos of ST or Thompson CSF

The second from last line four digit number is the date code. In some cases there are more than one transistor and this line does vary.

I Have tried adding MRF, 2SC, SRF in front of the ID and then I have done a google, but this has found nothing.

Any ideas?

--Gary

2564. 400Hz Servomotor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-17 21:54:41 UTC
From: IZ5FCY Roberto <iz5fcy_NOTRASH@arrl.net>
Message-ID: <qiu9mqrcyvct$.cv6sxu11kpm7.dlg@40tude.net>
Source record: 18897

Hi to all!
I need if your help.
I have a lot of 400Hz Muirhead Servomotor-Tachometer generator mod.
15M81A,fom Mil surplus.
For 400Hz supply isn't a problem but I Don't have idea how to apply or
drive this servomotors.
This motor is supplied with a 115Vac primary plus two 13Vac control
windings, one tachometer 115 Vac primary with a secondary output.
Do you have some suggestion, scheme, application notes for use this motors
in a light CNC project?
Will be welcome application notes, schematic, literatures or URL's for
this devices..

I please you to reply by email, many thanks in advance and sorry for
bandwidht..

Ciao from Italy....
--
Saluti da Roberto IZ5FCY

La teoria ï¿½ quando si sa tutto e non funziona nulla.
La pratica ï¿½ quando funziona tutto e non si sa perchï¿½.
Mi sento un vero "radioamatore" poichï¿½ ho raggiunto
entrambi gli obiettivi:
non mi funziona nulla e non so il perchï¿½!

2565. Re: Help identify RF Power Transistors/PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-17 22:06:26 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <g-ednQLv85569xffRVn-1A@comcast.com>
Source record: 18798

"Gary Morton" <gary@alma.demon.co.uk> wrote in message
news:3ftie.34123$G8.28786@text.news.blueyonder.co.uk...
>
> These are useful pointers.
> I am in the same situation as the original poster.
> I have been given a bunch of RF power transistors (316-01 and 244-04 type
> packages). I have been unable to identify them. The giver tried to find
> the information where he works (they were being thrown away) but he can't
> find any information.
>
> Transistor 1 markings: C / M2519 / 185 / 9014 / RR15
> the bag is labelled RF 10W UHF
>
> Transistor 2 markings: C / 185 / 4340P3 / 8817 / MALAYSIA
> the bag is labelled RF 12W VHF
>
> Transistor 3 markings: C / (Motorola Wing) / 8133P1 / 8919 / MALAYSIA
> the bag is labelled RF PA 28W VHF
>
> Transistor 4 markings: C / 4340P1 / 8824 M52 / (logo)
> the bag is labelled RF 4W VHF
> these have logos of ST or Thompson CSF
>
> The second from last line four digit number is the date code. In some
> cases there are more than one transistor and this line does vary.
>
> I Have tried adding MRF, 2SC, SRF in front of the ID and then I have done
> a google, but this has found nothing.
>
> Any ideas?
>
> --Gary
>

Gary -

Transworld amplifiers used TRW transistors, but I believe those transistors started with a "9". Some of the former RF designers from that time can be found at QRZ.COM (Question and Answer forum).

gb

2566. Pointers for a homebrew 2-meter XCVR

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-18 01:31:39 UTC
From: Bernard <bernard.debbasch_removethis_@mail.com>
Message-ID: <5Wwie.9489$jj.5508@lakeread06>
Source record: 18799

I have looked at homebrewing an FM 2-meter XCVR and already got help from this group. The goal is to spend time on something that others could duplicate and not work on a one of a kind.

First, why homebrewing ? Two reasons:

1) It is homebrewed
2) There is room for a "powerful" microprocessor that will do other things (APRS is one of them)

It seems that the problem is the selection of components that can be sourced in relatively low volume and at a reasonable cost by amateurs (read: Digikey, Mouser and alike).

Here is what I have found some far:

1) Transistors for RX front end: relatively easy to find if based on dual-gate MOSFET
2) RX band filters: I have decided to have a fixed capacitor and adjust the inductor.The availability of adjustable coils (Toko for example) has decreased in the last few years. Digikey only stocks a few of them but that should be OK in the near term.
3) First IF filters: not much choice since 10.7MHz and 21.4 MHz seem to be the only 2 frequencies stocked (most commercial boxes use between 35 and 70 MHz). The IF inductors/transformers at 10.7 MHz and 455 KHz have disappeared from Digikey (used to be there a few years ago).
4) 2nd IF + FM demodulator. The Motorola parts (MC33xx) are gone. The part that is found in many commercial XCVR is the Toshiba TA31136. This part is not stocked by Toshiba's distributors in the US (12 weeks lead time if you want to order 2K of them). Good news is that the Rohm BA4116FV is a pin-to-pin compatible device and it is available at Digikey for $1.26. I don't know if this part works since I have not seen it used anywhere...
5) 2nd mixer crystal. The 10.245 MHz crystals are easily available but not the 21.4 +/- .455. This seems to remove the option of using a 21.4 MHz IF..
6) 2nd IF filter. The 455 KHz ceramic filters seem to have a very limited availability. The exact type recommended by the IC vendor is hard to find..
7) FM discriminator. I could not find a source for the ceramic discriminator recommended by Toshiba/Rohm (CDLBLA455KCAY24-B0 which is the new P/N for the CDB450C24). I can understand the pain of the distributors since every FM IC requires a different discriminator. The discriminator coil that can be used instead is not easier to locate.
8) PLL: I am currently leaning towards National (LMX2306 or similar). They are cheap and available. NS has a nice PLL design tool online but the tool tries to convince me to switch to a better a part that I won't be able to handle (leadless package). It is clear that the new generations IC's are not designed for hand soldering at home...

9) Microprocessor and display: no problem here , plenty of choice.
10) TX chain transistors and PA Module: no problem with the regular vendors. www.rfparts.com seems to have a large selection of modules.
11) TX low pass filter: will need to be hand made. That's OK but who is selling tinned wire ?

Some notes:

1) I recently bought a dual conversion 72MHz RC receiver. For $45 (and 13 grams !), one can get one Toshiba TA31136FN, a ceramic discriminator, a 11.155 MHz (10.7 + .455) crystal, one 10.7 MHz crystal and one 455 kHz ceramic filters, one IF transformer, 3 adjustable inductors, one dual-gate mosfet (unidentified), a 3.3V regulator and more. I am not sure what to think except that this might be a non traditional way to source 1/2 of the RX section !
2) Some hard to find parts are sometime available as spare for Ham or commercial radios but the prices are generally too high to be considered.
3) One way to go around the hard to find parts is to go with a more discrete solution (no IF/Mixer/DEMOD/SQUELCH IC) and hand wire all the inductors. This is not the way I am planning to go.
4) English is my 2nd language. Excuse the grammar mistakes and hard to understand sentences.

2567. Re: Pointers for a homebrew 2-meter XCVR

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-18 03:16:37 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <d6ec2l$33a$1@theodyn.ncf.ca>
Source record: 18800

"Bernard" (bernard.debbasch_removethis_@mail.com) writes:

> 1) I recently bought a dual conversion 72MHz RC receiver. For $45 (and 13
> grams !), one can get one Toshiba TA31136FN, a ceramic discriminator, a
> 11.155 MHz (10.7 + .455) crystal, one 10.7 MHz crystal and one 455 kHz
> ceramic filters, one IF transformer, 3 adjustable inductors, one dual-gate
> mosfet (unidentified), a 3.3V regulator and more. I am not sure what to
> think except that this might be a non traditional way to source 1/2 of the
> RX section !

But amateur radio has always been about scrounging. Once you know enough, you can make do in a lot of cases with what's available rather than what's specified. Indeed, over the decades many an article has been based on what the author had at hand (or in some cases what he thought would be readily available) rather than because there was something special about the parts. A beginner suffers from not knowing enough, and going down to the parts store with the list of parts and having no choice but to live with the prices, or if the parts aren't available. But once they have a more extensive understanding, they know that they can pull those bypass capacitors off that VCR, and use those generic transistors instead of the generic transistors specified in the article.

$45 is kind of expensive. Take any older cordless phone, and one is bound to find a double conversion (10.7MHz and 455KHz) FM receiver, often using one of those Motorola ICs. You can get them cheap at garage sales over here, I've stopped bothering with them because they are still plentiful (though I suppose a later generation will be less useful, being more compact and maybe using different IF frequencies). Indeed, buy the handset and the base unit, and you get two IF strips. The ones I've taken apart have a ceramic 10.7MHz filter, of the type you'd find in an FM broadcast receiver, but that happens in a lot of stuff. (Note there are some exceptions, where the units are single converstion dropping from 49MHz to 455KHz, but the one I picked up like that did still use one of those Motorola ICs.)

Before FRS took off, there were license free 49MHz superhet walkie talkies, that had dual conversion receivers with the better ones, and they could be adapted with a change of front end coils. These have faded away, so I don't know how available they are (I once bought a pair for twenty dollars at a garage sale), but they're is nothing forbidding their use.

Baby monitors maybe, but I've never taken one apart and because of their use I have my suspcions that they may be single conversion, and perhaps even superregen.

Old cellphones, the bigger and clunkier the better, offer up narrow band FM IF filters, and even complete IF strips. The first IF will usually be in the 45MHz or higher range, but given that they do include the conversion crystal to 455KHz, it doesn't really matter. The older ones are cheap now, and the further back you go the more discrete components you'll see. They'll be through-hole ICs, and identifiable, rather than more recent ones that are surface mount and much higher density where you can only use the ICs for the intended purpose.

One problem that has arisen is that construction articles in recent decades have become more about providing a kit to the builder. Expect the builder to copy it perfectly, buy the exact parts, and maybe even buy it as a kit from the author or a third party. Once that happens, the author focuses on using parts that are easy to come by, and the article is about "building it like this" instead of explaining the philosophy and possible alternatives to the parts. But it's only through understanding that people can look at a schematic and realize they can use that filter they have. The more they are spoon fed the more dependent they become.

Michael VE2BVW

2568. Re: Pointers for a homebrew 2-meter XCVR

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-18 03:57:00 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <A4qdncNn4cu4IBffRVn-pQ@comcast.com>
Source record: 18801

"Bernard" <bernard.debbasch_removethis_@mail.com> wrote in message
news:5Wwie.9489$jj.5508@lakeread06...
>I have looked at homebrewing an FM 2-meter XCVR and already got help from
>this group. The goal is to spend time on something that others could
>duplicate and not work on a one of a kind.
>
> First, why homebrewing ? Two reasons:
>
> 1) It is homebrewed
> 2) There is room for a "powerful" microprocessor that will do other things
> (APRS is one of them)
>
> It seems that the problem is the selection of components that can be
> sourced in relatively low volume and at a reasonable cost by amateurs
> (read: Digikey, Mouser and alike).
>
> Here is what I have found some far:
>
> 1) Transistors for RX front end: relatively easy to find if based on
> dual-gate MOSFET
> 2) RX band filters: I have decided to have a fixed capacitor and adjust
> the inductor.The availability of adjustable coils (Toko for example) has
> decreased in the last few years. Digikey only stocks a few of them but
> that should be OK in the near term.
> 3) First IF filters: not much choice since 10.7MHz and 21.4 MHz seem to be
> the only 2 frequencies stocked (most commercial boxes use between 35 and
> 70 MHz). The IF inductors/transformers at 10.7 MHz and 455 KHz have
> disappeared from Digikey (used to be there a few years ago).
> 4) 2nd IF + FM demodulator. The Motorola parts (MC33xx) are gone. The part
> that is found in many commercial XCVR is the Toshiba TA31136. This part is
> not stocked by Toshiba's distributors in the US (12 weeks lead time if you
> want to order 2K of them). Good news is that the Rohm BA4116FV is a
> pin-to-pin compatible device and it is available at Digikey for $1.26. I
> don't know if this part works since I have not seen it used anywhere...
> 5) 2nd mixer crystal. The 10.245 MHz crystals are easily available but not
> the 21.4 +/- .455. This seems to remove the option of using a 21.4 MHz
> IF..
> 6) 2nd IF filter. The 455 KHz ceramic filters seem to have a very limited
> availability. The exact type recommended by the IC vendor is hard to
> find..
> 7) FM discriminator. I could not find a source for the ceramic
> discriminator recommended by Toshiba/Rohm (CDLBLA455KCAY24-B0 which is the
> new P/N for the CDB450C24). I can understand the pain of the distributors
> since every FM IC requires a different discriminator. The discriminator

> coil that can be used instead is not easier to locate.
> 8) PLL: I am currently leaning towards National (LMX2306 or similar). They
> are cheap and available. NS has a nice PLL design tool online but the tool
> tries to convince me to switch to a better a part that I won't be able to
> handle (leadless package). It is clear that the new generations IC's are
> not designed for hand soldering at home...
> 9) Microprocessor and display: no problem here , plenty of choice.
> 10) TX chain transistors and PA Module: no problem with the regular
> vendors. www.rfparts.com seems to have a large selection of modules.
> 11) TX low pass filter: will need to be hand made. That's OK but who is
> selling tinned wire ?
>
> Some notes:
>
> 1) I recently bought a dual conversion 72MHz RC receiver. For $45 (and 13
> grams !), one can get one Toshiba TA31136FN, a ceramic discriminator, a
> 11.155 MHz (10.7 + .455) crystal, one 10.7 MHz crystal and one 455 kHz
> ceramic filters, one IF transformer, 3 adjustable inductors, one dual-gate
> mosfet (unidentified), a 3.3V regulator and more. I am not sure what to
> think except that this might be a non traditional way to source 1/2 of the
> RX section !
> 2) Some hard to find parts are sometime available as spare for Ham or
> commercial radios but the prices are generally too high to be considered.
> 3) One way to go around the hard to find parts is to go with a more
> discrete solution (no IF/Mixer/DEMOD/SQUELCH IC) and hand wire all the
> inductors. This is not the way I am planning to go.
> 4) English is my 2nd language. Excuse the grammar mistakes and hard to
> understand sentences.
>
I agree with Michael. A Radio/TV repair shop where they dispose of old
circuit boards or equipment that cost more $$ to repair ... gold mine of
parts (some discontinued -- just start desoldering)

DSP-10 designed by Bob Larkin, W7PUA. Kits on sale at Dayton and through
TAPR. For more information see http://www.proaxis.com/~boblark/dsp10.htm

gb

2569. Re: Pointers for a homebrew 2-meter XCVR

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-18 03:59:23 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <GOudnUwott0_IBffRVn-sQ@comcast.com>
Source record: 18802

"Bernard" <bernard.debbasch_removethis_@mail.com> wrote in message
news:5Wwie.9489$jj.5508@lakeread06...
>I have looked at homebrewing an FM 2-meter XCVR and already got help from
>this group. The goal is to spend time on something that others could
>duplicate and not work on a one of a kind.
>
> First, why homebrewing ? Two reasons:
>
> 1) It is homebrewed
> 2) There is room for a "powerful" microprocessor that will do other things
> (APRS is one of them)
>
> It seems that the problem is the selection of components that can be
> sourced in relatively low volume and at a reasonable cost by amateurs
> (read: Digikey, Mouser and alike).
>
Also try Dan's Small Parts for a variety of home builder parts
http://www.danssmallpartsandkits.net/

gb

2570. Re: Pointers for a homebrew 2-meter XCVR

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-18 04:28:21 UTC
From: Bill Meara <meara.london@virgin.net>
Message-ID: <428B271E.10CD@virgin.net>
Source record: 18803

Bernard, Michael: Thanks for this wonderful question and great answer.
Yea, scrounging and making do with what is available is the way to go.
There's a great book "First Light" by Richard Preston. It is about the
Palomar Mountain telescope. There is a section on the technical team
that builds the modern instruments used with the old 'scope. They got a
lot of their best parts by "dumpster diving" in California.
73 Bill M0HBR, CU2JL, N2CQR
http://planeta.clix.pt/n2cqr

Michael Black wrote:
>
> "Bernard" (bernard.debbasch_removethis_@mail.com) writes:
>
> > 1) I recently bought a dual conversion 72MHz RC receiver. For $45 (and 13
> > grams !), one can get one Toshiba TA31136FN, a ceramic discriminator, a
> > 11.155 MHz (10.7 + .455) crystal, one 10.7 MHz crystal and one 455 kHz
> > ceramic filters, one IF transformer, 3 adjustable inductors, one dual-gate
> > mosfet (unidentified), a 3.3V regulator and more. I am not sure what to
> > think except that this might be a non traditional way to source 1/2 of the
> > RX section !
> But amateur radio has always been about scrounging. Once you know enough,
> you can make do in a lot of cases with what's available rather than
> what's specified. Indeed, over the decades many an article has
> been based on what the author had at hand (or in some cases what he
> thought would be readily available) rather than because there was
> something special about the parts. A beginner suffers from not
> knowing enough, and going down to the parts store with the list of
> parts and having no choice but to live with the prices, or if
> the parts aren't available. But once they have a more extensive
> understanding, they know that they can pull those bypass capacitors
> off that VCR, and use those generic transistors instead of the generic
> transistors specified in the article.
>
> $45 is kind of expensive. Take any older cordless phone, and
> one is bound to find a double conversion (10.7MHz and 455KHz)
> FM receiver, often using one of those Motorola ICs. You can
> get them cheap at garage sales over here, I've stopped bothering
> with them because they are still plentiful (though I suppose
> a later generation will be less useful, being more compact and
> maybe using different IF frequencies). Indeed, buy the handset
> and the base unit, and you get two IF strips. The ones I've
> taken apart have a ceramic 10.7MHz filter, of the type you'd
> find in an FM broadcast receiver, but that happens in a lot of
> stuff. (Note there are some exceptions, where the units

> are single converstion dropping from 49MHz to 455KHz, but the
> one I picked up like that did still use one of those Motorola
> ICs.)
>
> Before FRS took off, there were license free 49MHz superhet
> walkie talkies, that had dual conversion receivers with
> the better ones, and they could be adapted with a change of
> front end coils. These have faded away, so I don't know how
> available they are (I once bought a pair for twenty dollars
> at a garage sale), but they're is nothing forbidding their
> use.
>
> Baby monitors maybe, but I've never taken one apart and
> because of their use I have my suspcions that they may be
> single conversion, and perhaps even superregen.
>
> Old cellphones, the bigger and clunkier the better, offer
> up narrow band FM IF filters, and even complete IF strips.
> The first IF will usually be in the 45MHz or higher range,
> but given that they do include the conversion crystal to
> 455KHz, it doesn't really matter. The older ones are cheap
> now, and the further back you go the more discrete components
> you'll see. They'll be through-hole ICs, and identifiable,
> rather than more recent ones that are surface mount and much
> higher density where you can only use the ICs for the intended
> purpose.
>
> One problem that has arisen is that construction articles
> in recent decades have become more about providing a kit to
> the builder. Expect the builder to copy it perfectly, buy
> the exact parts, and maybe even buy it as a kit from the author
> or a third party. Once that happens, the author focuses on
> using parts that are easy to come by, and the article is about
> "building it like this" instead of explaining the philosophy and
> possible alternatives to the parts. But it's only through understanding
> that people can look at a schematic and realize they can use
> that filter they have. The more they are spoon fed the more dependent
> they become.
>
> Michael VE2BVW

2571. Re: Pointers for a homebrew 2-meter XCVR

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-18 04:28:23 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <118lh2rph8c7bd2@corp.supernews.com>
Source record: 18804

Bernard wrote:

> I have looked at homebrewing an FM 2-meter XCVR and already got help from
> this group. The goal is to spend time on something that others could
> duplicate and not work on a one of a kind.
>
> First, why homebrewing ? Two reasons:
>
> 1) It is homebrewed
> 2) There is room for a "powerful" microprocessor that will do other things
> (APRS is one of them)
>
> It seems that the problem is the selection of components that can be sourced
> in relatively low volume and at a reasonable cost by amateurs (read:
> Digikey, Mouser and alike).
>
> Here is what I have found some far:
>
> 1) Transistors for RX front end: relatively easy to find if based on
> dual-gate MOSFET

Last time I looked Digi-Key had a good selection of NEC parts.

> 2-7, various RF part complaints)

The world seems to be going to direct-conversion I-Q receivers with the baseband going to a DSP for processing. Reverse for TX. I think this would work fine for any mode on 2m, including FM if you're clever with your algorithms.

> 8) PLL: I am currently leaning towards National (LMX2306 or similar). They
> are cheap and available. NS has a nice PLL design tool online but the tool
> tries to convince me to switch to a better a part that I won't be able to
> handle (leadless package). It is clear that the new generations IC's are not
> designed for hand soldering at home...

This is why God made Toaster Ovens. Do a web search on "toaster oven reflow".

> 9) Microprocessor and display: no problem here , plenty of choice.
> 10) TX chain transistors and PA Module: no problem with the regular vendors.
> www.rfparts.com seems to have a large selection of modules.
> 11) TX low pass filter: will need to be hand made. That's OK but who is
> selling tinned wire ?
>
> Some notes:

>
> 1) I recently bought a dual conversion 72MHz RC receiver. For $45 (and 13
> grams !), one can get one Toshiba TA31136FN, a ceramic discriminator, a
> 11.155 MHz (10.7 + .455) crystal, one 10.7 MHz crystal and one 455 kHz
> ceramic filters, one IF transformer, 3 adjustable inductors, one dual-gate
> mosfet (unidentified), a 3.3V regulator and more. I am not sure what to
> think except that this might be a non traditional way to source 1/2 of the
> RX section !

Not a bad way to go.

> 2) Some hard to find parts are sometime available as spare for Ham or
> commercial radios but the prices are generally too high to be considered.
> 3) One way to go around the hard to find parts is to go with a more
> discrete solution (no IF/Mixer/DEMOD/SQUELCH IC) and hand wire all the
> inductors. This is not the way I am planning to go.
> 4) English is my 2nd language. Excuse the grammar mistakes and hard to
> understand sentences.

Your written English is most definitely up to par -- if you hadn't
mentioned it I wouldn't be able to tell that you're not a native speaker.

>
>

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

2572. Re: Pointers for a homebrew 2-meter XCVR

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-18 05:01:17 UTC
From: Bernard <bernard.debbasch_removethis_@mail.com>
Message-ID: <A_zie.17863$ye1.14557@okepread06>
Source record: 18805

Michael,

I did not intend to turn this thread into a philosophical debate (I had enough with the "no progress in decades" thread" !) but your are bringing a good point.

I should have stated more clearly that my intend is what you describe as "providing a kit to the builder". We may debate (please don't !) on the value that this brings to the builder. On a 1 to 10 scale, buying a transceiver is a 0 and building it from raw silicon, carbon and copper is a 10+. Where does building a "kit" from an article stand on that scale ? I guess somewhere between 1 and 9. But I am going to firmly defend the fact that it is more than zero. I can find many projects that anybody can build with spares (like many "one transistor radio") but I also believe that to go beyond that you need a PCB and an orderable parts list... When this is done, some may chose a path that will teach them a lot. More than 25 years ago, I did many mods on the first 2-meter FM transceiver that I owned. It was fun but finding the spare Japanese IC's that I burned in the process was a nightmare ! I whish I had done these mods on a XCVR that I built, even if I had to buy the PCB and the key components.

Good point on the 49 MHz intercom. I have a pair of them. And you are right, they have a wideband ceramic filter at 10.7 MHz. I guess they need to because they share the second conversion Xtal with the PLL (10.240 MHz) so the IF is really at 10.695 MHz (2nd if is at 455 KHz). This is confirmed by looking at the PLL datasheet. The bad news is that the PLL has a 60 MHz max input with preprogrammed channels. By the way, my intercom is not full-duplex but the phones are. May be somewhere someone is running a repeater with modified 49 MHz phone !

Thanks again !
Bernard

"Michael Black" <et472@FreeNet.Carleton.CA> wrote in message news:d6ec2l$33a$1@theodyn.ncf.ca...
>
> "Bernard" (bernard.debbasch_removethis_@mail.com) writes:
>
>
>> 1) I recently bought a dual conversion 72MHz RC receiver. For $45 (and
>> 13
>> grams !), one can get one Toshiba TA31136FN, a ceramic discriminator, a
>> 11.155 MHz (10.7 + .455) crystal, one 10.7 MHz crystal and one 455 kHz
>> ceramic filters, one IF transformer, 3 adjustable inductors, one
>> dual-gate
>> mosfet (unidentified), a 3.3V regulator and more. I am not sure what to

>> think except that this might be a non traditional way to source 1/2 of
>> the
>> RX section !
> But amateur radio has always been about scrounging. Once you know enough,
> you can make do in a lot of cases with what's available rather than
> what's specified. Indeed, over the decades many an article has
> been based on what the author had at hand (or in some cases what he
> thought would be readily available) rather than because there was
> something special about the parts. A beginner suffers from not
> knowing enough, and going down to the parts store with the list of
> parts and having no choice but to live with the prices, or if
> the parts aren't available. But once they have a more extensive
> understanding, they know that they can pull those bypass capacitors
> off that VCR, and use those generic transistors instead of the generic
> transistors specified in the article.
>
> $45 is kind of expensive. Take any older cordless phone, and
> one is bound to find a double conversion (10.7MHz and 455KHz)
> FM receiver, often using one of those Motorola ICs. You can
> get them cheap at garage sales over here, I've stopped bothering
> with them because they are still plentiful (though I suppose
> a later generation will be less useful, being more compact and
> maybe using different IF frequencies). Indeed, buy the handset
> and the base unit, and you get two IF strips. The ones I've
> taken apart have a ceramic 10.7MHz filter, of the type you'd
> find in an FM broadcast receiver, but that happens in a lot of
> stuff. (Note there are some exceptions, where the units
> are single converstion dropping from 49MHz to 455KHz, but the
> one I picked up like that did still use one of those Motorola
> ICs.)
>
> Before FRS took off, there were license free 49MHz superhet
> walkie talkies, that had dual conversion receivers with
> the better ones, and they could be adapted with a change of
> front end coils. These have faded away, so I don't know how
> available they are (I once bought a pair for twenty dollars
> at a garage sale), but they're is nothing forbidding their
> use.
>
> Baby monitors maybe, but I've never taken one apart and
> because of their use I have my suspcions that they may be
> single conversion, and perhaps even superregen.
>
> Old cellphones, the bigger and clunkier the better, offer
> up narrow band FM IF filters, and even complete IF strips.
> The first IF will usually be in the 45MHz or higher range,
> but given that they do include the conversion crystal to
> 455KHz, it doesn't really matter. The older ones are cheap
> now, and the further back you go the more discrete components
> you'll see. They'll be through-hole ICs, and identifiable,

> rather than more recent ones that are surface mount and much
> higher density where you can only use the ICs for the intended
> purpose.
>
> One problem that has arisen is that construction articles
> in recent decades have become more about providing a kit to
> the builder. Expect the builder to copy it perfectly, buy
> the exact parts, and maybe even buy it as a kit from the author
> or a third party. Once that happens, the author focuses on
> using parts that are easy to come by, and the article is about
> "building it like this" instead of explaining the philosophy and
> possible alternatives to the parts. But it's only through understanding
> that people can look at a schematic and realize they can use
> that filter they have. The more they are spoon fed the more dependent
> they become.
>
> Michael VE2BVW
>

2573. Re: Pointers for a homebrew 2-meter XCVR

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-18 05:25:26 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <d_6dnSTBAZJITBffRVn-og@comcast.com>
Source record: 18806

"Tim Wescott" <tim@seemywebsite.com> wrote in message
news:118lh2rph8c7bd2@corp.supernews.com...
> Bernard wrote:
>
>> I have looked at homebrewing an FM 2-meter XCVR and already got help from
>> this group. The goal is to spend time on something that others could
>> duplicate and not work on a one of a kind.
>>
>> First, why homebrewing ? Two reasons:
>>
>> 1) It is homebrewed
>> 2) There is room for a "powerful" microprocessor that will do other
>> things (APRS is one of them)
>>
>
>> 8) PLL: I am currently leaning towards National (LMX2306 or similar).
>> They are cheap and available. NS has a nice PLL design tool online but
>> the tool tries to convince me to switch to a better a part that I won't
>> be able to handle (leadless package). It is clear that the new
>> generations IC's are not designed for hand soldering at home...
>
> This is why God made Toaster Ovens. Do a web search on "toaster oven
> reflow".
> --
> Tim Wescott
>

Seattle Robotics is the group that uses the toaster oven for reflow. It
actually works very well !
'Have you seen my new soldering Iron? by Kenneth Maxon
http://www.seattlerobotics.org/encoder/200006/oven_art.htm

g. beat
w9gb

2574. Re: Pointers for a homebrew 2-meter XCVR

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-18 06:26:41 UTC
From: Bernard <bernard.debbasch_removethis_@mail.com>
Message-ID: <FeBie.17870$ye1.3226@okepread06>
Source record: 18807

> The world seems to be going to direct-conversion I-Q receivers with the
> baseband going to a DSP for processing. Reverse for TX. I think this
> would work fine for any mode on 2m, including FM if you're clever with
> your algorithms.

You are right, for example most of the 802.11 or Bluetooth solutions are zero-IF, but I don't think that this is ideal for Ham Radio (the main issue is re-injection of the LO into the RX). A better option (for us) is the low IF option (like in the DSP10). The DSP10 has an IF at 19.665 MHz and one at 15 KHz. The concept is excellent but slightly overdesigned for what I want to achieve. The drawback (when compared to zero-IF) is that the low-IF receivers still requires dual conversion and IF filters to achieve any level of performance.

2575. Re: Pointers for a homebrew 2-meter XCVR

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-18 10:41:19 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <jZEie.204$6d.21@trnddc07>
Source record: 18808

>You are right, for example most of the 802.11 or Bluetooth solutions are
>zero-IF, but I don't think that this is ideal for Ham Radio (the main issue
>is re-injection of the LO into the RX).

Bernard,

If your goal is to make a kit that uses simple, commonly available components and exploits a 'powerful microprocessor' for flexibility, then DSP is definitely the way to go. If properly done, it virtually eliminates the need for all of the old ham-favorite special function chips.

With respect to 're-injection of the LO into the RX', I'm not quite sure what you mean. There is the potential for LO leakage out of the antenna port because the LO is on the receive frequency, but this is pretty easily managed with careful electrical and electro-mechanical design.

Joe
W3JDR

"Bernard" <bernard.debbasch_removethis_@mail.com> wrote in message news:FeBie.17870$ye1.3226@okepread06...
>> The world seems to be going to direct-conversion I-Q receivers with the
>> baseband going to a DSP for processing. Reverse for TX. I think this
>> would work fine for any mode on 2m, including FM if you're clever with
>> your algorithms.
>
> You are right, for example most of the 802.11 or Bluetooth solutions are
> zero-IF, but I don't think that this is ideal for Ham Radio (the main
> issue is re-injection of the LO into the RX). A better option (for us) is
> the low IF option (like in the DSP10). The DSP10 has an IF at 19.665 MHz
> and one at 15 KHz. The concept is excellent but slightly overdesigned for
> what I want to achieve. The drawback (when compared to zero-IF) is that
> the low-IF receivers still requires dual conversion and IF filters to
> achieve any level of performance.
>

2576. Re: Pointers for a homebrew 2-meter XCVR

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-18 12:04:47 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <HbGie.208$G46.175@fe02.lga>
Source record: 18809

"Bernard" <bernard.debbasch_removethis_@mail.com> wrote in message
news:5Wwie.9489$jj.5508@lakeread06...

> 1) It is homebrewed
> 2) There is room for a "powerful" microprocessor that will do other things
> (APRS is one of them)

Nice goals, but your target market will be kind of limited. Whatever you come up with is going to cost 2-4x commercial. I can't really see the point of APRS. A nice, compact, inexpensive APRS box would be nice, but a homebrew VHF rig isn't going to get there. Now, maybe a little box with a TNC and GPS built in that would plug into an HT might come close, but that's not what you are focusing on here.

> 2) RX band filters: I have decided to have a fixed capacitor and adjust
the
> inductor.

That does make for harder parts selection. Why that choice?

> 5) 2nd mixer crystal. The 10.245 MHz crystals are easily available but not
> the 21.4 +/- .455. This seems to remove the option of using a 21.4 MHz
IF..

10.7 is a pretty low first IF. You might consider using a higher IF and winding the transformers on toroids.

> 8) PLL: I am currently leaning towards National (LMX2306 or similar).
They

Think about DDS. There are some really nice DDS choices from Analog Devices and TI. TI has some really nice, cheap synthesizers. DDS is way less of a pain than PLL. TI's 440 MHz part can easily work down to 2 meters. Yes, they are pretty much all TSSOP but that is manageable to hand solder on a PCB. Messy to prototype but then that will be a problem at VHF anyway.

..

2577. Re: Pointers for a homebrew 2-meter XCVR

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-18 12:08:23 UTC
From: John Hague <john.hague@philips.com>
Message-ID: <opsqyzz9g6aito4q@news.philips.com>
Source record: 18810

On Wed, 18 May 2005 10:41:19 GMT, W3JDR <joe@roccis.com> wrote:

> Bernard,
>
> If your goal is to make a kit that uses simple, commonly available
> components and exploits a 'powerful microprocessor' for flexibility, then
> DSP is definitely the way to go. If properly done, it virtually
> eliminates
> the need for all of the old ham-favorite special function chips.
>
> With respect to 're-injection of the LO into the RX', I'm not quite sure
> what you mean. There is the potential for LO leakage out of the antenna
> port
> because the LO is on the receive frequency, but this is pretty easily
> managed with careful electrical and electro-mechanical design.
>
> Joe
> W3JDR

If I remember rightly, there's a description of a DSP-based 2m transceiver
in 'Experimental Methods in RF Design...'

73

John, G4GOY

2578. Re: Pointers for a homebrew 2-meter XCVR

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-18 12:09:39 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <hgGie.210$G46.49@fe02.lga>
Source record: 18811

"Tim Wescott" <tim@seemywebsite.com> wrote in message
news:118lh2rph8c7bd2@corp.supernews.com...

> This is why God made Toaster Ovens. Do a web search on "toaster oven
> reflow".

Most of the DDS and PLL chips are available in TSSOP. You don't need a
toaster oven for that, your typical soldering iron works just fine. Now, if
you had to resort to a BGA that would be a different story.

I would encourage Bernard to consider mostly SMT parts. SMT resistors and
caps are a lot more convenient than leaded, and a lot smaller. Eliminates
any issues with lead inductance, too. Maybe a little more expensive,
though.

> Your written English is most definitely up to par -- if you hadn't
> mentioned it I wouldn't be able to tell that you're not a native speaker.

I agree

..

2579. Re: Pointers for a homebrew 2-meter XCVR

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-18 15:54:23 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <118mp9crq8oc772@corp.supernews.com>
Source record: 18812

> 1) Transistors for RX front end: relatively easy to find if based on
> dual-gate MOSFET

OK, but you can get better noise figure from a GaAs part.

> 2) RX band filters: I have decided to have a fixed capacitor and adjust
> the inductor.The availability of adjustable coils (Toko for example) has
> decreased in the last few years. Digikey only stocks a few of them but
> that should be OK in the near term.

Mouser stocks a VERY nice line of low cost VHF shielded inductors. Google "xicon" and "tunable coil" on the Mouser website.

> 3) First IF filters: not much choice since 10.7MHz and 21.4 MHz seem to be
> the only 2 frequencies stocked (most commercial boxes use between 35 and
> 70 MHz). The IF inductors/transformers at 10.7 MHz and 455 KHz have
> disappeared from Digikey (used to be there a few years ago).

Again, Mouser is your friend -- google "xicon" and "transformer". If I were doing it, I'd do a 70 MHz. first IF and then 10.7 MHz. second IF. Forget dropping down to 455 unless you have to.

> 4) 2nd IF + FM demodulator. The Motorola parts (MC33xx) are gone. The part
> that is found in many commercial XCVR is the Toshiba TA31136. This part is
> not stocked by Toshiba's distributors in the US (12 weeks lead time if you
> want to order 2K of them). Good news is that the Rohm BA4116FV is a
> pin-to-pin compatible device and it is available at Digikey for $1.26. I
> don't know if this part works since I have not seen it used anywhere...

Phillips makes (made??) a nice line of FM ICs. You might give them a try.

> 5) 2nd mixer crystal. The 10.245 MHz crystals are easily available but not
> the 21.4 +/- .455. This seems to remove the option of using a 21.4 MHz
> IF..
> 6) 2nd IF filter. The 455 KHz ceramic filters seem to have a very limited
> availability. The exact type recommended by the IC vendor is hard to
> find..

Why crystals? You are going to have a synthesizer for the front end anyway, why not use the synthesizer crystal as your timebase and synthesize the mixer oscillator? You said you wanted some stuff for the microprocessor to do anyway; controlling a synthesizer is one of them. Or, you could get a parallel input synthesizer and hardwire it to a fixed frequency.

> 7) FM discriminator. I could not find a source for the ceramic
> discriminator recommended by Toshiba/Rohm (CDLBLA455KCAY24-B0 which is the
> new P/N for the CDB450C24). I can understand the pain of the distributors

> since every FM IC requires a different discriminator. The discriminator
> coil that can be used instead is not easier to locate.

A discriminator (or ratio detector) is nothing more than a couple of transformers coupled bottom to top. You can make a two-coil ratio detector as easy as buying one.

> 11) TX low pass filter: will need to be hand made. That's OK but who is
> selling tinned wire ?

Why would you need tinned wire? Plain old magnet wire is easy to come by.

Jim

2580. Re: Help identify RF Power Transistors/PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-18 22:01:57 UTC
From: Sven Lundbech <oz7s@hotmail.com>
Message-ID: <428bbb45$0$50693$edfadb0f@dread14.news.tele.dk>
Source record: 18813

"gb" <onw9mapsgb@no.arrl.spam.net> skrev i en meddelelse
news:g-ednQLv85569xffRVn-1A@comcast.com...
> "Gary Morton" <gary@alma.demon.co.uk> wrote in message
> news:3ftie.34123$G8.28786@text.news.blueyonder.co.uk...
> >
> > These are useful pointers.
> > I am in the same situation as the original poster.
> > I have been given a bunch of RF power transistors (316-01 and 244-04
type
> > packages). I have been unable to identify them. The giver tried to find
> > the information where he works (they were being thrown away) but he
can't
> > find any information.
> >
> > Transistor 1 markings: C / M2519 / 185 / 9014 / RR15
> > the bag is labelled RF 10W UHF
> >
> > Transistor 2 markings: C / 185 / 4340P3 / 8817 / MALAYSIA
> > the bag is labelled RF 12W VHF
> >
> > Transistor 3 markings: C / (Motorola Wing) / 8133P1 / 8919 / MALAYSIA
> > the bag is labelled RF PA 28W VHF
> >
> > Transistor 4 markings: C / 4340P1 / 8824 M52 / (logo)
> > the bag is labelled RF 4W VHF
> > these have logos of ST or Thompson CSF
> >
> > The second from last line four digit number is the date code. In some
> > cases there are more than one transistor and this line does vary.
> >
> > I Have tried adding MRF, 2SC, SRF in front of the ID and then I have
done
> > a google, but this has found nothing.
> >
> > Any ideas?
> >
> > --Gary
> >
>
> Gary -
>
> Transworld amplifiers used TRW transistors, but I believe those
transistors
> started with a "9". Some of the former RF designers from that time can be

> found at QRZ.COM (Question and Answer forum).
>
> gb
>
>
I can probably provide a little more information: The designations 4340P3, 8133P1 and 4340P1 are most likely abbreviated internal type designations/stock no. used by General Electric (and by the Danish company Storno that was acquired by GE and later by Motorola). The full number might be something like e.g. 19J704340P1, almost all designations starting with 19J...

Unfortunately, I have no longer the xref lists between the 19J-numbers and the more common mfg. designations.

vy 73

--
Sven Lundbech
OZ7S, OZ1AWJ
President EDR

2581. Here is the smoking gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-19 01:19:25 UTC
From: Orin@gregpalast.com
Message-ID: <6945f695.e6c874b7@mail.gregpalast.com>
Source record: 18814

The memo that has "IMPEACH HIM" written all over it.

The top-level government memo marked "SECRET AND STRICTLY PERSONAL", dated eight months before Bush sent us into Iraq, following a closed meeting with the President, reads, "Military action was now seen as inevitable. Bush wanted to remove Saddam through military action justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy."

Read that again: "The intelligence and facts were being fixed...."

For years, after each damning report on BBC TV, viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote rigging, a blind eye to terror and the bin Ladens before 9-11, and so on. Evil, stupidity and self-dealing are shameful but not impeachable. What's needed is a "high crime or misdemeanor."

And if this ain't it, nothing is.

The memo uncovered this week by the TIMES, goes on to describe an elaborate plan by George Bush and British Prime Minister Tony Blair to hoodwink the lanet into supporting an attack on Iraq knowing full well the evidence for war was a phony.

A conspiracy to commit serial fraud is, under federal law, racketeering. However, the Mob's schemes never cost so many lives. Here's more. "Bush had made up his mind to take military action. But the case was thin. Saddam was not threatening his neighbors, and his WMD capability was less than that of Libya, North Korea or Iran."

Really? But Mr. Bush told us, "Intelligence gathered by this and other governments leaves no doubt that the Iraq regime continues to possess and conceal some of the most lethal weapons ever devised."

A month ago, the Silberman-Robb Commission issued its report on WMD intelligence before the war, dismissing claims that Bush fixed the facts with this snooty, condescending conclusion written directly to the President, "After a thorough review, the Commission found no indication that the Intelligence Community distorted the evidence regarding Iraq's weapons." We now know the report was a bogus 618 pages of thick whitewash aimed to let Bush off the hook for his murderous mendacity. Read on: The invasion build-up was then set, says the memo, "beginning 30 days before the US Congressional elections." Mission accomplished. You should parse the entire memo -- reprinted below -- and see if you can make it through its three pages without losing your lunch. Now sharp readers may note they didn't see this memo, in fact, printed in the New York Times. It wasn't. Rather, it was splashed across the front pages of the

Times of LONDON on Monday.

It has effectively finished the last, sorry remnants of Tony Blair's political career. (While his Labor Party will most assuredly win the elections Thursday, Prime Minister Blair is expected, possibly within months, to be shoved overboard in favor of his Chancellor of the Exchequer, a political execution which requires only a vote of the Labour party's members in Parliament.)

But in the US, barely a word. The New York Times covers this hard evidence of Bush's fabrication of a casus belli as some "British" elections story. Apparently, our President's fraud isn't "news fit to print."

My colleagues in the UK press have skewered Blair, digging out more incriminating memos, challenging the official government factoids and fibs. But in the US press nada, bubkes, zilch. Bush fixed the facts and somehow that's a story for "over there."

The Republicans impeached Bill Clinton over his cigar and Monica's affections. And the US media could print nothing else. Now, we have the stone, cold evidence of bending intelligence to sell us on death by the thousands, and neither a Republican Congress nor what is laughably called US journalism thought it worth a second look.

My friend Daniel Ellsberg once said that what's good about the American people is that you have to lie to them. What's bad about Americans is that it's so easy to do.

Greg Palast, former columnist for Britain's
Guardian papers, is the author of the New York Times bestseller, "The Best Democracy Money Can Buy". Subscribe to his columns at GregPalast.COM.
Media requests to CONTACT(at)GregPalast.COM.
Permission to reprint with attribution granted.

[Here it is - the secret smoking gun memo
- discovered by the Times of London. - GP]

SECRET AND STRICTLY PERSONAL - UK EYES ONLY
DAVID MANNING

From: Matthew Rycroft

Date: 23 July 2002 S 195 /02

cc: Defence Secretary,Foreign Secretary, Attorney-General,
Sir Richard Wilson, John Scarlett, Francis Richards, CDS, C,
Jonathan Powell, Sally Morgan, Alastair Campbell

IRAQ: PRIME MINISTER'S MEETING, 23 JULY

Copy addressees and you met the Prime Minister on 23 July to discuss Iraq.

This record is extremely sensitive. No further copies should be made. It should be shown only to those with a genuine need to know its contents.

John Scarlett summarised the intelligence and latest JIC assessment. Saddam's regime was tough and based on extreme fear. The only way to overthrow it was likely to be by massive military action. Saddam was worried and expected an attack, probably by air and land, but he was not convinced that it would be immediate or overwhelming. His regime expected their neighbours to line up with the US. Saddam knew that regular army morale was poor. Real support for Saddam among the public was probably narrowly based.

C reported on his recent talks in Washington. There was a perceptible shift in attitude. Military action was now seen as inevitable. Bush wanted to remove Saddam, through military action, justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy. The NSC had no patience with the UN route, and no enthusiasm for publishing material on the Iraqi regime's record. There was little discussion in Washington of the aftermath after military action.

CDS said that military planners would brief CENTCOM on 1-2 August, Rumsfeld on 3 August and Bush on 4 August.

The two broad US options were:

(a) Generated Start. A slow build-up of 250,000 US troops, a short (72 hour) air campaign, then a move up to Baghdad from the south. Lead time of 90 days (30 days preparation plus 60 days deployment to Kuwait).

(b) Running Start. Use forces already in theatre (3 x 6,000), continuous air campaign, initiated by an Iraqi casus belli. Total lead time of 60 days with the air campaign beginning even earlier. A hazardous option.

The US saw the UK (and Kuwait) as essential, with basing in Diego Garcia and Cyprus critical for either option. Turkey and other Gulf states were also important, but less vital. The three main options for UK involvement were:

(i) Basing in Diego Garcia and Cyprus, plus three SF squadrons.

(ii) As above, with maritime and air assets in addition.

(iii) As above, plus a land contribution of up to 40,000, perhaps with a discrete role in Northern Iraq entering from Turkey, tying down two Iraqi divisions.

The Defence Secretary said that the US had already begun "spikes of activity" to put pressure on the regime. No decisions had been taken, but he thought the most likely timing in US minds for military action to begin was January, with the timeline beginning 30 days before the US Congressional elections.

The Foreign Secretary said he would discuss this with Colin Powell this week. It seemed clear that Bush had made up his mind to take military action, even if the timing was not yet decided. But the case was thin. Saddam was not threatening his neighbours, and his WMD capability was less than that of Libya, North Korea or Iran. We should work up a plan

for an ultimatum to Saddam to allow back in the UN weapons inspectors. This would also help with the legal justification for the use of force.

The Attorney-General said that the desire for regime change was not a legal base for military action. There were three possible legal bases: self-defence, humanitarian intervention, or UNSC authorisation. The first and second could not be the base in this case. Relying on UNSCR 1205 of three years ago would be difficult. The situation might of course change.

The Prime Minister said that it would make a big difference politically and legally if Saddam refused to allow in the UN inspectors. Regime change and WMD were linked in the sense that it was the regime that was producing the WMD. There were different strategies for dealing with Libya and Iran. If the political context were right, people would support regime change. The two key issues were whether the military plan worked and whether we had the political strategy to give the military plan the space to work.

On the first, CDS said that we did not know yet if the US battleplan was workable. The military were continuing to ask lots of questions.

For instance, what were the consequences, if Saddam used WMD on day one, or if Baghdad did not collapse and urban warfighting began? You said that Saddam could also use his WMD on Kuwait. Or on Israel, added the Defence Secretary.

The Foreign Secretary thought the US would not go ahead with a military plan unless convinced that it was a winning strategy. On this, US and UK interests converged. But on the political strategy, there could be US/UK differences. Despite US resistance, we should explore discreetly the ultimatum. Saddam would continue to play hard-ball with the UN.

John Scarlett assessed that Saddam would allow the inspectors back in only when he thought the threat of military action was real.

The Defence Secretary said that if the Prime Minister wanted UK military involvement, he would need to decide this early. He cautioned that many in the US did not think it worth going down the ultimatum route. It would be important for the Prime Minister to set out the political context to Bush.

Conclusions:

(a) We should work on the assumption that the UK would take part in any military action. But we needed a fuller picture of US planning before we could take any firm decisions. CDS should tell the US military that we were considering a range of options.

(b) The Prime Minister would revert on the question of whether funds could be spent in preparation for this operation.

(c) CDS would send the Prime Minister full details of the proposed military campaign and possible UK contributions by the end of the week.

(d) The Foreign Secretary would send the Prime Minister the background on the UN inspectors, and discreetly work up the ultimatum to Saddam. He would also send the Prime Minister advice on the positions of countries in the region especially Turkey, and of the key EU member states.

(e) John Scarlett would send the Prime Minister a full intelligence update.

(f) We must not ignore the legal issues: the Attorney-General would consider legal advice with FCO/MOD legal advisers. (I have written separately to commissionthis follow-up work.)

MATTHEW RYCROFT
(Rycroft was a Downing Street foreign policy aide)

2582. Here is the smoking gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-19 02:37:16 UTC
From: Dianna@gregpalast.com
Message-ID: <b662b14f.f5f6d6b0@mail.gregpalast.com>
Source record: 18815

The memo that has "IMPEACH HIM" written all over it.

The top-level government memo marked "SECRET AND STRICTLY PERSONAL", dated eight months before Bush sent us into Iraq, following a closed meeting with the President, reads, "Military action was now seen as inevitable. Bush wanted to remove Saddam through military action justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy."

Read that again: "The intelligence and facts were being fixed...."

For years, after each damning report on BBC TV, viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote rigging, a blind eye to terror and the bin Ladens before 9-11, and so on. Evil, stupidity and self-dealing are shameful but not impeachable. What's needed is a "high crime or misdemeanor."

And if this ain't it, nothing is.

The memo uncovered this week by the TIMES, goes on to describe an elaborate plan by George Bush and British Prime Minister Tony Blair to hoodwink the lanet into supporting an attack on Iraq knowing full well the evidence for war was a phony.

A conspiracy to commit serial fraud is, under federal law, racketeering. However, the Mob's schemes never cost so many lives. Here's more. "Bush had made up his mind to take military action. But the case was thin. Saddam was not threatening his neighbors, and his WMD capability was less than that of Libya, North Korea or Iran."

Really? But Mr. Bush told us, "Intelligence gathered by this and other governments leaves no doubt that the Iraq regime continues to possess and conceal some of the most lethal weapons ever devised."

A month ago, the Silberman-Robb Commission issued its report on WMD intelligence before the war, dismissing claims that Bush fixed the facts with this snooty, condescending conclusion written directly to the President, "After a thorough review, the Commission found no indication that the Intelligence Community distorted the evidence regarding Iraq's weapons." We now know the report was a bogus 618 pages of thick whitewash aimed to let Bush off the hook for his murderous mendacity. Read on: The invasion build-up was then set, says the memo, "beginning 30 days before the US Congressional elections." Mission accomplished. You should parse the entire memo -- reprinted below -- and see if you can make it through its three pages without losing your lunch. Now sharp readers may note they didn't see this memo, in fact, printed in the New York Times. It wasn't. Rather, it was splashed across the front pages of the

Times of LONDON on Monday.

It has effectively finished the last, sorry remnants of Tony Blair's political career. (While his Labor Party will most assuredly win the elections Thursday, Prime Minister Blair is expected, possibly within months, to be shoved overboard in favor of his Chancellor of the Exchequer, a political execution which requires only a vote of the Labour party's members in Parliament.)

But in the US, barely a word. The New York Times covers this hard evidence of Bush's fabrication of a casus belli as some "British" elections story. Apparently, our President's fraud isn't "news fit to print."

My colleagues in the UK press have skewered Blair, digging out more incriminating memos, challenging the official government factoids and fibs. But in the US press nada, bubkes, zilch. Bush fixed the facts and somehow that's a story for "over there."

The Republicans impeached Bill Clinton over his cigar and Monica's affections. And the US media could print nothing else. Now, we have the stone, cold evidence of bending intelligence to sell us on death by the thousands, and neither a Republican Congress nor what is laughably called US journalism thought it worth a second look.

My friend Daniel Ellsberg once said that what's good about the American people is that you have to lie to them. What's bad about Americans is that it's so easy to do.

Greg Palast, former columnist for Britain's
Guardian papers, is the author of the New York Times bestseller, "The Best Democracy Money Can Buy". Subscribe to his columns at GregPalast.COM.
Media requests to CONTACT(at)GregPalast.COM.
Permission to reprint with attribution granted.

[Here it is - the secret smoking gun memo
- discovered by the Times of London. - GP]

SECRET AND STRICTLY PERSONAL - UK EYES ONLY
DAVID MANNING

From: Matthew Rycroft

Date: 23 July 2002 S 195 /02

cc: Defence Secretary,Foreign Secretary, Attorney-General,
Sir Richard Wilson, John Scarlett, Francis Richards, CDS, C,
Jonathan Powell, Sally Morgan, Alastair Campbell

IRAQ: PRIME MINISTER'S MEETING, 23 JULY

Copy addressees and you met the Prime Minister on 23 July to discuss Iraq.

This record is extremely sensitive. No further copies should be made. It should be shown only to those with a genuine need to know its contents.

John Scarlett summarised the intelligence and latest JIC assessment. Saddam's regime was tough and based on extreme fear. The only way to overthrow it was likely to be by massive military action. Saddam was worried and expected an attack, probably by air and land, but he was not convinced that it would be immediate or overwhelming. His regime expected their neighbours to line up with the US. Saddam knew that regular army morale was poor. Real support for Saddam among the public was probably narrowly based.

C reported on his recent talks in Washington. There was a perceptible shift in attitude. Military action was now seen as inevitable. Bush wanted to remove Saddam, through military action, justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy. The NSC had no patience with the UN route, and no enthusiasm for publishing material on the Iraqi regime's record. There was little discussion in Washington of the aftermath after military action.

CDS said that military planners would brief CENTCOM on 1-2 August, Rumsfeld on 3 August and Bush on 4 August.

The two broad US options were:

(a) Generated Start. A slow build-up of 250,000 US troops, a short (72 hour) air campaign, then a move up to Baghdad from the south. Lead time of 90 days (30 days preparation plus 60 days deployment to Kuwait).

(b) Running Start. Use forces already in theatre (3 x 6,000), continuous air campaign, initiated by an Iraqi casus belli. Total lead time of 60 days with the air campaign beginning even earlier. A hazardous option.

The US saw the UK (and Kuwait) as essential, with basing in Diego Garcia and Cyprus critical for either option. Turkey and other Gulf states were also important, but less vital. The three main options for UK involvement were:

(i) Basing in Diego Garcia and Cyprus, plus three SF squadrons.

(ii) As above, with maritime and air assets in addition.

(iii) As above, plus a land contribution of up to 40,000, perhaps with a discrete role in Northern Iraq entering from Turkey, tying down two Iraqi divisions.

The Defence Secretary said that the US had already begun "spikes of activity" to put pressure on the regime. No decisions had been taken, but he thought the most likely timing in US minds for military action to begin was January, with the timeline beginning 30 days before the US Congressional elections.

The Foreign Secretary said he would discuss this with Colin Powell this week. It seemed clear that Bush had made up his mind to take military action, even if the timing was not yet decided. But the case was thin. Saddam was not threatening his neighbours, and his WMD capability was less than that of Libya, North Korea or Iran. We should work up a plan

for an ultimatum to Saddam to allow back in the UN weapons inspectors. This would also help with the legal justification for the use of force.

The Attorney-General said that the desire for regime change was not a legal base for military action. There were three possible legal bases: self-defence, humanitarian intervention, or UNSC authorisation. The first and second could not be the base in this case. Relying on UNSCR 1205 of three years ago would be difficult. The situation might of course change.

The Prime Minister said that it would make a big difference politically and legally if Saddam refused to allow in the UN inspectors. Regime change and WMD were linked in the sense that it was the regime that was producing the WMD. There were different strategies for dealing with Libya and Iran. If the political context were right, people would support regime change. The two key issues were whether the military plan worked and whether we had the political strategy to give the military plan the space to work.

On the first, CDS said that we did not know yet if the US battleplan was workable. The military were continuing to ask lots of questions.

For instance, what were the consequences, if Saddam used WMD on day one, or if Baghdad did not collapse and urban warfighting began? You said that Saddam could also use his WMD on Kuwait. Or on Israel, added the Defence Secretary.

The Foreign Secretary thought the US would not go ahead with a military plan unless convinced that it was a winning strategy. On this, US and UK interests converged. But on the political strategy, there could be US/UK differences. Despite US resistance, we should explore discreetly the ultimatum. Saddam would continue to play hard-ball with the UN.

John Scarlett assessed that Saddam would allow the inspectors back in only when he thought the threat of military action was real.

The Defence Secretary said that if the Prime Minister wanted UK military involvement, he would need to decide this early. He cautioned that many in the US did not think it worth going down the ultimatum route. It would be important for the Prime Minister to set out the political context to Bush.

Conclusions:

(a) We should work on the assumption that the UK would take part in any military action. But we needed a fuller picture of US planning before we could take any firm decisions. CDS should tell the US military that we were considering a range of options.

(b) The Prime Minister would revert on the question of whether funds could be spent in preparation for this operation.

(c) CDS would send the Prime Minister full details of the proposed military campaign and possible UK contributions by the end of the week.

(d) The Foreign Secretary would send the Prime Minister the background on the UN inspectors, and discreetly work up the ultimatum to Saddam. He would also send the Prime Minister advice on the positions of countries in the region especially Turkey, and of the key EU member states.

(e) John Scarlett would send the Prime Minister a full intelligence update.

(f) We must not ignore the legal issues: the Attorney-General would consider legal advice with FCO/MOD legal advisers. (I have written separately to commissionthis follow-up work.)

MATTHEW RYCROFT
(Rycroft was a Downing Street foreign policy aide)

2583. Re: Pointers for a homebrew 2-meter XCVRF

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-19 04:20:41 UTC
From: Bernard <bernard.debbasch_removethis_@mail.com>
Message-ID: <wuUie.137$8p.11@fed1read06>
Source record: 18816

Thanks for all the comments. Here is some feedback:

The Palomar telescope: quite an interesting story. My answer: would it be better if many could build their own with parts from Sears and Home Depot or is it better as a one of a kind made from Southern California trash ?

DSP10: definitely a very good design but with a different goal. I think that adding a DSP substantially increases the barrier to entry but I take note that this was suggested a few times (even if it will end up just replacing a $1.26 demodulator). In the TX chain the DSP implementation is actually more complicated because it would require an additional mixer (assuming that the only goal is FM) instead of directly modulating the VCO.

Taking parts from Radio and TV: this is how I got started in electronic 30 years ago. I would not suggest it to someone who is starting in the hobby. One reason is Murphy. This TV might be in the dumpster just because the one part you need failed !

Dan's Small Parts (http://www.danssmallpartsandkits.net/): very good, thanks for the link. I would sometimes want more information about some parts but I guess this is why there is a phone number to call.

Toaster reflow: I will look into this but this getting border line for me ! I decided a few years a go to stop making my own PCB's and order them online (APC circuit or alike). I may do the same for soldering !

Market for APRS + XCVR: I am not looking at it in term of market but rather combining 2 interests (RF and ΦP) on one platform.

Zero-IF: I don't know if this has been done in a decent 2-meter receiver. If anyone has a pointer I would be interested

Experimental Methods in RF Design: it is on my list of book to buy now (if you own this book, check the errata. They are online).

Mouser: I will have a better look at their line of inductors (by the way, I prefer adjusting the inductor due to some old memories of melting adjustable capacitors !)

Philips: yes I looked at them. The only part they have left is the SA615. This market is more or less gone. The big professional users are moving to digital voice...

TI: they have fast D/A (400 MHZ) out of which a motivated hobbiest could build a DDS but I did not see synthesizers or DDS parts. I will double check and have a second look at ADI's DDS

I will update the group after I make up my mind...

Bernard

2584. Re: Pointers for a homebrew 2-meter XCVRF

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-19 04:57:24 UTC
From: -exray- <exray@coqui.net>
Message-ID: <118o75od5dmnge8@corp.supernews.com>
Source record: 18817

Bernard wrote:

> Thanks for all the comments. Here is some feedback:
>
> The Palomar telescope: quite an interesting story. My answer: would it be
> better if many could build their own with parts from Sears and Home Depot or
> is it better as a one of a kind made from Southern California trash ?
>
> DSP10: definitely a very good design but with a different goal. I think that
> adding a DSP substantially increases the barrier to entry but I take note
> that this was suggested a few times (even if it will end up just replacing a
> $1.26 demodulator). In the TX chain the DSP implementation is actually more
> complicated because it would require an additional mixer (assuming that the
> only goal is FM) instead of directly modulating the VCO.
>
> Taking parts from Radio and TV: this is how I got started in electronic 30
> years ago. I would not suggest it to someone who is starting in the hobby.
> One reason is Murphy. This TV might be in the dumpster just because the one
> part you need failed !
>
> Dan's Small Parts (http://www.danssmallpartsandkits.net/): very good, thanks
> for the link. I would sometimes want more information about some parts but I
> guess this is why there is a phone number to call.
>
> Toaster reflow: I will look into this but this getting border line for me !
> I decided a few years a go to stop making my own PCB's and order them online
> (APC circuit or alike). I may do the same for soldering !
>
> Market for APRS + XCVR: I am not looking at it in term of market but rather
> combining 2 interests (RF and ï¿½P) on one platform.
>
> Zero-IF: I don't know if this has been done in a decent 2-meter receiver. If
> anyone has a pointer I would be interested
>
> Experimental Methods in RF Design: it is on my list of book to buy now (if
> you own this book, check the errata. They are online).
>
> Mouser: I will have a better look at their line of inductors (by the way, I
> prefer adjusting the inductor due to some old memories of melting adjustable
> capacitors !)
>
> Philips: yes I looked at them. The only part they have left is the SA615.
> This market is more or less gone. The big professional users are moving to
> digital voice...

> TI: they have fast D/A (400 MHZ) out of which a motivated hobbiest could
> build a DDS but I did not see synthesizers or DDS parts. I will double check
> and have a second look at ADI's DDS
>
> I will update the group after I make up my mind...
>
> Bernard
>
>
>
I can see this will be a difficult project for you....maybe not
technically, but emotionally.

If I may say so...

I find homebrewing 'any something' falls into one of two broad categories.

One is to play around with the mind of experimentation, not to spend
too much money at the outset, to learn from the failures, and have the
project on the shelf eternally awaiting modifications for better
performance.... and typically at several times the cost of a commercial
ready-made equivalent.

Two - would be trying actually build something state-of-the-art and
trouble-free with the anticipation of actually using it on a daily
basis....and typically at several times the cost of a commercial
ready-made equivalent :-)

Neither is bad but they are entirely different disciplines to the hobby
of rolling your own and this has to be determined early on as you plan
the project. Most of us wind up somewhere between the two extremes. "It
works great, but..." Over-thinking the project often results in never
getting started.

-Bill

2585. High Quality incredible low cost PC-to-phone and broadband phone services

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-19 13:57:38 UTC
From: John <john@yahoo.com>
Message-ID: <428c9b51$1@news.starhub.net.sg>
Source record: 18818

www.gateway2call.com PC-to-phone and broadband phone services enable you to make and receive worldwide calls with incredibly low rates. Anyone with a broadband (high-speed) internet access can use their PC, regular phone or cordless phone to make unlimited calls from anywhere to anywhere in the U.S. , Canada, & up to 36 countries for one low monthly rate. The Pay-as-you-go's call plans will meet users who prefer to go for the low per minute International toll rates when needs arise. Manage your account online, Our voicemail will auto forward voicemail to your email as an attachment when you are not available, forward call to any phone and more. Talk smart with clear connections for a fraction of the cost of regular long distance phone calls.

Tired of using headphones and a computer! Just pick up a normal touch-tone phone or cordless phone, dial a phone number and start talking! Our broadband phones use the latest technology to send your calls over the Internet to bring you the greatest features, save you money and still give you stable, reliable phone service! Our call servers support most Gateway systems and phone adaptors.

Gateway2call offers home and business plans to meet all your needs. Several plans include unlimited calling within the US and Canada. You may choose a monthly plan that comes with free Incoming phone number or a toll free 800 number so you are always get connected any time anywhere from any regular phone or mobile.

Please visit www.gateway2call.com for more exciting features and call plans, one will suit your personal or business needs.

2586. FS: EICO 710 GRID DIP METER - LIKE NEW

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-19 15:35:45 UTC
From: Tim <RespondToGroupPlease@YouUnderstand.com>
Message-ID: <ln2je.18847$J12.5857@newssvr14.news.prodigy.com>
Source record: 18819
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

EICO 710 GRID DIP METER - LIKE NEW

on eBay - 6 hours left

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5774252809&rd=1&sspagename=STRK%3AMESE%3AIT&rd=1

Thanks for looking.

Tim

2587. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-19 16:10:14 UTC
From: Someone Else <a@b.com>
Message-ID: <4hep81hq2o52q4i72seb0o0npnm9vju02l@4ax.com>
Source record: 18820
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

Jeremy Boden <jeremy@jboden.demon.co.uk> wrote:

>What band does a PC broadcast on?

It leaks on wide range, with peaks varying on different PC's. You can certainly hear it clearly enough bringing an AM radio near your computer.

2588. Re: Pointers for a homebrew 2-meter XCVR

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-19 17:10:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1cf668467773d5119896c1@news-central.giganews.com>
Source record: 18821

In article <HbGie.208$G46.175@fe02.lga>, xpyttl_NOSPAM@earthling.net
says...
> > 8) PLL: I am currently leaning towards National (LMX2306 or similar).
> They
>
> Think about DDS. There are some really nice DDS choices from Analog Devices
> and TI. TI has some really nice, cheap synthesizers. DDS is way less of a
> pain than PLL. TI's 440 MHz part can easily work down to 2 meters.

Maybe use an image from a plain old AD9850 or AD9851... no need for a
fast clock if you only want to cover a 4 MHz chunk of spectrum.

The National and Analog PLL chips are great, but not needed here.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

2589. Re: Pointers for a homebrew 2-meter XCVR

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-19 19:31:20 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <kdnp8156vr02bigruve0pdovifdnpmbds0@4ax.com>
Source record: 18822

On Wed, 18 May 2005 08:54:23 -0700, "RST Engineering"
<jim@rstengineering.com> wrote:

>> 1) Transistors for RX front end: relatively easy to find if based on
>> dual-gate MOSFET
>
>OK, but you can get better noise figure from a GaAs part.

True, however most uses for 2m a good transistor or fet will be
adaquate and likely easier to use. GaAs fets are harder to use
and can easily take off at microwave and harder to find.

For real fast lashups I've used MAR or ERA (MiniCircuits) MIMICS
and they are the easiest way to get good stable and predictable
gain at VHF through microwave and a kit of 30pieces was
around 49$ (ERA 1,2, and 3types). Parts can be had for
under 2$US in singles. Compared to transistors, FETs and
GaAs devices they are noiser but for a lot of things a MAR6
at 3db and 20DB gain to 1000mhz is not shabby.

>> 2) RX band filters: I have decided to have a fixed capacitor and adjust
>> the inductor.The availability of adjustable coils (Toko for example) has
>> decreased in the last few years. Digikey only stocks a few of them but
>> that should be OK in the near term.
>
>Mouser stocks a VERY nice line of low cost VHF shielded inductors. Google
>"xicon" and "tunable coil" on the Mouser website.

There are many suppliers. For 2m use it's possible to design with a
bandpass frontend easily and then tuning is less an issue. I just
wind coils and bend them as needed to tune. Programs to calculate
a coild for that are easy to find on the 'net.

>> 3) First IF filters: not much choice since 10.7MHz and 21.4 MHz seem to be
>> the only 2 frequencies stocked (most commercial boxes use between 35 and
>> 70 MHz). The IF inductors/transformers at 10.7 MHz and 455 KHz have
>> disappeared from Digikey (used to be there a few years ago).

However for those who care to it's possibel to roll your own. Ladder
filters using very common 20 or 24 mhz clock crystals are do able.

>Again, Mouser is your friend -- google "xicon" and "transformer". If I were
>doing it, I'd do a 70 MHz. first IF and then 10.7 MHz. second IF. Forget
>dropping down to 455 unless you have to.

Dual conversion using Murata and other 455khz filters is easy.
Motorola (3357 and friends) and other have a complete dual conversion

IF (everthing after first mixer) in a DIP and all you need is 10.7,
CFU455 filters and 455 if can for the quadarture dectector and 10.245
mixer crystal. These are easily ripped from:

Baby monitors, (flea markets and garage sales)
49mhz hts (non supperregen) (flea markets and garage sales)
Old scanners (flea markets and garage sales)
Other older radios that have been 4d (4d diseased, dying, dead
or decaying). (flea markets and garage sales)

>> 4) 2nd IF + FM demodulator. The Motorola parts (MC33xx) are gone. The part
>> that is found in many commercial XCVR is the Toshiba TA31136. This part is
>> not stocked by Toshiba's distributors in the US (12 weeks lead time if you
>> want to order 2K of them). Good news is that the Rohm BA4116FV is a
>> pin-to-pin compatible device and it is available at Digikey for $1.26. I
>> don't know if this part works since I have not seen it used anywhere...

There are suppliers selling NOS motorola parts:

http://www.danssmallpartsandkits.net/ has them sometimes
http://partsandkits.com/parts.asp has the 3362 at 2 for 4$ (good
source for toroids, NE602 and other bits).

>Phillips makes (made??) a nice line of FM ICs. You might give them a try.

The 604 can be hard to find.

>> 6) 2nd IF filter. The 455 KHz ceramic filters seem to have a very limited
>> availability. The exact type recommended by the IC vendor is hard to
>> find..

Often thats easy to substitute and wider (15kc) ones are easy to find.

>Why crystals? You are going to have a synthesizer for the front end anyway,
>why not use the synthesizer crystal as your timebase and synthesize the
>mixer oscillator? You said you wanted some stuff for the microprocessor to
>do anyway; controlling a synthesizer is one of them. Or, you could get a
>parallel input synthesizer and hardwire it to a fixed frequency.

The only way to go unless you doing a repeater or other fixed
frequency application. One caveat, it's far easier to create a clean
crystal LO chain and for super low noise frontends the LO must also
have narrow noise sidebands.

>> 7) FM discriminator. I could not find a source for the ceramic
>> discriminator recommended by Toshiba/Rohm (CDLBLA455KCAY24-B0 which is the
>> new P/N for the CDB450C24). I can understand the pain of the distributors
>> since every FM IC requires a different discriminator. The discriminator
>> coil that can be used instead is not easier to locate.
>
>A discriminator (or ratio detector) is nothing more than a couple of
>transformers coupled bottom to top. You can make a two-coil ratio detector
>as easy as buying one.

True, the ratshlock PRO4, Pro12, series and the Pro7 series scanners used a trnsistor 455khs IF and two common IF cans for a discriminator with excellent results. The transistors were of the 2n2222/2n3904 equivelent class easily gotten form JDR at 4-6 cents each.

You can do a quadrature detector using a single IF can and a NE602 mixer.

>> 11) TX low pass filter: will need to be hand made. That's OK but who is
>> selling tinned wire ?
>
>Why would you need tinned wire? Plain old magnet wire is easy to come by.

Yep! tinned is not a requirement. Besides of you do it right you not going to need much.

I've used MAR6 mimic (cheap from Minicircuits) as RF with a TUF1 DBM feeding a MPF102 fet with it's output running into a textbook 3357 if chain for both 2m and similar for 440 and it's clean, easy and plenty of gain (sub .12 uv for 10db quieting FM). The Moto 3357 came from a 49mhz HT along with the 10.245 crystal, 10.7 filters and 455filter. I used a moto 145170 pll for the LO. Since the 3367 also does metering and squelch all it needed was audio (LM386-N). The front end was low loss (1db) bandpass before the MAR6 and image stripping (Higher loss bandpass) after the MAR6. the DBM can be one of a dozen different parts had cheap or even hand made (1n914s work ok at 2m). The post DBM fet was not optimized for gain only to buffer the DBM from the Crytal filter (10.7mhz).

Of course of you want something as a kit Ramsy has a FM rx for (FR146C is 2m, they have 10m, 6m and 220) that can be used for that range and has fair rx performance but needs either crystal control (NE602 VFO is not adaquately stable) or PLL either of which is usable with that. (it's cheap too! 44.95$US). They do about .7 uV for decent quieting and they do also sell a RF preamp thats decent. I've built both and they work as expected using the VFO and better with crystal control.

For experimentors its possible to do it. Parts even old ones are often found from small suppliers at resonable prices. Like someone said earlier learning where and what to look for is a big part of home made radio systems. It also helps to learn how to strip and use "old" parts.

Allison
KB1GMX

2590. Re: Pointers for a homebrew 2-meter XCVRF

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-19 19:45:17 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <jfqp81tkuoushlqu0rm4685bcf2mqrq2s7@4ax.com>
Source record: 18823

On Thu, 19 May 2005 00:57:24 -0400, -exray- <exray@coqui.net> wrote:

>> Experimental Methods in RF Design: it is on my list of book to buy now (if
>> you own this book, check the errata. They are online).

Must have as well as a Radio Amatuers Handbooks of differing years!

>I can see this will be a difficult project for you....maybe not
>technically, but emotionally.
>
>If I may say so...
>
>I find homebrewing 'any something' falls into one of two broad categories.
>
> One is to play around with the mind of experimentation, not to spend
>too much money at the outset, to learn from the failures, and have the
>project on the shelf eternally awaiting modifications for better
>performance.... and typically at several times the cost of a commercial
>ready-made equivalent.
>
>Two - would be trying actually build something state-of-the-art and
>trouble-free with the anticipation of actually using it on a daily
>basis....and typically at several times the cost of a commercial
>ready-made equivalent :-)
>

Then there are people like me. I build in the middle. I often want
something that may not be state of the art (but still works excellent)
and is specifically not feature laden yet still require stable and
robust operation. I've done 6m transceivers that easily hear better
than the best and TX with a clean high quality signal that are not
state of the art. Please never equate the lack of state of the art
with well executed design as the latter can be as good or better due
to fewer compromizes that a production design might suffer. Shielding
is one matter where the homebrewer can easily exceed commerial.

Another area is designs where labor counts. Often my time is cheap
but using a commercial coil or crystal filter is not. So making my
own may factor $s for time.

>Neither is bad but they are entirely different disciplines to the hobby
>of rolling your own and this has to be determined early on as you plan
>the project. Most of us wind up somewhere between the two extremes. "It
>works great, but..." Over-thinking the project often results in never
>getting started.
>

>-Bill

That kills most projects! Sometimes it's "better" to plunge in and
have a few bits that fail or just done meet expectations. If the
midset is right you just redesign it, replace it and keep building.
Sometimes along the way you can also make a discovery
that will enlighten.

Allison
KB!GMX

2591. FS: Coaxial Cable & Connectors - high Quality, low cost

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-20 14:55:37 UTC
From: AAA RF Products <info@aaarfproducts.com>
Message-ID: <8Tmje.3685$Qp.3424@fed1read04>
Source record: 18824
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Please email info@aaarfproducts.com to request our free catalog.

AAA RF Products
946 Calle Amanecer
San Clemente, CA 92673

Phone: 949 481 3154
Fax: 949 388 5448
email: info@AAARFProducts.com
web: www.aaarfproducts.com

2592. s.a.r.b.question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-20 15:42:48 UTC
From: hartlyuk@yahoo.com
Message-ID: <1116603768.600803.195830@z14g2000cwz.googlegroups.com>
Source record: 18825

I have an aero. search and rescue beacon transceiver from a Govt.
surplus store.
When I connect the homemade(bike spoke) ant. to the casing(at the same

time it is connected to the proper ant.input site) it changes to
receiving a different air to ground conversation,than if I don't
connect it to the casing.I presume it must be changing the frequency of

transmission received.
Why/how does this occur?.
Thanks.

2593. Re: Coaxial Cable & Connectors - high Quality, low cost

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-20 17:00:26 UTC
From: Travis Jordan <no.one@no.net>
Message-ID: <KIoje.476962$A81.329144@fe08.news.easynews.com>
Source record: 18826
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

AAA RF Products wrote:
> Please email info@aaarfproducts.com to request our free catalog.
> email: info@AAARFProducts.com
> web: www.aaarfproducts.com

Haven't we seen you before? Usenet is not a write-only medium, you
know.

> Welcome to usenet. We certainly enjoyed your posting and hope that
> your email address sales@aaarfproducts.com attracts some potential
> customers. I guess because you want to get email at
> sales@aaarfproducts.com ?
>
> Why don't you post your catalog on your web site? Perhaps your web
> designer dallas@hyperartdesign.com would like to have a catalog, too,
> so they can do that. Or maybe raphael@hyperartdesign.com should get a
> copy so she can put it there.
>
> In any case, thanks so much for stopping by.

2594. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-21 01:03:40 UTC
From: john graesser <graesser@tca.net>
Message-ID: <118t1tfn4b0jsc3@corp.supernews.com>
Source record: 18827
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

<shoppa@trailing-edge.com> wrote in message
news:1116180057.598783.160160@g14g2000cwa.googlegroups.com...
> I'm looking for a solid desktop (either pizza-box or mini-tower)
> computer case that has an all-metal exterior for shielding RFI. This
> is for use around radios etc. I realize that SVGA monitors, mice, and
> keyboard leak too, but right now I'm looking mainly at the PC box.
>
> Most of the cheaper cases come pretty close to good shielding, but they
> have these plastic filler panels in the drive bays that offer no
> shielding and let a lot of RF leak out.
>
> Most of the fancier cases in the computer stores around here have
> humongous plastic pieces on the side. I'm looking for all-metal.
>
> Rack-mount server cases seem to be pretty good in terms of metal
> shielding all around but I need something for desktop use.
>
> Any suggestions? If all else fails I can just put some perforated
> metal over the holes in a cheap case, but I'd rather just buy a good
> case to begin with.

All the cases I have bought have a metal insert that mounts behind the
plastic front piece. If that isn't there a simple piece of aluminum screen
wire could be cut and fit on the back side of the drive bay.

2595. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-21 01:18:41 UTC
From: lcw999 <lcw999@bellsouth.net>
Message-ID: <pan.2005.05.21.01.18.34.740331@bellsouth.net>
Source record: 18828
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

Tim..

Having dabbled around in this noisy rf environment for
about 20 years..the following things will help:

1. The Antec Sonata is a good starting point as far
as cases go.
2. Get away from the noise of the convential CRT
monitor! Check on a good Flat panel from NEC or
Samsung and many others. Study up on the FCC type
shielding they adhere to...usually Canada, Japan
Korea and others. Usually they are represented by the
series of stickers of authenication as to rf rules
they adhere to. This has improved over time.

Also, some old video cards have a lot of rf type noise.
If you have an older sound card, many of them have
digital/analogue converters that sing with noise and
Rf.

Be extremely awsare of any "switching power supplies"
these are a nightmare, generally, in a radio environment.
Stay away from these supplies..confirm that it is not
a switching supply.

Also, the battery back up power supply has
the same problem in a radio environment...they
emit unbearable noise on most radios..particularly
on the 80/75 meter bands.

Put your PCI card slot metal shields in where
you've removed the PCI card. Also, most of the
good cases, including the Antec, have some RF
shields..I've never proven to myself if these
work or not..however, these in theory help
maintain a lot of RF energy from escaping from the
above mentioned components..however, it is best
to get a better built component that does not
radiate much RF.

Make sure the radio is removed from the PC area as
far as possible...also note the reduction in noise
at different angles from the PC. Mind you, an old
CRT monitor will wipe you out with noise. A small
palm held am radio put next to a pc will help

find out which component is offending you. Note
also, on difficult situations, there are all types
of shielding material. Don't overlook your AC power
and noise brought in on the lines. Some power
filtering supplies from some cable suppliers
will help.

Good luck,

Leonard...

P.S some cheap fans cause electrical noise.
Again pc positioning is critical.
Google on rf shielding material

On Sun, 15 May 2005 11:00:57 -0700, shoppa wrote:

> I'm looking for a solid desktop (either pizza-box or mini-tower)
> computer case that has an all-metal exterior for shielding RFI. This
> is for use around radios etc. I realize that SVGA monitors, mice, and
> keyboard leak too, but right now I'm looking mainly at the PC box.
>
> Most of the cheaper cases come pretty close to good shielding, but they
> have these plastic filler panels in the drive bays that offer no
> shielding and let a lot of RF leak out.
>
> Most of the fancier cases in the computer stores around here have
> humongous plastic pieces on the side. I'm looking for all-metal.
>
> Rack-mount server cases seem to be pretty good in terms of metal
> shielding all around but I need something for desktop use.
>
> Any suggestions? If all else fails I can just put some perforated
> metal over the holes in a cheap case, but I'd rather just buy a good
> case to begin with.
>
> Tim.

2596. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-21 01:33:49 UTC
From: adykes@panix.com
Message-ID: <d6m35t$be2$1@panix5.panix.com>
Source record: 18829
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

In article <pan.2005.05.21.01.18.34.740331@bellsouth.net>,
lcw999 <lcw999@bellsouth.net> wrote:
>
>
>Tim..
>
>Having dabbled around in this noisy rf environment for
>about 20 years..the following things will help:
>
> 1. The Antec Sonata is a good starting point as far
>as cases go.
> 2. Get away from the noise of the convential CRT
>monitor! Check on a good Flat panel from NEC or
>Samsung and many others. Study up on the FCC type
>shielding they adhere to...usually Canada, Japan
>Korea and others. Usually they are represented by the
>series of stickers of authenication as to rf rules
>they adhere to. This has improved over time.
>
> Also, some old video cards have a lot of rf type noise.
> If you have an older sound card, many of them have
> digital/analogue converters that sing with noise and
> Rf.
>
> Be extremely awsare of any "switching power supplies"
>these are a nightmare, generally, in a radio environment.
>Stay away from these supplies..confirm that it is not
>a switching supply.

All PC power supplies are of the switching type.

A laptop running on it's batteries may be the quietest out-of-the-box
system.

A "KVM" (remote "keyboard/video/mouse") box will allow you to put your
PC many feet away from your radio. Use this with an LCD screen.

Some models are here: http://makeashorterlink.com/?E27C22D1B

--
a d y k e s @ p a n i x . c o m

Don't blame me. I voted for Gore.

2597. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-21 08:47:19 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <hhrt81tj2tju0t47u76e93v072rklk747q@4ax.com>
Source record: 18830
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

On 20 May 2005 21:33:49 -0400, adykes@panix.com (Al Dykes) wrote:

>A "KVM" (remote "keyboard/video/mouse") box will allow you to put your
>PC many feet away from your radio. Use this with an LCD screen.

What would that help, unless we are talking about at least one hundred
meters ?

The important thing is to keep the radiation away from the _antenna_.

For the direct connection of noise from the computer to the radio,
audio transformers can be used to connect the sound card to the radio
and an optoisolator for the PTT signal. This will eliminate any direct
galvanic connection between the systems, thus preventing noise
currents from flowing from the computer via the radio to the antenna
ground, causing all kinds of interference on the way.

As I said above, it is important to minimise the radiation from the
computer from reaching the antenna.

Paul OH3LWR

2598. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-21 09:50:03 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <TuGdnd7GBp3SmRLfRVnyiQ@pipex.net>
Source record: 18831
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

> Be extremely awsare of any "switching power supplies"
> these are a nightmare, generally, in a radio environment.
> Stay away from these supplies..confirm that it is not
> a switching supply.

Professional receivers like the ones from Watkins -Johnson have internal
(obviously high quality) SMPS

> Also, the battery back up power supply has
> the same problem in a radio environment...they
> emit unbearable noise on most radios..particularly
> on the 80/75 meter bands.

I have an APC - Back-UPS PRO650 less than a metre away from my TenTec
transceiver and do NOT suffer from noise on any band ,because of this UPS
(which is always on -line).

Frank GM0CSZ / KN6WH

2599. dsPIC audio processor PCB

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-21 10:17:22 UTC
From: Leon Heller <leon.heller@dsl.pipex.com>
Message-ID: <7fidnfCUd_solxLfRVnyvw@pipex.net>
Source record: 18832

I've got a few of my dsPIC audio processor PCBs left. It's a single-sided board and takes the DIL40 dsPIC30F4013 and SI3000 codec. $10 each plus postage.

73, Leon
--
Leon Heller, G1HSM
http://www.geocities.com/leon_heller

2600. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-21 10:54:59 UTC
From: Drifter <Drifter@pgh.com>
Message-ID: <428F1382.CC907DFB@pgh.com>
Source record: 18833
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

I have an APC - Back-UPS PRO650 less than a metre away from my TenTec
transceiver and do NOT suffer from noise on any band ,because of this
UPS
(which is always on -line).

****
i use 2 of the APC CS 500. lot of noise. i wraped both in alu-screening.
and grounded both to third pin on the mains. cleared up that noise. and,
if you use a router, check out the d-link- DI604. i used a link-sys for
too many years. they were cheap and easy to set up. tried all the known
name routers. ended up with the d-link DI-604. no noise at all. i have
a friend who's a manager for compUSA, and she let me try a bunch. this
is
wired, i didn't try the wireless units...
good luck/ just my 2 cents...
Drifter...

2601. Re: s.a.r.b.question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-21 11:19:39 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <VA.00000105.00742074@btinternet.com>
Source record: 18834

Hi,

If it is a UK SARBE unit made by Burndept, it probably uses a super-regenrative receiver (i.e. self-oscillating detector) hence the tendency to pull in frequency. They were designed as a 'downed-airman' distress beacon on 121.5 or 243MHz (usually with a secondary non-distress channel), where the receive specification doesn't need to be particularly high and with a low battery consumption figure.

Horrible things, although I guess they will have saved a good few lives in their time.

Cheers - Joe

2602. Re: FCC BUST IN TEXAS

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-21 12:53:07 UTC
From: Jim Douglas <james.douglas@genesis-software.com>
Message-ID: <Uf-dnbdTnN2JshLfRVn-tw@comcast.com>
Source record: 18835

But think about it, as more and more stations go to satellite it will free
up freq for this type of stuff.

<willfull_buck@yahoo.com> wrote in message
news:1116061077.163644.153230@g47g2000cwa.googlegroups.com...
> Hey Folks,
> Kinda down at the moment, our college radio station got busted by the
> FCC. Here a list of the stuff that was hauled off:
>
> NRG PLL-PRO 3 20W TRANSMITTER
> NRG 220 WATT RF LINEAR AMPLIFIER
> NRG PRO III STEREO CODER
> NRG PRO III STEREO LIMITER COMPRESSOR
> DAIWA CN-101L SWR+POWER METER
> COMET CFM-95SL 5/8 WAVE ANTENNA
> 50 FEET OF LMR 400 COAX
> KENWOOD R-1000 SW RECEIVER (my fathers old short-wave radio?)
>
> The really weird part is that we WERE NOT transmitting at the time of
> the raid. One of the agents tolds us that they traced us through a
> purchase order from Broadcast-Warehouse! It's true that we bought a
> 150w amp from broadcastwarehouse.com a few weeks ago. How did the FCC
> know about that?
>
> Anyways, we will rebuild the station and continue to fight the globle
> interests of the MEGA-MACHINE.
>
> DEATH TO THE MEGA-MACHINE!
>

2603. AEA vsb-70 transceiver Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-21 18:04:02 UTC
From: Dr Dave <wvdave1st@hotmail.com>
Message-ID: <mKKje.602$gl1.76@trnddc09>
Source record: 18836
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,alt.ham-radio.atv

Looking for a copy of the owners manual and or Schematic for the AEA vsb-70 transceiver .

Downloadable PDF would be ok.

Dave

2604. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-21 22:59:12 UTC
From: Tony VE6MVP <tony@REMOVEve6mvp.com>
Message-ID: <27fv81tff904k2c9vp20tc8fsggjilja2s@4ax.com>
Source record: 18837
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

On Sun, 15 May 2005 20:08:27 +0100, Jeremy Boden
<jeremy@jboden.demon.co.uk> wrote:

>What band does a PC broadcast on?

My laptop screws up my HT on two frequencies in the VHF band. I have to be at least 20 or 30 feet away before the hiss goes away. The same hiss is still present when the laptop is unplugged so it's not the power adapter.

Tony

2605. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-21 23:46:37 UTC
From: Fred W4JLE <w4jle@w4jle.com>
Message-ID: <920ae$428fc86d$438df1ec$18806@ALLTEL.NET>
Source record: 18838
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Mr. Ewald, if you would be so kind as to keep me informed of the value of this famous letter.

I also have several that I can only hope will bring in enough need funds to enable me to buy a new pack of Redman!

"Bill" <k4wge@arrl.net> wrote in message news:1116706052.516063.221960@g47g2000cwa.googlegroups.com...
> Speaking of "Fractenna", I have place a letter from him on eBay - -
>
>
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5776486531&rd=1&sspagename=STRK%3AMESE%3AIT&rd=1
>
>
> He's been carrying on in QRZ forums since AOL dropped usenet groups.
> Same old Chip.
>

2606. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-22 00:48:35 UTC
From: oldradiofan <oldradio@fan.com>
Message-ID: <qdlv8117ruarb645jqjr5ldmj2j8brgom6@4ax.com>
Source record: 18839
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

The ideal station accesory...

How do I get one?

And does this mean r.r.a.antenna is nutcase-free?

On Sat, 21 May 2005 19:46:37 -0400, "Fred W4JLE" <w4jle@w4jle.com>
wrote:

>Mr. Ewald, if you would be so kind as to keep me informed of the value of
>this famous letter.
>
>I also have several that I can only hope will bring in enough need funds to
>enable me to buy a new pack of Redman!
>
>"Bill" <k4wge@arrl.net> wrote in message
>news:1116706052.516063.221960@g47g2000cwa.googlegroups.com...
>> Speaking of "Fractenna", I have place a letter from him on eBay - -
>>
>>
>http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5776486531&rd=1&sspagename=STRK%3AMESE
%3AIT&rd=1
>>
>>
>> He's been carrying on in QRZ forums since AOL dropped usenet groups.
>> Same old Chip.
>>
>

2607. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-22 01:01:37 UTC
From: - exray - <exray@coqui.net>
Message-ID: <118vmfln6a5ljdd@corp.supernews.com>
Source record: 18840
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Fred W4JLE wrote:

> Mr. Ewald, if you would be so kind as to keep me informed of the value of
> this famous letter.
>
> I also have several that I can only hope will bring in enough need funds to
> enable me to buy a new pack of Redman!

And all I got out of Chip and his $200,000,000 lawsuit threat was a friggin threatening e-mail instead of a hard copy with seals and stamps. You guys are tops!

Wonder how much I could sell the email copy for?

This line alone is priceless.

"Sir: I am not "Snake Oil...". This statement and others are highly injurious and being made upon a public forum which has many readers who are involved in buying decisions, indeed, at the present time and near to long term. I have grave concerns that the continued injury of your statement will affect sales on this line of antennas, which has an immediate market niche in excess of $200 million in sales."

And for legal purposes, I hereby disclaim any knowledge of this person's sanity or how this found its way to my email box.

And to save the bother...I hereby retract all of this posting so as to not continue any injury.

I'll start the bidding at -0.01 and put on a reserve that I will not pay more than One US Dime to supply the entire text to the lucky high-bidder.

-Bill

2608. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-22 02:01:15 UTC
From: Roger <Delete-Invallid.stuff.groups@tm.net>
Message-ID: <nnmv81pdu70e4qhgie76qmrb8thlciinhf@4ax.com>
Source record: 18841
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

On 15 May 2005 11:00:57 -0700, shoppa@trailing-edge.com wrote:

>I'm looking for a solid desktop (either pizza-box or mini-tower)
>computer case that has an all-metal exterior for shielding RFI. This
>is for use around radios etc. I realize that SVGA monitors, mice, and
>keyboard leak too, but right now I'm looking mainly at the PC box.

I haven't seen a case that wasn't metal. Some/most have plastic
fronts over the metal.
>
>Most of the cheaper cases come pretty close to good shielding, but they
>have these plastic filler panels in the drive bays that offer no
>shielding and let a lot of RF leak out.

As do the expensive ones as well. The $30 - $40 ones I've used had
metal pieces that had to be removed from the 5 1/4" bays to use them.
Unfortunately when in use the drives have plastic fronts even if they
do have a metal chassis.

>
>Most of the fancier cases in the computer stores around here have
>humongous plastic pieces on the side. I'm looking for all-metal.

Standard is metal, fancy is a plastic insert with metal cross pieces
and a lighted fan for effects.
Surprisingly, those come with metal covers over the drive bays behind
the plastic ones in the front panel.
>
>Rack-mount server cases seem to be pretty good in terms of metal
>shielding all around but I need something for desktop use.
>
>Any suggestions? If all else fails I can just put some perforated
>metal over the holes in a cheap case, but I'd rather just buy a good
>case to begin with.

Find a local computer store and look at the cases they handle. Look
them over and find which ones have the metal pieces over the drive
bays. They aren't inserts, they are actually part of the front
stamping and have to be broken out. Sorta like knockouts in
electrical boxes.

However, I doubt you will find much relief even with a full metal
case.

I built up all 4 computers we use here using standard parts.

Now, I have one of those with the plastic insert on the side setting about a foot and a half below my rigs (Icom 756 Pro, Alpha 76A, Alinco DR610T, and Kenwood TMV7A. The computer is an MSI K7N2Delta Platinum with a 3.2 Gig Athlon, 1 Gig 400 MHz CAS-2 DDR Ram, 400 Gig SATA RAID, and three EIDE 7200 RPM HDs totaling 920 Gig. The monitor (19" CRT)sets directly above the two duobanders. About three feet to the left is this computer which is the standard all metal case with an MSI K8N Neo Series with a 3.4 Gig 64-bit Athlon, 2 Gig 400 MHz Dual, DDR RAM.and about 650 Gig of HD space. (I don't have the SATA RAID installed yet.) The monitor is a 17" NEC 1760v. Each computer is on its own UPS.

All have the dual layer, high speed DVD R/W drives and are part of a gigabit network that has two more computers. There is a 5 port gigabit switch, router, and cable modem less than two feet to the left of the duobanders and just over three feet from the HF rig. (I also run the legal limit from 160 through 10)

I have no detectable interaction between the rigs and the computer system in the house. The one in the shop will break the squelch if you put the HT next to the case, or hold the antenna for the best pick up, out to about 3')

I just brought the HT (VX-7R) in and the squelch did not open even when touching the antenna to the individual computer cases.
I should add that right now the network is running near capacity with backups across the network and several large downloads from the cable modem.

My wife's computer is about 15 feet to the south (in another room) and I do not hear it with the HT in there. The one is the shop is at the end of about 115 feet of Cat-5e and I use the HT within a foot of the monitor. That one is only a 2 Gig Athlon, but it too has 620Gig of HD space and a 19" CRT monitor. Those too are MSI motherboards with my wife's being a K7N2 Delta series and 2.8 Gig Athlon. I've forgotten the model of the one in the shop, but it's the oldest of the four. BTW, that case is also one of those with the plastic side windows and lighted fan.<:-))

Whether it's the motherboards, the cases, grounding, or a combination, I don't know, but interference has not been a problem...unless you count the electric fence across the road. Why I can not pick up the computers at all in here, but can open the squelch out to about 3' from the computer in the shop under ideal conditions I have no idea. I think it's more of a crap shoot. Some high end systems bother as bad as some low end systems while some low end systems cause no problems.

All four computers run 24 X 7.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com

>
>Tim.

2609. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-22 02:04:13 UTC
From: Roger <Delete-Invallid.stuff.groups@tm.net>
Message-ID: <g3qv81hh3js56a7nsqjt61qkj4im8u1qte@4ax.com>
Source record: 18842

On 16 May 2005 01:13:01 GMT, bg998@FreeNet.Carleton.CA (Martin Potter)
wrote:

>
> (shoppa@trailing-edge.com) writes:
>> I'm looking for a solid desktop (either pizza-box or mini-tower)
>> computer case that has an all-metal exterior for shielding RFI. This
>> is for use around radios etc. I realize that SVGA monitors, mice, and
>> keyboard leak too, but right now I'm looking mainly at the PC box.
>>
>
>
>Have you considered trying an old used HP computer case, one that was used
>by government? My Linux box is an HP Kayak XA (Pentium II 350 MHz) that

Most of the new boxes are very well shielded with knockouts in the
drive bays. .

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com
>has a Tempest-certified case. It was used by the Canadian government for
>classified work and it was part of a lot that I bought from Crown Assets
>Disposal. I expect that anything similar would satisfy your needs. (My
>Linux box does't need all that shielding but why bother changing it?!)
>
>... Martin VE3OAT
>
>

2610. WTB: 4CX/4X Series 2 Meter Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-22 02:58:44 UTC
From: KC0EH <cvest@cox.net>
Message-ID: <DySje.9717$Db6.5895@okepread05>
Source record: 18843
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Wanted to buy amplifier ONLY , power supply not neccessary. Consider homebrew, basket cases etc. Amplifer using 4X or 4CX series tubes. Will consider most anything within my budget.

73

...Charlie...KC0EH...KC0EH@arrl.net

2611. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-22 04:08:32 UTC
From: Fred W4JLE <w4jle@w4jle.com>
Message-ID: <12bbe$429005d1$438df1ec$13729@ALLTEL.NET>
Source record: 18844
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

I have an entire collection of E-mails. When I had my other website up, one of the links went to the Liberty Net. He concluded from this that he also had a case against me for anti Semitism. He was supposed to serve me in three days, I had a countdown clock on the website counting the days. When it finally got up to 167 days I took it off.

If you really want a letter of your very own, go to QRZ and offer fractal Antenna kits for sale. :>)

"- exray -" <exray@coqui.net> wrote in message news:118vmfln6a5ljdd@corp.supernews.com...
> Fred W4JLE wrote:
>
> > Mr. Ewald, if you would be so kind as to keep me informed of the value of
> > this famous letter.
> >
> > I also have several that I can only hope will bring in enough need funds to
> > enable me to buy a new pack of Redman!
>
> And all I got out of Chip and his $200,000,000 lawsuit threat was a
> friggin threatening e-mail instead of a hard copy with seals and stamps.
> You guys are tops!
>
> Wonder how much I could sell the email copy for?
>
> This line alone is priceless.
>
> "Sir: I am not "Snake Oil...". This statement and others are highly
> injurious and being made upon a public forum which has many readers who
> are involved in buying decisions, indeed, at the present time and near
> to long term. I have grave concerns that the continued injury of your
> statement will affect sales on this line of antennas, which has an
> immediate market niche in excess of $200 million in sales."
>
> And for legal purposes, I hereby disclaim any knowledge of this person's
> sanity or how this found its way to my email box.
>
> And to save the bother...I hereby retract all of this posting so as to
> not continue any injury.
>
> I'll start the bidding at -0.01 and put on a reserve that I will not pay
> more than One US Dime to supply the entire text to the lucky high-bidder.

>
> -Bill

2612. Re: AEA vsb-70 transceiver Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-22 08:09:02 UTC
From: Lee <lo012a4519@blueyonder.co.uk>
Message-ID: <y6Xje.74269$a9.51317@fe3.news.blueyonder.co.uk>
Source record: 18845
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,alt.ham-radio.atv

"Dr Dave" <wvdave1st @hotmail.com> wrote in message
news:mKKje.602$gl1.76@trnddc09...
> Looking for a copy of the owners manual and or Schematic for the AEA
vsb-70
> transceiver .
>
> Downloadable PDF would be ok.
>
> Dave
>
>

uk.radio.amateur

They may help

Lee....G6ZSG.....

2613. Re: dsPIC audio processor PCB

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-22 11:48:54 UTC
From: Leon Heller <leon.heller@dsl.pipex.com>
Message-ID: <tPSdnc6Bk9U47A3fRVnyvw@pipex.net>
Source record: 18846

Details of the board are here:

http://www.geocities.com/leon_heller/dspic.html

73, Leon

2614. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-22 18:28:43 UTC
From: Buck <iam@this.site>
Message-ID: <poj1911a3qkdc5u2o9dcgcsatpb04iu7qa@4ax.com>
Source record: 18847
Body handling: HTML body converted to readable text

On Sat, 7 May 2005 23:47:00 -0700, "John Smith"
wrote:

>Decades have brought us moon landing, mars landings,masers, lasers, lets,
>fets, mosfets, computers, etc...
>
>But the shape of radio equip. has remained virtually stagnant.
>
>One "innovation" would be to just copy what the IBM clone has taught us.
>
>Build a radio of "cards." Just like the computer, a standard case which you
>can plugin various power supplies, frontend board "cards", intermediate
>board "cards", buffer amp board "cards", IF board "cards", audio board
>"cards", xmitter board "cards", final amp board "cards", etc.... you get the pic>
>
>One radio case can/could virtually be any radio you can imagine.... new
>design in a frontend? Plug in a new front end "card", new audio offering?
>Plug in a new audio board "card."
>
>Someone really should get off a dead duff somewhere and DO IT!!!!
>
>Kinda makes ya wonder why not? Doesn't it?
>
>Warmest regards,
>John

They aren't all that, but do you remember the Atlas 180 or 10 radios?

Buck
--
For what it's worth.

2615. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-22 18:31:40 UTC
From: Buck <iam@this.site>
Message-ID: <vtj191dcslurlr9liuovqn9oj9hcu3m3qu@4ax.com>
Source record: 18748
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Sat, 21 May 2005 19:46:37 -0400, "Fred W4JLE" <w4jle@w4jle.com>
wrote:

>Mr. Ewald, if you would be so kind as to keep me informed of the value of
>this famous letter.
>
>I also have several that I can only hope will bring in enough need funds to
>enable me to buy a new pack of Redman!

If you have an eBay account, you can add it to your watch list and see
the results.

I would like to know more about this as my curiosity has been tweaked.
I did a search and find mostly works from the person but no
interaction that would cause such a letter.

Where might I learn more?

Buck
--
For what it's worth.

2616. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-22 18:42:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0hk191p6qq7cuslj5ejt1rs37di0gadcp5@4ax.com>
Source record: 18749
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Sun, 22 May 2005 14:31:40 -0400, Buck <iam@this.site> wrote:

>Where might I learn more?

Hi Buck,

Do you frequently volunteer to drink from a fire-hose? That's a
dribble compared to the Penstock you are about to open.

73's
Richard Clark, KB7QHC

2617. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-22 18:44:43 UTC
From: Buck <iam@this.site>
Message-ID: <p4k191l3h6927rn4bsk8si0ap3dessmbt2@4ax.com>
Source record: 18750

On Sun, 08 May 2005 12:23:14 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>
>As one of the "other people", I find it kind of insulting. Do you really
>think his is a valid point of view, that everyone else should jump up
>and implement his great idea, while this anonymous person's job is to
>tell us what we should do?
>
>I really do think that a caustic comment was appropriate.
>
>Roy Lewallen, W7EL

I don't know about the 'caustic comment', but I believe the OP has a
serious lack of understanding about both manufacturing and marketing.
The radios we use today are extremely complex and sophisticated.
Keeping everything from interacting and interfering with each other
inside seems to be a challenge for engineers. How much more a
challenge would a radio as he suggested be? Also, from a marketing
stand point, has he noticed how Kenwood and Icom connections are so
very different? The manufacturers don't want users using many outside
options. And what about the cost of adding all those connections for
the competitors to add modules? Who gets to pay for all that? If you
do get one, how do you know it won't draw too much current and burn up
something else, interact with another component causing RFI, or
what-have-you?

If there should be progress, it should be in the software operation of
these rigs. I believe there is much progress there, although in
regards to the 706 line, Icom does have some room for improvement.

just my opinion...

Buck
--
For what it's worth.

2618. freq doubler -> 1GHz - 2GHz (Mixer?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-22 21:51:56 UTC
From: Mikal <accclass101@hotmail.com>
Message-ID: <1116798716.532775.39120@z14g2000cwz.googlegroups.com>
Source record: 18751

Can someone help me? I'd like to come up with a freq doubler that will do 1 GHz to 2 GHz (from a 500MHz to 1Ghz source). I thought of using a mixer and simply tieing the RF and LO and getting my out on the IF, but all the spec's for all the parts I've seen are assuming downconversion, and the RF & IF is in the multi-GHz ranges, while the IF is below 1.5 GHz at best. I also seem to remember reading somewhere, that you can also use the IF port as the RF port, and get the result from the (original) RF port. Will this work? I'm working with about a 1-5 dbm signal (I guess I can through in an mmic if I need more power, but I'd like to keep the circuit small).
I haven't quite been down the road of tripling yet, as I'd like to keep the error multiplication down (2 is better than 3).

-mikal

2619. Re: freq doubler -> 1GHz - 2GHz (Mixer?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-22 22:50:40 UTC
From: artie <artie.m@gmail.com>
Message-ID: <220520051550403512%artie.m@gmail.com>
Source record: 18752

In article <1116798716.532775.39120@z14g2000cwz.googlegroups.com>,
Mikal <accclass101@hotmail.com> wrote:

> Can someone help me? I'd like to come up with a freq doubler that will
> do 1 GHz to 2 GHz (from a 500MHz to 1Ghz source). I thought of using a
> mixer and simply tieing the RF and LO and getting my out on the IF, but
> all the spec's for all the parts I've seen are assuming downconversion,
> and the RF & IF is in the multi-GHz ranges, while the IF is below 1.5
> GHz at best. I also seem to remember reading somewhere, that you can
> also use the IF port as the RF port, and get the result from the
> (original) RF port. Will this work? I'm working with about a 1-5 dbm
> signal (I guess I can through in an mmic if I need more power, but I'd
> like to keep the circuit small).
> I haven't quite been down the road of tripling yet, as I'd like to
> keep the error multiplication down (2 is better than 3).
>
> -mikal
>

http://www.minicircuits.com/dg03-204.pdf

Here's their line of doublers. All involve 12-15dB of conversion loss,
and want input signals on the order of 10-15 dBm input levels, so
you're going to have to boost the signal before the multiplier as well
as after (as well as doing some filtering to remove unwanted f1, f3,
and f4 products).

The AK-3000 and RK-3000 doublers are thru-hole packages with 70-1500
MHz in, 140-3000 MHz out. They want 12-15dBm input power, and have a
10-16dB conversion loss depending on frequency, phase of the moon, and
other characteristics. They run $60.

The MK-5 is 10-1000 in, 20-2000 out with 10-20 dBm input power and
13-17 dB conversion loss. It's in a fancy little box with SMA input
and output, yours for only $77.

You can find a lot of mini-circuits stuff on eBay, but I don't see the
doublers there very often.

--
Namaste--

2620. Re: No progress in decades...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-23 01:32:30 UTC
From: Fred W4JLE <w4jle@w4jle.com>
Message-ID: <24e17$429132c0$438df1ec$11193@ALLTEL.NET>
Source record: 18753
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Just go back in time on this conference a few years back. He used to send out his nastygrams to anyone who derided his fractal antenna.

He saw more enemies than Nixon!

In a single day it was not unusual to see 10 threats of lawsuits against various denizens of this conference.

As is my perverse nature, I reveled in tweaking him. I have several of the type on E-Bay as well as from his "attorney" telling me to cease and desist the manufacture of fractal antennas.

"Buck" <iam@this.site> wrote in message news:vtj191dcslurlr9liuovqn9oj9hcu3m3qu@4ax.com...
> On Sat, 21 May 2005 19:46:37 -0400, "Fred W4JLE" <w4jle@w4jle.com>
> wrote:
>
> >Mr. Ewald, if you would be so kind as to keep me informed of the value of
> >this famous letter.
> >
> >I also have several that I can only hope will bring in enough need funds
to
> >enable me to buy a new pack of Redman!
>
> If you have an eBay account, you can add it to your watch list and see
> the results.
>
> I would like to know more about this as my curiosity has been tweaked.
> I did a search and find mostly works from the person but no
> interaction that would cause such a letter.
>
> Where might I learn more?
>
>
> Buck
> --
> For what it's worth.

2621. FA:AMECO AC-1 CW XTMR

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-23 02:07:40 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <MVake.812177$w62.449616@bgtnsc05-news.ops.worldnet.att.net>
Source record: 18754

Have a nice, working, Ameco AC-1 transmitter at :

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=4675&item=5776893822&rd=1&ssPageName=WDVW

Plus some other stuff too. Tnx for looking, heytubeguy.

2622. WTB: n2pk VNA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-23 02:11:23 UTC
From: James Skalski <jskalski@yahoo.com>
Message-ID: <429103EE.8070105@yahoo.com>
Source record: 18755

I would like to buy parts or kit for n2pk vna. Anyone have the project started and shelved?

Jim n2go

2623. Collins 62S-1 VHF Transverter FA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-23 04:34:29 UTC
From: David Stinson <arc5@ix.netcom.com>
Message-ID: <p3dke.8315$cd.6997@trnddc01>
Source record: 18756

You don't see this one often:

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&Item=5776923356

Thanks for looking.

2624. Re: freq doubler -> 1GHz - 2GHz (Mixer?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-23 15:02:57 UTC
From: Mikal <accclass101@hotmail.com>
Message-ID: <1116860577.402493.210500@o13g2000cwo.googlegroups.com>
Source record: 18757

it appears as though I can use the solderable (what I was looking for)
KC2-11. But, that's ALOT of loss during the conversion. anyone else
out there know of a better 'wideband' solution? Should I triple?

2625. Re: s.a.r.b.question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-23 16:06:10 UTC
From: hartlyuk@yahoo.com
Message-ID: <1116864370.841246.284570@o13g2000cwo.googlegroups.com>
Source record: 18758

Thanks alot for the explaination,Joe.
Yes, it is made by Burndept Co.,'S.A.R.Be.,with voice'.
Therefore its a transceiver,with distress bleeper.
When its on receive without earthing the ant. to the body it
interferes with BBC1 reception.
It was yellow, but has been poorly painted in camo. colours, prob. by
Army.
It has what looks like a small lead acid battery connected, but I cant
get it to charge or work. I use a 9v d.c. supply to work it.
Thanks, Hartly.

Joe McElvenney wrote:
> Hi,
>
> If it is a UK SARBE unit made by Burndept, it probably uses a
> super-regenrative receiver (i.e. self-oscillating detector) hence
> the tendency to pull in frequency. They were designed as a
> 'downed-airman' distress beacon on 121.5 or 243MHz (usually with
> a secondary non-distress channel), where the receive
> specification doesn't need to be particularly high and with a low
> battery consumption figure.
>
> Horrible things, although I guess they will have saved a good
> few lives in their time.
>
>
> Cheers - Joe

2626. Re: s.a.r.b.question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-23 17:52:10 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <VA.0000010a.0016c0e3@btinternet.com>
Source record: 18759

Hartly,

> It has what looks like a small lead acid battery connected, but I cant
> get it to charge or work. I use a 9v d.c. supply to work it.
> Thanks, Hartly.

Years ago, one of the departments under me used to repair SABRE's.
There is an official battery adaptor but they used to take the guts out
of an unserviceable battery, drill a hole in the fluted end and feed
wires into it. I cannot remember the battery type as it was some years
ago but I don't think that it was ordinary carbon zinc, alkaline or even
NiCad/NiMH.

The idea as I remember it was for there to be a beacon (alternating
tones) on the distress channel and an airman to rescue craft talk-back
channel for when they got close to him/her. We used them on different
frequencies though for ground to helicopter liaison which was not very
mission critical. You could easily heave it and try another one if need
be. I once pulled the ring on one of the older models when in a mate's
car and it nearly put his eye out when the antenna suddenly unfurled :-(

Cheers - Joe

2627. FA: New Aluminum Slope-faced project box.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-23 19:25:10 UTC
From: Tom <tfarl@iowatelecom.net>
Message-ID: <q6qke.567$ls4.536@attbi_s21>
Source record: 18760

Nice project box for homebrewing. It's about 6" x 7" and the top slopes
from about 3" down to about 1 3/4".

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5776889558

Ends May-29-05 18:32:02 PDT

Vy 73 es best DX,
Tom

2628. Xtal oscillator.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-23 20:30:20 UTC
From: Mauro <mauro.succi@libero.it>
Message-ID: <w3rke.23379$795.720290@twister1.libero.it>
Source record: 18761

I'm looking for schematic of oscillator published in QST 9/04 at page 67 and subsequent.
Can anyone email?
Thanks
Mauro

2629. Nuts for a project 1/4-32 = 6-2 but 1/4 inch across flats Where?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-23 23:28:45 UTC
From: Kaz <monitor@dodgeit.com>
Message-ID: <soKdndD9icFR-w_fRVn-2w@comcast.com>
Source record: 18762

I need a source for "reduced standard" nuts.
These are 6-32 thread, but 1/4 across the flats instead of 5/16 inch.
Prefer brass, but steel will work.
Only need about 50 so distributors with minimum orders are out.
Mouser is close, but no go.

Thanks for any suggestions,
Kaz

2630. Re: Nuts for a project 1/4-32 = 6-2 but 1/4 inch across flats Where?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-24 00:12:27 UTC
From: Bill <spam@coqui.net>
Message-ID: <de8a4$4292716e$4232bd03$18762@COQUI.NET>
Source record: 18763

Kaz wrote:

> I need a source for "reduced standard" nuts.
> These are 6-32 thread, but 1/4 across the flats instead of 5/16 inch.
> Prefer brass, but steel will work.
> Only need about 50 so distributors with minimum orders are out.
> Mouser is close, but no go.
>
> Thanks for any suggestions,
> Kaz
>
>

Try http://www.mcmaster.com

-Bill

2631. Re: Nuts for a project 1/4-32 = 6-2 but 1/4 inch across flats Where?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-24 02:42:26 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <mwwke.787$IC6.116@attbi_s72>
Source record: 18764

> > I need a source for "reduced standard" nuts.
> > These are 6-32 thread, but 1/4 across the flats instead of 5/16 inch.
> > Prefer brass, but steel will work.
> > Only need about 50 so distributors with minimum orders are out.
> > Mouser is close, but no go.

Those are called "small pattern nuts" and are readily available at a good hardware store. Available among many at "Bolts and nuts" in Asheville, NC. Will sell you 1 or 100 .

W4ZCB

W4ZCB

2632. Re: Nuts for a project 1/4-32 = 6-2 but 1/4 inch across flats Where?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-24 08:32:20 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <o8p5919qe44pkqcl4c353nl9muit8s59vb@4ax.com>
Source record: 18765

On Tue, 24 May 2005 02:42:26 GMT, "Harold E. Johnson"
<W4ZCB@mchsi.com> wrote:

>> > I need a source for "reduced standard" nuts.
>> > These are 6-32 thread, but 1/4 across the flats instead of 5/16 inch.
>> > Prefer brass, but steel will work.
>> > Only need about 50 so distributors with minimum orders are out.
>> > Mouser is close, but no go.
>
>Those are called "small pattern nuts" and are readily available at a good
>hardware store. Available among many at "Bolts and nuts" in Asheville, NC.
>Will sell you 1 or 100 .
>
A good source to know about is McMaster-Carr at www.mcmaster.com

They have an amazing variety of fasteners and materials and tools.

Not the cheapest always, but no minimum order and next day delivery to
most places in the US.

Happy trails,
Gary (net.yogi.bear)
--
At the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

2633. Re: Nuts for a project 1/4-32 = 6-2 but 1/4 inch across flats Where?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-24 08:59:37 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <B9GdnbONm6BscQ_fRVnyjg@pipex.net>
Source record: 18766

>I need a source for "reduced standard" nuts.
> These are 6-32 thread, but 1/4 across the flats instead of 5/16 inch.
> Prefer brass, but steel will work.
> Only need about 50 so distributors with minimum orders are out.
> Mouser is close, but no go.
>
> Thanks for any suggestions,
==========
I thought that by putting 10 to 20 standard nuts side by side tight on a screw ,you could quickly grind the lot to size. Especially with brass, filing to size ,by clamping in a vice, would be a snip.

Frank GM0CSZ / KN6WH

2634. Re: Nuts for a project 1/4-32 = 6-2 but 1/4 inch across flats Where?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-24 09:02:46 UTC
From: Kaz <monitor@dodgeit.com>
Message-ID: <W7ednUaMlOYjcA_fRVn-sQ@comcast.com>
Source record: 18767

Thanks for the suggestions.
The "small pattern" helped, but have to question the "readily available"
part.
I called all the main hardwares in my area and no luck.
Did find in McMaster, but steel not brass. Guess they will have to do, and
match the plated solder lugs anyway.
Thanks again.
Kaz

"Kaz" <monitor@dodgeit.com> wrote in message
news:soKdndD9icFR-w_fRVn-2w@comcast.com...
>I need a source for "reduced standard" nuts.
> These are 6-32 thread, but 1/4 across the flats instead of 5/16 inch.
> Prefer brass, but steel will work.
> Only need about 50 so distributors with minimum orders are out.
> Mouser is close, but no go.
>
> Thanks for any suggestions,
> Kaz
>

2635. Re: Nuts for a project 1/4-32 = 6-2 but 1/4 inch across flats Where?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-24 11:59:31 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <HGEke.127$fe2.102@fe02.lga>
Source record: 18768

"Kaz" <monitor@dodgeit.com> wrote in message
news:W7ednUaMlOYjcA_fRVn-sQ@comcast.com...
> Thanks for the suggestions.
> The "small pattern" helped, but have to question the "readily available"
> part.
> I called all the main hardwares in my area and no luck.
> Did find in McMaster, but steel not brass. Guess they will have to do, and
> match the plated solder lugs anyway.
> Thanks again.
> Kaz

Look for contractor supplies and the like. Even out here in the boonies we
have an outlet that specializes in fasteners. Their store is a huge
warehouse with nothing but nuts and bolts. Not a regular hardware but a
place the caters to contractors.

If nothing local try www.almabolt.com

..

2636. Re: freq doubler -> 1GHz - 2GHz (Mixer?)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-24 18:50:29 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1116960629.298026.119740@o13g2000cwo.googlegroups.com>
Source record: 18769

Can you make (or buy) a broadband transformer with a center-tapped secondary, and use a pair of Schottky diodes arranged just like a full-wave rectifier? At your low power level, I suppose you'll want at least a 1:1:1 transformer ratio, and 1:2:2 likely will be better. Some experiments or careful Spice simulations with good models should help optimize the conversion efficiency, which won't be wonderful at those low levels because of the drop in the diodes. Be sure to provide a DC return path for the diodes or it's not going to work.

Since that balanced push-push circuit suppresses the fundamental and third harmonics, you can get _nearly_ an octave of coverage with a single set of good filters, but note that 2*500MHz = 1000MHz, and 4*500MHz will also be generated, yielding 2000MHz output at the same time, which would be passed by your filter. Will that be a problem to you?

Cheers,
Tom

2637. Re: Xtal oscillator.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-24 19:48:34 UTC
From: Mauro <mauro.succi@libero.it>
Message-ID: <myLke.25134$795.773955@twister1.libero.it>
Source record: 18770

Got it. Tks.
Mauro
"Mauro" <mauro.succi@libero.it> wrote in message
news:w3rke.23379$795.720290@twister1.libero.it...
> I'm looking for schematic of oscillator published in QST 9/04 at page 67
and
> subsequent.
> Can anyone email?
> Thanks
> Mauro
>
>

2638. AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-25 03:08:51 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <8%Rke.6363$dZ5.579272@news20.bellglobal.com>
Source record: 18771
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

I'm looking for some advice/guidance on the design of AGC detection and timing circuits, prompted by some level of frustration with a modification I have been doing to a DX-394 SW radio. My questions, though, probably apply to receiver design generally. I have a problem with stability - the receiver gain oscillates at medium and fast release speeds.

Previously I had done a mod that pretty successfully provided 3 release speeds for the DX-394 but fell short of what I thought was the ideal: an attack time of ~1 millisecond, independent of the release time. That was based on a survey of receivers from which I concluded that the attack should be less than 13 ms and that 1 ms seemed to be the goal. Release speeds should probably be on the order of 30ms, 300ms and 3 seconds, for fast, medium and slow, respectively, although there seems to be lots of scope for subjective preference. My mod required a rather large capacitor for Slow release so my Slow was more like 1.2 seconds and the attack was slowed to maybe 50-70 ms for the slow release..

The objectives of the enhanced mod are to:
a) improve the attack speed to better less than 13ms for all release speeds
b) extend the Slow release using smaller cap
c) reduce the loading of the AGC detector on the output of the 2nd IF amp and also possible distortion due to the AGC and AM/Product detectors fed in parallel

I used a JFET to buffer between the IF amp and the diode detector and an emitter follower between the attack R-C circuit and the release R-C circuit, dc coupled to the stock AGC amplifier. On the release side, about 1/10 the capacitance vs the earlier mod is required for slow release and the attack does seem to be similarly less affected by the release network.

However, at the fast and medium release settings, the receiver gain literally oscillates at a rate that seems to be a function of attack and release time constants, manual RF/IF gain setting, AGC gain setting and signal strength. The depth of this gain modulation is affected by AGC and RF gain. In order to get stability, it seems that I have to slow down the attack (and/or release) time constant and carefully tweak the AGC gain between the onset of oscillation and receiver peak distortion caused by not enough gain reduction.

Have I completely misunderstood the meaning of attack/release speeds? My 'ideal' attack circuit has a R-C time constant of 1 ms, which means it will even respond substantially to 1kHz modulation. That seems high. The R-C time constant for my target fast release of 30 ms means that it will substantially follow a 30Hz signal. I have had to pad these out to ~20ms attack, 50ms release for stability or tolerably low gain oscillation depth

at medium and lower signal strengths. With this slower attack, stability is much improved with the 500ms medium release speed.

The target attack/release of 1ms/30ms is not good for AM reception anyway as it causes considerable distortion on heavy bass modulation - it is for data services on steady carriers, e.g., PSK, FSK, DRM. But if the AGC causes oscillation, then that's interference of another kind that would adversely affect error rates. Several, including myself, have noted that DRM SNR is improved by defeating AGC, on a wide variety of receivers.

Is this a typical problem for receiver design? Would 'hang' AGC stabilise the AGC loop? Are my design objectives reasonable?

Comments from experienced radio designers/builders/experimenters much appreciated.

Tom

2639. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-25 06:57:23 UTC
From: miso@sushi.com
Message-ID: <1117004243.189545.126960@z14g2000cwz.googlegroups.com>
Source record: 18772
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

This sounds like a classic negative feedback oscillation. You sense the signal is too large, so you send a signal to kill the gain, and then you sense the signal is too small, so you send a signal to increase the gain.

Having different attack and release time means you have two different time constants My guess is the quick attack leads to the instability, since it is the lesser damped system. If this is true, then you should concentrate on the attack time, i.e find how slow it has to be for the sytem to be stable.

Of course this is really had to do without seeing the circuitry in action.

2640. Re: s.a.r.b.question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-25 15:04:33 UTC
From: hartlyuk@yahoo.com
Message-ID: <1117033473.290916.238650@g43g2000cwa.googlegroups.com>
Source record: 18773

Hello Joe,
Yes, I forgot to mention I've removed the nasty sharp rolled steel
tape ant.and replaced it with a bike spoke.
I'm thinking of using 50ft. of wire to extend the ant. down the garden
from my window to see if I can receive the ground end of the
conversations.

Hartly.

Joe McElvenney wrote:
> Hartly,
>
> > It has what looks like a small lead acid battery connected, but I cant
> > get it to charge or work. I use a 9v d.c. supply to work it.
> > Thanks, Hartly.
>
> Years ago, one of the departments under me used to repair SABRE's.
> There is an official battery adaptor but they used to take the guts out
> of an unserviceable battery, drill a hole in the fluted end and feed
> wires into it. I cannot remember the battery type as it was some years
> ago but I don't think that it was ordinary carbon zinc, alkaline or even
> NiCad/NiMH.
>
> The idea as I remember it was for there to be a beacon (alternating
> tones) on the distress channel and an airman to rescue craft talk-back
> channel for when they got close to him/her. We used them on different
> frequencies though for ground to helicopter liaison which was not very
> mission critical. You could easily heave it and try another one if need
> be. I once pulled the ring on one of the older models when in a mate's
> car and it nearly put his eye out when the antenna suddenly unfurled :-(
>
>
> Cheers - Joe

2641. IQ demod / IF or Direct conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-25 15:26:44 UTC
From: Mikal <accclass101@hotmail.com>
Message-ID: <1117034804.477430.46270@z14g2000cwz.googlegroups.com>
Source record: 18774

I've simulated a circuit and a little confused... If I have an BPSK RF signal at 1KHz, and I mix it with an LO of .9KHz, then I should get 100Hz still in BPSK format? PSpice says otherwise. If I filter the IF for lowpass at 100Hz, it doesnt look like anything I could possible work with and doesnt sync to anything. If I pass everything below 200Hz, it looks more like a sign wave, that's syncronous with the modulation.

On the other end of the spectrum (no pun intended), if I went with direct down converstion, what I get at the output of the mixer is a sign that it twice the RF freq that' shifts 'dc offset'. Should I be filtering for the DC offset?
Does anyone have a link to actual waveforms that I should see in a typical IQ demodulation scheme? Or at least some good docs for understanding the waveforms and what I should be looking for?

2642. Re: IQ demod / IF or Direct conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-25 16:22:57 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11999ijhaq2ehd7@corp.supernews.com>
Source record: 18775

Mikal wrote:

> I've simulated a circuit and a little confused... If I have an BPSK
> RF signal at 1KHz, and I mix it with an LO of .9KHz, then I should get
> 100Hz still in BPSK format? PSpice says otherwise. If I filter the IF
> for lowpass at 100Hz, it doesnt look like anything I could possible
> work with and doesnt sync to anything. If I pass everything below
> 200Hz, it looks more like a sign wave, that's syncronous with the
> modulation.
>
> On the other end of the spectrum (no pun intended), if I went with
> direct down converstion, what I get at the output of the mixer is a
> sign that it twice the RF freq that' shifts 'dc offset'. Should I be
> filtering for the DC offset?
> Does anyone have a link to actual waveforms that I should see in a
> typical IQ demodulation scheme? Or at least some good docs for
> understanding the waveforms and what I should be looking for?
>
Don't multiple post. If you must make the message visible on multiple
newsgroups then cross-post it.

And think twice before you cross-post.

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

2643. Re: IQ demod / IF or Direct conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-25 16:56:07 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <H62le.7927$uR4.999@newsread2.news.atl.earthlink.net>
Source record: 18776

"Mikal" <accclass101@hotmail.com> wrote in message
news:1117034804.477430.46270@z14g2000cwz.googlegroups.com...
> I've simulated a circuit and a little confused... If I have an BPSK
> RF signal at 1KHz, and I mix it with an LO of .9KHz, then I should get
> 100Hz still in BPSK format? PSpice says otherwise. If I filter the IF
> for lowpass at 100Hz, it doesnt look like anything I could possible
> work with and doesnt sync to anything. If I pass everything below
> 200Hz, it looks more like a sign wave, that's syncronous with the
> modulation.
>
When mixed down to 100 hz, will there be enough bandwidth at that frequency
for the BPSK to work ? I have no idea but it does take a certain ammount of
bandwidth for a given ammount of data. Also are the components of the
circuit of the correct value to pass frequencies below 100 hz ?

2644. Re: IQ demod / IF or Direct conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-25 17:14:49 UTC
From: Mikal <accclass101@hotmail.com>
Message-ID: <1117041289.819674.129520@g44g2000cwa.googlegroups.com>
Source record: 18777

Sorry.
How do I 'cross post'? My reasoning for doing what I did, what that
not everyone goes to every newsgroup, and the topic fit in two
newsgroups. So... how do I cross post.
..and thanks for the information. I'm actually using PSpice, so I
can make a 'perfect' filter just by editing a 'block'. Let me push
some more sims based on your feedback.
(Yea, 1khz RF? actually, I used that freq just for sim :).

2645. Re: IQ demod / IF or Direct conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-25 17:25:02 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <1199d7091sv1ue4@corp.supernews.com>
Source record: 18778

Mikal wrote:
> Sorry.
> How do I 'cross post'? My reasoning for doing what I did, what that
> not everyone goes to every newsgroup, and the topic fit in two
> newsgroups. So... how do I cross post.
>
It depends on your newsreader. Generally you just put multiple
newsgroups in the "to" section. Your newsreader will automatically post
to all the groups, and the item will carry that information.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

2646. Re: IQ demod / IF or Direct conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-25 17:26:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <Iz2le.43$pL4.1269834@news.sisna.com>
Source record: 18779

I could be mistaken, but I think "cross posting" would be to enter a
separate post to EACH newsgroup thread, separate from any other newsgroup
thread...

This avoids the following:
Including multiple newsgroups in the posting of a single post--causes any
reply to that post to be sent to ALL the newsgroups that single post has
been posted to...

Warmest regards,
John

"Mikal" <accclass101@hotmail.com> wrote in message
news:1117041289.819674.129520@g44g2000cwa.googlegroups.com...
> Sorry.
> How do I 'cross post'? My reasoning for doing what I did, what that
> not everyone goes to every newsgroup, and the topic fit in two
> newsgroups. So... how do I cross post.
> ..and thanks for the information. I'm actually using PSpice, so I
> can make a 'perfect' filter just by editing a 'block'. Let me push
> some more sims based on your feedback.
> (Yea, 1khz RF? actually, I used that freq just for sim :).
>

2647. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-25 17:30:37 UTC
From: Tom <holden_family@sympatico.ca>
Message-ID: <1117042237.285163.288130@z14g2000cwz.googlegroups.com>
Source record: 18780
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

I agree with you and slowing the attack is the only way that I have been able to approach stable operation with a fast release. But 20ms or longer attack runs counter to what I understand to be the objective - an attack speed of less than 13 ms and ideally about 1 ms. So, unless I have this wrong, how do other receivers accomplish similar speeds without self-oscillation?

The way my circuit operates (I think) is as follows (I'd be happy to send a schematic to anyone who is interested) :
a) assume an impulse of signal of duration very much longer than the attack time
b) the rectified signal is filtered of RF by a series-parallel R-C attack network whose adjustable output feeds an emitter follower
c) the emitter follower pumps current as a low resistance source into the release R-C network so the attack is not greatly slowed - its output feeds the AGC driver amp
d) at some point, equilibrium should be reached - the current flow through the release resistor and AGC driver base should equal the flow though the emitter follower - but maybe the emitter follower pinches off and that could be a cause of instability?
e) the signal drops, the attack network discharges at attack speed and shuts off the emitter follower, so the release capacitor discharges through its parallel R at release speed, the voltage to the AGC driver falls so the AGC bias rises at roughly release speed to increase RF/IF gain.

Having written that out, I have an idea or two I will try.

Tom

2648. Re: IQ demod / IF or Direct conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-25 20:04:38 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <QT4le.36388$rt1.27535@fe04.lga>
Source record: 18781

"John Smith" <assemblywizard@gmail.com> wrote in message
news:Iz2le.43$pL4.1269834@news.sisna.com...

> This avoids the following:
> Including multiple newsgroups in the posting of a single post--causes any
> reply to that post to be sent to ALL the newsgroups that single post has
> been posted to...

Which is basically what you want ... all the newsgroups being involved in the conversation. When you cross post, most newsreaders can recognize that and mark the posting already read in the other newsgroup. While not everyone may be subscribed to all the newsgroups, a lot of people will if they are related subjects. This avoids them reading the same post multiple times. It also avoids duplicate responses. If you multiply post and get a valid response in a newsgroup I don't read, I may well repeat essentially the same response.

If it is appropriate to cross-post (and it is often overused), then it seems far better than multiply posting essentially the same message to different groups.

..

2649. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-25 21:53:59 UTC
From: craigm <none@domain.invalid>
Message-ID: <Yt6le.797$fe2.212@fe02.lga>
Source record: 18782

Tom wrote:
> I agree with you and slowing the attack is the only way that I have
> been able to approach stable operation with a fast release. But 20ms or
> longer attack runs counter to what I understand to be the objective -
> an attack speed of less than 13 ms and ideally about 1 ms. So, unless I
> have this wrong, how do other receivers accomplish similar speeds
> without self-oscillation?
>
> The way my circuit operates (I think) is as follows (I'd be happy to
> send a schematic to anyone who is interested) :
> a) assume an impulse of signal of duration very much longer than the
> attack time
> b) the rectified signal is filtered of RF by a series-parallel R-C
> attack network whose adjustable output feeds an emitter follower
> c) the emitter follower pumps current as a low resistance source into
> the release R-C network so the attack is not greatly slowed - its
> output feeds the AGC driver amp
> d) at some point, equilibrium should be reached - the current flow
> through the release resistor and AGC driver base should equal the flow
> though the emitter follower - but maybe the emitter follower pinches
> off and that could be a cause of instability?
> e) the signal drops, the attack network discharges at attack speed and
> shuts off the emitter follower, so the release capacitor discharges
> through its parallel R at release speed, the voltage to the AGC driver
> falls so the AGC bias rises at roughly release speed to increase RF/IF
> gain.
>
> Having written that out, I have an idea or two I will try.
>
> Tom
>

Tom,
Another option may be to reduce the gain in the loop. This may reduce
the oscillation without significantly slowing the loop.

Craig

2650. Re: IQ demod / IF or Direct conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-26 00:48:47 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <119a77fbhtr6bfc@corp.supernews.com>
Source record: 18783

John Smith wrote:

> I could be mistaken, but I think "cross posting" would be to enter a
> separate post to EACH newsgroup thread, separate from any other newsgroup
> thread...
>
> This avoids the following:
> Including multiple newsgroups in the posting of a single post--causes any
> reply to that post to be sent to ALL the newsgroups that single post has
> been posted to...
>
> Warmest regards,
> John
>
>

Take the trouble to do a web search on the phrase "cross post" and
you'll get not only a definition but an explaination of why it's better
than multiple posting.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

2651. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-26 00:50:54 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <IcKdnZUZ8aUPgAjfRVn-pQ@comcast.com>
Source record: 18784
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

Hi Tom,

You might find some good info from reading the description and
data sheets for the Analog Devices SSM2165 and/or SSM2166
at www.analog.com. They address the issues of having a threshold
which can be adjusted and then varying the amount of compression
or limiting asymetrically. Perhaps you could modify your circuit to
emulate some of these features - or perhaps just use the devices
described?

Bill

<miso@sushi.com> wrote in message
news:1117004243.189545.126960@z14g2000cwz.googlegroups.com...
> This sounds like a classic negative feedback oscillation. You sense the
> signal is too large, so you send a signal to kill the gain, and then
> you sense the signal is too small, so you send a signal to increase the
> gain.
>
> Having different attack and release time means you have two different
> time constants My guess is the quick attack leads to the instability,
> since it is the lesser damped system. If this is true, then you should
> concentrate on the attack time, i.e find how slow it has to be for the
> sytem to be stable.
>
> Of course this is really had to do without seeing the circuitry in
> action.
>

2652. Re: IQ demod / IF or Direct conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-26 01:12:08 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <Ln9le.88$XB6.2686073@news.sisna.com>
Source record: 18785

I have worked out my own methods--but I am sure others may use that... good post...

Warmest regards,
John

"Tim Wescott" <tim@seemywebsite.com> wrote in message news:119a77fbhtr6bfc@corp.supernews.com...
> John Smith wrote:
>
>> I could be mistaken, but I think "cross posting" would be to enter a
>> separate post to EACH newsgroup thread, separate from any other newsgroup
>> thread...
>>
>> This avoids the following:
>> Including multiple newsgroups in the posting of a single post--causes any
>> reply to that post to be sent to ALL the newsgroups that single post has
>> been posted to...
>>
>> Warmest regards,
>> John
>>
>>
> Take the trouble to do a web search on the phrase "cross post" and you'll
> get not only a definition but an explaination of why it's better than
> multiple posting.
>
> --
> ---
> Tim Wescott
> Wescott Design Services
> http://www.wescottdesign.com

2653. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-26 03:17:30 UTC
From: Telamon <telamon_spamshield@pacbell.net.is.invalid>
Message-ID: <telamon_spamshield-6CD81B.20173225052005@newssvr13-ext.news.prodigy.com>
Source record: 18786
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

In article <8%Rke.6363$dZ5.579272@news20.bellglobal.com>,
"Tom Holden" <holden_family@sympatico.ca> wrote:

> I'm looking for some advice/guidance on the design of AGC detection and
> timing circuits, prompted by some level of frustration with a modification I
> have been doing to a DX-394 SW radio. My questions, though, probably apply
> to receiver design generally. I have a problem with stability - the receiver
> gain oscillates at medium and fast release speeds.

< Snip >

I don't know receiver design but I have a RX340 that uses the following
settings. Attack is in dB/mS, Hang in seconds, and Decay are in dB/S.

Attack Hang Decay
Fast .8 0 1600
Medium .8 0 100
Slow .8 0 25

Programable attack .01 to 1 dB/mS
Programable hang 0 to 99.9 seconds
Programable decay .01 to 99.9 dB/S

--
Telamon
Ventura, California

2654. Daft question about a Pi tank matching circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-26 07:17:44 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <1117091864.385259.117700@g49g2000cwa.googlegroups.com>
Source record: 18787

Hi All,

I keep noticing something which looks odd to me - I am sure it is correct because this appears to be standard practice, but I would appreciate it if someone could shed some light on the reasons...

Take a peek at http://web.telia.com/~u85920178/tx/500w-txt.htm (first example I found). Specifically look at the 5 position switch on the output matching, in position 5, the bulk of the inductor is shorted out. This just looks plain wrong to me.

I assume that having shorted turns on an inductor like this drops the Q drastically, or is this the whole point ?

Is the same true for roller coaster type variable inductors ?

Comments appreciated.

Thanks,

Mark.

2655. Re: IQ demod / IF or Direct conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-26 13:12:51 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4295CB43.52BA3D06@earthlink.net>
Source record: 18788

Mikal wrote:
>
> Sorry.
> How do I 'cross post'? My reasoning for doing what I did, what that
> not everyone goes to every newsgroup, and the topic fit in two
> newsgroups. So... how do I cross post.
> ..and thanks for the information. I'm actually using PSpice, so I
> can make a 'perfect' filter just by editing a 'block'. Let me push
> some more sims based on your feedback.
> (Yea, 1khz RF? actually, I used that freq just for sim :).

I don't think Google lets you cross post. You need a real news
server and software to do it.

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

2656. Re: Daft question about a Pi tank matching circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-26 13:22:33 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <t4kle.10696$w21.6030@newsread3.news.atl.earthlink.net>
Source record: 18789

"MarkAren" <markaren10@yahoo.com> wrote in message
news:1117091864.385259.117700@g49g2000cwa.googlegroups.com...
> Hi All,
>
> I keep noticing something which looks odd to me - I am sure it is
> correct because this appears to be standard practice, but I would
> appreciate it if someone could shed some light on the reasons...
>
> Take a peek at http://web.telia.com/~u85920178/tx/500w-txt.htm (first
> example I found). Specifically look at the 5 position switch on the
> output matching, in position 5, the bulk of the inductor is shorted
> out. This just looks plain wrong to me.
>
> I assume that having shorted turns on an inductor like this drops the Q
> drastically, or is this the whole point ?
>
> Is the same true for roller coaster type variable inductors ?
>

It might cause some small ammount of power loss but it has been done that
way in many other amps over the years. Probably not enough loss to notice
or others would have done it differantly.

2657. Re: Daft question about a Pi tank matching circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-26 15:26:27 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <119bql3mqcgitba@corp.supernews.com>
Source record: 18790

MarkAren wrote:
> Hi All,
>
> I keep noticing something which looks odd to me - I am sure it is
> correct because this appears to be standard practice, but I would
> appreciate it if someone could shed some light on the reasons...
>
> Take a peek at http://web.telia.com/~u85920178/tx/500w-txt.htm (first
> example I found). Specifically look at the 5 position switch on the
> output matching, in position 5, the bulk of the inductor is shorted
> out. This just looks plain wrong to me.
>
> I assume that having shorted turns on an inductor like this drops the Q
> drastically, or is this the whole point ?
>
> Is the same true for roller coaster type variable inductors ?
>
> Comments appreciated.
>
> Thanks,
>
> Mark.
>
I've pondered this question myself. I've only seen this done on
air-wound coils -- on a coil wound or a core this would be disaster. I
think the reason it's done is because if you _don't_ short the turns
you'd have all sorts of wierd resonance and/or high RF voltage effects
in the unshorted coils.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

2658. Re: Daft question about a Pi tank matching circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-26 16:03:20 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <119bsqcm71sim3a@corp.supernews.com>
Source record: 18791

Bill Sabin W0IYH posted an enlightening comment on this topic just a month ago in this newsgroup. Look in groups.google.com for his posting on April 27. The topic was "Re: Shielded inductors -- why do they work so well?"

Roy Lewallen, W7EL

MarkAren wrote:
> Hi All,
>
> I keep noticing something which looks odd to me - I am sure it is
> correct because this appears to be standard practice, but I would
> appreciate it if someone could shed some light on the reasons...
>
> Take a peek at http://web.telia.com/~u85920178/tx/500w-txt.htm (first
> example I found). Specifically look at the 5 position switch on the
> output matching, in position 5, the bulk of the inductor is shorted
> out. This just looks plain wrong to me.
>
> I assume that having shorted turns on an inductor like this drops the Q
> drastically, or is this the whole point ?
>
> Is the same true for roller coaster type variable inductors ?
>
> Comments appreciated.
>
> Thanks,
>
> Mark.
>

2659. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-26 16:17:54 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <bdtb91h9sgm3h9rius2kkp0vffcmc82j22@4ax.com>
Source record: 18792

On Tue, 24 May 2005 23:08:51 -0400, "Tom Holden"
<holden_family@sympatico.ca> wrote:

>
>However, at the fast and medium release settings, the receiver gain
>literally oscillates at a rate that seems to be a function of attack and
>release time constants, manual RF/IF gain setting, AGC gain setting and
>signal strength. The depth of this gain modulation is affected by AGC and RF
>gain. In order to get stability, it seems that I have to slow down the
>attack (and/or release) time constant and carefully tweak the AGC gain
>between the onset of oscillation and receiver peak distortion caused by not
>enough gain reduction.
>

Tom,

The problem is the system (AGC) is a servo loop and the loop lacks
damping so it overshoots then rings at the loop time constant.

Try adding a simple RC of something like 1000 ohms and 100uf in the
place where your putting a time constant. The high series resistor
will allow fast change but the series capacitor will absorb some of
the rate of change. You may have to emprically tweek the values.

Also Experimental Methods in RF Design (ARRL Press) is a good
reference and has examples plus discussion on the subject..

Allison

2660. Re: Daft question about a Pi tank matching circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-26 16:27:21 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <cstb91t64a7akpasi1fq8apbu1l0bru9bf@4ax.com>
Source record: 18793

On 26 May 2005 00:17:44 -0700, "MarkAren" <markaren10@yahoo.com>
wrote:

>Hi All,
>
>I keep noticing something which looks odd to me - I am sure it is
>correct because this appears to be standard practice, but I would
>appreciate it if someone could shed some light on the reasons...
>
>Take a peek at http://web.telia.com/~u85920178/tx/500w-txt.htm (first
>example I found). Specifically look at the 5 position switch on the
>output matching, in position 5, the bulk of the inductor is shorted
>out. This just looks plain wrong to me.
>
>I assume that having shorted turns on an inductor like this drops the Q
>drastically, or is this the whole point ?
>
>Is the same true for roller coaster type variable inductors ?
>

Mark,

Nominally those coils are loaded to a Q of less than 10. So the
shorted turns do not significantly affect the Q of the coil. Also the
turns are off the "end" of the inductor where the least effect is
felt.

In some cases the shorted turn can be used to tune the coil there
is a 6M amp that used a shorted turn inside the primary
inductor the make the inductance variable with out mechanicaly
altering the primary coil.

Part two of that is if t he unused sections were left unshorted
they may resonate and develope high voltages or other
undesired parasitic effects.

Roller inductors are indeed used that way as well.

Allison

2661. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-26 17:57:11 UTC
From: Tom <holden_family@sympatico.ca>
Message-ID: <1117130231.745038.154940@g14g2000cwa.googlegroups.com>
Source record: 18794
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

Telamon, those are interesting numbers, expressing the action of a more sophisticated, programmable, digital AGC. Classic analog AGC speeds are expressed as the length of time it takes to reach a certain percentage or within a few dB of the desired gain setting, i.e., similar to and based on RC time constants as that was the foundation of the classic AGC control system. With an RC derived control, whether the gain change is 10 dB or 100 dB, it takes the same time. With your digital control in 'Fast' mode, attack would be 8ms for 10 dB and 80 ms for 100 dB; release would be hang time plus 6ms or 60 ms respectively. It's interesting how these compare with my target of 1-13 ms attack, 25-50 ms release.

I'm wondering how your RX340 behaves when you program to 0.01 dB/ms attack, 0 hang, and 1600 dB/s decay (but I see that the programmable decay is limited to 99.9? probably for good reason!). That would correspond to my Fast target when you tune from no signal to S9+50.

Regards,

Tom

2662. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-26 18:02:59 UTC
From: Tom <holden_family@sympatico.ca>
Message-ID: <1117130579.586382.284860@g47g2000cwa.googlegroups.com>
Source record: 18795

Hi Allison, wouldn't the 1000R-100uF have a time constant of 100 ms?
That would slow my attack speed to 10 times slower than what I think is
the desired range, unless I've got that all wrong!

Thanks for the reference - there certainly is not a lot about this in
the ARRL Handbook.

Tom

2663. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-26 18:06:30 UTC
From: Tom <holden_family@sympatico.ca>
Message-ID: <1117130790.871908.310840@f14g2000cwb.googlegroups.com>
Source record: 18796

Craig, the dilemma is that reducing the AGC loop gain results in IF or AM detector or audio overload; increasing it aggravates instability! So far, I can only avoid these two adverse effects by slowing the AGC attack and release speeds to well below what I am aiming for.

Tom

2664. N2PK VNA cool control program

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-26 19:35:47 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <nyple.253919$cg1.33615@bgtnsc04-news.ops.worldnet.att.net>
Source record: 18797

I just downloaded the latest version of GM3SEK's VNA4win program. Boy, is it cool!

Pete

2665. Re: Daft question about a Pi tank matching circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-26 20:32:05 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1117139525.827282.19700@o13g2000cwo.googlegroups.com>
Source record: 18698

It's really not all that hard to estimate what the degradation will be. Use your favorite inductance formula or program to find the inductance of the whole coil, and then find the inductance of the unshorted part if it were standing alone, and the inductance of the shorted part if it were standing alone. From those three values you can find the mutual inductance between the coils, and the coefficient of coupling. You'll probably find it's much lower than you had guessed. The result is that shorting the unused portion really doesn't have that much effect on either the inductance or the Q of the remaining portion.

For example, an inductance program I use tells me that 20 turns of 8AWG wire 2" inside diameter helix, spaced with a pitch of two wire diameters, will give me a coil just over 4" long, 8.705uH, unloaded Q around 860 at 10MHz. (There's some question if the unloaded Q would actually be that high, but that's another topic.) If I use 10 turns of that same winding geometry, I get 3.637uH and Qu about 720 at 10MHz. The mutual inductance between the two 10-turn halves of the 20-turn coil is then 0.5*(L(20t)-2*L(10t)) = .716uH, and the coefficient of coupling is mutual inductance divided by sqrt(L(10t)*L(10t)), or .197. If you leave the unused portion of the coil open, the inductance of the 10t part you're using is, of course, 3.637uH. If you short out the unused portion, the inductance of the used part drops to about 3.496uH, which is only about 3.9 percent. The Q drops by about twice that percentage. But if the LOADED Q of the network is around 10, and the unloaded Q is up around 500, then only 1/50 of the input power is dissipated in the coil resistance, and a change of even 10 percent on the unloaded Q will result in a change of 10 percent in the power dissipated in the coil...so in a 1kW system, the power dissipation in the coil might go from 20 watts to 22 watts, in this example.

In summary, the assumption that the (unloaded) Q drops drastically is incorrect for practical coils commonly used in transmitter tank circuits. But it does suggest that you should understand what the coupling is, and insure that the shorted part of the coil really isn't coupled too strongly with the unshorted part: if the coil is very short compared with its diameter, you'd get into trouble shorting turns.

Cheers,
Tom

2666. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-26 21:21:09 UTC
From: LenAnderson@ieee.org
Message-ID: <1117142469.248063.219040@g44g2000cwa.googlegroups.com>
Source record: 18699
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

From: "Tom" on Wed,May 25 2005 10:30 am

>I agree with you and slowing the attack is the only way that I have
>been able to approach stable operation with a fast release. But 20ms or
>longer attack runs counter to what I understand to be the objective -
>an attack speed of less than 13 ms and ideally about 1 ms. So, unless I
>have this wrong, how do other receivers accomplish similar speeds
>without self-oscillation?
>
>The way my circuit operates (I think) is as follows (I'd be happy to
>send a schematic to anyone who is interested) :
>a) assume an impulse of signal of duration very much longer than the
>attack time
>b) the rectified signal is filtered of RF by a series-parallel R-C
>attack network whose adjustable output feeds an emitter follower
>c) the emitter follower pumps current as a low resistance source into
>the release R-C network so the attack is not greatly slowed - its
>output feeds the AGC driver amp
>d) at some point, equilibrium should be reached - the current flow
>through the release resistor and AGC driver base should equal the flow
>though the emitter follower - but maybe the emitter follower pinches
>off and that could be a cause of instability?
>e) the signal drops, the attack network discharges at attack speed and
>shuts off the emitter follower, so the release capacitor discharges
>through its parallel R at release speed, the voltage to the AGC driver
>falls so the AGC bias rises at roughly release speed to increase RF/IF
>gain.
>
>Having written that out, I have an idea or two I will try.

Having encountered a similar problem many years ago, I'll offer
this as a suggestion: Analyze the behavior of the total signal
amplification chain at LOW frequencies, not at the RF or IF
carrier. Know the control characteristics of the AGC voltage
input to the amplifier versus the total amount of gain of the
receiver chain. Approach the whole receiver AGC action as a
low-frequency servo loop (which is what the AGC actually does).
Think servo control systems theory.

Control systems theory is a rather abstract thing and there
probably will be no sudden bright light of understanding
switched on, but here's a bit of that: The AGC loop action
works by BOTH magnitude and phase at low frequencies.
"Nyquist" and "Bode" plots are helpful there, even though

both of those subjects are also rather abstract. In general, if the AGC control action results in instability or even motor-boating, the overall receiver gain - related to the control voltage range - is too high. Adding a voltage divider at the low-pass R-C filter of the AGC voltage input will demonstrate that. Also, the low-frequency phase shifting in the AGC voltage "decoupling" can upset the phase versus magnitude of the control voltage. Note: Vacuum tube or FET RF/IF controlled amplifiers probably use such R-C decoupling, working only on AGC voltage; other amplifier types might have some other form of R-C filtering at low frequencies. That low-frequency magnitude AND phase relationship is important for total loop stability.

What has to be considered in the AGC loop is the response through all the decoupling newtorks between the ACG control source and the controlled device(s). For a "non-linear" loop (separate attack and decay times) that analysis will be difficult. It is much easier to analyze with a Spice simulation that has the capability to model a controlled-gain amplifier. The whole loop at low frequencies can be modelled that way. In starting that, forget the RF and IF components and consider only the amplifications at low frequencies; the source of the AGC control (detector output) may have to be modelled slightly differently in that the detector is, in effect, similar to a power supply rectifier. If that model is tweaked to be stable with sudden transitions on its input, then it will be stable at RF and IF.

LenAnderson@ieee.org

2667. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-26 21:39:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <119cgh0plioond4@corp.supernews.com>
Source record: 18700
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

Let me add one more general note about AGC design. The BFO frequency is very close to the IF, and it typically puts out volts of signal while the AGC circuit is trying to operate with millivolts. Unless you're very careful with layout, shielding, and balance, a lot of BFO signal can get into the AGC circuit and cause disturbances and malfunctions of various kinds.

The last AGC circuit I did was very conventional, and it's the sweetest operating one I've ever used. But I went to great pains to keep the BFO out of it, and feel that was one of the essential ingredients in getting it to operate so well.

Roy Lewallen, W7EL

2668. NEWFLASH: Nero fiddles--Rome burns!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-27 00:41:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <21ule.167$T_3.6624292@news.sisna.com>
Source record: 18701

http://ah0a.org/FCC/Licenses.html

http://ah0a.org/FCC/

Warmest regards,
John
--
Watching the cutting edge of yesterday replay--in virtual reality, right before my eyes--in real time!
Thirty year old technology--wasn't it amazing?

2669. Re: Daft question about a Pi tank matching circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-27 10:37:55 UTC
From: Roland Hell Grossister <RonGrossi382855@yoohoo.com>
Message-ID: <d76ta3$1rm$1@news.al.sw.ericsson.se>
Source record: 18702

> I keep noticing something which looks odd to me - I am sure it is
> correct because this appears to be standard practice, but I would
> appreciate it if someone could shed some light on the reasons...
>
> Take a peek at http://web.telia.com/~u85920178/tx/500w-txt.htm (first
> example I found). Specifically look at the 5 position switch on the
> output matching, in position 5, the bulk of the inductor is shorted
> out. This just looks plain wrong to me.

Hi Mark,
If you take an inductor, make a tapping and pass a hugh RF current through the smaller end, then a voltage will be induced in the other side. If the tapping ratio was (say) 10:1 rati,o and 300 volts was developed across the 1, then the bigger end would have 3000 volts at the other end = arcing and "sparkalating", smoke and switch breakdown :-(

Regards

2670. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-27 18:57:50 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <m9re91lblek2h5td6k9a3t33of6g295d83@4ax.com>
Source record: 18703

On 26 May 2005 11:02:59 -0700, "Tom" <holden_family@sympatico.ca>
wrote:

>Hi Allison, wouldn't the 1000R-100uF have a time constant of 100 ms?
>That would slow my attack speed to 10 times slower than what I think is
>the desired range, unless I've got that all wrong!
>
>Thanks for the reference - there certainly is not a lot about this in
>the ARRL Handbook.
>
>Tom

The series resistance allows overshoot but, limits it. Also it's
series R-C used in addition the paralle C you have for time constant.
EMDRF is the better source than the handbook.

Allision

2671. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-27 19:01:58 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <0gre911ptu1qhpn3f0amhpk8e5ud76hk9d@4ax.com>
Source record: 18704

On Thu, 26 May 2005 14:39:43 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>Let me add one more general note about AGC design. The BFO frequency is
>very close to the IF, and it typically puts out volts of signal while
>the AGC circuit is trying to operate with millivolts. Unless you're very
>careful with layout, shielding, and balance, a lot of BFO signal can get
>into the AGC circuit and cause disturbances and malfunctions of various
>kinds.
>
>The last AGC circuit I did was very conventional, and it's the sweetest
>operating one I've ever used. But I went to great pains to keep the BFO
>out of it, and feel that was one of the essential ingredients in getting
>it to operate so well.
>
>Roy Lewallen, W7EL

Roy, you have that right. Simple AGC works well but it's the details.
A 6m SSB design I did required a BFO and balanced mixer (DBM prod det)
to be in a sealed box with bypassed feed throughs. Once that was done
the AGC behaved far better.

Allison

2672. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-27 21:36:32 UTC
From: LenAnderson@ieee.org
Message-ID: <1117229792.842799.29010@o13g2000cwo.googlegroups.com>
Source record: 18705
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

From: Roy Lewallen on May 26, 5:39 pm

>Let me add one more general note about AGC design. The BFO frequency is
>very close to the IF, and it typically puts out volts of signal while
>the AGC circuit is trying to operate with millivolts. Unless you're very
>careful with layout, shielding, and balance, a lot of BFO signal can get
>into the AGC circuit and cause disturbances and malfunctions of various
>kinds.

I agree on the need for isolation of various circuits but fail
to see the relevance. A "BFO" is on for OOK CW reception and
normally a manual RF/IF amplification control is used to set a
comfortable listening level. Yes, AGC could be used on OOK CW
but it would be a mistake to derive the AGC control from an AM
detector getting "BFO" input...that would be the same as
introducing a DC bias into the AGC control loop...which would
change the AGC servo-action control...perhaps severely so.

Note: A "BFO" source is steady-state. The detector mixes the
incoming signal (usually at the IF) with the "BFO" to derive
the audio. If the AGC control line is picked off this same
detector, the DC component is akin to having a nearly fixed
DC bias inserted. To use AGC on an OOK CW signal, the audio
tone would have to be used...and that necessaitates a different
sort of AGC control source derivation. A peak-riding, perhaps
selective audio circuit could do that, but the complexity of
that part of the receiving chain is growing. It might be
easier all-around to just pick off the IF to a separate AM
detector as the AGC control line source. The "original"
detector could remain as the OOK CW output with isolated BFO
feeding it.

For SSB voice reception, a "BFO" is still present but a single
diode detector all-purpose sort of detector is far from
optimum as a combined audio source and AGC control line source.
It WILL work, but it is non-linear for both audio and AGC
purposes and that alone could be the source of AGC instability.
It depends on the IF signal level at the detector diode (or
"product detector" which is really a mixer stage).

A single diode with large time-constant on its voltage output
is a peak-riding source for the AGC control line. Whether or
not it follows fast "attack" conditions depends on the source
impedance capabilities of the final IF stage. If that is too
high then the "attack" time is slowed from the necessity to

build up a charge on the diode's load capacitance; that can be seen on examining an ordinary AC rectifier circuit in response to a step transient of AC input through various values of AC source resistors. The peak-riding capability is usually distorted on the leading edge...which then reflects on the AGC control characteristics (when loop is closed) in trying to hold the received signal constant at the detector.

Thought of as a servo-control loop, the AGC subsystem can get rather involved and complex, affected by a number of different factors, ALL of which are important insofar as AGC instability is concerned. "BFO" level is just one item and I will disagree that it is a very important. It is no more important than anything else in that loop in my experience.

As a suggestion to anyone else, I would recommend first either measuring or calculating the AGC control line versus both the antenna input level and the IF level at the AGC detector input. That yields a DC baseline datum on the controllable level of the receiving chain. From that, one can "back-track" calculate how well the closed-loop AGC action behaves; i.e., the antenna input RF level versus the peak audio output with AGC on. If that is using old-style "variable-mu" pentode tubes, then the control characteristics will show whatever non-linearity it has steady-state. That can be used as a special controlled-gain model baseline for a Spice analysis of the AGC loop. Differing time-constants IN the AGC control feedback can be set to observe closed-loop response with transient signal input to the antenna.

>The last AGC circuit I did was very conventional, and it's the sweetest
>operating one I've ever used. But I went to great pains to keep the BFO
>out of it, and feel that was one of the essential ingredients in getting
>it to operate so well.

Having had a National NC-57 receiver since 1948, I decided to "play" with it in 1959 and "improve" its performance, such as increasing IF gain. The first IF stage as well as the RF stage were AGC-controlled. Not knowing enough about Control Theory then, nor considering the low-frequency characteristics of the AGC control voltage line R-C decoupling, that modification became a disaster for anything but manual RF gain control. The motorboating (very low-frequency oscillation) extended to having the VR-150 screen supply regulator (gaseous shunt regulator to those of solid-state era times) going on and off. It was restored to its original components and not played with for over a decade. Much later, on having had to get into Control Theory and servo control loops, I could analyze how bad it was and see what I SHOULD have done. The control was too "tight" in trying to hold the audio output too constant over a wide signal input range. There was low-frequency phase shift in the AGC voltage

control decoupling that was responsible for most of the motor-boating; the VR-150 shunt regulator control range was a bit too narrow so naturally it had dropped out of regulation and added the final insult to the original "mod." [forty somethings and younger may not be familiar with such relaxation oscillator circuits :-)]

National Radio Company had made an acceptible product in the NC-57 but it was a low-end item in their product line. It worked well enough as a single-conversion HF receiver but it wasn't optimum in design and no doubt stock logistics at the factory probably accounted for some of the parts values. Several passive components seemed to be rather arbitrary in value choices. I had learned (or should say re-learned) that NO product is an example is "what something should be" as a design example.

There just aren't any "easy" answers for some things in electronics. But, they can be WONDERFUL, challenging "cross-word puzzle" kinds of thing to solve! :-)

LenAnderson@ieee.org

2673. WTB picastar

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-27 22:18:19 UTC
From: James Skalski <jskalski@yahoo.com>
Message-ID: <42976488.8040202@yahoo.com>
Source record: 18706

I am thinking about building one. Before I start gathering parts I figured I would check to see if anyone has started, fizzled out, or otherwise changed plans to build it. What parts do you have? Any completed modules?

Jim n2go

2674. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-27 22:49:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <119f8v3ipiq7r01@corp.supernews.com>
Source record: 18707
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

LenAnderson@ieee.org wrote:
> From: Roy Lewallen on May 26, 5:39 pm
>
>
>>Let me add one more general note about AGC design. The BFO frequency is
>>very close to the IF, and it typically puts out volts of signal while
>>the AGC circuit is trying to operate with millivolts. Unless you're very
>>careful with layout, shielding, and balance, a lot of BFO signal can get
>>into the AGC circuit and cause disturbances and malfunctions of various
>>kinds.
>
>
> I agree on the need for isolation of various circuits but fail
> to see the relevance. A "BFO" is on for OOK CW reception and
> normally a manual RF/IF amplification control is used to set a
> comfortable listening level. Yes, AGC could be used on OOK CW
> but it would be a mistake to derive the AGC control from an AM
> detector getting "BFO" input...that would be the same as
> introducing a DC bias into the AGC control loop...which would
> change the AGC servo-action control...perhaps severely so.
> . . .

I apologize for not being more precise in my nomenclature.

By "BFO" I mean the oscillator used for product detection when receiving SSB and CW signals. No AM detector is involved. The AGC pickoff is of course done from the IF preceding the product detector, and doesn't intentionally use the BFO or product detector in any way. The problem I was alluding to is that the BFO produces a large signal which is very near the IF, and therefore can get into the AGC circuitry unless some care is taken to prevent it. This produces a DC bias among other problems, which can interfere with AGC circuit operation. I found it necessary to completely shield the BFO, use a good doubly balanced detector, and use differential amplifiers in the AGC chain in order to reduce the BFO crosstalk to a tolerable level.

I strongly suspect that a number of the complicated AGC circuits evolved because a simpler AGC circuit was poorly designed and/or subject to problems like crosstalk from the BFO. Instead of solving the fundamental problems, increasingly complex circuits are developed until one accidentally works correctly, then the improvement is credited to the complex circuit rather than its accidental relative immunity to the results of poor fundamental design. This isn't of course universally true, but it happens pretty often.

Roy Lewallen, W7EL

2675. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-28 00:14:40 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <119fdufeur5me76@corp.supernews.com>
Source record: 18708
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:119f8v3ipiq7r01@corp.supernews.com...
> Instead of solving the fundamental
> problems, increasingly complex circuits are developed until one
> accidentally works correctly, then the improvement is credited to the
> complex circuit rather than its accidental relative immunity to the
> results of poor fundamental design.

I prefer the solution of, "Hmm... there's already a CPU in this radio anyway... and we've got an ADC around... hey, let's make it the software guy's problem!"

:-) :-)

2676. FA: ends Sat - Slope-faced Project Box - Aluminum N.O.S.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-28 00:19:50 UTC
From: Tom <tfarl@iowatelecom.net>
Message-ID: <GOOle.12225$ls4.2734@attbi_s21>
Source record: 18709
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Nice project box for homebrewing. It's about 6" x 7" and the top slopes
from about 3" down to about 1 3/4".

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5776889558

Ends May-29-05 18:32:02 PDT

Vy 73 es best DX,
Tom

2677. Re: Daft question about a Pi tank matching circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-28 00:29:38 UTC
From: LenAnderson@ieee.org
Message-ID: <1117240178.460442.141540@g43g2000cwa.googlegroups.com>
Source record: 18710

From: "K7ITM" on Thurs 26 May 2005 13:32

<snip of good stuff>

>In summary, the assumption that the (unloaded) Q drops drastically is
>incorrect for practical coils commonly used in transmitter tank
>circuits. But it does suggest that you should understand what the
>coupling is, and insure that the shorted part of the coil really isn't
>coupled too strongly with the unshorted part: if the coil is very
>short compared with its diameter, you'd get into trouble shorting
>turns.

Good stuff there, Tom. The COEFFICIENT OF COUPLING isn't
considered enough by others (in my opinion) but makes all
the difference as far as losses.

Toroidal power transformers are going to be in for a hot
time in the old town if they are mounted with a non-
insulating strap. That's the "shorted turn effect" with a
toroidal form having a high coefficient of coupling due to
concentration of flux lines. The conductive mounting strap
will suddenly become very hot being a one-turn winding that
has very low resistance (always insulate such mountings).

Air-core coils having a high length to diamerter ratio will
have a lower possible coefficient of coupling...which
actually varies somewhat depending on the position of the
coupling location along the length...lowest at the ends.
The flux density is very low, spread all over as compared to
a toroid where the flux density is concentrated IN the torus.
"Pie-wound" multi-layer coils have an intermediate coefficient
of coupling, less than toroids but greater than high L:D
solenoidal windings.

There will be some losses due to that "shorted turn effect"
but that hasn't unduly bothered high-power transmitter
designers and users for over six decades. I got started
in HF communications in the Army in the fifties and one of
my tasks was changing the shorting link assemblies on a 15
KW Press Wireless transmitter running FSK RTTY. Two tank
coils about four feet long and about a foot in diameter using
tubing about 3/4" in diameter (memory may be short on the
exact dimensions, I didn't take notes due to having to QSY
as quickly as possible when so ordered). Those got thermally
HOT sometimes but then the final amplifier compartment was
generally thermally hot all over despite forced air cooling.

At least 20 KW of the AC electrical feed of about 45 KW
was wasted in various forms of HEAT on those critters.

Shorting bars were ALWAYS placed beginning at the bottom end
of the coil. A similar shorting system was used on the
old BC-340 power amplifiers (10 KW CW, also running FSK).
Those beasties were operating 24/7 and cranked out the RF
continuously until another QSY was required. BC-340 was
water-cooled with the water flow going through the tank
coil tubing from the final amplifier tube jacket. Was
thermally cooler than the PW-15.

For those who are interested in details and comparisons with
actual result numbers can consult with almost any old text
for ways of measuring Q, coefficient of coupling, etc.
Hours of drudgery to derive all that...as lots of EE students
can testify to. :-)

LenAnderson@ieee.org

2678. FA:SHORT TUBE LIST:801A +....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-28 00:37:09 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <V2Ple.842587$w62.53832@bgtnsc05-news.ops.worldnet.att.net>
Source record: 18711
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Current tubes on ebay include:

811A's -CH x 10 Lot #2 (have more)
USN- 5Y3WGTB X 4
801A's X2
6E5 X2
6CN6/EL-38 MULLARD X2
at : http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

More stuff + tubes coming as well, tnx for looking, heytubeguy

2679. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-28 20:23:25 UTC
From: LenAnderson@ieee.org
Message-ID: <1117311805.316066.192920@g43g2000cwa.googlegroups.com>
Source record: 18712
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

From: Roy Lewallen on May 27, 6:49 pm

>LenAnder...@ieee.org wrote:

>I apologize for not being more precise in my nomenclature.

No problem to me...I fear I got off on a "lecture mode" again,
but was speaking in generalities to other readers about
receiver back-ends.

>By "BFO" I mean the oscillator used for product detection when receiving
>SSB and CW signals. No AM detector is involved. The AGC pickoff is of
>course done from the IF preceding the product detector, and doesn't
>intentionally use the BFO or product detector in any way. The problem I
>was alluding to is that the BFO produces a large signal which is very
>near the IF, and therefore can get into the AGC circuitry unless some
>care is taken to prevent it. This produces a DC bias among other
>problems, which can interfere with AGC circuit operation. I found it
>necessary to completely shield the BFO, use a good doubly balanced
>detector, and use differential amplifiers in the AGC chain in order to
>reduce the BFO crosstalk to a tolerable level.

Sounds good to me. Separated, isolated detectors allow one to
concentrate on the particulars of each, makes it a lot easier to
work with.

For what it's worth on the audio-output part, I'm more fond of
rather high levels of IF into the detector to get around the
"square-law" response...looking for a better AM envelope
reproduction. While that results in better audio, it also makes
decoupling more difficult to avoid feeding the strong IF back
to the input. Different problem, same cuss-words on the bench,
though. :-)

>I strongly suspect that a number of the complicated AGC circuits evolved
>because a simpler AGC circuit was poorly designed and/or subject to
>problems like crosstalk from the BFO. Instead of solving the fundamental
>problems, increasingly complex circuits are developed until one
>accidentally works correctly, then the improvement is credited to the
>complex circuit rather than its accidental relative immunity to the
>results of poor fundamental design. This isn't of course universally
>true, but it happens pretty often.

I agree with you there. At least for voice-band detection
receivers (of which I've only built two in a half century from
my own design). Discounting copies of "All-American Five"

table-model cheapies using a single diode for both audio rectification and (low-pass filtered) for AGC voltage to a single controlled variable-mu amplifier. Ultimate simplicity for reasons of price over the counter. One CAN put a BFO on those (Hallicrafters did back in the late 40s) but the performance is not the best.

Separating the "detectors" by function is best. The audio "detector" (I still think of them as 'rectifiers') can be optimized for best sound. The AGC detector can be optimized for its action separately...and its response versus IF input and overall receive chain amplification tailored for the AGC control-loop "gain." Filtering-decoupling that follows can be figured out to keep the low-frequency phase response from upsetting the closed-loop AGC control.

Separate AGC and voice detectors lets one play around with "attack" and "decay" time-constants with no more than a single dual op-amp shaping circuit...multiple time-constants under manual control if desired, that won't interfere with the audio detection part. AGC detector input would have to be the fastest-responding (to desired time-constant) with a relatively simple op-amp doing the time-stretching.

Some folks might consider that op-amp addition "complicated." Won't blame them if they do. From my experience, a "complicated" AGC subsystem is having to AGC on a 1 uSec pulse with a time gate in the presence of other assynchronous 1 uSec pulse sidebands located on 1 MHz intervals (up to 3) on either side...with a decay to attack time ratio of about 1000:1. :-) Did that for an R&D airborne system at RCA...was somewhat too much but that allowed a greater simplification for a following generation of airborne equipment. A lesson there can be to "cover all bases possible" the first time around, then investigate to see what can be simplified for something less complicated.

AGC, in the basic consideration, should begin as a control loop. From there on its a matter of choice of circuits.

LenAnderson@ieee.org

2680. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-28 20:23:53 UTC
From: clifto <clifto@clifto.com>
Message-ID: <qj0nm2-ofn.ln1@remote.clifto.com>
Source record: 18713
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

Roy Lewallen wrote:
> I strongly suspect that a number of the complicated AGC circuits evolved
> because a simpler AGC circuit was poorly designed and/or subject to
> problems like crosstalk from the BFO. Instead of solving the fundamental
> problems, increasingly complex circuits are developed until one
> accidentally works correctly, then the improvement is credited to the
> complex circuit rather than its accidental relative immunity to the
> results of poor fundamental design. This isn't of course universally
> true, but it happens pretty often.

All too many software wannabees work this way too.

--
I miss my .signature.

2681. Re: Just $19.95 to start -HOME BUSINESS

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-29 01:01:09 UTC
From: Mr Fed UP <mrfedup@bellsouth.net>
Message-ID: <fp8me.33278$lQ3.26699@bignews5.bellsouth.net>
Source record: 18714

DAMN!!!! ISN'T THERE ANYWHERE YOU JACKASSES WON'T DUMP YOUR SHIT!
GET A LIFE AND LEAVE FOLKS ALONE
...
>
>
>
> • Just $19.95 to start a HOME BUSINESS
>
> • Just $19.95 a month to keep it going
>
> • Anybody can do that
>
> • That's a 1/2 a tank of gas
>
> • Not a financial decision
>
> If you want more information, please reply this e-mail with your
> contact(name+e-mail)with the subject: MORE INFO
>
>
>
>

2682. Re: Just $19.95 to start -HOME BUSINESS

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-29 01:25:09 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <ae6i91563ef20tp3j5rqt882oliln95v9f@4ax.com>
Source record: 18715

On Sat, 28 May 2005 20:01:09 -0500, "Mr Fed UP"
<mrfedup@bellsouth.net> wrote:

>DAMN!!!! ISN'T THERE ANYWHERE YOU JACKASSES WON'T DUMP YOUR SHIT!
>GET A LIFE AND LEAVE FOLKS ALONE
>...
>>
>>
>>
>> ï¿½ Just $19.95 to start a HOME BUSINESS
>>
>> ï¿½ Just $19.95 a month to keep it going
>>
>> ï¿½ Anybody can do that
>>
>> ï¿½ That's a 1/2 a tank of gas
>>
>> ï¿½ Not a financial decision
>>
>> If you want more information, please reply this e-mail with your
>> contact(name+e-mail)with the subject: MORE INFO
>>
>>
>>
>>
>

Their life is scamming the naive, ignorant and greedy.

R

2683. Re: Just $19.95 to start -HOME BUSINESS

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-29 01:30:52 UTC
From: yeah man <radio@aus.om>
Message-ID: <42991b4b$1@news.comindico.com.au>
Source record: 18716

CARLA.... LOOK HERE.... WHY DON'T YOU JUST FUCK OFF AND LEAVE OUR NEWS
GROUPS ALONE.
CAN I MAKE IT ANY MORE PLAIN FOR YOU.

"Carla Rodrigues" <betteruniverse@sapo.pt> wrote in message
news:050528161542446@news.telepac.pt...
> HERE'S THE DIFFERENCE...
>
>
>
> • Just $19.95 to start a HOME BUSINESS
>
> • Just $19.95 a month to keep it going
>
> • Anybody can do that
>
> • That's a 1/2 a tank of gas
>
> • Not a financial decision
>
> If you want more information, please reply this e-mail with your
contact(name+e-mail)with the subject: MORE INFO
>
>
>
>

2684. Re: Just $19.95 to start -HOME BUSINESS

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-29 01:34:13 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <t_8me.156$CN5.9344137@news.sisna.com>
Source record: 18717

The people who paste up such stuff don't worry me near as much as the ones answering the ads, purchasing the junk and keeping them in business!!!

Warmest regards,
John
"Mr Fed UP" <mrfedup@bellsouth.net> wrote in message
news:fp8me.33278$lQ3.26699@bignews5.bellsouth.net...
DAMN!!!! ISN'T THERE ANYWHERE YOU JACKASSES WON'T DUMP YOUR SHIT!
GET A LIFE AND LEAVE FOLKS ALONE
...
>
>
>
> · Just $19.95 to start a HOME BUSINESS
>
> · Just $19.95 a month to keep it going
>
> · Anybody can do that
>
> · That's a 1/2 a tank of gas
>
> · Not a financial decision
>
> If you want more information, please reply this e-mail with your
> contact(name+e-mail)with the subject: MORE INFO
>
>
>
>

2685. Re: Just $19.95 to start -HOME BUSINESS

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-29 01:52:38 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <rv7i91pdgrk4i18od2aiovgm8pic7nfnn7@4ax.com>
Source record: 18718

On Sun, 29 May 2005 01:30:52 GMT, "yeah man" <radio@aus.om> wrote:

>CARLA.... LOOK HERE.... WHY DON'T YOU JUST FUCK OFF AND LEAVE OUR NEWS
>GROUPS ALONE.
>CAN I MAKE IT ANY MORE PLAIN FOR YOU.
>
Exactly what makes you think that these spammers ever read the
replies, if they even have ever read anything in any newsgroup?

This is a broadcast, and replies are as effective as yelling at the
guy on TV.

Happy trails,
Gary (net.yogi.bear)
--
At the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

2686. Re: Just $19.95 to start -HOME BUSINESS

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-29 02:15:25 UTC
From: "Anon E. Mouse" <mouseae@superheros.com>
Message-ID: <d7b8jt$a6s$1@enyo.uwa.edu.au>
Source record: 18719

Gary S. <Idontwantspam@net> wrote:
> This is a broadcast, and replies are as effective as yelling at the
> guy on TV.
>
You mean the guy on TV can't hear me! I'm shocked.
If anyone feel like a vigilante, might I suggest an email bomb or a DOS
attack. Sort of like putting up a broad spectrum transmitter to jam radio
signal. Thats more effective than replying to this post.

--
Anon.

"The most prolific writer in history is Anon."

2687. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-29 02:25:18 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <lK9me.35204$Ot6.1760006@news20.bellglobal.com>
Source record: 18721
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

Thanks to all for the constructive and informative discussion. I wish I could say that it has helped to solve my problem but I'm still wrestling with it. The low frequency circuit analysis by Spice, Bode and Nyquist plot are beyond my capacity but I have had some excellent help from Dave, off-list, who eye-balled the DX-394 schematic and my mod. We identified decoupling networks and what I assume to be AGC 'delay' networks and tackled it on the basis that reducing the time constants of the larger ones should reduce the low frequency phase shift that could be contributing to the problem. The opposite occurred - increasing the 'delayed AGC' time constant reduced the instability and effectively slowed the attack, especially on the RF front-end. More or less the same effect was obtained by slowing the attack in the attack network that affects all stages.

I believe 'delayed AGC' means a slower or delayed attack at the RF stages; in the DX-394, there is a R-C network adding maybe 15 ms to the attack on the AGC line affecting both the 1st mixer and the drain-source current of the RF preamp and a second network adding maybe 10 ms on top of this affecting the AGC gate of the RF preamp. I've doubled that first time constant and doubled what I would like in my attack and release networks in order to get the fastest stable speeds which I guess would be on the order of 20-40 ms attack and 50-80 ms release.

My mod has a FET amp/buffer at IF driving the heck out of the diodes so that should be fairly linear. I have adjustable gain at the output of the detector/attack filter. I don't think BFO interference is an issue; I don't notice any great difference in stability with it on or off - there are separate envelope and product detectors.

I'd welcome any more input. The base DX-394 schematic is at http://www.monitor.co.uk/radio-mods/dx-394/dx-394.htm and I'd be happy to send anyone the schematic of my mod.

73, Tom

2688. Re: Just $19.95 to start -HOME BUSINESS

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-29 02:27:20 UTC
From: - exray - <exray@coqui.net>
Message-ID: <119ia4b9qkh52f1@corp.supernews.com>
Source record: 18720

Ad text quoted/reposted by 5 or 6 folks while my ISP had the sense to delete the original posting.

-ex

Mr Fed UP wrote:

> DAMN!!!! ISN'T THERE ANYWHERE YOU JACKASSES WON'T DUMP YOUR SHIT!
> GET A LIFE AND LEAVE FOLKS ALONE

2689. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-29 07:23:41 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <oQW9tbC93WmCFwG3@g3ohx.demon.co.uk>
Source record: 18722
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

In message <lK9me.35204$Ot6.1760006@news20.bellglobal.com>, Tom Holden
<holden_family@sympatico.ca> writes
>Thanks to all for the constructive and informative discussion.
>
>I believe 'delayed AGC' means a slower or delayed attack at the RF stages;
>in the DX-394, there is a R-C network adding maybe 15 ms to the attack on
>the AGC line affecting both the 1st mixer and the drain-source current of
>the RF preamp and a second network adding maybe 10 ms on top of this
>affecting the AGC gate of the RF preamp. I've doubled that first time
>constant and doubled what I would like in my attack and release networks in
>order to get the fastest stable speeds which I guess would be on the order
>of 20-40 ms attack and 50-80 ms release.
>
>
>73, Tom
>
>

Tom,
I haven't been following this thread. However, in my understanding,
'Delayed AGC' doesn't refer to a time delay. It normally means that the
AGC in the RF stage doesn't cut in until a certain level of signal is
reached. AGC is applied as 'normal' to the IF stages but the RF stage is
held at maximum gain until the input signal is higher. The effect is to
obtain a better signal-to-noise ratio with low-level signals.
Ian.
--

2690. Re: WTB picastar

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-29 14:42:03 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <Ppkme.42551$CR5.13122@bignews1.bellsouth.net>
Source record: 18723

James Skalski wrote:
> I am thinking about building one. Before I start gathering parts I
> figured I would check to see if anyone has started, fizzled out, or
> otherwise changed plans to build it. What parts do you have? Any
> completed modules?
>
> Jim n2go
>
Would that be the DDS controled receiver design from the UK?
His DDS-Micro design was in an ap-note on the Analog Devices
web site (pdf download), but source code wasn't published.
The specific pic micro he used is now obsolete, though similar chips
are available (require software changes). Also the AD9850 dds
chip he used is now somewhat long in the tooth.

I am considering building a DDS vfo for a homebrew xcvr, but
I am looking at using one of the AD9951 series chips. These clock
to 400mhz and have a 14bit D/A vs the 10bit in the 9850. Spurs
and phase noise should be quite a bit lower with the 9951 series
chips over the 9850. You will need a surface mount to .1 mill
spacing proto board to hand solder it (not to mention good eyes
and/or a strong magnifier, and steady hands). Such proto boards
are available on ebay sometimes, and can also be found for sale
via a google search.

I would also switch from the PIC processor
to an Atmel MegaAvr mirco. The MegaAt16 and MegaAt32 processors
are available in 40pin dip and 44pin surface mount packages. They
have 28 i/o pins available if the on board JTAG interface is used
for debugging. The JTAG feature and the support of the GNU C
compiler makes these chips a better choice (IMHO) than the pics.
A JTAG interface from Atmel sells for $200, but 'clones' are
available for under $50 (and plans are available for building
your own for even less. I have already built one). Atmel's
Avrstudio is a free download for Windows (to drive the jtag)
along with WINAVR (the gnu compilier and C library). Similar
software is available for Linux from GNU/Sourceforge.

2691. Re: Daft question about a Pi tank matching circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-29 14:50:40 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <Uxkme.42586$CR5.8382@bignews1.bellsouth.net>
Source record: 18724

Tim Wescott wrote:
> MarkAren wrote:
>
>> Hi All,
>>
>> I keep noticing something which looks odd to me - I am sure it is
>> correct because this appears to be standard practice, but I would
>> appreciate it if someone could shed some light on the reasons...
>>
>> Take a peek at http://web.telia.com/~u85920178/tx/500w-txt.htm (first
>> example I found). Specifically look at the 5 position switch on the
>> output matching, in position 5, the bulk of the inductor is shorted
>> out. This just looks plain wrong to me.
>>
>> I assume that having shorted turns on an inductor like this drops the Q
>> drastically, or is this the whole point ?
>>
>> Is the same true for roller coaster type variable inductors ?
>>
>> Comments appreciated.
>>
>> Thanks,
>>
>> Mark.
>>
> I've pondered this question myself. I've only seen this done on
> air-wound coils -- on a coil wound or a core this would be disaster. I
> think the reason it's done is because if you _don't_ short the turns
> you'd have all sorts of wierd resonance and/or high RF voltage effects
> in the unshorted coils.
>
Most commerical receiver designs that used band switched coils
had a special rotary switch that shorted out all the unused coils
while they unshorted and selected the coil for the current band.
The reason was to avoid 'suckout' at the resonate frequency of the
unused coils.

Be aware that even if you do short out the unused section of the
coil in a tank circuit, if the lead lengths and the switch form
a resonate ground loop you will have arcing while you tune up
on some bands. Been there done that! (2kw amp with a pair of 4-400A's
in grounded grid. Selecting a good bandswitch is VERY IMPORTANT!!!!)

2692. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-29 16:50:05 UTC
From: Richard <delete.this.rf.gillette@ieee.org>
Message-ID: <1pmme.10141$M36.9936@newsread1.news.atl.earthlink.net>
Source record: 18725
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

Tom Holden wrote:
> I'm looking for some advice/guidance on the design of AGC detection and
> timing circuits, prompted by some level of frustration with a modification I
> have been doing to a DX-394 SW radio. My questions, though, probably apply
> to receiver design generally. I have a problem with stability - the receiver
> gain oscillates at medium and fast release speeds.
>
> Previously I had done a mod that pretty successfully provided 3 release
> speeds for the DX-394 but fell short of what I thought was the ideal: an
> attack time of ~1 millisecond, independent of the release time. That was
> based on a survey of receivers from which I concluded that the attack should
> be less than 13 ms and that 1 ms seemed to be the goal. Release speeds
> should probably be on the order of 30ms, 300ms and 3 seconds, for fast,
> medium and slow, respectively, although there seems to be lots of scope for
> subjective preference. My mod required a rather large capacitor for Slow
> release so my Slow was more like 1.2 seconds and the attack was slowed to
> maybe 50-70 ms for the slow release..
>
> The objectives of the enhanced mod are to:
> a) improve the attack speed to better less than 13ms for all release speeds
> b) extend the Slow release using smaller cap
> c) reduce the loading of the AGC detector on the output of the 2nd IF amp
> and also possible distortion due to the AGC and AM/Product detectors fed in
> parallel
>
> I used a JFET to buffer between the IF amp and the diode detector and an
> emitter follower between the attack R-C circuit and the release R-C circuit,
> dc coupled to the stock AGC amplifier. On the release side, about 1/10 the
> capacitance vs the earlier mod is required for slow release and the attack
> does seem to be similarly less affected by the release network.
>
> However, at the fast and medium release settings, the receiver gain
> literally oscillates at a rate that seems to be a function of attack and
> release time constants, manual RF/IF gain setting, AGC gain setting and
> signal strength. The depth of this gain modulation is affected by AGC and RF
> gain. In order to get stability, it seems that I have to slow down the
> attack (and/or release) time constant and carefully tweak the AGC gain
> between the onset of oscillation and receiver peak distortion caused by not
> enough gain reduction.
>
> Have I completely misunderstood the meaning of attack/release speeds? My
> 'ideal' attack circuit has a R-C time constant of 1 ms, which means it will
> even respond substantially to 1kHz modulation. That seems high. The R-C time

> constant for my target fast release of 30 ms means that it will
> substantially follow a 30Hz signal. I have had to pad these out to ~20ms
> attack, 50ms release for stability or tolerably low gain oscillation depth
> at medium and lower signal strengths. With this slower attack, stability is
> much improved with the 500ms medium release speed.
>
> The target attack/release of 1ms/30ms is not good for AM reception anyway as
> it causes considerable distortion on heavy bass modulation - it is for data
> services on steady carriers, e.g., PSK, FSK, DRM. But if the AGC causes
> oscillation, then that's interference of another kind that would adversely
> affect error rates. Several, including myself, have noted that DRM SNR is
> improved by defeating AGC, on a wide variety of receivers.
>
> Is this a typical problem for receiver design? Would 'hang' AGC stabilise
> the AGC loop? Are my design objectives reasonable?
>
> Comments from experienced radio designers/builders/experimenters much
> appreciated.
>
> Tom
>
>
Here is a way out solution.

To avoid the pumping try the following as a last resort:

1. Increase the agc filter cap. value. This by itself will decrease the agc attack time, but if you lower the charging source resistance you can again decrease the attack time. This change may require two emitter flowers in series to lower the charging source resistance. (If 2 x .7 volts is two high of an offset try npn followed by pnp or select the optimum fet.) The object is to move the filter corner down in frequency and stop the pumping. At this point you have fast attack and very slow release.
2. Now add a second agc circuit in parallel with the first. It should have the attack and release times that you want. Compare the two agc voltages and when the second one is lower than the first by some small amount, activate an active pull down to discharge the large cap in the first agc filter.

This may be one way to isolate and stabilize the agc feedback .

2693. FA: Breadboard Recvr 3 Tube

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-29 17:53:34 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <xknme.853134$w62.384638@bgtnsc05-news.ops.worldnet.att.net>
Source record: 18726
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Offering a 3 tube, 301A,201A, 301A, Breadboard type receiver at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

+ other stuff AND a BB transmitter coming soon too. Tnx heytubeguy

2694. Re: WTB picastar

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-29 20:48:31 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <zUpme.17791$PS3.2676@attbi_s22>
Source record: 18727

> Would that be the DDS controled receiver design from the UK?
> His DDS-Micro design was in an ap-note on the Analog Devices
> web site (pdf download), but source code wasn't published.
> The specific pic micro he used is now obsolete, though similar chips
> are available (require software changes). Also the AD9850 dds
> chip he used is now somewhat long in the tooth.

The very one. Source code available on the Picastar website.
>
> I am considering building a DDS vfo for a homebrew xcvr, but
> I am looking at using one of the AD9951 series chips. These clock
> to 400mhz and have a 14bit D/A vs the 10bit in the 9850. Spurs
> and phase noise should be quite a bit lower with the 9951 series
> chips over the 9850. You will need a surface mount to .1 mill
> spacing proto board to hand solder it (not to mention good eyes
> and/or a strong magnifier, and steady hands). Such proto boards
> are available on ebay sometimes, and can also be found for sale
> via a google search.

I've been running a 9951 overclocked at 600 MHz (It'll do a bit over 700 before it REALLY doesn't like it) Waterproofed in the shielding department, feedthru decoupled and on a 2 layer board with PTH copied from the AD proto board. BTW, the 9951 is still running cool at 600 MHz (External LO) with the center post solder grounded to a large PTH.

Seven pole band pass filter, also in the DDS box. Phase noise is non-existent. Spurious, while at the AD specs is still objectionable.

W4ZCB

2695. Re: need CRT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-29 21:40:17 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <429A36BA.BE44802B@earthlink.net>
Source record: 18728

Bill wrote:
>
> If you can further cross to see what type goes in a H-P 1222A scope -
> and find a match - I've got one of those here free for the cost of shipping.
>
> -Bill
> exray at coqui dot net

That should be H-P part number 5083-3872

http://www.sphere.bc.ca/test/crts.html for common CRTs.

http://www.sphere.bc.ca/test/hp-crts.html for HP CRTs.

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

2696. Re: need CRT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-29 22:18:54 UTC
From: Bill <spam@coqui.net>
Message-ID: <38d5c$429a3fd1$4232bdd1$6521@COQUI.NET>
Source record: 18729

Michael A. Terrell wrote:

> Bill wrote:
>
>>If you can further cross to see what type goes in a H-P 1222A scope -
>>and find a match - I've got one of those here free for the cost of shipping.
>>
>>-Bill
>>exray at coqui dot net
>
>
>
> That should be H-P part number 5083-3872
>
> http://www.sphere.bc.ca/test/crts.html for common CRTs.
>
> http://www.sphere.bc.ca/test/hp-crts.html for HP CRTs.
>

FWIW, the manual calls it a HP Nr. 2090-0032 with an errata sheet
changing it to 2090-0031. They've probably changed numbers several
times since then.

-Bill

2697. Re: need CRT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-29 23:40:59 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <429A52F8.31EF0787@earthlink.net>
Source record: 18730

Bill wrote:
>
> Michael A. Terrell wrote:
>
> > Bill wrote:
> >
> >>If you can further cross to see what type goes in a H-P 1222A scope -
> >>and find a match - I've got one of those here free for the cost of shipping.
> >>
> >>-Bill
> >>exray at coqui dot net
> >
> >
> >
> > That should be H-P part number 5083-3872
> >
> > http://www.sphere.bc.ca/test/crts.html for common CRTs.
> >
> > http://www.sphere.bc.ca/test/hp-crts.html for HP CRTs.
> >
>
> FWIW, the manual calls it a HP Nr. 2090-0032 with an errata sheet
> changing it to 2090-0031. They've probably changed numbers several
> times since then.
>
> -Bill

Thanks, I'm collecting as much of this information as I can and creating
a database to post on one of my websites. I know some products go
though a number of changes as design changes are made. Sphere has some
CRTs in stock, but a lot are listed as "sold".
--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

2698. FA: HRO50 & 60 SAMS:1 Day left

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-30 01:05:31 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <vFtme.854989$w62.346920@bgtnsc05-news.ops.worldnet.att.net>
Source record: 18731
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Have both HRO-50 and HRO-60 Sams photofact information at address:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

+other stuff too, tnx heytubeguy

2699. FS teflon wire at Rochester Hamfest

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-30 16:46:01 UTC
From: James Skalski <jskalski@yahoo.com>
Message-ID: <429B0B49.9070104@yahoo.com>
Source record: 18732
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

I will have some Teflon insulated, silver plated stranded 22AWG wire for sale. It is 5 fifty foot rolls (250 feet total)
At least five different colors. The wire is rated at 200C and 600V.
Price at Rochester hamfest will be $7 per pack of 250 feet. I will be in at Flea market Saturday morning. (It is a flea market and I will be wandering about at times looking for stuff that I need) So I will try to be there "on the hour"...

If you could use larger quantities you can reserve 1000' spools of 22 AWG teflon wire for $20 per spool. You must contact me in advance with your callsign. I will be limited by weight and space requirements.

Jim n2go

2700. Tulsa Oklahoma

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-30 17:10:52 UTC
From: Rob Mills <robmills@cox.net>
Message-ID: <rOHme.138$Zt.8@okepread05>
Source record: 18733

This ad will appear in the Tulsa World Thursday, Fri and Sat of this week under "Garage sales general location". Thanks for looking, RM ~

Radio & Electronics House cleaning, shortwave, scanners, ham and cb. Also Household

2701. Re: Tulsa Oklahoma

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-30 18:06:59 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnd9mli3.1mq2.bit-bucket@shell.config.com>
Source record: 18734

On Mon, 30 May 2005 12:10:52 -0500, Rob Mills wrote:
> This ad will appear in the Tulsa World Thursday, Fri and Sat of this week
> under "Garage sales general location". Thanks for looking, RM ~
>
> Radio & Electronics House cleaning, shortwave, scanners, ham and cb. Also
> Household

All the hams in the other 49 U.S. states and in all the countries
of the the rest of the world thank you.

2702. Re: Tulsa Oklahoma

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-30 22:55:30 UTC
From: Bruce Fletcher <r1card1an@bt1nternet.c0m>
Message-ID: <d7g5l2$r73$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 18735

Rob Mills wrote:
> This ad will appear in the Tulsa World Thursday, Fri and Sat of this week
> under "Garage sales general location". Thanks for looking, RM ~
>
>
> Radio & Electronics House cleaning, shortwave, scanners, ham and cb. Also
> Household
>
>

Thanks but it's a long way to go for a garage sale.
--
Bruce Fletcher
Stronsay, Orkney UK
<www.stronsay.co.uk/claremont>

2703. Garmin GPS to TinyTrak3 problems

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-31 00:06:59 UTC
From: Anonymous <jupiter@anon.com>
Message-ID: <1117498020.376799@cswreg.cos.agilent.com>
Source record: 18736

Hi, Everybody,

I am trying to set up an APRS station consisting of a Garmin GPSmap 60 and one of the TinyTrak3 TNCs. However, the green 'GPS Valid' LED never lights.

I can connect the GPS receiver directly to my computer's serial port and read good data, and I can capture some of that data and play it back from computer to TinyTrak and the green LED lights up, but a direct connection between GPS and TT just does not work.

I see a waveform coming out of the GPS serial (J2 pin 2 of the TT) using a scope. Quiescent voltage is -5V, and when the data burst comes it is -5 V to +5 V.

Could this be a voltage level problem on the serial? Is there a converter that can be used? Or is it another problem, possibly protocol-related?

Any ideas?

Thank you,

Al W6LX

2704. Re: Garmin GPS to TinyTrak3 problems

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-31 00:57:27 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <4scn9152diu9faa00seifrimfdombfddfi@4ax.com>
Source record: 18737

On Mon, 30 May 2005 17:06:59 -0700, "Anonymous" <jupiter@anon.com>
wrote:

>Hi, Everybody,
>
>I am trying to set up an APRS station consisting of a Garmin GPSmap 60 and
>one of the TinyTrak3 TNCs. However, the green 'GPS Valid' LED never lights.
>
>I can connect the GPS receiver directly to my computer's serial port and
>read good data, and I can capture some of that data and play it back from
>computer to TinyTrak and the green LED lights up, but a direct connection
>between GPS and TT just does not work.
>
>I see a waveform coming out of the GPS serial (J2 pin 2 of the TT) using a
>scope. Quiescent voltage is -5V, and when the data burst comes it is -5 V to
>+5 V.
>
>Could this be a voltage level problem on the serial? Is there a converter
>that can be used? Or is it another problem, possibly protocol-related?
>
>Any ideas?
>
>Thank you,
>
>Al W6LX
>

OK Al, I'm going to go out on a limb here. The GPS doesn't work on
the TNC. It does work on the PC. The PC can send GPS data it
recorded from the GPS out to the TNC and the TNC recognizes the dya as
GPS data and interprets the protocol correctly (the green LED goes
on). You measured the waveform from the GPS and it shows +- 5V.

I. The GPS is good, it works on the PC.
II. The PC is good, it reads and writes GPS data.
III. The TNC is good, it reacts correctly to the PC and the GPS data
from the PC.
IV. The GPS waveform is +- 5V.

My conclusion: The voltage is too small for the TNC to recognize.
Did you 'scope the PS serial data? If you do, you will see that it is
+- 12V. The PC's serial port can read and write both +-5V and +-12V
levels. You need a level converter to change the GPS data to the
level that the TNC needs to see.

Russ

2705. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-31 02:40:25 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <w8Qme.7055$yG4.493107@news20.bellglobal.com>
Source record: 18738
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

Thanks for the reference, Bill. I did learn something of value from it but
the devices are clearly intended for audio frequency although one might
actually support 0dB gain at 455kHz! However, they are a closed loop system
and it's not obvious that one could bring out the required control voltage
to drive the receiver AGC.

Regards,

Tom

"Netgeek" <no_spam@comcast.net> wrote in message
news:lcKdnZUZ8aUPgAjfRVn-pQ@comcast.com...
> Hi Tom,
>
> You might find some good info from reading the description and
> data sheets for the Analog Devices SSM2165 and/or SSM2166
> at www.analog.com. They address the issues of having a threshold
> which can be adjusted and then varying the amount of compression
> or limiting asymetrically. Perhaps you could modify your circuit to
> emulate some of these features - or perhaps just use the devices
> described?
>
> Bill
>
> <miso@sushi.com> wrote in message
> news:1117004243.189545.126960@z14g2000cwz.googlegroups.com...
>> This sounds like a classic negative feedback oscillation. You sense the
>> signal is too large, so you send a signal to kill the gain, and then
>> you sense the signal is too small, so you send a signal to increase the
>> gain.
>>
>> Having different attack and release time means you have two different
>> time constants My guess is the quick attack leads to the instability,
>> since it is the lesser damped system. If this is true, then you should
>> concentrate on the attack time, i.e find how slow it has to be for the
>> sytem to be stable.
>>
>> Of course this is really had to do without seeing the circuitry in
>> action.
>>
>
>

2706. Re: Tulsa Oklahoma

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-31 03:02:44 UTC
From: Rob Mills <robmills@cox.net>
Message-ID: <stQme.150$Zt.112@okepread05>
Source record: 18739

"Bruce Fletcher" <r1card1an@bt1nternet.c0m> wrote in message
news:d7g5l2$r73$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com...

>>> Thanks but it's a long way to go for a garage sale.<<<

Not even if I give you a 10% travel allowance? :(

Cheerios, Rob Mills

2707. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-31 12:05:38 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <429c5313$0$5113$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 18740
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

I have struggled with this in the past
It is a function of the behaviour of the servo loop at low freq and I
dont have the theory to analyse it properly.
However, the most successful AGC system I used in a DC receiver had a T
attenuator as the control element, consisting of resistors on the
horizontal arms of the T with a Darlington pair to ground as the control
element. This was driven by Opamp -> rectifier (BE junction of a 2N3904)
driving an emitter follwer driving a conventional RC circuit. It seemed
that when you got rid of any DC shift in the system this fixed the
problem. As a bonus you got a surprisingly accurate log detector(over
about 60bB range) for an S meter. The difficult part in all systems
seems to be the control element.

Richard

Tom Holden wrote:
> I'm looking for some advice/guidance on the design of AGC detection and
> timing circuits, prompted by some level of frustration with a modification I
> have been doing to a DX-394 SW radio. My questions, though, probably apply
> to receiver design generally. I have a problem with stability - the receiver
> gain oscillates at medium and fast release speeds.
>
> Previously I had done a mod that pretty successfully provided 3 release
> speeds for the DX-394 but fell short of what I thought was the ideal: an
> attack time of ~1 millisecond, independent of the release time. That was
> based on a survey of receivers from which I concluded that the attack should
> be less than 13 ms and that 1 ms seemed to be the goal. Release speeds
> should probably be on the order of 30ms, 300ms and 3 seconds, for fast,
> medium and slow, respectively, although there seems to be lots of scope for
> subjective preference. My mod required a rather large capacitor for Slow
> release so my Slow was more like 1.2 seconds and the attack was slowed to
> maybe 50-70 ms for the slow release..
>
> The objectives of the enhanced mod are to:
> a) improve the attack speed to better less than 13ms for all release speeds
> b) extend the Slow release using smaller cap
> c) reduce the loading of the AGC detector on the output of the 2nd IF amp
> and also possible distortion due to the AGC and AM/Product detectors fed in
> parallel
>
> I used a JFET to buffer between the IF amp and the diode detector and an
> emitter follower between the attack R-C circuit and the release R-C circuit,
> dc coupled to the stock AGC amplifier. On the release side, about 1/10 the
> capacitance vs the earlier mod is required for slow release and the attack

> does seem to be similarly less affected by the release network.
>
> However, at the fast and medium release settings, the receiver gain
> literally oscillates at a rate that seems to be a function of attack and
> release time constants, manual RF/IF gain setting, AGC gain setting and
> signal strength. The depth of this gain modulation is affected by AGC and RF
> gain. In order to get stability, it seems that I have to slow down the
> attack (and/or release) time constant and carefully tweak the AGC gain
> between the onset of oscillation and receiver peak distortion caused by not
> enough gain reduction.
>
> Have I completely misunderstood the meaning of attack/release speeds? My
> 'ideal' attack circuit has a R-C time constant of 1 ms, which means it will
> even respond substantially to 1kHz modulation. That seems high. The R-C time
> constant for my target fast release of 30 ms means that it will
> substantially follow a 30Hz signal. I have had to pad these out to ~20ms
> attack, 50ms release for stability or tolerably low gain oscillation depth
> at medium and lower signal strengths. With this slower attack, stability is
> much improved with the 500ms medium release speed.
>
> The target attack/release of 1ms/30ms is not good for AM reception anyway as
> it causes considerable distortion on heavy bass modulation - it is for data
> services on steady carriers, e.g., PSK, FSK, DRM. But if the AGC causes
> oscillation, then that's interference of another kind that would adversely
> affect error rates. Several, including myself, have noted that DRM SNR is
> improved by defeating AGC, on a wide variety of receivers.
>
> Is this a typical problem for receiver design? Would 'hang' AGC stabilise
> the AGC loop? Are my design objectives reasonable?
>
> Comments from experienced radio designers/builders/experimenters much
> appreciated.
>
> Tom
>
>

2708. FA: Silver Marshall Literature later today

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-31 12:50:17 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <d4Zme.269810$cg1.260095@bgtnsc04-news.ops.worldnet.att.net>
Source record: 18741
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Will list brochures, catalogs, data sheets, & 'The Radiobuilder' newsletter later today at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

++++ coming in June is a working McMurdo-Silver 5Cspeaker as well. Tnx, 73, heytubeguy

2709. FA: Coming June:McMurdo-Silver 5C/spkr working

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-31 12:56:04 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <E9Zme.864329$w62.650657@bgtnsc05-news.ops.worldnet.att.net>
Source record: 18742
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Will post a McMurdo-Silver 5C and speaker in June. ~1931 model at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

+++ Silver -Marshall catalogs, data sheets,.... coming later today-check it out.

Tnx 73 heytubeguy

2710. Re: Garmin GPS to TinyTrak3 problems

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-31 18:32:24 UTC
From: fmmck@aol.com
Message-ID: <fmmck-3105051432240001@aca31097.ipt.aol.com>
Source record: 18743

In article <1117498020.376799@cswreg.cos.agilent.com>, "Anonymous"
<jupiter@anon.com> wrote:

> I am trying to set up an APRS station consisting of a Garmin GPSmap 60 and
> one of the TinyTrak3 TNCs. However, the green 'GPS Valid' LED never lights.

Al-

Russ may be right about needing level conversion. Another possibility is
that you need a null-modem adapter in the line between the GPS and the
TNC.

And what about baud rate? What if the PC has automatic baud-rate
adjustment and the GPS & TNC don't?

73, Fred, K4DII

2711. Re: Tulsa Oklahoma

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-31 19:36:20 UTC
From: Bruce Fletcher <r1card1an@bt1nternet.c0m>
Message-ID: <d7iebjfuv1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 18744

Rob Mills wrote:
> "Bruce Fletcher" <r1card1an@bt1nternet.c0m> wrote in message
> news:d7g5l2$r73$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com...
>
>
>
>>>>Thanks but it's a long way to go for a garage sale.<<<
>
>
>
> Not even if I give you a 10% travel allowance? :(

It's not just the cost of travel, Rob, it's the time it takes. Just to get to Thurso on the mainland of Scotland takes two ferries and one days travel. I could fly from Kirkwall to Aberdeen but at the prices they charge (350 pounds return) it would be more expensive than the UK-USA air fare. <vbg>
--
Bruce Fletcher
Stronsay, Orkney
<www.stronsay.co.uk/claremont>

2712. Re: Tulsa Oklahoma

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-31 20:25:02 UTC
From: mikea@mikea.ath.cx
Message-ID: <d7ih6uapp1@puck.litech.org>
Source record: 18745

Bruce Fletcher <r1card1an@bt1nternet.c0m> wrote:
> Rob Mills wrote:
> > "Bruce Fletcher" <r1card1an@bt1nternet.c0m> wrote in message
> > news:d7g5l2$r73$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com...
> >
> >>>>Thanks but it's a long way to go for a garage sale.<<<
> >
> > Not even if I give you a 10% travel allowance? :(

> It's not just the cost of travel, Rob, it's the time it takes. Just to
> get to Thurso on the mainland of Scotland takes two ferries and one days
> travel. I could fly from Kirkwall to Aberdeen but at the prices they
> charge (350 pounds return) it would be more expensive than the UK-USA
> air fare. <vbg>

I live about 120 miles from Tulsa. If I had my way, then I'd be off like a
shot to Thurso or Aberdeen or Kirkwall or even Inverness. I really, really
like Scotland, but I'm sentenced to Oklahoma, and I try to take it like a
man.

--
Part of the MicroSloth Experience is having the slothware do all the hard stuff
for you. Another part is having your Winblows machine cracked and a copy of
BackOrifice planted, like a wasp's egg in a drugged spider carcass, so that you
can Retry, ReBoot, Reinstall, and RedHat.

2713. nc302l?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-31 22:14:32 UTC
From: grym <grym@gmx.net>
Message-ID: <1117577672.724911.258200@g49g2000cwa.googlegroups.com>
Source record: 18746

hi

i im trying to get one nc302l, here in sweden the minimum order from
noise com's dealer is 200usd
is there som dealer ho ships internation who has noise com's products?

i tryed to email noise com but i havent heard anything from them

t.i.a
hannu

2714. FA: National Vernier Dial Type MCN

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-05-31 23:55:13 UTC
From: Tom <tfarl@iowatelecom.net>
Message-ID: <BP6ne.24616$g66.17006@attbi_s71>
Source record: 18747
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap,rec.radio.swap

This is the one with the square face and three semi-circular "bands" + a
logging scale.

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5778456797

Ends Sunday Jun-05-05 15:20:46 PDT / 23:20:46 UTC.

Thanks for looking!
"theponyengine"

2715. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-01 00:00:20 UTC
From: LenAnderson@ieee.org
Message-ID: <1117584020.259442.149200@z14g2000cwz.googlegroups.com>
Source record: 18648
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

From: Richard Hosking on Tues 31 May 2005 20:05

>I have struggled with this in the past
>It is a function of the behaviour of the servo loop at low freq and I
>dont have the theory to analyse it properly.

The "theory" part should be evident to anyone who has made
a negative-feedback amplifier, single transistor to op-amp.
Getting to know op-amp responses both open-loop and closed-
loop (with negative feedback) can be helpful. Note that
op-amp designers actually build in open-loop phase shifts
at high frequencies to avoid oscillation with feedback.

The only difficult part is in MEASURING the PHASE at low
frequencies in the 0.1 to 10 Hz range...especially that of
the AGC control-line (feedback) circuitry. If not, some
dog-work on analyzing the magnitude and phase response of
that circuit will show that. [ability to handle complex
quantities is preferred there]

If the phase response is 0/360 degrees between AGC control-
line input and output (to the gain-controlled stages), AND
the closed-loop gain of the system is greater than unity,
there be troubles there! :-(

To get a view into AGC behavior with any general receiver,
disconnect the AGC control-line from the gain-controlled
stage and substitute a small variable DC source for the
AGC control-line input to that gain-controlled stage.
Using a reasonably-well-calibrated RF source, pick some
RF levels over the expected dynamic range of receiver input.
At each input level, adjust the DC control-line substitute
to be the same as the value of the disconnected AGC control-
line. Measure the DC value of both the input and output of
that AGC control-line circuitry.

The reason for doing that is to remove any phase effects
at low frequencies. That's a baseline value set that
SIMULATES the closed-loop control range of the AGC.

With enough RF input signal levels, the characteristic curve
of the closed-loop AGC action at DC can be seen...from no
AGC (maximum receiver gain) to high values of AGC control
(essentially minimum receiver gain). That will show the
delta of tiny AGC-control line variations which is the

equivalent of the "feedback percentage" of a negative-feedback amplifier simple formula.

Alternately, one can do an open-loop gain measurement using a series of AGC control-line value increments from minimum to estimated maximum. Setting the simple DC supply (substitute for the AGC control-line) to those increments will do it nicely. Log the RF input level for those DC increments and measure the input to the AGC control-line feedback circuitry (even though it is disconnected from the controlled stages). That will result in the same input signal characteristic curve.

Either way will result in "seeing" what the RF input signal characteristics are, allow one to use the AGC line for things like an S-Meter indicating circuit, squelch control, etc. Note: The alternate method can also be done analytically on paper if the controlled stages' gain v. control line is known. A "gain budget" can be tabulated of the total receiver sensitivity to various RF input levels that produce various AGC control-line values.

That takes part of an afternoon's bench data logging, dreary though that may be. It will establish THE characteristics of that receiver, valuable reference for later work on it. That curve will be no different than that of a single amplifier stage with varying amounts of negative feedback.

Next is to either measure or calculate the low-frequency magnitude and phase characteristics of the AGC control-line circuitry (ALL of it, even to bypass caps at the controlled stage input connection). Magnitude alone will yield the feedback percentage of the equivalent negative-feedback amplifier. The phase response at various low frequencies has to be compared to the "attack" and "decay" times as desired. THAT is not intuitive but must be examined to see if the low-frequency AGC control characteristics will result in a negative-feedback or positive-feedback (oscillatory, motorboating) amplifier equivalent.

A stable receiver WITH AGC should ALWAYS have some error.

If actual low-frequency oscillation occurs, one cure is to attenuate the AGC control-line range. A voltage divider if the AGC control is through voltage does that. Such attenuation works on the magnitude of the AGC control but will also affect the phase.

I hope this simplified explanation is a help for all who aren't familiar with Control System theory. Control Systems aren't as intuitive as many instructors on the subject claim so there isn't a lot of literature on it in popular publications for hobbyists. Those usually present some

very simple analogue such as the ball governor valve on a
steam engine of old and let it go at that. :-(

LenAnderson@ieee.org

2716. FA: Rare Hammarlund HQ129X Main TuneE & Bandspread Knobs

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-01 00:01:43 UTC
From: Tom <tfarl@iowatelecom.net>
Message-ID: <GV6ne.24006$IC6.17783@attbi_s72>
Source record: 18649
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Ends Saturday, June 04- 17:20:22 PDT (Sunday June 05 -01:20:22 UTC)
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=4673&item=5778278737&rd=1&ssPageName=WDVW

Thanks for looking,
"theponyengine"

2717. FA: Vintage "CRUD-o-ject" CW filter.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-01 00:09:45 UTC
From: Tom <tfarl@iowatelecom.net>
Message-ID: <d17ne.24623$g66.23392@attbi_s71>
Source record: 18650
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Really clean and works good.

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5778466256

Ends Sunday, Jun-05 16:30:23 PDT (Monday June 06- 00:30:23).

73,
"theponyengine"

2718. Re: my auctions -Duhh, I can't read a clock too good, Moe!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-01 00:19:19 UTC
From: Tom <tfarl@iowatelecom.net>
Message-ID: <ba7ne.24025$IC6.11186@attbi_s72>
Source record: 18651
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Age sets in, I guess. I see in my previous "FA" posts that I got the
UTC ending times wrong. They should be an hour earlier. Back to novice
class for me!

73,
"theponyengine"

2719. Re: WTB picastar

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-01 01:53:52 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <fw8ne.53860$J25.34105@bignews6.bellsouth.net>
Source record: 18652

Harold E. Johnson wrote:
>>Would that be the DDS controled receiver design from the UK?
>>His DDS-Micro design was in an ap-note on the Analog Devices
>>web site (pdf download), but source code wasn't published.
>>The specific pic micro he used is now obsolete, though similar chips
>>are available (require software changes). Also the AD9850 dds
>>chip he used is now somewhat long in the tooth.
>
>
> The very one. Source code available on the Picastar website.
>
URL please? Thanks!
(He must have been a dedicated hacker to fit all that he did
in just 1k! I've seen a similar design that would calibrate
itself, and it took almost 2k of code! Actually given all
the glue required to expand 13 i/o lines to drive everything
it might be easier and cheaper just to use a MegaAt16 AVR
micro, program in "C", and have the jtag to debug.)

>>I am considering building a DDS vfo for a homebrew xcvr, but
>>I am looking at using one of the AD9951 series chips. These clock
>>to 400mhz and have a 14bit D/A vs the 10bit in the 9850. Spurs
>>and phase noise should be quite a bit lower with the 9951 series
>>chips over the 9850. You will need a surface mount to .1 mill
>>spacing proto board to hand solder it (not to mention good eyes
>>and/or a strong magnifier, and steady hands). Such proto boards
>>are available on ebay sometimes, and can also be found for sale
>>via a google search.
>
>
> I've been running a 9951 overclocked at 600 MHz (It'll do a bit over 700
> before it REALLY doesn't like it) Waterproofed in the shielding department,
> feedthru decoupled and on a 2 layer board with PTH copied from the AD proto
> board. BTW, the 9951 is still running cool at 600 MHz (External LO) with the
> center post solder grounded to a large PTH.
>
Waterproofed? Ya liquid cooling it?!!
I've got a small proto board to change from the small surface mount
pattern to a .100" through hole pattern so I can bread board with
the 9951. There isn't any provision for the ground on the bottom
of the chip, so I'd have to add a small square of copper foil to the
proto board, drill a hole in the middle, and solder through the
back of the board to the chip, bringing the ground lead out the back
to the circuit ground.

Are you driving the chip AT 600mhz or using the frequency multiplier
on the chip with a lower frequency drive? What kind of oscillator
is driving the chip? (noise in the oscillator might matter).
> Seven pole band pass filter, also in the DDS box. Phase noise is
> non-existent. Spurious, while at the AD specs is still objectionable.
>
> W4ZCB
>
I had this idea of not using a low pass filter, but rather a band
switched band pass filter with a separate section for each band.
Might even use a varicap to tune the filter for max output at
the lo frequency via a d/a driven by the micro tuning the dds.
I wonder if such a filter would reduce the spur output over using
even a seven pole low pass?
>

2720. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-01 02:08:48 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <SM8ne.8826$yG4.632473@news20.bellglobal.com>
Source record: 18653
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

<LenAnderson@ieee.org> wrote in message
news:1117584020.259442.149200@z14g2000cwz.googlegroups.com...
> From: Richard Hosking on Tues 31 May 2005 20:05
>
>>I have struggled with this in the past
>>It is a function of the behaviour of the servo loop at low freq and I
>>dont have the theory to analyse it properly.
>
> The "theory" part should be evident to anyone who has made
> a negative-feedback amplifier, single transistor to op-amp.
> Getting to know op-amp responses both open-loop and closed-
> loop (with negative feedback) can be helpful. Note that
> op-amp designers actually build in open-loop phase shifts
> at high frequencies to avoid oscillation with feedback.
>
> The only difficult part is in MEASURING the PHASE at low
> frequencies in the 0.1 to 10 Hz range...especially that of
> the AGC control-line (feedback) circuitry. If not, some
> dog-work on analyzing the magnitude and phase response of
> that circuit will show that. [ability to handle complex
> quantities is preferred there]
>
Lacking a calibrated RF source and much other critical equipment, I do have a 45 year old Eico scope that once belonged to the famous Bach pianist Glenn Gould, and could cobble together a variable dc source and a low freq oscillator. To observe phase response of the open loop system, I'm thinking that the loop could be broken between the AGC detector and the AGC time constant/buffer. Drive the latter and the X input of the scope with the dc supply and superposed low freq signal, feed the receiver with steady state RF carrier and take the output of the AGC detector to the scope's Y input. The variation of the input to the AGC system will cause variation in the receiver gain and the output of the AGC detector. If in phase, the scope would show a line with positive slope; if antiphase, a line with negative slope; if in-between, an ellipse or some open shape subject to time constants and non-linearities. This arrangement would leave the receiver's RF gain control intact and its effect on time constant and phase observable; it appears to modify the discharge resistance seen by a 1uF cap at the RF and 1st Mixer in addition to pulling down the AGC voltage applied to them.

Does that seem to be a practical approach, Len?

Tom

2721. New program

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-01 13:40:07 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d7kdrnsjc1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 18654

It is well known that endfed 1/2-wave dipoles and similar length
antennas can be difficult, if not impossible, to tune up using
conventional T-tuners.

Download program TUNEHALF from website below and become familiar with
another tuner circuit which deals with vertical, inverted-L and
sloping antennas.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

2722. How make UNconnected PC power supply operate?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-01 22:16:26 UTC
From: mcalhoun@ksu.edu
Message-ID: <d7lc3q$go3@unix1.cc.ksu.edu>
Source record: 18655

For testing purposes, I'd like to make an PC power supply operate when
NOT installed in a PC. I've heard that the AT supply needs at least
SOME load on its 5-volt output before it will operate; is an ampere
or two sufficient?

For ATX supplies, I visited a friendly computer-repair store today and
examined the "cheater" into which they plugged UNconnected ATX supplies;
it had three pairs of connections:
1) A jumper from Ground to PS-ON
2) an LED and resistor from PowerOK to Ground
3) two wires from +5V and ground going into something about the size
of a small box of matches which was shrink-wrapped to the cable

They wouldn't let me disassemble it !-)
Was there probably a 5-ohm resistor in that box?
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

2723. Re: How make UNconnected PC power supply operate?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-01 22:41:56 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <UQqne.14063$w21.1412@newsread3.news.atl.earthlink.net>
Source record: 18656

<mcalhoun@ksu.edu> wrote in message news:d7lc3q$go3@unix1.cc.ksu.edu...
> For testing purposes, I'd like to make an PC power supply operate when
> NOT installed in a PC. I've heard that the AT supply needs at least
> SOME load on its 5-volt output before it will operate; is an ampere
> or two sufficient?
>
> For ATX supplies, I visited a friendly computer-repair store today and
> examined the "cheater" into which they plugged UNconnected ATX supplies;
> it had three pairs of connections:
> 1) A jumper from Ground to PS-ON
> 2) an LED and resistor from PowerOK to Ground
> 3) two wires from +5V and ground going into something about the size
> of a small box of matches which was shrink-wrapped to the cable
>
> They wouldn't let me disassemble it !-)
> Was there probably a 5-ohm resistor in that box?

Most all computer switching supplies need some load on it to start. About
1/2 to 1 amp should be fine. YOu can use a 5 ohm resistor rated at 10 watts
or so to put a load on the 5 volt line. When testing an AT supply I usually
just hook up to an old hard drive.
If you have some kind of load already hooked to the supply they you can
forget the resistor load.

2724. Re: How make UNconnected PC power supply operate?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-01 22:43:32 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <sSqne.72$Yi6.3617895@news.sisna.com>
Source record: 18657

Using PC power supply for powering other circuits than PC
PC power supplies are specifically designed for PC electronics.
Typically they work well in the current range a typical PC takes. If you
take too low current form the ouputs, the power supply myght not work
properly. If you load only one output, you might run into troubles of
poor regulation. Typically PC power supplies regulate the output voltage
of all outputs according the voltage in 5V output pin. If you don't put
enough load to +5V output, you don't get stable +12V output from the
power suppply.

I found the above, on the web, hope it helps...

Warmest regards,
John

<mcalhoun@ksu.edu> wrote in message news:d7lc3q$go3@unix1.cc.ksu.edu...
> For testing purposes, I'd like to make an PC power supply operate when
> NOT installed in a PC. I've heard that the AT supply needs at least
> SOME load on its 5-volt output before it will operate; is an ampere
> or two sufficient?
>
> For ATX supplies, I visited a friendly computer-repair store today and
> examined the "cheater" into which they plugged UNconnected ATX
> supplies;
> it had three pairs of connections:
> 1) A jumper from Ground to PS-ON
> 2) an LED and resistor from PowerOK to Ground
> 3) two wires from +5V and ground going into something about the size
> of a small box of matches which was shrink-wrapped to the cable
>
> They wouldn't let me disassemble it !-)
> Was there probably a 5-ohm resistor in that box?
> --
> --Myron A. Calhoun.
> Five boxes preserve our freedoms: soap, ballot, witness, jury, and
> cartridge
> PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785)
> 539-4448
> NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle,
> Pistol)

2725. Re: How make UNconnected PC power supply operate?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-01 23:40:48 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <5mhs915ggu36rp7mhf7r30m7iapa2h2upd@4ax.com>
Source record: 18658

On 1 Jun 2005 17:16:26 -0500, mcalhoun@ksu.edu wrote:

>For testing purposes, I'd like to make an PC power supply operate when
>NOT installed in a PC. I've heard that the AT supply needs at least
>SOME load on its 5-volt output before it will operate; is an ampere
>or two sufficient?
>
>For ATX supplies, I visited a friendly computer-repair store today and
>examined the "cheater" into which they plugged UNconnected ATX supplies;
>it had three pairs of connections:
> 1) A jumper from Ground to PS-ON
> 2) an LED and resistor from PowerOK to Ground
> 3) two wires from +5V and ground going into something about the size
> of a small box of matches which was shrink-wrapped to the cable
>
>They wouldn't let me disassemble it !-)
>Was there probably a 5-ohm resistor in that box?

I recall about a year or so ago, one of the ham magazines had an
article about converting PC power supplies for use as a radio PS.

Might be CQ or QST. The article gave specs on what youe are looking
for, but I do not remember details. If you are an ARRL member, you can
do a search on past QST articles on their website.

Happy trails,
Gary (net.yogi.bear)
--
At the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

2726. Re: How make UNconnected PC power supply operate?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-02 01:21:51 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <0mns91hq8fjm49k6mgldrrgkt46vbcd7q4@4ax.com>
Source record: 18659

On 1 Jun 2005 17:16:26 -0500, mcalhoun@ksu.edu wrote:

>For testing purposes, I'd like to make an PC power supply operate when
>NOT installed in a PC. I've heard that the AT supply needs at least
>SOME load on its 5-volt output before it will operate; is an ampere
>or two sufficient?
>
>For ATX supplies, I visited a friendly computer-repair store today and
>examined the "cheater" into which they plugged UNconnected ATX supplies;
>it had three pairs of connections:
> 1) A jumper from Ground to PS-ON
> 2) an LED and resistor from PowerOK to Ground
> 3) two wires from +5V and ground going into something about the size
> of a small box of matches which was shrink-wrapped to the cable
>
>They wouldn't let me disassemble it !-)
>Was there probably a 5-ohm resistor in that box?

Hi Myron, how's the new QTH going?

Plug in an old HD. It should provide enough of a load to get the PS
started and regulating.

Russ - kf4wxd

2727. Re: Garmin GPS to TinyTrak3 problems

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-02 03:30:20 UTC
From: Anonymous <jupiter@anon.com>
Message-ID: <1117683022.521979@cswreg.cos.agilent.com>
Source record: 18660

Thanks to all who replied. In the end, I never got it working. It appears to be a basic incompatibility between the Garmin GPSmap 60 and the TinyTrak3. I should have done better research into exactly which GPS models are compatible with the TinyTrak3.

An exhaustive search of the Internet turns up absolutely no information on incompatibilities between the TinyTrak3 and the vast number of GPS units on the market today. But neither could I find any complaints of people running into incompatibility problems. Strange.

Incidentally, the latest generation of Garmin units have only USB ports, no more serial ports. By definition, all of these are incompatible with the TinyTrak3.

I have a feeling that the TinyTrak3 hasn't kept up with the times and if it expects to survive it has to be updated to allow operation with the latest NMEA protocol version and the new USB units.

The TinyTrak is a good idea. I hope it gets updated, and I hope to see a section on its web site with information about which GPS's are okay and which ones to avoid.

Regards,

Al W6LX

"Anonymous" <jupiter@anon.com> wrote in message
news:1117498020.376799@cswreg.cos.agilent.com...
> Hi, Everybody,
>
> I am trying to set up an APRS station consisting of a Garmin GPSmap 60 and
> one of the TinyTrak3 TNCs. However, the green 'GPS Valid' LED never
lights.
>
> I can connect the GPS receiver directly to my computer's serial port and
> read good data, and I can capture some of that data and play it back from
> computer to TinyTrak and the green LED lights up, but a direct connection
> between GPS and TT just does not work.
>
> I see a waveform coming out of the GPS serial (J2 pin 2 of the TT) using a
> scope. Quiescent voltage is -5V, and when the data burst comes it is -5 V
to
> +5 V.
>
> Could this be a voltage level problem on the serial? Is there a converter
> that can be used? Or is it another problem, possibly protocol-related?

>
> Any ideas?
>
> Thank you,
>
> Al W6LX
>
>
>
>

2728. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-02 03:54:20 UTC
From: LenAnderson@ieee.org
Message-ID: <1117684460.521631.229120@g49g2000cwa.googlegroups.com>
Source record: 18661
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

From: "Tom Holden" on Tues 31 May 2005 22:08

><LenAnderson@ieee.org> wrote in message
>news:1117584020.259442.149200@z14g2000cwz.googlegroups.com...
>> From: Richard Hosking on Tues 31 May 2005 20:05

>Lacking a calibrated RF source and much other critical equipment, I do have
>a 45 year old Eico scope that once belonged to the famous Bach pianist Glenn
>Gould, and could cobble together a variable dc source and a low freq
>oscillator. To observe phase response of the open loop system, I'm thinking
>that the loop could be broken between the AGC detector and the AGC time
>constant/buffer. Drive the latter and the X input of the scope with the dc
>supply and superposed low freq signal, feed the receiver with steady state
>RF carrier and take the output of the AGC detector to the scope's Y input.
>The variation of the input to the AGC system will cause variation in the
>receiver gain and the output of the AGC detector. If in phase, the scope
>would show a line with positive slope; if antiphase, a line with negative
>slope; if in-between, an ellipse or some open shape subject to time
>constants and non-linearities. This arrangement would leave the receiver's
>RF gain control intact and its effect on time constant and phase observable;
>it appears to modify the discharge resistance seen by a 1uF cap at the RF
>and 1st Mixer in addition to pulling down the AGC voltage applied to them.
>
>Does that seem to be a practical approach, Len?

If that tells you what you want to know, it is practical.

However, the phase information from that Lissajous display is
rather gross. If, with a closed-loop condition, there is
marginal stability, then a better handle on phase response
would be necessary...or just reducing the AGC control-line
magnitude (which would offer less AGC action).

I'll have to presume the Eico scope doesn't have a slow sweep
rate. If that scope has a DC input on both horizontal and
vertical, then the cobbled-together low-frequency source could
be built with a ramp output that would act as the horizontal
sweep; the display would then be just one cycle but that would
indicate the phase difference. Suggestion for source: Exar
XR-8038 DIP which has both square-wave and sine outputs.

A "bounce-less" switch circuit can be put together out of two
NAND gates connected as an R-S flip-flop, an SPDT switch
grounding/earthing one input on each NAND gate. That simulates
a very extreme "attack" situation to check the response of the

AGC control-line circuit. It's a bit much to infer anything of numerical value out of that, though, since the amount of analysis of the waveform out of the AGC control-line is lengthy and probably more time than it's worth.

I'll have to remind all that a reasonably-calibrated RF signal source is also necessary. That will yield both the open-loop gain and the closed-loop gain...which can then be applied to a standard negative-feedback amplifier formula. Even with a "cheap" RF signal source, an RF output voltage meter circuit (even if a 1N34 diode rectifier is used, good to ~ 30 MHz) will provide a maximum RF output level. Resistor Tee or Pi pads built on DPDT switches (cheap slide switches work out best due to least internal inductance) external to the RF generator are effective although not to the wideband accuracy of the waveguide-below-cutoff type used in older commercial RF generators. A sequence of 1, 2, 3, 5, 10, 20, 40 etc db pads would do well enough. If needs be to make the pads the most accurate, a spoiler pad of around 10 db at the start of this chain of pads would insure a good source impedance. While not of greatest metrology quality, those would be better than nothing at all.

Note on the above: The RF signal generator meter would determine the signal level into the attenuator chain. The chain's output would then be that value minus the total db of the attenuators switched-in. Making the attenuator-switch mountings in-line in an outboard long metal box having 1:2 ratio of width to height will reduce most of the RF feed-around across switched-in attenuators; if that is 1 x 2 inches it is roughly high C-Band waveguide size and a maximum of 30 MHz RF input would certainly be below cutoff frequency of that "waveguide." Attenuation through that long metal box would be a linear relationship of db v. length. I did just that with an old Heathkit RF generator (meter calibration set against lab equipment) and outboard switched attenuators...until I lucked-out and obtained a pair of HP 355 step attenuators (wideband to 500 MHz, easier to use).

LenAnderson@ieee.org

2729. Re: How make UNconnected PC power supply operate?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-02 13:00:46 UTC
From: ceh <hampton@arrl.net>
Message-ID: <429ecabe$1@alpha.wvnet.edu>
Source record: 18662

"Russ" <carlzomer@hotmail.com> wrote in message
news:0mns91hq8fjm49k6mgldrrgkt46vbcd7q4@4ax.com...
> On 1 Jun 2005 17:16:26 -0500, mcalhoun@ksu.edu wrote:
>
>>For testing purposes, I'd like to make an PC power supply operate when
>>NOT installed in a PC. I've heard that the AT supply needs at least
>>SOME load on its 5-volt output before it will operate; is an ampere
>>or two sufficient?
>>
>>For ATX supplies, I visited a friendly computer-repair store today and
>>examined the "cheater" into which they plugged UNconnected ATX supplies;
>>it had three pairs of connections:
>> 1) A jumper from Ground to PS-ON
>> 2) an LED and resistor from PowerOK to Ground
>> 3) two wires from +5V and ground going into something about the size
>> of a small box of matches which was shrink-wrapped to the cable
>>
>>They wouldn't let me disassemble it !-)
>>Was there probably a 5-ohm resistor in that box?
>
> Hi Myron, how's the new QTH going?
>
> Plug in an old HD. It should provide enough of a load to get the PS
> started and regulating.
>
> Russ - kf4wxd

This link is a good one for using PC power supplies. It
works great. I did it.

Charles, ka8jvx

http://antennex.com/preview/archive3/powers.htm

2730. Re: How make UNconnected PC power supply operate?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-02 13:54:38 UTC
From: joe <once_shocked_twice_shy@aol.com>
Message-ID: <429F0F4E.706B75D1@aol.com>
Source record: 18663

Yes, that is a good link, August has lot of good info.

Be sure to discharge any capacitors inside the cage
on any switching supply, the voltages inside the cage
are LETHAL !!!

2731. Re: Garmin GPS to TinyTrak3 problems

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-02 17:22:15 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <119ug0ul1ush32a@corp.supernews.com>
Source record: 18664

Al,

"Anonymous" <jupiter@anon.com> wrote in message
news:1117683022.521979@cswreg.cos.agilent.com...
> I have a feeling that the TinyTrak3 hasn't kept up with the times and if it
> expects to survive it has to be updated to allow operation with the latest
> NMEA protocol version and the new USB units.

Unfortunately, whereas "RS-232 and NMEA" are very much a standard, the newer GPS receivers with USB ports neither all show up as a "standard serial-type device" nor do they encode NMEA the same way. :-(Updating the TinyTrak to support USB receivers is a _major_ undertaking... whereas you can talk RS-232 with any old microcontroller (especially at the 4800bps that NMEA typically uses), I believe that the commercial USB receivers are running full speed (12Mbps) and there is simply no way to build a full speed USB master (what you need to talk to one of these receivers) in software alone. I.e., the TinyTrak would have to change to incorporate a microcontroller containing a USB _host_ (and these are few and far between -- Cypress has one), or it would have to add a separate chip to perform this function.

OEM GPS modules that spit out RS-232 won't be going away any time soon; even in 2010 you'll still have no problem getting them.

---Joel Kolstad

2732. Re: How make UNconnected PC power supply operate?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-02 17:44:08 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <LzHne.183$UH6.8218669@news.sisna.com>
Source record: 18665

ceh:

that is a good URL... I forgot to mention about some (a lot) of
supplies needing the "power good" signal before they even function...

Warmest regards,
John

"ceh" <hampton@arrl.net> wrote in message
news:429ecabe$1@alpha.wvnet.edu...
>
> "Russ" <carlzomer@hotmail.com> wrote in message
> news:0mns91hq8fjm49k6mgldrrgkt46vbcd7q4@4ax.com...
>> On 1 Jun 2005 17:16:26 -0500, mcalhoun@ksu.edu wrote:
>>
>>>For testing purposes, I'd like to make an PC power supply operate
>>>when
>>>NOT installed in a PC. I've heard that the AT supply needs at least
>>>SOME load on its 5-volt output before it will operate; is an ampere
>>>or two sufficient?
>>>
>>>For ATX supplies, I visited a friendly computer-repair store today
>>>and
>>>examined the "cheater" into which they plugged UNconnected ATX
>>>supplies;
>>>it had three pairs of connections:
>>> 1) A jumper from Ground to PS-ON
>>> 2) an LED and resistor from PowerOK to Ground
>>> 3) two wires from +5V and ground going into something about the
>>> size
>>> of a small box of matches which was shrink-wrapped to the cable
>>>
>>>They wouldn't let me disassemble it !-)
>>>Was there probably a 5-ohm resistor in that box?
>>
>> Hi Myron, how's the new QTH going?
>>
>> Plug in an old HD. It should provide enough of a load to get the PS
>> started and regulating.
>>
>> Russ - kf4wxd
>
> This link is a good one for using PC power supplies. It
> works great. I did it.
>

> Charles, ka8jvx
>
> http://antennex.com/preview/archive3/powers.htm
>

2733. Re: How make UNconnected PC power supply operate?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-02 19:06:41 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <d7nlc1$a8d$1@theodyn.ncf.ca>
Source record: 18666

"John Smith" (assemblywizard@gmail.com) writes:
> ceh:
>
> that is a good URL... I forgot to mention about some (a lot) of
> supplies needing the "power good" signal before they even function...
>
> Warmest regards,
> John
>
No, the "power good" is an output from the power supply.

Michael VE2BVW

> "ceh" <hampton@arrl.net> wrote in message
> news:429ecabe$1@alpha.wvnet.edu...
>>
>> "Russ" <carlzomer@hotmail.com> wrote in message
>> news:0mns91hq8fjm49k6mgldrrgkt46vbcd7q4@4ax.com...
>>> On 1 Jun 2005 17:16:26 -0500, mcalhoun@ksu.edu wrote:
>>>
>>>>For testing purposes, I'd like to make an PC power supply operate
>>>>when
>>>>NOT installed in a PC. I've heard that the AT supply needs at least
>>>>SOME load on its 5-volt output before it will operate; is an ampere
>>>>or two sufficient?
>>>>
>>>>For ATX supplies, I visited a friendly computer-repair store today
>>>>and
>>>>examined the "cheater" into which they plugged UNconnected ATX
>>>>supplies;
>>>>it had three pairs of connections:
>>>> 1) A jumper from Ground to PS-ON
>>>> 2) an LED and resistor from PowerOK to Ground
>>>> 3) two wires from +5V and ground going into something about the
>>>> size
>>>> of a small box of matches which was shrink-wrapped to the cable
>>>>
>>>>They wouldn't let me disassemble it !-)
>>>>Was there probably a 5-ohm resistor in that box?
>>>
>>> Hi Myron, how's the new QTH going?
>>>
>>> Plug in an old HD. It should provide enough of a load to get the PS
>>> started and regulating.
>>>

>>> Russ - kf4wxd
>>
>> This link is a good one for using PC power supplies. It
>> works great. I did it.
>>
>> Charles, ka8jvx
>>
>> http://antennex.com/preview/archive3/powers.htm
>>
>
>

2734. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-03 01:17:51 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <6dOne.35922$_r1.1061035@news20.bellglobal.com>
Source record: 18667
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

<LenAnderson@ieee.org> wrote in message
news:1117684460.521631.229120@g49g2000cwa.googlegroups.com...
> [snip]
> However, the phase information from that Lissajous display is
> rather gross. If, with a closed-loop condition, there is
> marginal stability, then a better handle on phase response
> would be necessary...or just reducing the AGC control-line
> magnitude (which would offer less AGC action).

I thought that phase errors of a few degrees would not be an issue.

>
> I'll have to presume the Eico scope doesn't have a slow sweep
> rate. If that scope has a DC input on both horizontal and
> vertical, then the cobbled-together low-frequency source could
> be built with a ramp output that would act as the horizontal
> sweep; the display would then be just one cycle but that would
> indicate the phase difference. Suggestion for source: Exar
> XR-8038 DIP which has both square-wave and sine outputs.

The scope does not go below 10 Hz sweep. I have a simple gen board that can
be pushed to 3 Hz and maybe lower with mods.
>
> A "bounce-less" switch circuit can be put together out of two
> NAND gates connected as an R-S flip-flop, an SPDT switch
> grounding/earthing one input on each NAND gate. That simulates
> a very extreme "attack" situation to check the response of the
> AGC control-line circuit. It's a bit much to infer anything
> of numerical value out of that, though, since the amount of
> analysis of the waveform out of the AGC control-line is lengthy
> and probably more time than it's worth.

I'm hoping that the qualititative observation would get me headed in the
right direction

>
> I'll have to remind all that a reasonably-calibrated RF signal
> source is also necessary. That will yield both the open-loop
> gain and the closed-loop gain...which can then be applied to
> a standard negative-feedback amplifier formula. Even with a
> "cheap" RF signal source, an RF output voltage meter circuit
> (even if a 1N34 diode rectifier is used, good to ~ 30 MHz) will
> provide a maximum RF output level. Resistor Tee or Pi pads
> built on DPDT switches (cheap slide switches work out best due
> to least internal inductance) external to the RF generator are

> effective although not to the wideband accuracy of the
> waveguide-below-cutoff type used in older commercial RF
> generators. A sequence of 1, 2, 3, 5, 10, 20, 40 etc db pads
> would do well enough. If needs be to make the pads the most
> accurate, a spoiler pad of around 10 db at the start of this
> chain of pads would insure a good source impedance. While
> not of greatest metrology quality, those would be better than
> nothing at all.

Been meaning to build something like that. I need some basic, low cost gear
for RF/IF testing.

> Note on the above: The RF signal generator meter would
> determine the signal level into the attenuator chain. The
> chain's output would then be that value minus the total db
> of the attenuators switched-in. Making the attenuator-
> switch mountings in-line in an outboard long metal box
> having 1:2 ratio of width to height will reduce most of the
> RF feed-around across switched-in attenuators; if that is
> 1 x 2 inches it is roughly high C-Band waveguide size and a
> maximum of 30 MHz RF input would certainly be below cutoff
> frequency of that "waveguide." Attenuation through that
> long metal box would be a linear relationship of db v.
> length. I did just that with an old Heathkit RF generator
> (meter calibration set against lab equipment) and outboard
> switched attenuators...until I lucked-out and obtained a
> pair of HP 355 step attenuators (wideband to 500 MHz,
> easier to use).
>
> LenAnderson@ieee.org
>

You're a wealth of info, Len. Because of impending holiday, I'm going to
have to shelve this for a few weeks. Hope to get back to it in July...

73, Tom

2735. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-03 06:14:45 UTC
From: LenAnderson@ieee.org
Message-ID: <1117779285.834426.179690@g44g2000cwa.googlegroups.com>
Source record: 18668
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

>Because of impending holiday, I'm going to
>have to shelve this for a few weeks. Hope to get back to it in July...

You can alert me via the e-mail address below when you get
back.

LenAnderson@ieee.org

2736. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-03 06:45:56 UTC
From: miso@sushi.com
Message-ID: <1117781156.293043.97350@g14g2000cwa.googlegroups.com>
Source record: 18669
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

I think you are onto something here regarding the quick hit, i.e. closed loop step response. Use one of those RF detecting scope probes or just look at the envelope detector.If the envelope is ringing, you need more delay. The step can be off to on for attack and on to off for decay. It seems to me it not a matter of what you want, but rather what is stable.

2737. Re: Garmin GPS to TinyTrak3 problems

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-03 08:29:50 UTC
From: Roger Conroy <rogerconroy@nospam.hotmail.com>
Message-ID: <d7p4ki$6um$1@ctb-nnrp2.saix.net>
Source record: 18670

"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> wrote in message
news:119ug0ul1ush32a@corp.supernews.com...
> Al,
>
> "Anonymous" <jupiter@anon.com> wrote in message
> news:1117683022.521979@cswreg.cos.agilent.com...
>> I have a feeling that the TinyTrak3 hasn't kept up with the times and if
>> it
>> expects to survive it has to be updated to allow operation with the
>> latest
>> NMEA protocol version and the new USB units.
>
> Unfortunately, whereas "RS-232 and NMEA" are very much a standard, the
> newer
> GPS receivers with USB ports neither all show up as a "standard
> serial-type
> device" nor do they encode NMEA the same way. :-(Updating the TinyTrak
> to
> support USB receivers is a _major_ undertaking... whereas you can talk
> RS-232
> with any old microcontroller (especially at the 4800bps that NMEA
> typically
> uses), I believe that the commercial USB receivers are running full speed
> (12Mbps) and there is simply no way to build a full speed USB master (what
> you
> need to talk to one of these receivers) in software alone. I.e., the
> TinyTrak
> would have to change to incorporate a microcontroller containing a USB
> _host_
> (and these are few and far between -- Cypress has one), or it would have
> to
> add a separate chip to perform this function.
>
> OEM GPS modules that spit out RS-232 won't be going away any time soon;
> even
> in 2010 you'll still have no problem getting them.
>
> ---Joel Kolstad
>
A lot of GPSs these days have Bluetooth and so practically all PDAs and
almost all notebooks - now all we need is for the radio manufacturers to
include it.
73
Roger ZR3RC

2738. WTB: Homebrew items

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-03 09:01:24 UTC
From: David J Windisch <davidjw@cinci.rr.com>
Message-ID: <E%Une.4052$iu.2197@tornado.ohiordc.rr.com>
Source record: 18671

Hi, all concerned:

If you'd like to sell a homebrew and/or kit project which is gathering
dust, send me its original intention, a picture if possible, its weight (for
ground shipping estimate to 45251), and what you'd
like to get for it, and maybe we can shake hands and do business.

Tubes or transistors -- doesn't matter.

TIA and

73, Dave, N3HE
Cincinnati OH

2739. Re: Garmin GPS to TinyTrak3 problems

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-03 10:19:41 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <L6CdnatewKsisz3fRVnysA@pipex.net>
Source record: 18672

> A lot of GPSs these days have Bluetooth and so practically all PDAs and
> almost all notebooks - now all we need is for the radio manufacturers to
> include it.
==========
Perhaps there are Bluetooth to serial port RS232 /USB1 /USB2 converters ?

Frank GM0CSZ / KN6WH

2740. Re: Garmin GPS to TinyTrak3 problems

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-03 13:35:51 UTC
From: Roger Conroy <rogerconroy@nospam.hotmail.com>
Message-ID: <d7pmc1lg1@ctb-nnrp2.saix.net>
Source record: 18673

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:L6CdnatewKsisz3fRVnysA@pipex.net...
>> A lot of GPSs these days have Bluetooth and so practically all PDAs and
>> almost all notebooks - now all we need is for the radio manufacturers to
>> include it.
> ==========
> Perhaps there are Bluetooth to serial port RS232 /USB1 /USB2 converters
> ?
>
> Frank GM0CSZ / KN6WH
>
>

USB <---> Bluetooth are very common and quite cheap - getting to RS232 might
take a bit more research.

2741. Free coaxial cable & connector catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-03 14:36:11 UTC
From: AAA RF Products <info@aaarfproducts.com>
Message-ID: <KUZne.6976$Wr.4000@fed1read04>
Source record: 18674
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.swap

High quality, but low cost, coaxial cable, connectors & adapters. Call 949 481 3154 or see www.aaarfproducts.com or email sales@aaarfproducts to receive your full line catalog.

No minimum order.

No handling charges.

Paypal & credit cards accepted.

2742. Re: Garmin GPS to TinyTrak3 problems

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-03 16:25:50 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11a1132sh9m9f40@corp.supernews.com>
Source record: 18675

Hi Roger,

"Roger Conroy" <rogerconroy@nospam.hotmail.com> wrote in message
news:d7p4ki$6um$1@ctb-nnrp2.saix.net...
> A lot of GPSs these days have Bluetooth and so practically all PDAs and
> almost all notebooks - now all we need is for the radio manufacturers to
> include it.

AFAIK, there aren't any simple "microcontroller to Bluetooth" interfaces
available either. I forget the exact chip, but I'm fairly certain the
TinyTrak 3 uses some little 8 bit microcontroller with probably no more than
"many kilobytes" of flash ROM and "a handful of kilobytes" of RAM. That's
nowhere near enough to support Bluetooth.

Bluetooth is also a lot more power hungry than a wired connection would be,
and of course is prone to interference since it's operating in the 2.4GHz ISM
bands.

---Joel

2743. Re: Free coaxial cable & connector catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-03 19:35:08 UTC
From: nm5k@wt.net
Message-ID: <1117827308.085016.239010@f14g2000cwb.googlegroups.com>
Source record: 18676
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.swap

I don't really need a connector catalog, but I can always
use free coaxial cable...I'm good in QRZ....MK

2744. dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-03 21:59:12 UTC
From: nanchez <nanchez@gmail.com>
Message-ID: <1117835952.287681.65290@g49g2000cwa.googlegroups.com>
Source record: 18677

Hi.
I'm doing some RF experimentation and I need to know the "relation"
between dBm specificatons and voltage level for a signal.

I have a RF mixer with a specification that says:

LO drive level (50 ohm) = -16 dBm

And I have a LO source that give me an output of 2.5Vpp to a capacitive
load of 5pF at 40MHz.

How can I relate both items and design a circuit to connect LO source
to RF mixer ?

If you have some web source to study about this items, I'll be glad to
hear about it.

Thanks

Hernán Sánchez

2745. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-03 22:07:51 UTC
From: -ex- <exray@coqui.net>
Message-ID: <dba00$42a0d4bb$4232bd58$11148@COQUI.NET>
Source record: 18678

nanchez wrote:

> Hi.
> I'm doing some RF experimentation and I need to know the "relation"
> between dBm specificatons and voltage level for a signal.
>
> I have a RF mixer with a specification that says:
>
> LO drive level (50 ohm) = -16 dBm
>
> And I have a LO source that give me an output of 2.5Vpp to a capacitive
> load of 5pF at 40MHz.
>
> How can I relate both items and design a circuit to connect LO source
> to RF mixer ?
>
> If you have some web source to study about this items, I'll be glad to
> hear about it.
>
> Thanks
>
> Hernï¿½n Sï¿½nchez

Maybe this will help explain...

http://zone.ni.com/devzone/conceptd.nsf/webmain/36EA112B7F683D7686256811004DD454

2746. FA: Sunday-Xtal 7127.6 kHz 40M Novice / Tech+ FT-243

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-04 01:50:50 UTC
From: Tom <tfarl@iowatelecom.net>
Message-ID: <_N7oe.13929$nG6.8718@attbi_s22>
Source record: 18679
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Ending this Sunday

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5778487817

Ends Sunday, Jun-05 18:18:42 PDT (Monday, Jun-06 01:18:42 UTC)

Thank's for looking,
"theponyengine"

2747. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-04 03:14:38 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <3j62a19rqad5p8jfsfr8odl208njq4imp2@4ax.com>
Source record: 18680

On Fri, 03 Jun 2005 18:07:51 -0400, -ex- <exray@coqui.net> wrote:

>nanchez wrote:
>
>> Hi.
>> I'm doing some RF experimentation and I need to know the "relation"
>> between dBm specificatons and voltage level for a signal.
>>
>> I have a RF mixer with a specification that says:
>>
>> LO drive level (50 ohm) = -16 dBm
>>
>> And I have a LO source that give me an output of 2.5Vpp to a capacitive
>> load of 5pF at 40MHz.
>>
>> How can I relate both items and design a circuit to connect LO source
>> to RF mixer ?
>>
>> If you have some web source to study about this items, I'll be glad to
>> hear about it.
>>
>> Thanks
>>
>> Hernï¿½n Sï¿½nchez
>
>Maybe this will help explain...
>
>http://zone.ni.com/devzone/conceptd.nsf/webmain/36EA112B7F683D7686256811004DD454

This is pretty good, but errs when it states that 0 dBm is 1 mW in a
50 ohm system. This is the usual case, but it could just as well be
70 ohm, 600 ohm or 6 3/8 ohm.

2748. Re: Free coaxial cable & connector catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-04 03:50:25 UTC
From: Albert & Btittany Spear <FLIR@yahoo.com>
Message-ID: <5y9oe.21590$4u.11960@newssvr33.news.prodigy.com>
Source record: 18681
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.swap

here , here, how about 1000 feet of 9914 OM?

<nm5k@wt.net> wrote in message
news:1117827308.085016.239010@f14g2000cwb.googlegroups.com...
>I don't really need a connector catalog, but I can always
> use free coaxial cable...I'm good in QRZ....MK
>

2749. Re: How make UNconnected PC power supply operate?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-04 04:02:30 UTC
From: mcalhoun@ksu.edu
Message-ID: <d7r94m$ncu@unix1.cc.ksu.edu>
Source record: 18585

>For testing purposes, I'd like to make an PC power supply operate when
>NOT installed in a PC. I've heard that the AT supply needs at least
>....[snip]....
>For ATX supplies, I visited a friendly computer-repair store today and
>examined the "cheater" into which they plugged UNconnected ATX supplies;
>....[snip]....

Thanks to all who replied. I HAVE now gotten an AT supply to run
outside of a PC (by putting a resistor across the +5/ground wires;
someone else suggested using an old hard drive, which sounds even
easier!-) but haven't yet tried the ATX. But from the "cheater" I
know the ATX connector needs a ground connected to "PS-ON".

73,
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

2750. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-04 13:53:43 UTC
From: john jardine <john@jjdesigns.fsnet.co.uk>
Message-ID: <d7sauvsea1@newsg3.svr.pol.co.uk>
Source record: 18682

"nanchez" <nanchez@gmail.com> wrote in message
news:1117835952.287681.65290@g49g2000cwa.googlegroups.com...
Hi.
I'm doing some RF experimentation and I need to know the "relation"
between dBm specificatons and voltage level for a signal.

I have a RF mixer with a specification that says:

LO drive level (50 ohm) = -16 dBm

And I have a LO source that give me an output of 2.5Vpp to a capacitive
load of 5pF at 40MHz.

How can I relate both items and design a circuit to connect LO source
to RF mixer ?

If you have some web source to study about this items, I'll be glad to
hear about it.

Thanks

Hern�n S�nchez

To rejoin the real world, take the "16" figure and divide it by 20.
get "0.8"
Then find the antilog of that 0.8 [use normal 'base10' logs]
get "6.31"
This number is a multiply or divide factor that is applied to a 50 ohm 0dBm
reference voltage.
So what is this god like reference voltage?. The 50ohm 0dBm reference
voltage is in actual fact 0.223Vac.
The original number was "-"16 dBm. Just read the minus sign as meaning a
voltage less than the 0dBm reference voltage.
So that 0.223Vac reference value is divided by your 6.31 factor.
get "0.035" Vac.
So "-16dBm" is really 35mVac. This means you have more than enough drive
voltage available from your 2.5Vpp (900mVac) local oscillator signal.

Be very wary whenever you come across dBm figures. There is a minefield of
disinformation out there.
In many cases they are intended purely to obfscutate the reader and prevent
them clearly seeing that the described circuit is junk.
In many other cases they are purposely used as an extra level of abstraction
to sort out the 'RF men' from the 'boys'.
Manufacturers still use the dB concept for historical reasons. It doesn't
effect their sales as the RF people buying their kit carry in their heads
instant dB-V conversion tables.

Don't know about everyone else but all my scopes and signal generators and sources and dc-ac-voltmeters and DVMs and signal probes etc, are marked in Volts and Amps. So that's what I use.
(Someday I'll get round to building a real world 1:2:5:10 50ohm attenuator. I certainly can't buy one :-)
regards
john

2751. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-04 14:48:19 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <2bf3a197velv1plglcb35lpvo92k17gbji@4ax.com>
Source record: 18683

On Sat, 4 Jun 2005 14:53:43 +0100, "john jardine"
<john@jjdesigns.fsnet.co.uk> wrote:

>
>"nanchez" <nanchez@gmail.com> wrote in message
>news:1117835952.287681.65290@g49g2000cwa.googlegroups.com...
>Hi.
>I'm doing some RF experimentation and I need to know the "relation"
>between dBm specificatons and voltage level for a signal.
>
>I have a RF mixer with a specification that says:
>
>LO drive level (50 ohm) = -16 dBm
>
>And I have a LO source that give me an output of 2.5Vpp to a capacitive
>load of 5pF at 40MHz.
>
>How can I relate both items and design a circuit to connect LO source
>to RF mixer ?
>
>If you have some web source to study about this items, I'll be glad to
>hear about it.
>
>Thanks
>
>Hernï¿½n Sï¿½nchez
>
>To rejoin the real world, take the "16" figure and divide it by 20.
>get "0.8"
>Then find the antilog of that 0.8 [use normal 'base10' logs]
>get "6.31"
>This number is a multiply or divide factor that is applied to a 50 ohm 0dBm
>reference voltage.
>So what is this god like reference voltage?. The 50ohm 0dBm reference
>voltage is in actual fact 0.223Vac.
>The original number was "-"16 dBm. Just read the minus sign as meaning a
>voltage less than the 0dBm reference voltage.
>So that 0.223Vac reference value is divided by your 6.31 factor.
>get "0.035" Vac.
>So "-16dBm" is really 35mVac. This means you have more than enough drive
>voltage available from your 2.5Vpp (900mVac) local oscillator signal.

Except neither you or Hernan can be sure of this. His source is not
specified to work into a 50 ohm load or present a 50 ohm source
impedance to the mixer (what is really needed). Who knows what the

delivered voltage will be when driving the mixer port?

A measurement is in order. Terminate the source in 50 ohm and measure
the power and/or voltage. If it exceeds -16 dBm, attenuate
accordingly.

>
>Be very wary whenever you come across dBm figures. There is a minefield of
>disinformation out there.
>In many cases they are intended purely to obfscutate the reader and prevent
>them clearly seeing that the described circuit is junk.

Spoken like a real expert on bafflegab.

>In many other cases they are purposely used as an extra level of abstraction
>to sort out the 'RF men' from the 'boys'.
>Manufacturers still use the dB concept for historical reasons. It doesn't
>effect their sales as the RF people buying their kit carry in their heads
>instant dB-V conversion tables.
>Don't know about everyone else but all my scopes and signal generators and
>sources and dc-ac-voltmeters and DVMs and signal probes etc, are marked in
>Volts and Amps. So that's what I use.
>(Someday I'll get round to building a real world 1:2:5:10 50ohm attenuator.
>I certainly can't buy one :-)
>regards
>john
>
>
>
>
>
>
>
>
>
>
>

2752. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-04 15:56:56 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <11a3jqipgip97ba@corp.supernews.com>
Source record: 18684

It is worse than that, Wes. I fail to understand how a device can be specified as X dB into a capacitive load. Last time I looked, a capacitive load couldn't dissipate ANY power.

Jim

> This is pretty good, but errs when it states that 0 dBm is 1 mW in a
> 50 ohm system. This is the usual case, but it could just as well be
> 70 ohm, 600 ohm or 6 3/8 ohm.
>

2753. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-04 16:16:21 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <otkoe.417$Cr.52@fed1read07>
Source record: 18685

This may help - url:
http://www.hardware-guru.com/LabStuff%5CdBm.htm

--
CL -- I doubt, therefore I might be !

>>news:1117835952.287681.65290@g49g2000cwa.googlegroups.com...
>>Hi.
>>I'm doing some RF experimentation and I need to know the "relation"
>>between dBm specificatons and voltage level for a signal.
>>
>>I have a RF mixer with a specification that says:
>>
>>LO drive level (50 ohm) = -16 dBm
>>
>>And I have a LO source that give me an output of 2.5Vpp to a capacitive
>>load of 5pF at 40MHz.
>>
>>How can I relate both items and design a circuit to connect LO source
>>to RF mixer ?
>>
>>If you have some web source to study about this items, I'll be glad to
>>hear about it.
>>
>>Thanks
>>
>>Hern�n S�nchez

2754. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-04 16:37:53 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <orl3a19qhkicduu1he8dsu8t9invvlc6it@4ax.com>
Source record: 18686

On Sat, 4 Jun 2005 08:56:56 -0700, "RST Engineering"
<jim@rstengineering.com> wrote:

>It is worse than that, Wes. I fail to understand how a device can be
>specified as X dB into a capacitive load. Last time I looked, a capacitive
>load couldn't dissipate ANY power.

Jim, the OP said:

"And I have a LO source that give me an output of 2.5Vpp to a
capacitive load of 5pF at 40MHz."

No dB or dBm mentioned. This sounds like a CMOS device with limited
drive capability. That's why I suggest terminating it in 50 ohm,
assuming this doesn't destroy it, and see what kind of power it can
deliver.

Most likely, a buffer will be needed, although -16 dBm isn't much and
at that level it suggests that this is an active, not passive, mixer
and that it might be driven by a higher source Z okay.

Wes

>
>Jim
>
>> This is pretty good, but errs when it states that 0 dBm is 1 mW in a
>> 50 ohm system. This is the usual case, but it could just as well be
>> 70 ohm, 600 ohm or 6 3/8 ohm.
>>
>

2755. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-04 17:45:58 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1117907158.580123.7980@z14g2000cwz.googlegroups.com>
Source record: 18687

Actually, if it is a CMOS/HCMOS output, it might be better to terminate it into a voltage divider of, say, 270 ohms from the osc output to 56 or 62 or 68 ohms to ground. Many of the common clock oscillators are not intended to directly drive a 50 ohm load. Then an output taken across the resistor to ground will look like it's from a nominally 50 ohm source. You could use a larger voltage divider ratio to get the output down further if desired. If the osc has square wave output, that's likely OK for a mixer input, but if it's not 50% duty cycle, you might benefit from cleaning it up a bit with a tuned circuit, for example. And if the oscillator has a TTL output (rather than HCMOS), you might benefit from returning the voltage divider to the osc power supply, presumably 5V. Beware when calculating the power delivered from the voltage divider to a (say) 50 ohm load; put that load in parallel with the output resistor of the divider to calculate the net division ratio. So the suggested resistors, e.g. with 68 ohm output R, might give you about -8dBm, if the osc delivers 2.5V P-P into the divider, yielding roughly .24V P-P output into a presumed 50 ohm load. -- Also, the oscillator probably has DC on its output, and you might benefit from a blocking capacitor. 1000pF would be adequate. And beware that the osc might deliver noticably higher voltage into a resistive load.

Perhaps the OP could provide a bit more detail...

Also, I'd ask if that -16dBm is accurate...that's pretty low even for active mixers.

Finally, RFSim99 is a nice little free program for playing with linear RF circuits, and includes an "RF calculator" which has a tab for signal levels, converting among dBm, watts, volts-RMS, and volts-P-P for a user-specified impedance level. (I wish that tab had "locks" on the values like the resonance one does, so you could see what power level you get when you load a fixed voltage with various resistances, but you can always just copy-and-paste the voltage to "remember" it over a resistance change.) I always appreciate that RFSim99 has a lot of tools all in one place, and I don't have to remember a whole bunch of different programs, each of some very limited scope.

Cheers,
Tom

2756. Interesting tube for a linear...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-04 19:04:53 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <qXmoe.196$NM3.28221551@news.sisna.com>
Source record: 18688

http://cgi.ebay.co.uk/ws/eBayISAPI.dll?ViewItem&category=58171&item=7521276496&rd=1&ssPage Name=WDVW

John
--
Watching the cutting edge of yesterday replay--in virtual reality, right
before my eyes--in real time!
Thirty year old technology--wasn't it amazing?

2757. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-04 20:07:21 UTC
From: LenAnderson@ieee.org
Message-ID: <1117915636.052993.76240@g44g2000cwa.googlegroups.com>
Source record: 18689

From: "nanchez" on Fri 3 Jun 2005 14:59

>I'm doing some RF experimentation and I need to know the "relation"
>between dBm specificatons and voltage level for a signal.
>
>I have a RF mixer with a specification that says:
>
>LO drive level (50 ohm) = -16 dBm
>
>And I have a LO source that give me an output of 2.5Vpp to a capacitive
>load of 5pF at 40MHz.
>
>How can I relate both items and design a circuit to connect LO source
>to RF mixer ?

A basic definition that is industry-wide, government-wide, has "dbm" as decibels of "0 dbm" related to a power level of 1.0 milliWatts in a "50 Ohm system." That has become so widespread that specification writers don't always include those words. It is implicit when referring to RF components.

The RMS voltage can be quickly calculated from some identities on the basic formula for Watts: P = E x I. Knowing R (50 Ohms) one can substitute Ohm's Law of Resistance of I = E / R into that to get E = SquareRoot (P x R).

For 1.0 mW in a 50 Ohm system, P x R = 0.050 and the square root of that is 0.2236 so 0 dbm has an RMS voltage of 223.6 milliVolts.

In your mixer specification, -16 dbm is equal to 35.44 mV RMS across a resistance of 50 Ohms.

You can't DIRECTLY use your 40 MHz source value of 2.5 V peak-peak across a 5.0 pFd capacitance because it does not include the characteristic RESISTIVE impedance of 50 Ohms. Power in Watts must be related to the impedance of a load in order to perform "work." [a basic definition of power in Watts is "a unit of work"]

Capacitance across a load will vary its impedance depending on the frequency. For that reason the electronics industry has long relied on a basic resistive impedance to measure and characterize RF components. The result is the very common "dbm" referred to 1.0 mW across a resistive 50 Ohm load...or the characteristic impedance of the measurement

system, both source and load impedance.

To relate your mixer specification to your RF source, you
will have to put a 50 Ohm load across the source and
measure that. If you have some stray capacitance across
that load (inevitable) and know approximately what that is,
you can calculate its effect across a resistance. At 40 MHz
a 5.0 pFd capacitance has a reactance of 796 Ohms. That is
not much but it changes the magnitude of the parallel R-C
from 50.0 Ohms resistive to 47.0 Ohms slightly capacitive.
That's a small change and can generally be neglected for
experimental bench work.

>If you have some web source to study about this items, I'll be glad to
>hear about it.

It's in practically every textbook on the subject of RF
electronics. What can confuse newcomers to RF is the
implicit "standard" which is not always included in
specification sheets. The definition of "dbm" is arbitrary
and probably picked (way back in time) for sake of
convenience in measurement by all concerned.

The reason for picking "50 Ohms" in a "system" is more
obscure and ties into the physics of power transfer in
coaxial cables. That's a curiosity that some can look up
if they are interested but does not apply to how to USE the
"dbm" specifications. To use "dbm" one only needs to
remember the definition and apply simple forumulas for Power
and Ohm's Law of Resistance.

I hope that was of some help to you.

LenAnderson@ieee.org

2758. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-04 21:06:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11a45v5o4lbb15@corp.supernews.com>
Source record: 18690

LenAnderson@ieee.org wrote:
>
> A basic definition that is industry-wide, government-wide,
> has "dbm" as decibels of "0 dbm" related to a power level of
> 1.0 milliWatts in a "50 Ohm system." That has become so
> widespread that specification writers don't always include
> those words. It is implicit when referring to RF components.
> . . .

That's common in the RF industry, but many others also use dBm -- for example, it's often used in video systems where the standard impedance is 75 ohms, and others where the standard is 600 ohms. In all those applications, dBm is universally defined and understood to mean dB relative to 1 mW, regardless of the impedance.

Roy Lewallen, W7EL

2759. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-04 22:04:44 UTC
From: john jardine <john@jjdesigns.fsnet.co.uk>
Message-ID: <d7t7ni$k3c$1@newsg3.svr.pol.co.uk>
Source record: 18691

"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
news:2bf3a197velv1plglcb35lpvo92k17gbji@4ax.com...
> On Sat, 4 Jun 2005 14:53:43 +0100, "john jardine"
> <john@jjdesigns.fsnet.co.uk> wrote:
>
> >
> >"nanchez" <nanchez@gmail.com> wrote in message
> >news:1117835952.287681.65290@g49g2000cwa.googlegroups.com...
> >Hi.
> >I'm doing some RF experimentation and I need to know the "relation"
> >between dBm specificatons and voltage level for a signal.
> >
> >I have a RF mixer with a specification that says:
> >
> >LO drive level (50 ohm) = -16 dBm
> >
> >And I have a LO source that give me an output of 2.5Vpp to a capacitive
> >load of 5pF at 40MHz.
> >
> >How can I relate both items and design a circuit to connect LO source
> >to RF mixer ?
> >
> >If you have some web source to study about this items, I'll be glad to
> >hear about it.
> >
> >Thanks
> >
> >Hern&#65533;n S&#65533;nchez
> >
> >To rejoin the real world, take the "16" figure and divide it by 20.
> >get "0.8"
> >Then find the antilog of that 0.8 [use normal 'base10' logs]
> >get "6.31"
> >This number is a multiply or divide factor that is applied to a 50 ohm
0dBm
> >reference voltage.
> >So what is this god like reference voltage?. The 50ohm 0dBm reference
> >voltage is in actual fact 0.223Vac.
> >The original number was "-"16 dBm. Just read the minus sign as meaning a
> >voltage less than the 0dBm reference voltage.
> >So that 0.223Vac reference value is divided by your 6.31 factor.
> >get "0.035" Vac.
> >So "-16dBm" is really 35mVac. This means you have more than enough drive

> >voltage available from your 2.5Vpp (900mVac) local oscillator signal.
>
> Except neither you or Hernan can be sure of this. His source is not
> specified to work into a 50 ohm load or present a 50 ohm source
> impedance to the mixer (what is really needed). Who knows what the
> delivered voltage will be when driving the mixer port?
>
> A measurement is in order. Terminate the source in 50 ohm and measure
> the power and/or voltage. If it exceeds -16 dBm, attenuate
> accordingly.

I imagine we would both have read Hernans post the same way. I.e that he has some logic running at 40MHz and is seeing a rough 2.5Vpp sinewave on his 50-100MHz oscilloscope via a 10:1 probe. From this I'd also assume we both knew that the logic drive impedance would be a couple hundred ohms at the most and that serious mis-matching was not going to be a problem.
I'd though, suggest he just connects the parts together and see what happens. He's experimenting. Monitoring the results (good or bad) is just part of the due process. Doesn't look like he's got a spectrum analyser, so how can he validate a 50ohm test measurement as exceeding -16dBm?.

His sticking point was specifically about the link between Dbs and Volts. A common, basic electronics question yet surprisingly badly answered by the original suggested link, which started off with the concept of a "dimensionless gain" and went downhill from there using 3 pages of sums. How many radio hams talk to each other about their TX powers in terms of (ISO standard) units of dBs wrt one watt?. Why do the filter tables tell me a Cheb' filter ripple is in dBs when all I want is percent values. Why do my function generators handbooks tell me the sine THD is 0.2% upto 200kHz but beyond that the distortion suddenly becomes an obscure "-30db wrt the fundamental".
A recent EW magazine article for a AC mV meter said the response was flat within 0.0024dB. How flat is that?.

> >
> >Be very wary whenever you come across dBm figures. There is a minefield
of
> >disinformation out there.
> >In many cases they are intended purely to obfscutate the reader and
prevent
> >them clearly seeing that the described circuit is junk.
>
> Spoken like a real expert on bafflegab.
>

Indeed, the word was intended that way (UK English).
regards
john

2760. Re: Interesting tube for a linear...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-04 23:28:16 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <XHqoe.53744$lQ3.48146@bignews5.bellsouth.net>
Source record: 18692

John Smith wrote:
> http://cgi.ebay.co.uk/ws/eBayISAPI.dll?ViewItem&category=58171&item=7521276496&rd=1&ssPageName=WDVW
>
> John
Running that baby at 1500w out (maybe 1/3 it's max rating)
it should last a long time.

2761. Re: Interesting tube for a linear...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-04 23:41:29 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <L_qoe.234$W01.30846009@news.sisna.com>
Source record: 18693

Ken:

I'd probably have one beer too many and starting using it to tell off
the aussies at 5KW so they could hear me clearly... <grin>

John

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
news:XHqoe.53744$lQ3.48146@bignews5.bellsouth.net...
> John Smith wrote:
>> http://cgi.ebay.co.uk/ws/eBayISAPI.dll?ViewItem&category=58171&item=7521276496&rd=1&ssP
ageName=WDVW
>>
>> John
> Running that baby at 1500w out (maybe 1/3 it's max rating)
> it should last a long time.

2762. Re: Tulsa Oklahoma

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-05 01:35:06 UTC
From: 998 cc <mycallsign@0sbcglobal0.net>
Message-ID: <eFsoe.2164$IE7.1134@newssvr21.news.prodigy.com>
Source record: 18694

It figures that I was in Tulsa until last Thursday...

Russ
W6OHM

"Rob Mills" <robmills@cox.net> wrote in message
news:rOHme.138$Zt.8@okepread05...
> This ad will appear in the Tulsa World Thursday, Fri and Sat of this week
> under "Garage sales general location". Thanks for looking, RM ~
>
>
> Radio & Electronics House cleaning, shortwave, scanners, ham and cb. Also
> Household
>
>
>

2763. Re: Interesting tube for a linear...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-05 03:20:34 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <8cuoe.255$R_4.31445130@news.sisna.com>
Source record: 18695

LOL... well, I do need a beer cooler, now that you mention it, ya
suppose?.... <grin>

Warmest regards,
John
"Bill Turner" <noway@nohow.com> wrote in message
news:6lp4a19u4nspd1vjmlta5qiiqelpag3pqg@4ax.com...
> On Sat, 04 Jun 2005 19:28:16 -0400, Ken Scharf
> <wa2mzeNOTTHIS@bellsouth.net> wrote:
>
>>Running that baby at 1500w out (maybe 1/3 it's max rating)
>>it should last a long time.
>
> ----------
>
> That's so far under its rating it will actually cool your shack. :-)
>
> --
> Bill, W6WRT

2764. 2C39's for 144 MHZ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-05 04:07:47 UTC
From: 998 cc <mycallsign@0sbcglobal0.net>
Message-ID: <nUuoe.2208$IE7.796@newssvr21.news.prodigy.com>
Source record: 18598

Hello, Has anyone tried using 2C39's for 144 Mhz? I happen to have a few of them and was considering using them for a junkbox amplifier for 2 meter SSB. I have found several 1296 Mhz amps that use them, but so far, nothing for 2 meters.

Thanks.
Russ

2765. Re: Interesting tube for a linear...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-05 08:07:13 UTC
From: atec <atec77@XXXhotmail.com>
Message-ID: <42a2b281$1@dnews.tpgi.com.au>
Source record: 18696

John Smith wrote:
> Ken:
>
> I'd probably have one beer too many and starting using it to tell off
> the aussies at 5KW so they could hear me clearly... <grin>
>
> John
>
> "Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
> news:XHqoe.53744$lQ3.48146@bignews5.bellsouth.net...
>
>>John Smith wrote:
>>
>>>http://cgi.ebay.co.uk/ws/eBayISAPI.dll?ViewItem&category=58171&item=7521276496&rd=1&ssPageName=WDVW
>>>
>>>John
>>
>>Running that baby at 1500w out (maybe 1/3 it's max rating)
>>it should last a long time.
>
>
>
Assuming anyone could understand "Redneck "

2766. Intriguing story about undersampling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-05 08:16:41 UTC
From: erine <erine@hotmail.com>
Message-ID: <Jxyoe.43248$795.1356380@twister1.libero.it>
Source record: 18697

Look at this http://spazioscuola.altervista.org/UndersamplingAR/UndersamplingAR.htm
An excerpt:

A STORY ABOUT UNDERSAMPLING

by Angelo Ricotta - Rome, Italy

a.ricotta@isac.cnr.it

ITALIAN VERSION

In the article "Turning Nyquist upside down by undersampling" by Bonnie Baker, EDN 12 May 2005, are reported two formulae to compute an allowable sampling frequency for undersampling a bandpass signal. I was surprised by that because I have been using the undersampling technique since the late seventies and even wrote a report (Angelo Ricotta, "Some remarks on the sampling and processing of SODAR data", Technical Report, IFA-CNR, July 1983) where I gave two simple and practical formulae to compute all the allowable sampling frequencies for undersampling a given bandpass signal. The report was written in Italian and was known, at least, among the Italian community working on SODAR systems in which a few people and even students utilized my formulae in an unfair way because they did not mention the source. On 10 October and 7 December 1991, also to stop the above misuses, I sent two letters, containing my formulae for undersampling, to EDN Signals & Noise Editor but I never received an answer...

2767. Re: 2C39's for 144 MHZ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-05 13:37:02 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <3ov5a1hboijmkhd1m2719aiq8ppf19jhar@4ax.com>
Source record: 18599

On Sun, 05 Jun 2005 04:07:47 GMT, "998 cc"
<mycallsign@0sbcglobal0.net> wrote:

>Hello, Has anyone tried using 2C39's for 144 Mhz? I happen to have a few
>of them and was considering using them for a junkbox amplifier for 2 meter
>SSB. I have found several 1296 Mhz amps that use them, but so far, nothing
>for 2 meters.

Certainly they will work but I suggest the effort will be more trouble
than it's worth.

2768. Re: Tulsa Oklahoma

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-05 15:26:14 UTC
From: Rob Mills <robmills@cox.net>
Message-ID: <nQEoe.326$Zt.147@okepread05>
Source record: 18600

"998 cc" <mycallsign@0sbcglobal0.net> wrote in message
news:eFsoe.2164$IE7.1134@newssvr21.news.prodigy.com...

>>>> It figures that I was in Tulsa until last Thursday...<<<<

You must have taken everyone else with you because I had very little
turnout. As one poster suggested, every body headed for Dallas. :-(

2769. Re: Interesting tube for a linear...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-05 16:20:29 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <iDFoe.17$dd6.2030720@news.sisna.com>
Source record: 18601

If you heat you trailer with just the power delivered to the filaments
of your leen-e-ear, you just might be a redneck...

Warmest regards,
John
"atec" <atec77@XXXhotmail.com> wrote in message
news:42a2b281$1@dnews.tpgi.com.au...
> John Smith wrote:
>> Ken:
>>
>> I'd probably have one beer too many and starting using it to tell off
>> the aussies at 5KW so they could hear me clearly... <grin>
>>
>> John
>>
>> "Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
>> news:XHqoe.53744$lQ3.48146@bignews5.bellsouth.net...
>>
>>>John Smith wrote:
>>>
>>>>http://cgi.ebay.co.uk/ws/eBayISAPI.dll?ViewItem&category=58171&item=7521276496&rd=1&ss
PageName=WDVW
>>>>
>>>>John
>>>
>>>Running that baby at 1500w out (maybe 1/3 it's max rating)
>>>it should last a long time.
>>
>>
>>
> Assuming anyone could understand "Redneck "

2770. Re: 2C39's for 144 MHZ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-05 16:39:39 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <hVFoe.18$ye7.2347124@news.sisna.com>
Source record: 18602

Yes, I should suspect that a lower freq for a high freq tube is no problem... I think why you don't see them ever used at 144 Mhz is that there used to be VERY expensive--you would only pay the money if necessary and there were much cheaper alternatives for 144...

Warmest regards,
John
"998 cc" <mycallsign@0sbcglobal0.net> wrote in message news:nUuoe.2208$IE7.796@newssvr21.news.prodigy.com...
> Hello, Has anyone tried using 2C39's for 144 Mhz? I happen to have a
> few
> of them and was considering using them for a junkbox amplifier for 2
> meter
> SSB. I have found several 1296 Mhz amps that use them, but so far,
> nothing
> for 2 meters.
>
> Thanks.
> Russ
>
>

2771. Re: Interesting tube for a linear...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-05 17:36:05 UTC
From: atec <atec77@XXXhotmail.com>
Message-ID: <42a337d6@dnews.tpgi.com.au>
Source record: 18603

John Smith wrote:
> If you heat you trailer with just the power delivered to the filaments
> of your leen-e-ear, you just might be a redneck...
>

Agreed you meet the criteria .
>>>
>>Assuming anyone could understand "Redneck "
>
>
>

2772. Re: Interesting tube for a linear...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-05 17:56:08 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <Z0Hoe.27$og1.2735218@news.sisna.com>
Source record: 18604

atec:

You are an idiot, I am sure others have told you, I am sure you have few friends, I am sure you will go on and on with this behavior, a year from now, hell, ten years from now--your mind will still lie in the state we find it in today--an idiot who thinks personal attacks and his personal opinion(s) is/are of paramount importance to those suffering the BS... you even think you shall affect the path of discourse with such nonsense... I fear you have not the capacity for better... and are more than willing to prove by examples you do not--till the repetitive nature of it kills our patience...

Warmest regards,
John
"atec" <atec77@XXXhotmail.com> wrote in message
news:42a337d6@dnews.tpgi.com.au...
> John Smith wrote:
>> If you heat you trailer with just the power delivered to the
>> filaments of your leen-e-ear, you just might be a redneck...
>>
>
>
> Agreed you meet the criteria .
>>>>
>>>Assuming anyone could understand "Redneck "
>>
>>

2773. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-05 18:53:09 UTC
From: LenAnderson@ieee.org
Message-ID: <1117997589.046915.13560@f14g2000cwb.googlegroups.com>
Source record: 18605

From: Roy Lewallen <w...@eznec.com> on Sat, 04 Jun 2005 14:06:41 -0700

>LenAnder...@ieee.org wrote:
>
>> A basic definition that is industry-wide, government-wide,
>> has "dbm" as decibels of "0 dbm" related to a power level of
>> 1.0 milliWatts in a "50 Ohm system." That has become so
>> widespread that specification writers don't always include
>> those words. It is implicit when referring to RF components.
>
> > . . .
>
>That's common in the RF industry, but many others also use dBm -- for
>example, it's often used in video systems where the standard impedance
>is 75 ohms, and others where the standard is 600 ohms. In all those
>applications, dBm is universally defined and understood to mean dB
>relative to 1 mW, regardless of the impedance.

Quite true, Roy. :-)

I restricted myself to "50 Ohms" for a couple of reasons:
As far as "pure" RF components go, 50 Ohms is the Z
characteristic; I didn't want to complicate my explanation.

The TV Cable industry is HUGE and they use 75 Ohms. However,
so many radio amateurs run around snarking on "TV" that it
could have raised a lot of unneccessary babbling in here. :-)
TV cable is digital in some locations (ours is in the SF
Valley of L.A.) and has more TV channels crammed into the
same VHF-UHF space than old analog TV. Don't know the
modulation of my digital TV cable signals, whether it is
wider or narrower than analog channels...but my TV service
crams over 400 channels into the same bandwidth. TV sure
isn't the narrow-band stuff that many hams are used to.

"dbv" (sometimes "dbu" but rarely) refers "0" as 1.0 microVolt,
almost any characteristic. Not seen much in specifications,
though.

The "VU" (for Volume Unit) is an old, old one in the audio
and telephone industry with "0 VU" being 1.0 mW into 600
Ohms impedance. Not only that, the "VU" industry standard
used to call out the indicating meter's ballistic (needle or
meter motor) characteristics! :-)

"dbc" is an often-used term on component specifications but is still a relative term of db in regards to the Carrier of a signal where the noise is called out. ["C" for Carrier]

"dba" is a legal term in the USA standing for "Doing Business As" in local governments that require business licenses. :-)

My apologies if some ISPs show two more postings of my message. When I posted via Google on Saturday early afternoon, Google was interrupting itself with lots of users (?) or something that kept prompting "server error." I've since removed redundant posts on Google, but some other ISPs may be storing the multiples. Stuff happens.

LenAnderson@ieee.org

2774. ADI Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-05 19:53:12 UTC
From: Rob <robnang34@woh.rr.com>
Message-ID: <IKIoe.22021$JX5.2351@tornado.ohiordc.rr.com>
Source record: 18606

I have an ADI AR-146 2 meter moble radio that I need to get some front cover parts for and I can`t seem to find any parts dealers for this unit. Does anybody know of any sources? Thank`s for any info. Rob WB8VWI

2775. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-05 23:33:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11a72u5b8su7h72@corp.supernews.com>
Source record: 18607

LenAnderson@ieee.org wrote:
> . . .
> "dbv" (sometimes "dbu" but rarely) refers "0" as 1.0 microVolt,
> almost any characteristic. Not seen much in specifications,
> though.
> . . .

Interesting. I've many times seen dB relative to one volt as dBV, and dB relative to one microvolt as dBuV, but never dBv meaning dB relative to one microvolt, or dBu at all. Do you have any references that show these unusual usages?

Roy Lewallen, W7EL

2776. Re: 2C39's for 144 MHZ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-06 00:13:48 UTC
From: LenAnderson@ieee.org
Message-ID: <1118016828.581349.206890@g47g2000cwa.googlegroups.com>
Source record: 18608

From: "John Smith" <assemblywiz...@gmail.com> on Sun,Jun 5 2005 12:39 pm

>Yes, I should suspect that a lower freq for a high freq tube is no
>problem... I think why you don't see them ever used at 144 Mhz is that
>there used to be VERY expensive--you would only pay the money if
>necessary and there were much cheaper alternatives for 144...

The 2C39 was never intended for lower-frequency "CW" or other narrow-band modes. General Electric used them in 1800 MHz pulsed microwave radio relay terminals having peak pulse envelope output of 12 Watts...with forced-air cooling on the integral anode fins. There were six 2C39s in every GE 1.8 GHz terminal designed about 1950 (!).

The transconductance is very high (14,000 umho?) and the grid-cathode, grid-plate spacing very small. The only sure way to hold such tolerances in varying heat environments is to use non-standard glass or ceramic tubing sections in the inverted lighthouse structure. Those who want to use it have to have an equally-expensive socket arrangement or be a fairly competent machinist have good tools at their disposal.

The GE microwave terminal used integral socket and tuned cavity assemblies at 1.8 GHz. The GE transmitter was a chain of 7-pin and 9-pin tube oscillator-multipliers to about 255 MHz, then into a 2C39 septupler, that into the 2C39 final amplifier (pulsed anode). Receiver LO had a similar arrangement but only one 2C39 in the chain. "Hot spare" duplicate assemblies for the RF doubled the 2C39 totals. They worked and worked and worked in 24/7 operation, nine terminals where I was the operation and maintenance supervising NCO in the Army. There were hundreds of them used in many kinds of multi-channel radio relay, including long pipeline telemetry and control in the USA.

The only thing "bad" about them was due to another tube manuafacturer's dimensional conflict with GE cavity design.

Why that particular tube? Because it "looks sexy" with the anode fins so nicely machined? There's lots more half-century-old vacuum tube designs available somewhere. Western Electric 416s and 417s are out there in larger quantities. Geez, 829 duals have been used at 144 MHz with more output than one can safely run a 2C39 at that frequency. Socket assemblies for an 829 are easier to

get than for an inverted lighthouse structure.

A year or so ago I happened across a couple of non-USA sites giving nice details of 2C39s used in ham VHF transmitters. Nice photos and dimensions available. Both of them used the triode "pushed" beyond its safe limits of power. Think about replacement costs.

At 2 meters, a better way using vacuum tubes (besides going to Eimac goodies) is in a "distributed amplifier," the grids of many 9-pin tubes connected to an L-C delay-line-like structure, the plates connected to another L-C network. The Tektronix 540 series scopes had those for the vertical amplifiers, good beyond 50 MHz, back in the 1960s. No tuning required...except in how to couple the medium-Z output to a low-Z antenna.

Or...one can get transistors that have worked in their ratings at 150 MHz VHF "business band" with all the nitty and gritty details in old Motorola Application Notes. CW operation at 2 meters no sweat at up to 150 Watts, more than a 2C39 pair can do safely. Lots of alternate choices...such as solid-state Cellular Telephone cell site ("base station") transmitters and equivalents that don't have internal networks to optimize operation in the 1 GHz band. [but, you knew that already, right? :-)]

LenAnderson@ieee.org

2777. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-06 00:16:10 UTC
From: LenAnderson@ieee.org
Message-ID: <1118016970.922022.220730@g43g2000cwa.googlegroups.com>
Source record: 18609

Yes, I do. :-)

LenAnderson@ieee.org

2778. Re: 2C39's for 144 MHZ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-06 00:40:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <IYMoe.69$MS2.7053436@news.sisna.com>
Source record: 18610

yes, you will forgive me if I skip reading all of that, I doubt you
offered anything relevant to the mans original question anyway...

John
<LenAnderson@ieee.org> wrote in message
news:1118016828.581349.206890@g47g2000cwa.googlegroups.com...
> From: "John Smith" <assemblywiz...@gmail.com> on Sun,Jun 5 2005 12:39
> pm
>
>
>>Yes, I should suspect that a lower freq for a high freq tube is no
>>problem... I think why you don't see them ever used at 144 Mhz is
>>that
>>there used to be VERY expensive--you would only pay the money if
>>necessary and there were much cheaper alternatives for 144...
>
> The 2C39 was never intended for lower-frequency "CW" or other
> narrow-band modes. General Electric used them in 1800 MHz
> pulsed microwave radio relay terminals having peak pulse
> envelope output of 12 Watts...with forced-air cooling on
> the integral anode fins. There were six 2C39s in every
> GE 1.8 GHz terminal designed about 1950 (!).
>
> The transconductance is very high (14,000 umho?) and the
> grid-cathode, grid-plate spacing very small. The only sure
> way to hold such tolerances in varying heat environments is
> to use non-standard glass or ceramic tubing sections in the
> inverted lighthouse structure. Those who want to use it have
> to have an equally-expensive socket arrangement or be a
> fairly competent machinist have good tools at their disposal.
>
> The GE microwave terminal used integral socket and tuned
> cavity assemblies at 1.8 GHz. The GE transmitter was a
> chain of 7-pin and 9-pin tube oscillator-multipliers to
> about 255 MHz, then into a 2C39 septupler, that into the
> 2C39 final amplifier (pulsed anode). Receiver LO had a
> similar arrangement but only one 2C39 in the chain. "Hot
> spare" duplicate assemblies for the RF doubled the 2C39
> totals. They worked and worked and worked in 24/7 operation,
> nine terminals where I was the operation and maintenance
> supervising NCO in the Army. There were hundreds of them
> used in many kinds of multi-channel radio relay, including
> long pipeline telemetry and control in the USA.
>

> The only thing "bad" about them was due to another tube
> manuafacturer's dimensional conflict with GE cavity design.
>
> Why that particular tube? Because it "looks sexy" with
> the anode fins so nicely machined? There's lots more
> half-century-old vacuum tube designs available somewhere.
> Western Electric 416s and 417s are out there in larger
> quantities. Geez, 829 duals have been used at 144 MHz
> with more output than one can safely run a 2C39 at that
> frequency. Socket assemblies for an 829 are easier to
> get than for an inverted lighthouse structure.
>
> A year or so ago I happened across a couple of non-USA
> sites giving nice details of 2C39s used in ham VHF
> transmitters. Nice photos and dimensions available.
> Both of them used the triode "pushed" beyond its safe
> limits of power. Think about replacement costs.
>
> At 2 meters, a better way using vacuum tubes (besides
> going to Eimac goodies) is in a "distributed amplifier,"
> the grids of many 9-pin tubes connected to an L-C
> delay-line-like structure, the plates connected to another
> L-C network. The Tektronix 540 series scopes had those
> for the vertical amplifiers, good beyond 50 MHz, back in
> the 1960s. No tuning required...except in how to couple
> the medium-Z output to a low-Z antenna.
>
> Or...one can get transistors that have worked in their
> ratings at 150 MHz VHF "business band" with all the nitty
> and gritty details in old Motorola Application Notes.
> CW operation at 2 meters no sweat at up to 150 Watts,
> more than a 2C39 pair can do safely. Lots of alternate
> choices...such as solid-state Cellular Telephone cell
> site ("base station") transmitters and equivalents that
> don't have internal networks to optimize operation in the
> 1 GHz band. [but, you knew that already, right? :-)]
>
> LenAnderson@ieee.org
>

2779. Re: Intriguing story about undersampling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-06 03:21:05 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1118028065.065290.214250@o13g2000cwo.googlegroups.com>
Source record: 18611

Gee, I hope Bonnie didn't claim they were original. Certainly it's not difficult to figure out.

More interesting to me is recent work on letting a delta-sigma ADC sample at a rate to serve as a direct IF sampler--up around 5GHz. The practice of getting it to work really right at such frequencies is much more interesting than the formulas for what frequencies work and avoid aliasing.

Cheers,
Tom

2780. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-06 11:12:03 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <7cWoe.8279$yS2.596@trnddc07>
Source record: 18612

I've never seen "dBv" refer to 1uv either. Always 1V.

Joe
W3JDR

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:11a72u5b8su7h72@corp.supernews.com...
> LenAnderson@ieee.org wrote:
>> . . .
>> "dbv" (sometimes "dbu" but rarely) refers "0" as 1.0 microVolt,
>> almost any characteristic. Not seen much in specifications,
>> though.
>> . . .
>
>
> Interesting. I've many times seen dB relative to one volt as dBV, and dB
> relative to one microvolt as dBuV, but never dBv meaning dB relative to
> one microvolt, or dBu at all. Do you have any references that show these
> unusual usages?
>
> Roy Lewallen, W7EL

2781. website

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-06 11:23:11 UTC
From: steve carey <scarey@tds.net>
Message-ID: <42a431eb$1_2@newspeer2.tds.net>
Source record: 18613

www.k9yk.com

2782. Re: Intriguing story about undersampling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-06 12:53:53 UTC
From: glenn.b.dixon@gmail.com
Message-ID: <1118062433.241192.124290@f14g2000cwb.googlegroups.com>
Source record: 18614

Greetings all,

I'm new to the group and find many of the various threads fascinating. I'm currently building a homebrew HF rig.

I think undersampling has probably been around nearly as long as sampling itself. This is because samplers are a subset of (RF) mixers, and early engineers fluent in RF mixer skills would have had undersampling in their toolboxes already.

As mixers, samplers are modelled as a multipliers with the sampler clock serving as the local oscillator. What makes samplers a subset of mixers are the constraints placed on the LO--in the ideal sampler a Dirac delta function is used. This waveform has the property that all harmonics (including the zeroth or DC and even harmonics) have the same amplitude. Our doubly-balanced RF mixers typically respond to only odd harmonics. Real-World samplers approximate the ideal sampler fairly well over a wide frequency range.

Because samplers have a DC response, the baseband signal Fin is passed by the sampler, something RF mixers don't normally do (but can be made to do simply by putting a DC component on the local oscillator). When viewing a sampler as a mixer, aliasing is nothing more or less than the mixing product (LO-Fin) overlapping the baseband signal Fin. Undersampling is nothing more or less than prefiltering the desired band of frequencies and mixing them to baseband with the appropriate harmonic of the local oscillator.

I've not found the notion of samplers as mixers in the literature, but probably could if I looked hard enough. Perhaps authors consider the notion either obvious or not useful, but to this old ham viewing samplers as mixers is useful.

Bonnie's article contains a fun blunder. She states Nyquist and Shannon developed sampling theory in the 1920's, which would have put Shannon in his teens. Shannon's seminal paper on communication theory was actually published in 1948. I've read that the 'Nyquist rate' should really be called the 'Shannon rate' as he was the first to develop it. Anyone know more?

Regards,
Glenn Dixon, AC7ZN

2783. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-06 13:54:25 UTC
From: drwxr-xr-x <nobody@frontier.net>
Message-ID: <slrnda8lch.eg0.bit-bucket@shell.config.com>
Source record: 18615

On 5 Jun 2005 17:16:10 -0700, LenAnderson@ieee.org wrote:
> Yes, I do. :-)
>
> LenAnderson@ieee.org

Yes, you 'do' WHAT??
What are you nattering on about?!?

Oh, I see. Another sloppy groups.google poster.

2784. Spartan 3 Starter Kit group formed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-06 14:32:55 UTC
From: Leon Heller <leon.heller@dsl.pipex.com>
Message-ID: <lY-dnc_3pOgEwznfRVnyhg@pipex.net>
Source record: 18616
Cross-posted to:
comp.arch.embedded,sci.electronics.design,comp.dsp,comp.lang.vhdl,rec.radio.amateur.homebrew,rec.radio.amateur.digital

I've just formed a Yahoo group for users of the Xilinx/Digilent Spartan 3
Starter Kit:

http://groups.yahoo.com/group/s3_kit

It'll take a couple of days before it will show up in the group listings,
but the above link should work for anyone wishing to join.

Leon
--
Leon Heller, G1HSM
http://www.geocities.com/leon_heller

2785. Re: 2C39's for 144 MHZ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-06 16:31:07 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <fT_oe.2741$Kj3.761@trnddc03>
Source record: 18617

"John Smith" <assemblywizard@gmail.com> wrote in message
news:lYMoe.69$MS2.7053436@news.sisna.com...
> yes, you will forgive me if I skip reading all of that, I doubt you
> offered anything relevant to the mans original question anyway...
>
>Yeah, don't confuse us with theory and engineering- especially stay away
from any math.

But to Len,
Thanks for the informative post. I have used 2C39's on 23cM in 2 and 4 tube
water cooled designs for EME, but appreciate your insight into the
construction and caveats.

Dale W4OP

2786. Re: Interesting tube for a linear...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-06 16:32:44 UTC
From: atec <atec77@XXXhotmail.com>
Message-ID: <42a47a7a$1@dnews.tpgi.com.au>
Source record: 18618

John Smith wrote:
> atec:
>
> You are an idiot, I am sure others have told you, I am sure you have few
>
Ahuh I thought you might be weak willed and of low cunning ,
you confirmed it troll ,
buhbye,

2787. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-06 16:40:02 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1118076002.820950.318330@g49g2000cwa.googlegroups.com>
Source record: 18619

This page: http://decibel.biography.ms/ mentions both dBv and dBu.
Says in "electrical voltage" (probably with reference to audio
industry), dBu and dBv both mean dB relative to 0.775V -- generally
0.775Vrms, but dB taken as 20 log(V/0.775), without reference to a
particular impedance.

But the same page says dBu or dB(lower-case Greek mu: "micro") as radio
power is dB relative to one microvolt per square meter.

Go figure. It all points out the need to be careful to define your
terms if there's any chance of ambiguity. If you're not careful, your
reader may think dBu refers to Dallas Baptist University, or Deutsche
Billiard Union, or Duluth Business University... though the
capitalization would be wrong for those.

Cheers,
Tom

2788. Re: Interesting tube for a linear...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-06 17:25:19 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <4G%oe.23$PQ2.1294455@news.sisna.com>
Source record: 18621

good, now be off about your business, and I to mine...

John

"atec" <atec77@XXXhotmail.com> wrote in message
news:42a47a7a$1@dnews.tpgi.com.au...
> John Smith wrote:
>> atec:
>>
>> You are an idiot, I am sure others have told you, I am sure you have
>> few
> Ahuh I thought you might be weak willed and of low cunning ,
> you confirmed it troll ,
> buhbye,

2789. Re: 2C39's for 144 MHZ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-06 17:27:01 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <FH%oe.24$xr4.1535094@news.sisna.com>
Source record: 18620

the guy asking about using 'em on 144 Mhz will be thrilled by the
reports of another Ghz user...

John

"Dale Parfitt" <par@parelectronics.com> wrote in message
news:fT_oe.2741$Kj3.761@trnddc03...
>
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:lYMoe.69$MS2.7053436@news.sisna.com...
>> yes, you will forgive me if I skip reading all of that, I doubt you
>> offered anything relevant to the mans original question anyway...
>>
>>Yeah, don't confuse us with theory and engineering- especially stay
>>away
> from any math.
>
> But to Len,
> Thanks for the informative post. I have used 2C39's on 23cM in 2 and 4
> tube
> water cooled designs for EME, but appreciate your insight into the
> construction and caveats.
>
> Dale W4OP
>
>

2790. Re: Intriguing story about undersampling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-06 21:53:15 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11a9hef6th9b333@corp.supernews.com>
Source record: 18622

That's absolutely correct.

Tektronix has produced sampling oscilloscopes from at least the early 60's which have a frequency response of from several to several tens of GHz but sample at rates often below 1 M sample/sec. Aliasing? You betcha! As you pointed out, the aliased signal is the desired one -- a frequency (or time) converted signal. The only requirement is that the signal be repetative, since it takes samples from many cycles to create the time-scaled waveform. Single-shot events, often misunderstood or disregarded by RF engineers, require Nyquist-dictated sampling rates. This is done by most conventional digital oscilloscopes. The Nyquist criterion assumes that you want to recreate a nearly exact replica of the waveform and that it extends down to DC; if you'll settle for a time scaled or frequency shifted one, or one with a limited bandwidth, other options are available.

Roy Lewallen, W7EL

glenn.b.dixon@gmail.com wrote:
> Greetings all,
>
> I'm new to the group and find many of the various threads fascinating.
> I'm currently building a homebrew HF rig.
>
> I think undersampling has probably been around nearly as long as
> sampling itself. This is because samplers are a subset of (RF) mixers,
> and early engineers fluent in RF mixer skills would have had
> undersampling in their toolboxes already.
>
> As mixers, samplers are modelled as a multipliers with the sampler
> clock serving as the local oscillator. What makes samplers a subset of
> mixers are the constraints placed on the LO--in the ideal sampler a
> Dirac delta function is used. This waveform has the property that all
> harmonics (including the zeroth or DC and even harmonics) have the same
> amplitude. Our doubly-balanced RF mixers typically respond to only odd
> harmonics. Real-World samplers approximate the ideal sampler fairly
> well over a wide frequency range.
>
> Because samplers have a DC response, the baseband signal Fin is passed
> by the sampler, something RF mixers don't normally do (but can be made
> to do simply by putting a DC component on the local oscillator). When
> viewing a sampler as a mixer, aliasing is nothing more or less than the
> mixing product (LO-Fin) overlapping the baseband signal Fin.
> Undersampling is nothing more or less than prefiltering the desired
> band of frequencies and mixing them to baseband with the appropriate

> harmonic of the local oscillator.
>
> I've not found the notion of samplers as mixers in the literature, but
> probably could if I looked hard enough. Perhaps authors consider the
> notion either obvious or not useful, but to this old ham viewing
> samplers as mixers is useful.
>
> Bonnie's article contains a fun blunder. She states Nyquist and
> Shannon developed sampling theory in the 1920's, which would have put
> Shannon in his teens. Shannon's seminal paper on communication theory
> was actually published in 1948. I've read that the 'Nyquist rate'
> should really be called the 'Shannon rate' as he was the first to
> develop it. Anyone know more?
>
> Regards,
> Glenn Dixon, AC7ZN
>

2791. WTD--Source for LM325H or SG2501 dual voltage regulator IC

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-07 02:43:15 UTC
From: Bob Weiss <bob.weiss@verizon.net>
Message-ID: <7R7pe.1124$5M2.813@trndny06>
Source record: 18623
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.homebrew

Am in need of 3 pcs of this now discontinued device. A dual tracking +/- 15V regulator in a 10 pin TO-5 type package. Anyone have a few of these moldy oldies gathering dust on their shelves?

73,
Bob Weiss N2IXK

2792. Re: WTD--Source for LM325H or SG2501 dual voltage regulator IC

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-07 03:16:42 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <arqdnRYMhLABjDjfRVn-gw@comcast.com>
Source record: 18624
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.homebrew

"Bob Weiss" <bob.weiss@verizon.net> wrote in message
news:7R7pe.1124$5M2.813@trndny06...
> Am in need of 3 pcs of this now discontinued device. A dual tracking +/-
> 15V regulator in a 10 pin TO-5 type package. Anyone have a few of these
> moldy oldies gathering dust on their shelves?
>
> 73,
> Bob Weiss N2IXK

There are a number of "obsolete parts" distributors around the world.

Your part number LM325
http://www1.national.com/ds/LM/LM325.pdf
came up as available
http://www.icparts.com/dbOffers.asp

Rochester Electronics actually purchases the "dies" from many discontinued
IC devices
http://www.rocelec.com/

Summit Electronics also lists this part as available
http://www.summitelectronics.com/searchItem.php

4-Star also lists thousands in stock
http://www.4starelectronics.com/part_search/PartSearchResults.aspx

w9gb

2793. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-07 08:54:14 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11aao5qhuet9116@corp.supernews.com>
Source record: 18625

Thanks, Tom. This newsgroup is truly educational. I'm slowly learning that out there, somewhere, just about every possible convention or nomenclature is used by someone for some purpose. I'll bet I'm the only kid on my block now who knows what dBu and dBv mean. And I guess Len is the only kid on his block that knows they sometimes mean dB relative to 1 uV, as well -- ah, what's a factor of 775,000 one way or the other, anyhow.

dBu = dumb Bastard unit.

Roy Lewallen, W7EL

K7ITM wrote:
> This page: http://decibel.biography.ms/ mentions both dBv and dBu.
> Says in "electrical voltage" (probably with reference to audio
> industry), dBu and dBv both mean dB relative to 0.775V -- generally
> 0.775Vrms, but dB taken as 20 log(V/0.775), without reference to a
> particular impedance.
>
> But the same page says dBu or dB(lower-case Greek mu: "micro") as radio
> power is dB relative to one microvolt per square meter.
>
> Go figure. It all points out the need to be careful to define your
> terms if there's any chance of ambiguity. If you're not careful, your
> reader may think dBu refers to Dallas Baptist University, or Deutsche
> Billiard Union, or Duluth Business University... though the
> capitalization would be wrong for those.
>
> Cheers,
> Tom
>

2794. Re: WTD--Source for LM325H or SG2501 dual voltage regulator IC

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-07 09:02:08 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <kodpe.293612$cg1.38406@bgtnsc04-news.ops.worldnet.att.net>
Source record: 18626
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.homebrew

I remember the HP 339A distortion analyzer used something similar to that,
if not the same device. When I was working at Motorola, we had to purchase
100 dollars of them as a minimum buy.
Don't waste your time on Doom.com.....they only sell to vendors.

Pete

"gb" <onw9mapsgb@no.arrl.spam.net> wrote in message
news:arqdnRYMhLABjDjfRVn-gw@comcast.com...
> "Bob Weiss" <bob.weiss@verizon.net> wrote in message
> news:7R7pe.1124$5M2.813@trndny06...
>> Am in need of 3 pcs of this now discontinued device. A dual tracking +/-
>> 15V regulator in a 10 pin TO-5 type package. Anyone have a few of these
>> moldy oldies gathering dust on their shelves?
>>
>> 73,
>> Bob Weiss N2IXK
>
> There are a number of "obsolete parts" distributors around the world.
>
> Your part number LM325
> http://www1.national.com/ds/LM/LM325.pdf
> came up as available
> http://www.icparts.com/dbOffers.asp
>
> Rochester Electronics actually purchases the "dies" from many discontinued
> IC devices
> http://www.rocelec.com/
>
> Summit Electronics also lists this part as available
> http://www.summitelectronics.com/searchItem.php
>
> 4-Star also lists thousands in stock
> http://www.4starelectronics.com/part_search/PartSearchResults.aspx
>
> w9gb
>

2795. Re: Intriguing story about undersampling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-07 13:33:48 UTC
From: glenn.b.dixon@gmail.com
Message-ID: <1118151228.690060.299930@f14g2000cwb.googlegroups.com>
Source record: 18627

I read Angelo's full article (shoulda done that before I pontificated the first time) and it answered the Nyquist vs. Shannon question I had. Nyquist had the concept, Shannon proved it mathematically. Thanks, Angelo.

Regards,
Glenn Dixon, AC7ZN

2796. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-07 14:22:00 UTC
From: nanchez <nanchez@gmail.com>
Message-ID: <1118154120.820531.144940@g44g2000cwa.googlegroups.com>
Source record: 18628

Hi

Thanks to all of you... like Roy said, this newsgroup is very
educational... now I have enough information to make some
experimentation with this mixer and oscillator... actually, the mixer
is an Analog Devices AD607 and the oscillator is a Linear LTC6903...
I'm planning to build my own rig...

Thank you so much.

Hernán Sánchez
HJ4SZY

2797. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-07 17:46:21 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1118166381.367177.256430@g43g2000cwa.googlegroups.com>
Source record: 18629

Hi Hernán,

Hope a couple comments will be helpful:

I'd suggest you reconsider using the LTC6903. The data sheet says it has a lot of jitter, which will translate to huge phase noise... If you connect up just the LTC6903 and listen to its output on a good receiver, if it doesn't sound like a clean tone (SSB/CW mode receiver) or a noisless carrier, that's what it's going to add to whatever signal you want to listen to when using it as an LO for a receiver. There are probably some very decent low-power LO designs in the QRP community that you could adapt. May be difficult to get wideband digital control, which it looks like you might be trying to get with the LTC part.

I suppose the AD607 is pretty tolerant of levels at the LO input, and it's a relatively high input impedance. You don't have to waste power by adding an external 50 ohm resistor. Get the LO input voltage level close to the suggested value or a bit more and you should be fine.

Cheers,
Tom

nanchez wrote:
> Hi
>
> Thanks to all of you... like Roy said, this newsgroup is very
> educational... now I have enough information to make some
> experimentation with this mixer and oscillator... actually, the mixer
> is an Analog Devices AD607 and the oscillator is a Linear LTC6903...
> I'm planning to build my own rig...
>
> Thank you so much.
>
> Hernán Sánchez
> HJ4SZY

2798. Re: AGC Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-07 17:54:49 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <tqnba1p2i76o6ronmu4s28t5on8qftrpt0@4ax.com>
Source record: 18630
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

On Sat, 28 May 2005 22:25:18 -0400, "Tom Holden"
<holden_family@sympatico.ca> wrote:

>Thanks to all for the constructive and informative discussion. I wish I
>could say that it has helped to solve my problem but I'm still wrestling
>with it. The low frequency circuit analysis by Spice, Bode and Nyquist plot
>are beyond my capacity but I have had some excellent help from Dave,
>off-list, who eye-balled the DX-394 schematic and my mod. We identified
>decoupling networks and what I assume to be AGC 'delay' networks and tackled
>it on the basis that reducing the time constants of the larger ones should
>reduce the low frequency phase shift that could be contributing to the
>problem. The opposite occurred - increasing the 'delayed AGC' time constant
>reduced the instability and effectively slowed the attack, especially on the
>RF front-end. More or less the same effect was obtained by slowing the
>attack in the attack network that affects all stages.
>
>I believe 'delayed AGC' means a slower or delayed attack at the RF stages;
>in the DX-394, there is a R-C network adding maybe 15 ms to the attack on
>the AGC line affecting both the 1st mixer and the drain-source current of
>the RF preamp and a second network adding maybe 10 ms on top of this
>affecting the AGC gate of the RF preamp. I've doubled that first time
>constant and doubled what I would like in my attack and release networks in
>order to get the fastest stable speeds which I guess would be on the order
>of 20-40 ms attack and 50-80 ms release.
>
>My mod has a FET amp/buffer at IF driving the heck out of the diodes so that
>should be fairly linear. I have adjustable gain at the output of the
>detector/attack filter. I don't think BFO interference is an issue; I don't
>notice any great difference in stability with it on or off - there are
>separate envelope and product detectors.
>
>I'd welcome any more input. The base DX-394 schematic is at
>http://www.monitor.co.uk/radio-mods/dx-394/dx-394.htm and I'd be happy to
>send anyone the schematic of my mod.
>
>73, Tom
>

Tom,

You might try an rf choke in the agc line near the agc detector. With
fast attack that usually means small filter capacitors on the agc
line. Rf can be coupled into the agc line that larger time constant
capacitors would filter out.

I have also found that decreasing the capacitors at each controlled stage to try and speed up the attack times resulted in instability of stages due to not enough rf decoupling.

As another poster mentioned, using a low source impedance on the agc driver amplifier will allow you to use larger capacitors on the agc line. That can solve most rf on the agc line problems.

Regards
Gary K4FMX

2799. Heathkit frequency counter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-07 18:25:56 UTC
From: g3mea@harle2000.fsnet.co.uk
Message-ID: <42a5e609.2463984@news.freeserve.net>
Source record: 18631

Does anyone know the modern equivalent of the ua9368 chip used as
7 segment decoder-driver
Tnx Stan G3MEA

2800. Re: 2C39's for 144 MHZ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-07 21:22:30 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <fs3ca1tuhvh4v5omk46gtr926thcbgqt9q@4ax.com>
Source record: 18632

On 5 Jun 2005 17:13:48 -0700, LenAnderson@ieee.org wrote:

[snip]
> Western Electric 416s and 417s are out there in larger
> quantities.

Hmm. I used several of these in two-meter receive pre-amps, but never considered them for the finals. I did have a little blower on the 416B tho.

I know that W-E used them in transmitters but I never saw any ham designs doing it.

> Geez, 829 duals have been used at 144 MHz
> with more output than one can safely run a 2C39 at that
> frequency. Socket assemblies for an 829 are easier to
> get than for an inverted lighthouse structure.

Had one of those on two-meter CW/AM. Used the modulated high voltage out of my Heath DX-100 to run it.

>
> A year or so ago I happened across a couple of non-USA
> sites giving nice details of 2C39s used in ham VHF
> transmitters. Nice photos and dimensions available.
> Both of them used the triode "pushed" beyond its safe
> limits of power. Think about replacement costs.

The 2C39 is often converted to water cooling, and really pushed.

http://www.w6pql.com/200w_23cm_amplifier.htm

>
> At 2 meters, a better way using vacuum tubes (besides
> going to Eimac goodies) is in a "distributed amplifier,"
> the grids of many 9-pin tubes connected to an L-C
> delay-line-like structure, the plates connected to another
> L-C network. The Tektronix 540 series scopes had those
> for the vertical amplifiers, good beyond 50 MHz, back in
> the 1960s. No tuning required...except in how to couple
> the medium-Z output to a low-Z antenna.

I wouldn't call this a better way unless you live in a cold climate and need the extra heat in the shack.

2801. Re: 2C39's for 144 MHZ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-07 21:44:37 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <r45ca11cfcp0ggi431nj4th99ia83oqs7a@4ax.com>
Source record: 18633

On Sun, 05 Jun 2005 06:37:02 -0700, Wes Stewart <n7ws_@*yahoo.com>
wrote:

>On Sun, 05 Jun 2005 04:07:47 GMT, "998 cc"
><mycallsign@0sbcglobal0.net> wrote:
>
>>Hello, Has anyone tried using 2C39's for 144 Mhz? I happen to have a few
>>of them and was considering using them for a junkbox amplifier for 2 meter
>>SSB. I have found several 1296 Mhz amps that use them, but so far, nothing
>>for 2 meters.
>
>
>Certainly they will work but I suggest the effort will be more trouble
>than it's worth.
>

I've used them aircooled at 432 but thy are only good for maybe 15W
that way. A pair running grounded grid at 144 would work but for the
it's a lot of work unless you go to the trouble of water cooling. I'd
use 4CX250 before I'd bother with that.

FYI the motorola H44s (a old tube UHF FM business radio used 2C39s for
the driver and final).

Allison

2802. Clean Transmitters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-07 22:02:38 UTC
From: MadEngineer <glenn.b.dixon@gmail.com>
Message-ID: <1118181758.569075.195220@o13g2000cwo.googlegroups.com>
Source record: 18634

Wes Hayward in _Experimental Methods for RF Design_ bemoans the fact that our transmitters are so dirty in terms of noise floor, close-in phase noise and IMD. I see newer transmitters like the Mark V offer a cleaner class A mode which really seems to help IMD, and read a previous post regarding a transmitter that filters the noise floor, but wonder if there are any homebrewers out there who are working this problem? This seems the type of problem that we hams can and do ignore completely, unless we are contesters or have a neighbor on the bands.

Regards,
Glenn Dixon AC7ZN

2803. Re: Clean Transmitters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-07 22:33:36 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2005.06.07.22.33.35.973296@oceanfree.net>
Source record: 18635

On Tue, 07 Jun 2005 15:02:38 -0700, MadEngineer wrote:

> Wes Hayward in _Experimental Methods for RF Design_ bemoans the fact that
> our transmitters are so dirty in terms of noise floor, close-in phase
> noise and IMD.

This is not such a big issue at HF where band noise
is relatively high. Keeping noise and distortion to
a minimum is a lot more important on VHF where noise
is low, local stations are very strong and everyone
has an ultra low noise preamp. I can operate within
+/- a few KHz of some of the cleaner local VHF stations.
Some of the nastier ones need about 30KHz of elbow
room.

> any homebrewers out there who are working this problem?

Many homebrewers put a lot of effort into keeping
phase noise and IMD to an absolute minimum. Some
of the cleanest signals on the 80M band can be
heard on the homebrew net frequency (3.727MHz).

73, Ed. EI9GQ.

--
Remove 'X' to reply via e-mail.
Linux 2.6.11

2804. Re: Clean Transmitters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-08 00:00:54 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <Wyqpe.22683$_o.19980@attbi_s71>
Source record: 18636

> Many homebrewers put a lot of effort into keeping
> phase noise and IMD to an absolute minimum. Some
> of the cleanest signals on the 80M band can be
> heard on the homebrew net frequency (3.727MHz).
>
> 73, Ed. EI9GQ.
>
> Hi Ed, now get them all to get on at say 05, 0600Z so we can have the
propagation to do that.

Regards
W4ZCB

2805. Re: Heathkit frequency counter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-08 00:44:03 UTC
From: budgie <me@privacy.net>
Message-ID: <jpfca11hic60t0i9c4d0l2ud60mb8j4mvf@4ax.com>
Source record: 18637

On Tue, 07 Jun 2005 18:25:56 GMT, g3mea@harle2000.fsnet.co.uk (stanharle) wrote:

>Does anyone know the modern equivalent of the ua9368 chip used as
>7 segment decoder-driver

Seeing it is still available, why do you seek an "equivalent"?

2806. Re: Clean Transmitters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-08 01:48:05 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <ebspe.16180$QX1.4708@fe06.lga>
Source record: 18638

"MadEngineer" <glenn.b.dixon@gmail.com> wrote in message
news:1118181758.569075.195220@o13g2000cwo.googlegroups.com...

> Wes Hayward in _Experimental Methods for RF Design_ bemoans the fact

> but wonder if there are any homebrewers out there who are working this
> problem?

You don't suppose Wes may have homebrewed a rig or two in his time?

..

2807. Re: WTD--Source for LM325H or SG2501 dual voltage regulator IC

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-08 01:56:54 UTC
From: Bob Weiss <bob.weiss@verizon.net>
Message-ID: <42A65069.2060408@verizon.net>
Source record: 18639
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.homebrew

Have 3 of them on the way! Thanks a lot, guys!

73,
Bob Weiss N2IXK

Pete KE9OA wrote:
> I remember the HP 339A distortion analyzer used something similar to that,
> if not the same device. When I was working at Motorola, we had to purchase
> 100 dollars of them as a minimum buy.
> Don't waste your time on Doom.com.............they only sell to vendors.
>
> Pete
>
> "gb" <onw9mapsgb@no.arrl.spam.net> wrote in message
> news:arqdnRYMhLABjDjfRVn-gw@comcast.com...
>
>>"Bob Weiss" <bob.weiss@verizon.net> wrote in message
>>news:7R7pe.1124$5M2.813@trndny06...
>>
>>>Am in need of 3 pcs of this now discontinued device. A dual tracking +/-
>>>15V regulator in a 10 pin TO-5 type package. Anyone have a few of these
>>>moldy oldies gathering dust on their shelves?
>>>
>>>73,
>>>Bob Weiss N2IXK
>>
>>There are a number of "obsolete parts" distributors around the world.
>>
>>Your part number LM325
>>http://www1.national.com/ds/LM/LM325.pdf
>>came up as available
>>http://www.icparts.com/dbOffers.asp
>>
>>Rochester Electronics actually purchases the "dies" from many discontinued
>>IC devices
>>http://www.rocelec.com/
>>
>>Summit Electronics also lists this part as available
>>http://www.summitelectronics.com/searchItem.php
>>
>>4-Star also lists thousands in stock
>>http://www.4starelectronics.com/part_search/PartSearchResults.aspx
>>
>>w9gb

>>
>
>
>

2808. Re: Garmin GPS to TinyTrak3 problems

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-08 01:57:10 UTC
From: Anonymous <jupiter@anon.com>
Message-ID: <1118195831.711208@cswreg.cos.agilent.com>
Source record: 18640

>
> Unfortunately, whereas "RS-232 and NMEA" are very much a standard,

Hi, Joel,

Actually, RS-232 has always baffled me, and from some measurements I made it doesn't seem to be a very strict standard. For example, the waveform coming out of the GPS receiver was +/- 5 V, whereas I have seen the waveform out of the RS-232 on the computer at +/- 12 V. Is the voltage level arbitrary?

Al

2809. Re: Garmin GPS to TinyTrak3 problems

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-08 02:47:54 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11acn19g0c9vt56@corp.supernews.com>
Source record: 18641

Hi Al,

"Anonymous" <jupiter@anon.com> wrote in message
news:1118195831.711208@cswreg.cos.agilent.com...
> Actually, RS-232 has always baffled me, and from some measurements I made it
> doesn't seem to be a very strict standard.

There really is an RS-232 standard, it's just commonly abused. Here's what I have from a "cheat sheet" I have at hand:

-- Transition levels are between +/-3V (this is what you have to detect)
-- Maximum open circuit voltage is 25V (!)
-- Maximum load capacitance is 2.5nF
-- Load resistance is 3-7kohm (this is ignored all the times -- often the load is much, much higher than this)
-- Maximum slew rate is 30V/us (probably violated occasionally but no one checks :-))
-- Maximum transition time is 4% of bit time
-- Maximum data rate is 20,000 bits/second (obviously ignored with good reason...)

The above is supposedly the official EIA-232 standard, "revision D," approved in November, 1986.

As you can see, both +/-5V (open circuit) and +/-12V drivers can readily meet the spec so long as they still swing +/-3V into 3k loads.

Often times the receivers are designed so that the "logic 1" input is anything below about a voltage or two and anything above that is a "logic 0". This is done (rather than having the threshold at 0V) so that you can get away with hooking a TTL or CMOS logic output directly to the RS-232 input and still successfully receive characters. You'll occasionally see people ask whether or not some given serial card or USB to serial adapter will support such shenanigans. :-)

---Joel

2810. Re: Garmin GPS to TinyTrak3 problems

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-08 03:00:50 UTC
From: Al Lorona <al_lorona@agilent.com>
Message-ID: <1118199651.591076@cswreg.cos.agilent.com>
Source record: 18642

Thanks, Joel! This is all very good information. It does bring up another point, though, related to my original question about interfacing the GPS to the TinyTrak3.

The GPS puts out +/- 5 V serial, but the Tiny Trak's serial input is a TTL-level input to the PIC microprocessor. The PIC runs off of a single +5V supply. I guess it can withstand the negative voltage swing without failing? And... if I looked at the serial output from the GPS into an open circuit, there was no signal. It was as if the GPS shut off its serial if it detected an open circuit. Is this normal? Even after connecting it to the TinyTrak, many times it wouldn't 'wake up' and start sending serial data. This was very confusing.

Thanks

Al W6LX

>
> There really is an RS-232 standard, it's just commonly abused. Here's what I
> have from a "cheat sheet" I have at hand:
>
> -- Transition levels are between +/-3V (this is what you have to detect)
> -- Maximum open circuit voltage is 25V (!)
> -- Maximum load capacitance is 2.5nF
> -- Load resistance is 3-7kohm (this is ignored all the times -- often the load
> is much, much higher than this)
> -- Maximum slew rate is 30V/us (probably violated occasionally but no one
> checks :-))
> -- Maximum transition time is 4% of bit time
> -- Maximum data rate is 20,000 bits/second (obviously ignored with good
> reason...)
>
> The above is supposedly the official EIA-232 standard, "revision D," approved
> in November, 1986.
>
> As you can see, both +/-5V (open circuit) and +/-12V drivers can readily meet
> the spec so long as they still swing +/-3V into 3k loads.
>
> Often times the receivers are designed so that the "logic 1" input is anything
> below about a voltage or two and anything above that is a "logic 0". This

is
> done (rather than having the threshold at 0V) so that you can get away
with
> hooking a TTL or CMOS logic output directly to the RS-232 input and still
> successfully receive characters. You'll occasionally see people ask
whether
> or not some given serial card or USB to serial adapter will support such
> shenanigans. :-)
>
> ---Joel
>
>

2811. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-08 03:54:21 UTC
From: Korbin Dallas <korbindallas@dodgeit.com>
Message-ID: <pan.2005.06.08.03.54.13.364674@dodgeit.com>
Source record: 18643

On Mon, 06 Jun 2005 11:12:03 +0000, W3JDR wrote:

I think that would be dBuv not dBv which is Ref 1V

> I've never seen "dBv" refer to 1uv either. Always 1V.
>
> Joe
> W3JDR
>
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:11a72u5b8su7h72@corp.supernews.com...
>> LenAnderson@ieee.org wrote:
>>> . . .
>>> "dbv" (sometimes "dbu" but rarely) refers "0" as 1.0 microVolt,
>>> almost any characteristic. Not seen much in specifications,
>>> though.
>>> . . .
>>
>>
>> Interesting. I've many times seen dB relative to one volt as dBV, and dB
>> relative to one microvolt as dBuV, but never dBv meaning dB relative to
>> one microvolt, or dBu at all. Do you have any references that show these
>> unusual usages?
>>
>> Roy Lewallen, W7EL

--
Korbin Dallas
The name was changed to protect the guilty.

2812. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-08 03:57:35 UTC
From: Korbin Dallas <korbindallas@dodgeit.com>
Message-ID: <pan.2005.06.08.03.57.27.675189@dodgeit.com>
Source record: 18644

On Tue, 07 Jun 2005 01:54:14 -0700, Roy Lewallen wrote:

dBv = 1v
dBu = 1 uV
dBm = 1 mw
dBw = 1 w
dBk = 1 KW

> Thanks, Tom. This newsgroup is truly educational. I'm slowly learning
> that out there, somewhere, just about every possible convention or
> nomenclature is used by someone for some purpose. I'll bet I'm the only
> kid on my block now who knows what dBu and dBv mean. And I guess Len is
> the only kid on his block that knows they sometimes mean dB relative to
> 1 uV, as well -- ah, what's a factor of 775,000 one way or the other,
> anyhow.
>
> dBu = dumb Bastard unit.
>
> Roy Lewallen, W7EL
>
> K7ITM wrote:
>> This page: http://decibel.biography.ms/ mentions both dBv and dBu.
>> Says in "electrical voltage" (probably with reference to audio
>> industry), dBu and dBv both mean dB relative to 0.775V -- generally
>> 0.775Vrms, but dB taken as 20 log(V/0.775), without reference to a
>> particular impedance.
>>
>> But the same page says dBu or dB(lower-case Greek mu: "micro") as radio
>> power is dB relative to one microvolt per square meter.
>>
>> Go figure. It all points out the need to be careful to define your
>> terms if there's any chance of ambiguity. If you're not careful, your
>> reader may think dBu refers to Dallas Baptist University, or Deutsche
>> Billiard Union, or Duluth Business University... though the
>> capitalization would be wrong for those.
>>
>> Cheers,
>> Tom
>>

--
Korbin Dallas
The name was changed to protect the guilty.

2813. Re: 2C39's for 144 MHZ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-08 04:05:24 UTC
From: 998 cc <mycallsign@0sbcglobal0.net>
Message-ID: <88upe.1130$bv7.832@newssvr21.news.prodigy.com>
Source record: 18645

Hello Len and All. Thanks for the replies. I found all of the "positive" responses very beneficial including the Ghz responses. The reason for my enquiry is that I have some of these tubes and related surplus equipment and was looking for a way to use the parts from it. In fact, I believe the equipment I have is one of the pulsed relay stations mentioned below. I have one complete Lo-band unit except for the horn antenna.

It sounds like the end would not justify the means in considering these tubes as viable 2-meter amps. I do have a few 829/3E29's and sockets in the parts box, so that is a possibility as well. Anyway, I like tube equipment which is why I am not going the solid state route.

Thanks again.

73,
Russ
W6OHM

<LenAnderson@ieee.org> wrote in message
news:1118016828.581349.206890@g47g2000cwa.googlegroups.com...
> From: "John Smith" <assemblywiz...@gmail.com> on Sun,Jun 5 2005 12:39
> pm
>
>
> >Yes, I should suspect that a lower freq for a high freq tube is no
> >problem... I think why you don't see them ever used at 144 Mhz is that
> >there used to be VERY expensive--you would only pay the money if
> >necessary and there were much cheaper alternatives for 144...
>
> The 2C39 was never intended for lower-frequency "CW" or other
> narrow-band modes. General Electric used them in 1800 MHz
> pulsed microwave radio relay terminals having peak pulse
> envelope output of 12 Watts...with forced-air cooling on
> the integral anode fins. There were six 2C39s in every
> GE 1.8 GHz terminal designed about 1950 (!).
>
> The transconductance is very high (14,000 umho?) and the
> grid-cathode, grid-plate spacing very small. The only sure
> way to hold such tolerances in varying heat environments is
> to use non-standard glass or ceramic tubing sections in the
> inverted lighthouse structure. Those who want to use it have
> to have an equally-expensive socket arrangement or be a
> fairly competent machinist have good tools at their disposal.
>
> The GE microwave terminal used integral socket and tuned

> cavity assemblies at 1.8 GHz. The GE transmitter was a
> chain of 7-pin and 9-pin tube oscillator-multipliers to
> about 255 MHz, then into a 2C39 septupler, that into the
> 2C39 final amplifier (pulsed anode). Receiver LO had a
> similar arrangement but only one 2C39 in the chain. "Hot
> spare" duplicate assemblies for the RF doubled the 2C39
> totals. They worked and worked and worked in 24/7 operation,
> nine terminals where I was the operation and maintenance
> supervising NCO in the Army. There were hundreds of them
> used in many kinds of multi-channel radio relay, including
> long pipeline telemetry and control in the USA.
>
> The only thing "bad" about them was due to another tube
> manuafacturer's dimensional conflict with GE cavity design.
>
> Why that particular tube? Because it "looks sexy" with
> the anode fins so nicely machined? There's lots more
> half-century-old vacuum tube designs available somewhere.
> Western Electric 416s and 417s are out there in larger
> quantities. Geez, 829 duals have been used at 144 MHz
> with more output than one can safely run a 2C39 at that
> frequency. Socket assemblies for an 829 are easier to
> get than for an inverted lighthouse structure.
>
> A year or so ago I happened across a couple of non-USA
> sites giving nice details of 2C39s used in ham VHF
> transmitters. Nice photos and dimensions available.
> Both of them used the triode "pushed" beyond its safe
> limits of power. Think about replacement costs.
>
> At 2 meters, a better way using vacuum tubes (besides
> going to Eimac goodies) is in a "distributed amplifier,"
> the grids of many 9-pin tubes connected to an L-C
> delay-line-like structure, the plates connected to another
> L-C network. The Tektronix 540 series scopes had those
> for the vertical amplifiers, good beyond 50 MHz, back in
> the 1960s. No tuning required...except in how to couple
> the medium-Z output to a low-Z antenna.
>
> Or...one can get transistors that have worked in their
> ratings at 150 MHz VHF "business band" with all the nitty
> and gritty details in old Motorola Application Notes.
> CW operation at 2 meters no sweat at up to 150 Watts,
> more than a 2C39 pair can do safely. Lots of alternate
> choices...such as solid-state Cellular Telephone cell
> site ("base station") transmitters and equivalents that
> don't have internal networks to optimize operation in the
> 1 GHz band. [but, you knew that already, right? :-)]
>
> LenAnderson@ieee.org

>

2814. Re: Garmin GPS to TinyTrak3 problems

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-08 05:47:33 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11ad1i4hqvlsb74@corp.supernews.com>
Source record: 18646

Hi Al,

"Al Lorona" <al_lorona@agilent.com> wrote in message
news:1118199651.591076@cswreg.cos.agilent.com...
> The GPS puts out +/- 5 V serial, but the Tiny Trak's serial input is a
> TTL-level input to the PIC microprocessor. The PIC runs off of a single +5V
> supply. I guess it can withstand the negative voltage swing without failing?

You'd have to look at the PIC's data sheet, but it's very common for digital ICs to have appropriately connected diodes to Vcc and Ground for the sake of ESD protection. It's not the most elegant design, but it's not uncommon to use these built-in diodes to limit (clamp) input voltages to a diode drop above Vcc or below ground, which -- assuming the current through the diodes is limited, hence the power dissipated by them is -- is usually harmless.

> And... if I looked at the serial output from the GPS into an open circuit,
> there was no signal. It was as if the GPS shut off its serial if it detected
> an open circuit. Is this normal?

I am a little surprised, to tell you the truth, but given that the Garmin is typically battery powered, it would make sense for them to shut down the serial interface circuitry if they don't detect anyone "listening."

---Joel

2815. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-08 06:47:10 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11ad53ic47fjtaf@corp.supernews.com>
Source record: 18647

Korbin Dallas wrote:
> On Tue, 07 Jun 2005 01:54:14 -0700, Roy Lewallen wrote:

Just for the record, no, I didn't write this:

>
> dBv = 1v
> dBu = 1 uV
> dBm = 1 mw
> dBw = 1 w
> dBk = 1 KW
>

Roy Lewallen, W7EL

2816. Re: Garmin GPS to TinyTrak3 problems

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-08 08:34:37 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <kd3da1d5iqh3vdtg67rkbgg0nu97eteumt@4ax.com>
Source record: 18548

On Tue, 7 Jun 2005 19:47:54 -0700, "Joel Kolstad"
<JKolstad71HatesSpam@yahoo.com> wrote:

>Hi Al,
>
>"Anonymous" <jupiter@anon.com> wrote in message
>news:1118195831.711208@cswreg.cos.agilent.com...
>> Actually, RS-232 has always baffled me, and from some measurements I made it
>> doesn't seem to be a very strict standard.
>
>There really is an RS-232 standard, it's just commonly abused. Here's what I
>have from a "cheat sheet" I have at hand:
>
>-- Transition levels are between +/-3V (this is what you have to detect)
>-- Maximum open circuit voltage is 25V (!)
>-- Maximum load capacitance is 2.5nF
>-- Load resistance is 3-7kohm (this is ignored all the times -- often the load
>is much, much higher than this)
>-- Maximum slew rate is 30V/us (probably violated occasionally but no one
>checks :-))
>-- Maximum transition time is 4% of bit time
>-- Maximum data rate is 20,000 bits/second (obviously ignored with good
>reason...)
-- The maximum distance is 15 m (or was it 50 ft originally). This is
often ignored and usually the problems are related to ground potential
differences.

The 20 kbit/s makes sense, when you look at the other requirements. At
this speed, the bit time is 50 us and a 4 % transition is 2 us. At 30
V/us, that would be a 60 V transition from -30 V to +30 V. Compare
this to the 25 V open circuit voltage.

To charge a 2.5 nF capacitor with the 30 V/us slew rate, a 75 mA
current is required. IIRC, the standard also contained a short circuit
current limit about that magnitude. The power dissipation can be quite
high in the transmitter.

These calculations clearly indicate the fundamental problems with
RS-232.

The RS-422/485 and later LVDS solved the problem by radically reducing
the driver voltage swing to a few volts or even below 1 V. Even with a
modest 30 V/us slew rate, the transition from one state to an other
does not take a long time. With the termination resistance of the
order of 100 ohms, the connection can also be analyzed as a bipolar
current loop. Since the characteristic impedance of a twisted pair

cable is typically around 100 ohms, this is also a well matched (low SWR :-) transmission line system, so there are not much reflections that would mess with the bit transitions. Also the differential construction avoids most of the ground potential difference problems. RS-422/485 is usually implemented with transceivers running from a single +5V supply

It is sad that RS-422/485 is not used in common PCs, but instead all kinds of hacks violating the RS-232 are used (some even claim TTL signal levels RS-232 "compatible").

Paul OH3LWR

2817. Re: Clean Transmitters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-08 13:05:12 UTC
From: MadEngineer <glenn.b.dixon@gmail.com>
Message-ID: <1118235912.544555.292500@f14g2000cwb.googlegroups.com>
Source record: 18549

He has indeed.

But what he was writing about would be something like a method that enables a medium power (tunable, not crystal-controlled) transmitter that, while transmitting SSB, still allows reception of adjacent weak signals from a receiver connected to a nearby separate antenna. At the time of Wes's writing, it seemed clear to this reader that Wes believed this technology didn't exist, at least in the amateur community. Since his writing I haven't really seen the problem addressed beyond what I mentioned in my first post, and I was asking if anyone knew anything more.

Regards,
Glenn Dixon AC7ZN

2818. Re: Clean Transmitters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-08 14:00:43 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <fSCpe.35821$nG6.14867@attbi_s22>
Source record: 18550

> But what he was writing about would be something like a method that
> enables a medium power (tunable, not crystal-controlled) transmitter
> that, while transmitting SSB, still allows reception of adjacent weak
> signals from a receiver connected to a nearby separate antenna. At the
> time of Wes's writing, it seemed clear to this reader that Wes believed
> this technology didn't exist, at least in the amateur community. Since
> his writing I haven't really seen the problem addressed beyond what I
> mentioned in my first post, and I was asking if anyone knew anything
> more.
>
> Regards,
> Glenn Dixon AC7ZN

You're describing the oscillator phase noise problem, and since G3SBI's unveiling of the "H"-mode mixer, THE compromise to a "perfect" radio.

All oscillators have some degree of phase noise, from a poorly designed VFO, to a well designed one, (One of the better is Gumms class C design featured in several of Haywards books). The DDS has VERY little phase noise, but has substituted serious problems with spurious content in it's spectrum, and use of a PLL to get rid of those results in phase noise again (outside the loop bandwidth)

Lots of folks working on it, the same G3SBI has come up with a multiple resonator VCO for his PLL in the CDG2000. While it has had some technical criticism, Tibor Hajder has established that the concept is theoretically sound and results in a faster roll-off of phase noise than the single resonator approach. (Applied Microwave and Wireless, Oct 2002)

That same problem from the interference caused by the "lousy" transmitter, will be encountered from the phase noise of the local oscillator of the "receiver connected to a nearby separate antenna". Unless of course, the RX is a TRF design with no LO.

W4ZCB

2819. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-08 14:49:04 UTC
From: nanchez <nanchez@gmail.com>
Message-ID: <1118242144.033674.164340@o13g2000cwo.googlegroups.com>
Source record: 18551

Hi.

Thanks for your suggestions....

Yes, I'm trying to do some digital control to the frequency of LO using the LTC part. I will think in another way to do that...

I'm looking for an oscillator of about 33MHz to replace the LTC part... any ideas ?

About the AD607 comment, I have a voltage divider to couple the previous LO output to the level of LO input of AD607... is it what you mean ?

Thanks

Hernán Sánchez

2820. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-08 16:17:23 UTC
From: nanchez <nanchez@gmail.com>
Message-ID: <1118247443.672151.81160@o13g2000cwo.googlegroups.com>
Source record: 18552

Hi again.

One last question (for this thread) about jitter... how low it needs to be ? The LTC6903 datasheet says it's 1% (max value).

Thanks

Hernán Sánchez

2821. Re: Garmin GPS to TinyTrak3 problems

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-08 18:22:43 UTC
From: dplatt@radagast.org
Message-ID: <11aedrjm92neba4@corp.supernews.com>
Source record: 18553

In article <1118195831.711208@cswreg.cos.agilent.com>,
Anonymous <jupiter@anon.com> wrote:

>> Unfortunately, whereas "RS-232 and NMEA" are very much a standard,
>
>Hi, Joel,
>
>Actually, RS-232 has always baffled me, and from some measurements I made it
>doesn't seem to be a very strict standard. For example, the waveform coming
>out of the GPS receiver was +/- 5 V, whereas I have seen the waveform out of
>the RS-232 on the computer at +/- 12 V. Is the voltage level arbitrary?

The RS-232 specification formally requires that the voltage swing both positive and negative, with respect to ground, by at least 5 volts. Swings for a loaded circuit can go up to +/- 15 volts, and the swing must not exceed +/- 25 for an unloaded circuit.

RS-232 receivers are required to be sensitive enough to detect reliably at +/- 3 volt levels. Voltages between +3 and -3 are somewhat of a "no-man's land" and as far as I know the RS-232 standard is silent on how they should be interpreted.

The slightly newer RS-423 spec also requires positive and negative swings, but they only need to be +/- 3.6 volts at a minimum, +/- 6 volts at a maximum, and the receivers are required to have +/- 200 millivolt sensitivity. This standard allows for simpler operation from a 5-volt-only circuit (a simpler charge pump can generate a -5 supply), and the increased receiver sensitivity allows the system to work with longer lines (up to 4000 feet, where RS-232 is formally limited to 50 feet).

A lot of devices these days don't produce properly-conforming RS-232 *or* RS-423 signal levels on their serial ports. It's fairly common to see devices which use TTL/CMOS voltage levels - swinging up no higher than 5 volts, and down to ground.

To cope with such nonstandard signals, it has become fairly common to use serial-port receivers which are deliberately asymmetric... they have a single detection threshold, somewhere in the 1-volt range I think. A receiver of this sort will work properly (with a slight reduction in noise margin) with a real RS-232 or RS-423 transmitter which swings to +5/-5 or above, and will also work with a "pseudo-RS-423" transmitter which swings +5/0.

--
Dave Platt <dplatt@radagast.org> AE6EO

Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2822. FA: BNC to SMA adapters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-08 18:42:02 UTC
From: AAA RF Products <sales@aaarfproducts.com>
Message-ID: <_ZGpe.5021$6s.2825@fed1read02>
Source record: 18554

Please view at:
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=7522161862&rd=1&sspagename=STRK%3AMESE%3AIT&rd=1

www.aaarfproducts.com

2823. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-08 20:27:43 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1118262463.156983.26030@g14g2000cwa.googlegroups.com>
Source record: 18555

nanchez wrote:
> Hi again.
>
> One last question (for this thread) about jitter... how low it needs to
> be ? The LTC6903 datasheet says it's 1% (max value).
>
> Thanks
>
> Hernán Sánchez

Because I work with high-speed ADCs, I'm most familiar with articles about jitter in sampled systems. A sampler and a mixer are pretty similar, and you should be able to learn a lot from things like Analog Devices ap notes AN-501 and AN-756, and even the data sheets for converters like the AD6644 and AD6645. For example, the SNR for an AD6644 sampling a 30MHz sinewave at 65Msamples/sec is degraded perceptably by clock jitter of 0.15psec, which is about 0.001% jitter, expressed as a percentage of the clock period.

I'd post links to the pdf files for those ap notes, but the form I have them in, they are too long to reliably include in a posting. Just go to http://www.analog.com/en/index.html and enter AN-501 or AN-756 into the search box. Also, if you enter "jitter phase noise" (without the quotes) into a Google search, you'll get LOTS of references.

http://www.maxim-ic.com/appnotes.cfm/appnote_number/3359 is an ap note on conversion between clock jitter and phase noise.

Disclaimer: I have not reviewed any of these apnotes critically for accuracy.

Cheers,
Tom

2824. Re: dBm and Voltage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-08 20:38:03 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1118263083.506564.81470@o13g2000cwo.googlegroups.com>
Source record: 18556

Yes, a voltage divider should do fine. It may be convenient to have the voltage divider output look approximately like a 50-ohm source, but from what I can see in the AD607 data sheet, there is no requirement that the LO come from a 50 ohm source. You just want to deliver a voltage to the LO input pin which is equivalent to -16dBm across a 50 ohm resistor: in other words, about 35mV RMS or 0.1V peak-to-peak. I expect that if your level is anywhere between 0.1Vp-p and 0.2Vp-p, or even more, or perhaps even a bit less than 0.1, it should work fine. I didn't notice anything very explicit in the data sheet. about it.

Two choices for digitally-controlled LO are DDS (direct digital synthesis) and PLL (phase locked loop). Each has its strong points and drawbacks. Do you want to keep the power very low? What sort of frequency resolution do you want? How simple do you need to keep the circuit? How critical is it that the LO not have any noticable spurious outputs? -- I still suspect that the QRP community has already done some nice work on LOs that might suit your need.

Cheers,
Tom

2825. How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-09 05:58:29 UTC
From: pie_garnishment@lycos.com
Message-ID: <2d5631c0.0506082158.39fb1c20@posting.google.com>
Source record: 18557
Cross-posted to: rec.radio.amateur.homebrew,hun.hobbi,alt.birthright

I'm an assassin and have to kill a mafia boss.I want to blow him up
with a radio bomb.

What do I need ?

2826. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-09 06:04:07 UTC
From: -ex- <exray@coqui.net>
Message-ID: <93842$42a7dbdc$4232bdd4$17897@COQUI.NET>
Source record: 18558
Cross-posted to: rec.radio.amateur.homebrew,hun.hobbi,rec.antiques.radio+phono

Winnie Oakbob wrote:

> I'm an assassin and have to kill a mafia boss.I want to blow him up
> with a radio bomb.
>
> What do I need ?

A selenium rectifier. Might not kill him when it finally fails but he
may shoot himself because of the stink.

-ex

2827. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-09 07:38:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11afsg8eu9pbo5b@corp.supernews.com>
Source record: 18559

The following was recently posted on another newsgroup in response to a similar posting there by this same infantile idiot. It's worth reading. You might have to reassemble this long URL if your browser breaks it up:

http://groups-beta.google.com/group/sci.chem.electrochem.battery/msg/c44fa14f4d2b4bda?dmode=source&hl=en

Roy Lewallen, W7EL

2828. Re: Clean Transmitters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-09 09:32:21 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2005.06.09.09.32.20.619061@oceanfree.net>
Source record: 18560

On Wed, 08 Jun 2005 00:00:54 +0000, Harold E. Johnson wrote:

> Hi Ed, now get them all to get on at say 05, 0600Z so we can have the
> propagation to do that.
>
> Regards
> W4ZCB

Hi Harold,
The homebrew net gang are never heard during the hours
of darkness. They probably build rigs during the night
and operate during the day :-)

It should be quite easy to make contact on 17M. I would
like to give it a try sometime. I have yet to work a
homebrew SSB rig from the USA.

73, Ed. EI9GQ.

--
Remove 'X' to reply via e-mail.
Linux 2.6.11

2829. Re: Clean Transmitters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-09 10:10:07 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <3AUpe.30015$_o.27502@attbi_s71>
Source record: 18561

> > Hi Ed, now get them all to get on at say 05, 0600Z so we can have the
> > propagation to do that.
> >
> > Regards
> > W4ZCB
>
>
> Hi Harold,
> The homebrew net gang are never heard during the hours
> of darkness. They probably build rigs during the night
> and operate during the day :-)
>
> It should be quite easy to make contact on 17M. I would
> like to give it a try sometime. I have yet to work a
> homebrew SSB rig from the USA.
>
> 73, Ed. EI9GQ.

GM Ed

Well, I can cure your problem, and give you something to cover that hole in the wall at the same time if you'd get busy on a STAR offspring. The alternative frequency to 3.727 is 14.305 or 14.307 when some net is in operation. I've worked 10 STARS up there and have made up a little WAS certificate for guys that have done likewise. So far, Peter got number one, Alessandro number 2 and a really weak contact with DL9 (he was running 20 watts to a field day dipole on a day with REALLY lousy propagation) gave me number 3. (Peter has an endorsement for working 20 of them!)

I know what you mean, we have way too much money over this way (We keep spending money we don't have, THAT will change) and homebrew is a dying artform. I make a lot of contacts where the guy on the other end responds with "yours is the first homebrew transceiver I've EVER worked." My Signal One hasn't been turned on in over a year and thinking of getting rid of it.

There IS hope. After Dayton, we have two more under construction, one in NJ and one in GA.

Regards, County Cork almost got invaded last Spring to see you, but we loved Goray so much, I only made it down to Waterford. You live in a beautiful part of the world.

Melt solder!

W4ZCB

2830. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-09 13:57:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <kVXpe.166$aU7.9516097@news.sisna.com>
Source record: 18562
Cross-posted to: rec.radio.amateur.homebrew,hun.hobbi,alt.birthright

Winnie:

You need dynamite or nitroglycerin and a detonator.
Rip out all the insides from the radio and install the dynamite/nitro,
detonator and switch (for the first one the timer will be you)--go deep
into the desert where no will hear--holding the radio tightly--throw the
switch--if all is well and it is working, go build another one for
use... <grin>

Warmest regards,
John
"Winnie Oakbob" <pie_garnishment@lycos.com> wrote in message
news:2d5631c0.0506082158.39fb1c20@posting.google.com...
> I'm an assassin and have to kill a mafia boss.I want to blow him up
> with a radio bomb.
>
> What do I need ?

2831. Re: Clean Transmitters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-09 16:34:41 UTC
From: MadEngineer <glenn.b.dixon@gmail.com>
Message-ID: <1118334881.006112.54330@f14g2000cwb.googlegroups.com>
Source record: 18563

Thanks, Harold, I appreciate the info and will try to find the article.

Phase noise is but one of the problems Wes mentions, and on the transmitter side he makes it clear the IMD particularly in the transmitter final stage needs work and is perhaps the largest of the problems on the transmitter side. Wes implies that he can actually hear such distortion simply by listening to the band (I don't know what to listen for beyond a particularly wide-frequency signal). Chris Trask has done excellent work on this, but haven't seen actual IMD numbers from his techniques.

I'm currently thinking a poor IMD transmitter would only be a problem in a wideband mode such as SSB or SSTV. Though in theory a poor IMD transmitter might cause keyclicks in CW (I really haven't thought this out), I doubt this is much of a problem.

Regards,
Glenn Dixon, AC7ZN

2832. Re: Clean Transmitters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-09 17:15:29 UTC
From: MadEngineer <glenn.b.dixon@gmail.com>
Message-ID: <1118337329.386227.136940@g47g2000cwa.googlegroups.com>
Source record: 18564

I'm sorry, Harold, I don't know that 'TRF' stands for. Is that
somehting similar to TSDR 'true software defined radio'? That is, an
A/D hooked directly to an antenna?
Glenn

2833. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-09 18:21:34 UTC
From: dplatt@radagast.org
Message-ID: <11ah25e27nirfc0@corp.supernews.com>
Source record: 18565

This posting is from a well-known troll, who delights in stirring up the pot on USENET with outrageous and provocative postings. The Newsgroups: header is the clue - the troll's posting runs are spread across many newsgroups, but each run includes a single fairly-obscure newsgroup, which the troll seems to use to collect and count responses.

My recommendation: ignore such postings completely, and if you do follow up, edit the Newsgroups: header down to the minimum (i.e. remove the name of the newsgroup being used to collect the responses).

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

2834. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-09 18:35:42 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <4_%pe.203$Fw7.10138729@news.sisna.com>
Source record: 18566

... excellent suggestion... Roy was quit to be on target and call him
for what he is/was too...

Warmest regards,
John

"Dave Platt" <dplatt@radagast.org> wrote in message
news:11ah25e27nirfc0@corp.supernews.com...
> This posting is from a well-known troll, who delights in stirring up
> the pot on USENET with outrageous and provocative postings. The
> Newsgroups: header is the clue - the troll's posting runs are spread
> across many newsgroups, but each run includes a single fairly-obscure
> newsgroup, which the troll seems to use to collect and count
> responses.
>
> My recommendation: ignore such postings completely, and if you do
> follow up, edit the Newsgroups: header down to the minimum (i.e.
> remove the name of the newsgroup being used to collect the responses).
>
> --
> Dave Platt <dplatt@radagast.org>
> AE6EO
> Hosting the Jade Warrior home page:
> http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

2835. Re: Clean Transmitters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-09 20:43:06 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <uR1qe.40718$xm3.32501@attbi_s21>
Source record: 18567

> I'm sorry, Harold, I don't know that 'TRF' stands for. Is that
> somehting similar to TSDR 'true software defined radio'? That is, an
> A/D hooked directly to an antenna?
> Glenn

I HATE it when I do that! No, it's an OLD term. Actually, one of the few that's older than me. Stands for Tuned Radio Frequency, the topology from before Armstrong came along. Tuned RF amplifiers at the signal frequency, followed by a detector and audio. No oscillators.

IMD, in particular odd order IMD, is readily identified by tuning to the opposite sideband of a SSB signal with a selective receiver. If you can hear the signal weakly but clearly, you're listening to the suppressed sideband of the transmitting station. If everything is garbled, (AND MUCH stronger than the suppressed sideband which you probably CAN'T hear due to the garbage) You're hearing odd order IMD.

If it's a REALLY strong signal, it may be being generated in your receiver. If it's not terribly strong, (Like maybe "S"-9 although this is being pretty subjective) it's likely that the transmitting station is producing the IMD.

We've been sold down the river to some extent, published tests of amateur equipment in this country, now examine the IMD with respect to a single tone of two tones used in the test to generate the IMD. This makes the equipment look like it's 6 dB better than it would be if you tested it against BOTH tones which is the benchmark our military and most other countries use to evaluate IMD. Commercial offerings these days, particularly in more modestly priced gear is really pretty sorry in this respect.

IMD is bad news, but there are cures for it. Phase noise is bad news, and there's no cure for it other than using very High Q sources that still have it but at much reduced levels. New technology that uses spur cancellation in digital synthesis is also helpful, but out of reach for most of us.

Everytime you multiply an RF signal by 2, you increase it's phase noise by close to 6 dB. Everytime you synchronously divide that signal by 2, you gain that same 6 dB. Obviously, if you can make a very low phase noise variable oscillator at a high enough frequency so that you can divide it by a zillion and still have it high enough to do what you wish to do with it, you wind up with a low noise source. That's a bit expensive as well.
>
Sorry for the long post, didn't have time for a short one.

W4ZCB

2836. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-09 23:00:42 UTC
From: hhc314@yahoo.com
Message-ID: <1118358041.995563.121270@o13g2000cwo.googlegroups.com>
Source record: 18568
Cross-posted to: rec.radio.amateur.homebrew,hun.hobbi,alt.birthright

School is out for the summer!

Harry C.

2837. Re: Clean Transmitters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-10 01:23:43 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <tlqha1hs0d3eilubnh1bptsihndpegfupv@4ax.com>
Source record: 18569

On Thu, 09 Jun 2005 20:43:06 GMT, "Harold E. Johnson"
<W4ZCB@mchsi.com> wrote:

>
>> I'm sorry, Harold, I don't know that 'TRF' stands for. Is that
>> somehting similar to TSDR 'true software defined radio'? That is, an
>> A/D hooked directly to an antenna?
>> Glenn
>
>I HATE it when I do that! No, it's an OLD term. Actually, one of the few
>that's older than me. Stands for Tuned Radio Frequency, the topology from
>before Armstrong came along. Tuned RF amplifiers at the signal frequency,
>followed by a detector and audio. No oscillators.
>
>IMD, in particular odd order IMD, is readily identified by tuning to the
>opposite sideband of a SSB signal with a selective receiver. If you can hear
>the signal weakly but clearly, you're listening to the suppressed sideband
>of the transmitting station. If everything is garbled, (AND MUCH stronger
>than the suppressed sideband which you probably CAN'T hear due to the
>garbage) You're hearing odd order IMD.
>
>If it's a REALLY strong signal, it may be being generated in your receiver.
>If it's not terribly strong, (Like maybe "S"-9 although this is being pretty
>subjective) it's likely that the transmitting station is producing the IMD.
>
>We've been sold down the river to some extent, published tests of amateur
>equipment in this country, now examine the IMD with respect to a single tone
>of two tones used in the test to generate the IMD. This makes the equipment
>look like it's 6 dB better than it would be if you tested it against BOTH
>tones which is the benchmark our military and most other countries use to
>evaluate IMD. Commercial offerings these days, particularly in more modestly
>priced gear is really pretty sorry in this respect.
>

IMD should be expressed referencing a single tone of a two tone test
signal. That is the way most tube manufacturers do it.

Some of the radio manufacturers reference IMD to PEP which makes it
look like the IMD is 6 db further down!

The PEP of a transmitter is 6 db higher than either tone of a two tone
signal.
If the IMD is 30 db below the level of one tone of a two tone signal
then it will be 36 db below PEP.

73
Gary K4FMX

2838. Re: Clean Transmitters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-10 01:26:46 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <q%5qe.41253$xm3.30581@attbi_s21>
Source record: 18570

> IMD should be expressed referencing a single tone of a two tone test
> signal. That is the way most tube manufacturers do it.
>
> Some of the radio manufacturers reference IMD to PEP which makes it
> look like the IMD is 6 db further down!
>
> The PEP of a transmitter is 6 db higher than either tone of a two tone
> signal.
> If the IMD is 30 db below the level of one tone of a two tone signal
> then it will be 36 db below PEP.
>
> 73
> Gary K4FMX

Poorly expressed on my part. Thanks for the correction.

W4ZCB

2839. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-10 02:02:43 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1d12949ba9b5fc72989759@localhost>
Source record: 18571
Cross-posted to: rec.radio.amateur.homebrew,hun.hobbi,alt.birthright

In article <2d5631c0.0506082158.39fb1c20@posting.google.com>,
pie_garnishment@lycos.com says...

> I'm an assassin and have to kill a mafia boss.I want to blow him up
> with a radio bomb.
>
> What do I need ?

Professional psychiatric help.

PLONK!

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped
with surreal ports?"

2840. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-10 03:41:18 UTC
From: Mike Silva <snarflemike@yahoo.com>
Message-ID: <1118374878.453642.139960@f14g2000cwb.googlegroups.com>
Source record: 18572
Cross-posted to: rec.radio.amateur.homebrew,hun.hobbi,alt.birthright

Sounds like you need a radio bomb.

2841. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-10 03:45:54 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <d8b2dieec1@theodyn.ncf.ca>
Source record: 18573

Roy Lewallen (w7el@eznec.com) writes:
> The following was recently posted on another newsgroup in response to a
> similar posting there by this same infantile idiot. It's worth reading.
> You might have to reassemble this long URL if your browser breaks it up:
>
> http://groups-beta.google.com/group/sci.chem.electrochem.battery/msg/c44fa14f4d2b4bda?dmode=source&hl=en
>
> Roy Lewallen, W7EL

I didn't bother following the link, but the original message
was posted to three completely unrelated newsgroups, the other
two pretty obscure. So I'd say the point wasn't the question, but
to get responses into one or both of those other newsgroups. I gather
some see it as a game, and if you don't get responses in the specified
newsgroup, you don't win points.

So anyone who replied without deleting the other newsgroups was playing
into the hands of the original poster. Those who didn't, like you Roy,
well the poster doesn't care and likely won't see it.

The poster isn't interested in making a bomb, he's interested in
getting responses. The whole deal is to make the post seem almost
but not quite on topic to a newsgroup, so people will fall for it and
reply.

Michael VE2BVW

2842. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-10 05:12:11 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <Ki9qe.291$jw3.12317853@news.sisna.com>
Source record: 18574

... yep, he is phishing for "paranoids", these guys are the ones tying
up the polices phonelines with calls they inspire from old women
thinking a burglar is hiding beneath their beds... they think it
funny... at least, that is my best guess...

Warmest regards,
John

"Michael Black" <et472@FreeNet.Carleton.CA> wrote in message
news:d8b2dieec1@theodyn.ncf.ca...
>
> Roy Lewallen (w7el@eznec.com) writes:
>> The following was recently posted on another newsgroup in response to
>> a
>> similar posting there by this same infantile idiot. It's worth
>> reading.
>> You might have to reassemble this long URL if your browser breaks it
>> up:
>>
>> http://groups-beta.google.com/group/sci.chem.electrochem.battery/msg/c44fa14f4d2b4bda?d
mode=source&hl=en
>>
>> Roy Lewallen, W7EL
>
>
> I didn't bother following the link, but the original message
> was posted to three completely unrelated newsgroups, the other
> two pretty obscure. So I'd say the point wasn't the question, but
> to get responses into one or both of those other newsgroups. I gather
> some see it as a game, and if you don't get responses in the specified
> newsgroup, you don't win points.
>
>
> So anyone who replied without deleting the other newsgroups was
> playing
> into the hands of the original poster. Those who didn't, like you
> Roy,
> well the poster doesn't care and likely won't see it.
>
> The poster isn't interested in making a bomb, he's interested in
> getting responses. The whole deal is to make the post seem almost
> but not quite on topic to a newsgroup, so people will fall for it and
> reply.
>
> Michael VE2BVW

>

2843. QUESTION PLEASE

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-10 13:15:34 UTC
From: The Tube Man <thetubeman@earthlink.net>
Message-ID: <Wngqe.2116$VK4.670@newsread1.news.atl.earthlink.net>
Source record: 18575

On many of the older tube type base radios, there is a capacitor (like a 4uf) on each the pins of the mic connector...like on a 4 pin mic male connector there might be 4 each caps, wired in series, with a leg of the cap wired to one of the pins with one leg of the caps going to ground.

Question is:
1-why is this done
2-what is this suppose to do
3- if the caps are not used what will be the outcome

Thanx!!

2844. FA: Ends Sunday FT-243 XTAL 7025.5 kHz

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-10 13:35:44 UTC
From: Tom <tfarl@iowatelecom.net>
Message-ID: <QGgqe.42406$xm3.26937@attbi_s21>
Source record: 18576
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Ends Sunday Jun-11-05 14:06:00 PDT (21:06:00 UTC)

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5779863000

Thanks for looking, es 73,
"theponyengine"

2845. Identify High Current Power Supply Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-10 13:40:59 UTC
From: pinpassion <mjdrum@comcast.net>
Message-ID: <1118410859.300137.78310@g44g2000cwa.googlegroups.com>
Source record: 18577

Hi Gang,

I have a large and heavy power supply transformer
that is part of a high current power supply project
that was featured in 73 magazine back in 1973. It
was started by a ham radio operator and was never
finished. I am going to finish it, if I can. I am
trying to identify the transformer leads. This is
for a 12 volt, 40 to 60 amp output. Here are the markings:

This transformer was made by ADC and is marked 541-010 REV H.
There is a marking on it that says 3-19470 and what I think
is a date code of 7438. There are terminal connections on one
side that are numbered 1 - 6. On the other side the connections
are numbered 7 - 14. I need to know the connection scheme for
this transformer so I can put it to use. I contacted who I
thought was the manufacturer "ADC" for information, and that
did not help.

I don't have the issue of 73 magazine, and I don't even know
if this is the same transformer that may have been part of the
construction article. I can take pictures and post them if that
might help.

Anybody have any ideas?

Thanks a lot.

Mike

2846. FA: Ends Sunday - NOS ALUMINUM SLOPE-FACE PROJECT BOX.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-10 13:41:51 UTC
From: Tom <tfarl@iowatelecom.net>
Message-ID: <zMgqe.43286$nG6.12156@attbi_s22>
Source record: 18578
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap,rec.radio.swap

Nice project box for homebrewing. It's about 6" x 7" and the top slopes
from about 3" down to about 1 3/4".

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5779872589

Ends Sunday, Jun-11-05 15:13:44 PDT (22:13:44 GMT).

Vy 73 es best DX,
Tom

2847. Re: QUESTION PLEASE

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-10 14:23:28 UTC
From: -ex- <exray@coqui.net>
Message-ID: <9508e$42a9a264$4232bd52$30975@COQUI.NET>
Source record: 18579

The Tube Man wrote:
> On many of the older tube type base radios, there is a capacitor (like a
> 4uf) on each the pins of the mic connector...like on a 4 pin mic male
> connector there might be 4 each caps, wired in series, with a leg of the
> cap wired to one of the pins with one leg of the caps going to ground.
>
> Question is:
> 1-why is this done
> 2-what is this suppose to do
> 3- if the caps are not used what will be the outcome
>
> Thanx!!
>
>
>
I'm assuming rf bypassing but 4uf would be extremely high. That would
bleed off any audio as well.

-Bill

2848. Spectran

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-10 15:53:11 UTC
From: F5pvg <f5pvg@wanadoo.fr>
Message-ID: <Xns9671B59304BF9F5pvg@212.27.42.68>
Source record: 18580

Hi,

It is possible to extract in real time, from the software Spectran, the
frequency "Peak at" and the force (..dB) for use in an over software ?

Many Thanks

73' Qro

F5pvg

2849. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-10 16:11:43 UTC
From: Peter Wieck <pfjw@aol.com>
Message-ID: <1118419903.425788.13520@g44g2000cwa.googlegroups.com>
Source record: 18581
Cross-posted to: rec.radio.amateur.homebrew,hun.hobbi,rec.antiques.radio+phono

-ex- wrote:
> Winnie Oakbob wrote:
>
> > I'm an assassin and have to kill a mafia boss.I want to blow him up
> > with a radio bomb.
> >
> > What do I need ?
>
> A selenium rectifier. Might not kill him when it finally fails but he
> may shoot himself because of the stink.
>
> -ex

Or, simply turn it on to any given AM "Music" station.... No need for
anything else.

Peter Wieck
Wyncote PA

2850. Re: Identify High Current Power Supply Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-10 17:40:14 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1118425214.526533.149520@g43g2000cwa.googlegroups.com>
Source record: 18582

> Anybody have any ideas?

Ohm out the windings. Figure out which ones are center taps for the secondary or input voltage selects on the primary. (It may have two independent secondary and/or primary windings if center-tapped out and intended to work on both 120 and 240 VAC).

The lowest resistance winding is the high-current secondary. The primary must be one of the other windings (if you're lucky the only other winding is the primary!)

Tim.

2851. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-10 17:49:39 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <Vokqe.40$5j5.1450083@news.sisna.com>
Source record: 18583
Cross-posted to: rec.radio.amateur.homebrew,hun.hobbi,rec.antiques.radio+phono

Anyone got any recordings of Wayne Green when he did the Art Bell shows? Swap the radio for a tape recorder have him listen to a couple of those shows--it will reduce him to life in a mental asylum. Much kinder than termination by extreme prejudice....

John

"Peter Wieck" <pfjw@aol.com> wrote in message news:1118419903.425788.13520@g44g2000cwa.googlegroups.com...
>
>
> -ex- wrote:
>> Winnie Oakbob wrote:
>>
>> > I'm an assassin and have to kill a mafia boss.I want to blow him up
>> > with a radio bomb.
>> >
>> > What do I need ?
>>
>> A selenium rectifier. Might not kill him when it finally fails but
>> he
>> may shoot himself because of the stink.
>>
>> -ex
>
> Or, simply turn it on to any given AM "Music" station.... No need for
> anything else.
>
> Peter Wieck
> Wyncote PA
>

2852. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-10 21:50:12 UTC
From: Jeff <jeffhs@ameritech.net>
Message-ID: <1118440212.962109.53410@g47g2000cwa.googlegroups.com>
Source record: 18584
Cross-posted to: rec.radio.amateur.homebrew,hun.hobbi,rec.antiques.radio+phono

It might kill him if he touches the radio chassis when the rectifier fails. The stink is from the gas seleniums give off when they short. Since the rectifier is in the power supply (across the AC line) and has the full line voltage across it as long as the line cord is plugged in (whether or not the radio is on), if it shorts it will likely put the chassis at line potential (until the fuse blows). Another way the guy could do himself in in a big hurry would be to touch the chassis of an AC/DC radio and a grounded surface, such as a radiator, both at the same time. Just a couple of thoughts.

2853. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-10 22:25:03 UTC
From: -ex- <exray@coqui.net>
Message-ID: <c5ea6$42aa1344$4232bde1$20012@COQUI.NET>
Source record: 18586
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

Jeff wrote:

> It might kill him if he touches the radio chassis when the rectifier
> fails. The stink is from the gas seleniums give off when they short.
> Since the rectifier is in the power supply (across the AC line) and has
> the full line voltage across it as long as the line cord is plugged in
> (whether or not the radio is on), if it shorts it will likely put the
> chassis at line potential (until the fuse blows). Another way the guy
> could do himself in in a big hurry would be to touch the chassis of an
> AC/DC radio and a grounded surface, such as a radiator, both at the
> same time. Just a couple of thoughts.

Adding a label that says "Do Not Use When Dry - Use Only in the Shower"
might be helpful since we are so warning label conscious these days.

-ex

2854. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-10 22:34:20 UTC
From: Steven Dinius <sameas@always.com.invalid>
Message-ID: <Mzoqe.74$983.16342@monger.newsread.com>
Source record: 18587
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

Put a Marantz/Superscope sticker on it. Trying to figure out why it's broken
will speed a coronary.

"-ex-" <exray@coqui.net> wrote in message
news:c5ea6$42aa1344$4232bde1$20012@COQUI.NET...
| Jeff wrote:
|
| > It might kill him if he touches the radio chassis when the rectifier
| > fails. The stink is from the gas seleniums give off when they short.
| > Since the rectifier is in the power supply (across the AC line) and has
| > the full line voltage across it as long as the line cord is plugged in
| > (whether or not the radio is on), if it shorts it will likely put the
| > chassis at line potential (until the fuse blows). Another way the guy
| > could do himself in in a big hurry would be to touch the chassis of an
| > AC/DC radio and a grounded surface, such as a radiator, both at the
| > same time. Just a couple of thoughts.
|
| Adding a label that says "Do Not Use When Dry - Use Only in the Shower"
| might be helpful since we are so warning label conscious these days.
|
| -ex

2855. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-10 22:51:22 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <d8d5h2lpo1@news2.kornet.net>
Source record: 18588
Cross-posted to: rec.radio.amateur.homebrew,hun.hobbi,rec.antiques.radio+phono

"Jeff" <jeffhs@ameritech.net> wrote in message
news:1118440212.962109.53410@g47g2000cwa.googlegroups.com...
> It might kill him if he touches the radio chassis when the rectifier
> fails. The stink is from the gas seleniums give off when they short.
> Since the rectifier is in the power supply (across the AC line) and has
> the full line voltage across it as long as the line cord is plugged in
> (whether or not the radio is on), if it shorts it will likely put the
> chassis at line potential (until the fuse blows). Another way the guy
> could do himself in in a big hurry would be to touch the chassis of an
> AC/DC radio and a grounded surface, such as a radiator, both at the
> same time. Just a couple of thoughts.

I've never seen a radio where the rectifier is across the AC line. Half wave rectifiers are in series with one side of the AC line with the cathode feeding into the B+ line (thereby isolating that side of the rectifier from the other side of the AC line by the tubes and electrolytic capacitors). Now then, if a bypass or electrolytic were to short out completely, that would put the AC line across the rectifier. At any rate, I've never seen a rectifier that was energized whether the switch was on or not (save some of the cheap SS stuff where they keep the PS live and switch the radio out of circuit).

2856. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-11 03:28:39 UTC
From: k1man <"NOT>k1man"@aol.com>
Message-ID: <42AA5A66.3F090BFC@aol.com>
Source record: 18589
Cross-posted to: rec.radio.amateur.homebrew,hun.hobbi,alt.birthright

Get an old shortwave radio
and tune it to K1MAN broadcasts.

That will do him in.

Winnie Oakbob wrote:

> I'm an assassin and have to kill a mafia boss.I want to blow him up
> with a radio bomb.
>
> What do I need ?

2857. Amateur Radio Webpage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-11 11:50:00 UTC
From: Paul Blackmore <blackmore@ns.sympatico.ca>
Message-ID: <BdAqe.19287$Nd3.922513@news20.bellglobal.com>
Source record: 18590

If you would like, check out the message board here:

http://www.ve1xyz.net/rag_chew/

Thanks in advance.

--
Paul
VE1XYZ
http://www.ve1xyz.net

2858. Re: Amateur Radio Webpage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-11 19:34:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <71Hqe.5224$t97.9179237@news.sisna.com>
Source record: 18591

... why doesn't someone setup an IRC chat room? I'd be there to chat
with ya, just let me know where it is...

John

"Paul Blackmore" <blackmore@ns.sympatico.ca> wrote in message
news:BdAqe.19287$Nd3.922513@news20.bellglobal.com...
> If you would like, check out the message board here:
>
> http://www.ve1xyz.net/rag_chew/
>
> Thanks in advance.
>
> --
> Paul
> VE1XYZ
> http://www.ve1xyz.net
>
>

2859. FA:Breadboard Transmitter,Meissner 80M Coils +more

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-12 01:51:34 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <GyMqe.937128$w62.549732@bgtnsc05-news.ops.worldnet.att.net>
Source record: 18592
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Have breadboard transmitter-mostly complete-less tubes; Meissner Signal Shift 80 M Coil set; 811A's x10 (CH) NOS, Svetlana 811A x2 NOS, See at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

COMING SOON: McMurdo Silver 5C-very nice condition-working and a Meissner Signal Shifter WITH 10 SETS OF COILS!

Tnx heytubeguy

2860. Re: Amateur Radio Webpage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-12 03:18:28 UTC
From: Larry <larryw@holbrookmasons.org>
Message-ID: <3h1ns4FetsahU2@individual.net>
Source record: 18593

John Smith wrote:
> ... why doesn't someone setup an IRC chat room? I'd be there to chat
> with ya, just let me know where it is...

Well, if one did want an alternative to getting on the air (BWG), I
believe there is a ham channel on EFNET.

73
Larry
N1POP

2861. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-12 03:34:17 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d8gafpsem1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 18594
Cross-posted to: rec.radio.amateur.homebrew,hun.hobbi,alt.birthright

Try poison. It's quieter.

2862. ch3 video to uhf upconversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-12 04:36:43 UTC
From: eternalsquire@comcast.net
Message-ID: <1118551002.975808.12970@o13g2000cwo.googlegroups.com>
Source record: 18595

Hi all,

It's me again, attempting yet another mad science project, and I have practically googled the subject to death before thinking of asking this group for help:

I am wanting to put video (preferably color but will settle for grayscale) onto a UHF TV channel for inhouse use only. I am considering doing it as follows:

1) Convert output of a VGA card to composite video using resistive combiner
(found a few on net).

2) Place composite video on VHF channel 3 using a game modulator.

3) Upconvert the video signal on VHF to UHF by with a local oscillator whose frequence is the difference between the channels. I'd use an active mixer circuit from the VHF/UHF part of the Handbook to do this.

4) To test functionality, attempt to tune in using either an analog TV receiver or a TV tuner card.

Question is this:

Is point 3, upconverting video from VHF to UHF, a generally workable technique?

Any other gotchas or pitfalls to my intended approach?

Thanks in advance,

The Eternal Squire

2863. Re: ch3 video to uhf upconversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-12 06:01:27 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1118556086.995969.141850@g47g2000cwa.googlegroups.com>
Source record: 18596

eternalsquire@comcast.net wrote:
> Hi all,
>
> It's me again, attempting yet another mad science project, and I have
> practically googled the subject to death before thinking of asking this
> group for help:
>
> I am wanting to put video (preferably color but will settle for
> grayscale) onto a UHF TV channel for inhouse use only. I am
> considering doing it as follows:
>
> 1) Convert output of a VGA card to composite video using resistive
> combiner
> (found a few on net).
>
> 2) Place composite video on VHF channel 3 using a game modulator.
>
> 3) Upconvert the video signal on VHF to UHF by with a local oscillator
> whose frequence is the difference between the channels. I'd use an
> active mixer circuit from the VHF/UHF part of the Handbook to do this.
>
> 4) To test functionality, attempt to tune in using either an analog TV
> receiver or a TV tuner card.
>
> Question is this:
>
> Is point 3, upconverting video from VHF to UHF, a generally workable
> technique?
>
> Any other gotchas or pitfalls to my intended approach?
>
> Thanks in advance,
>
> The Eternal Squire

The easiest way is to gt a hard rubbish vcr, (most have been dumped
because of tape transport faults) use the av inputs, and output on a
UHF channel - the modern ones have tunable UHF output.

73 de VK3BFA Andrew

2864. Re: ch3 video to uhf upconversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-12 06:44:03 UTC
From: eternalsquire@comcast.net
Message-ID: <1118558643.783417.67230@g47g2000cwa.googlegroups.com>
Source record: 18597

Did some research on Alps UHF modulator, these are limited to channels
30 - 37. I am wanting more channel range, but these would be
good for experiments I suppose.

What I want is to ask if upconverting the HF television signal to the
center frequency of the UHF channel would have the same overall effect
as using a direct modulator.. The physics says probably yes, but are
there any showstoppers other than physics?

The Eternal Squire

2865. Re: ch3 video to uhf upconversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-12 12:49:08 UTC
From: -ex- <exray@coqui.net>
Message-ID: <b20c8$42ac2f4a$4232bd38$2727@COQUI.NET>
Source record: 18498

eternalsquire@comcast.net wrote:
> Did some research on Alps UHF modulator, these are limited to channels
> 30 - 37. I am wanting more channel range, but these would be
> good for experiments I suppose.
>
> What I want is to ask if upconverting the HF television signal to the
> center frequency of the UHF channel would have the same overall effect
> as using a direct modulator.. The physics says probably yes, but are
> there any showstoppers other than physics?
>
> The Eternal Squire
>
Converting TV channels - even upwards to UHF - is commonplace in cable
and MATV systems. I would skip the chanel 3 conversion and go straight
modulator to UHF if I were you unless you have a need for the ch. 3 signal.

A modulator which tunes the entire band does add to the cost. You can
get commercial units that tune all channels if thats a necessity.

I was just thinking...remember the "Rabbit" system that was popular
about a decade ago? It was used for transmitting a signal from your VCR
or sat rcvr to other sets in the house. I can't recall if it used UHF
or some proprietary frequency. That might be worth looking into.

GL,
Bill

2866. Re: ch3 video to uhf upconversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-12 13:41:29 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <42AC3B83.7010708@invalid.invalid>
Source record: 18499

Andrew VK3BFA wrote:
> The easiest way is to gt a hard rubbish vcr, (most have been dumped
> because of tape transport faults) use the av inputs, and output on a
> UHF channel - the modern ones have tunable UHF output.

Not in the States. VCR modulators here output on VHF channels 3 or 4.
(60-66 or 66-72MHz)

If the OP can find a foreign UHF modulator, it should work with US
signals, with two possible issues:

- The sound-video separation is different. This means the sound will be
on the wrong frequency for an American TV. If the OP doesn't care about
sound then this isn't a problem!

- TV channel frequencies are different in different countries. Most
Australian channels don't coincide with American channels. (if a
modulator tunes Australian channels 30-37, the only channel in that
range that corresponds to an American channel is 32, which is American
channel 28)

Are European/Australian VCR modulators continuously tunable? Or can
they only be set to discrete channels?

http://www.73.com/a/0019.shtml offers a "block converter". (among
dozens of other items! It's about 3/4 down the page on the left-hand
side, stock #AE047) It's a broadband frequency converter that will
convert a US channel 3 RF signal up to US channel 37.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

2867. Re: Amateur Radio Webpage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-12 15:21:17 UTC
From: Fabian Kurz <usenet@fkurz.net>
Message-ID: <3h327dFev6f7U1@news.dfncis.de>
Source record: 18500

John Smith wrote:
> ... why doesn't someone setup an IRC chat room? I'd be there to chat
> with ya, just let me know where it is...
>
> John

There are already quite a few. See http://www.w8irc.com/ for a list.

73,
--
Fabian Kurz, DJ1YFK * Dresden, Germany * http://fkurz.net/

2868. MOTOROLA Micom-1 HF receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-12 19:05:21 UTC
From: moreradio <moreradio@virgilio.it>
Message-ID: <RH%qe.10411$75.823166@news4.tin.it>
Source record: 18501

I'm looking for someone who as experienced with the receiver in the subject
about how to set it for tuning wheel.
Thanks
Claudio

2869. FA: VARIAN TOOL SET: < 1 day + more

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-12 23:57:46 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <_Z3re.314169$cg1.141788@bgtnsc04-news.ops.worldnet.att.net>
Source record: 18502
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Have a Varian small tool set +catalogs + tubes + more stuff being added; see at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking; Heytubeguy

2870. Re: ch3 video to uhf upconversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-13 01:04:12 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1118624652.185755.81080@g49g2000cwa.googlegroups.com>
Source record: 18503

Doug Smith W9WI wrote:
> Andrew VK3BFA wrote:
> > The easiest way is to gt a hard rubbish vcr, (most have been dumped
> > because of tape transport faults) use the av inputs, and output on a
> > UHF channel - the modern ones have tunable UHF output.
>
> Not in the States. VCR modulators here output on VHF channels 3 or 4.
> (60-66 or 66-72MHz)
>
> If the OP can find a foreign UHF modulator, it should work with US
> signals, with two possible issues:
>
> - The sound-video separation is different. This means the sound will be
> on the wrong frequency for an American TV. If the OP doesn't care about
> sound then this isn't a problem!
>
> - TV channel frequencies are different in different countries. Most
> Australian channels don't coincide with American channels. (if a
> modulator tunes Australian channels 30-37, the only channel in that
> range that corresponds to an American channel is 32, which is American
> channel 28)
>
> Are European/Australian VCR modulators continuously tunable? Or can
> they only be set to discrete channels?
>
> http://www.73.com/a/0019.shtml offers a "block converter". (among
> dozens of other items! It's about 3/4 down the page on the left-hand
> side, stock #AE047) It's a broadband frequency converter that will
> convert a US channel 3 RF signal up to US channel 37.
> --
> Doug Smith W9WI
> Pleasant View (Nashville), TN EM66
> http://www.w9wi.com

Hi Doug,
thats interesting - us in OZ had the same VHF output system years ago,
but when we got UHF broadcasting, all the VCR's went to UHF output.
Most (if not all) are tunable over a narrow range,(via a trimmer cap on
the rear panel) some of the more exotic ones (even from dumpster
diving) have user settable(sp) output with the actual RF frequency on
screen - makes a crude UHF sig gen.

The advantage of the UHF output over the older VHF only is no
co-channel QRM from the strong Ch3 signal to local on air channels.
Agree with the different standards - nowadays, this is not an issue as

even the el cheapo VCR's are multi-standard. Saves having to manufacture for different markets, and the new chipsets for this are dirt cheap. Most new ones have an integrated tuner/if/video conversion "can" - unfortunately, bus controlled so difficult to experiment with unless you are comfortable with microprocessors. I aint - firmly rooted in the analog domain!

73 de VK3BFA Andrew

2871. Re: ch3 video to uhf upconversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-13 01:59:23 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <42ACE879.4050504@invalid.invalid>
Source record: 18504

Andrew VK3BFA wrote:
> thats interesting - us in OZ had the same VHF output system years ago,
> but when we got UHF broadcasting, all the VCR's went to UHF output.
> Most (if not all) are tunable over a narrow range,(via a trimmer cap on
> the rear panel) some of the more exotic ones (even from dumpster
> diving) have user settable(sp) output with the actual RF frequency on
> screen - makes a crude UHF sig gen.

UHF in the States long predates the VCR. But that may be why we stuck with VHF output -- because early UHF tuners were pretty bad and many Americans had experience with their poor stability and difficult tuning.

So the VCRs with on-screen frequency setting are also continuously variable? I mean, you can select a RF frequency that doesn't correspond to a valid Australian channel?

> The advantage of the UHF output over the older VHF only is no
> co-channel QRM from the strong Ch3 signal to local on air channels.

True. (though with the dawn of digital TV in the States I'm not so sure that's enough anymore! Here in the Nashville area we have stations on channels 20, 21, 23, 24, 26, 27, 28, and 30 among many others...)

Cable TV boxes use the same modulators as VCRs. CBS-TV had a serious problem when they began digital broadcasts in Chicago a few years ago. They'd been assigned channel 3 for their digital transmitter, and it clobbered the cable boxes. Of course, QRM on the boxes' output channel meant that it clobbered *every* channel on the cable!

> Agree with the different standards - nowadays, this is not an issue as
> even the el cheapo VCR's are multi-standard. Saves having to
> manufacture for different markets, and the new chipsets for this are
> dirt cheap. Most new ones have an integrated tuner/if/video conversion
> "can" - unfortunately, bus controlled so difficult to experiment with
> unless you are comfortable with microprocessors. I aint - firmly rooted
> in the analog domain!

Multistandard equipment is more common in the US than it used to be, but it's still pretty rare. I only know of two variants of NTSC - the one used in Japan, and the one used in all other NTSC countries including the US - and they vary only in the RF carrier frequencies used. (even sound-vision separation is the same) Still, American equipment cannot (usually) be switched to receive Japanese frequencies.

Yeah, my microcontroller experience is pretty limited as well!

--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

2872. Re: ch3 video to uhf upconversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-13 03:29:21 UTC
From: -ex- <exray@coqui.net>
Message-ID: <cf5ae$42acfd97$4232bd55$16896@COQUI.NET>
Source record: 18505

Doug Smith W9WI wrote:

> Andrew VK3BFA wrote:
>
>> thats interesting - us in OZ had the same VHF output system years ago,
>> but when we got UHF broadcasting, all the VCR's went to UHF output.
>> Most (if not all) are tunable over a narrow range,(via a trimmer cap on
>> the rear panel) some of the more exotic ones (even from dumpster
>> diving) have user settable(sp) output with the actual RF frequency on
>> screen - makes a crude UHF sig gen.
>
>
> UHF in the States long predates the VCR. But that may be why we stuck
> with VHF output -- because early UHF tuners were pretty bad and many
> Americans had experience with their poor stability and difficult tuning.

For the most part, USA VCRs or cable boxes have always had a switch for ch 3/4, or to a lesser extent, 2/3. The way the channel allocations are done in the US you won't find adjacent channels broadcasting in a given area so one or the other is supposed to work. Guys halfway between Philadelphia and New York City will of course explain why thats not always workable.
Nowadays they have dropped in the digital channels, yes in VHF too, with no need to regard adjacent channels which turns the cake upside down. Given the capabilities of modern tuners it makes much more sense to have selectable UHF channel outputs on consumer gear. There's still some free slots in the most crowded metro areas...although the "digital data" people are lobbying hard to get access to those unused frequencies.
>

-Bill

2873. Re: FA: VARIAN TOOL SET: < 1 day + more

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-13 03:37:47 UTC
From: -ex- <exray@coqui.net>
Message-ID: <af3f$42acff91$4232bd55$17331@COQUI.NET>
Source record: 18506
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Heytubeguy wrote:

> Have a Varian small tool set +catalogs + tubes + more stuff being added; see
> at:
>
> http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy
>
> Tnx for looking; Heytubeguy
>
>

Hmmm, lets see. You spam newsgroups with "coming soon" auctions, then
with current auctions and then with "one day more" notices.
Why don't you make a list for maybe one month and just post it once?
Some of us get really pissed off about the constant reminders to "come
look at my stuff".
Just when did you decide that public discussion groups were your
personal corkboard for selling?

I'm not carping about posting ebay links - I'm carping about the manner
in which you're doing it as if I need 3 whacks across the head to look
at your stuff. Once is enough.

-Bill

2874. WTD Scan 1959 Hints and Kinks

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-13 03:39:39 UTC
From: Carl WA1KPD <nantucketbound@yahoo.com>
Message-ID: <9a2dnQoM3OtXYjHfRVn-2g@comcast.com>
Source record: 18507
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

HINTS & KINKS booklet from 1959, volume 6, page 31, I need a scan of the 455 KHz BFO described therein.

Thanks and 73
--
Carl
WA1KPD
Visit My Boatanchor Collection at
http://home.comcast.net/~chnord/wa1kpd.html

2875. Re: ch3 video to uhf upconversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-13 05:30:48 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1118640648.868592.125490@g49g2000cwa.googlegroups.com>
Source record: 18508

-ex- wrote:
> Doug Smith W9WI wrote:
>
> > Andrew VK3BFA wrote:
> >
> >> thats interesting - us in OZ had the same VHF output system years ago,
> >> but when we got UHF broadcasting, all the VCR's went to UHF output.
> >> Most (if not all) are tunable over a narrow range,(via a trimmer cap on
> >> the rear panel) some of the more exotic ones (even from dumpster
> >> diving) have user settable(sp) output with the actual RF frequency on
> >> screen - makes a crude UHF sig gen.
> >
> >
> > UHF in the States long predates the VCR. But that may be why we stuck
> > with VHF output -- because early UHF tuners were pretty bad and many
> > Americans had experience with their poor stability and difficult tuning.
>
> For the most part, USA VCRs or cable boxes have always had a switch for
> ch 3/4, or to a lesser extent, 2/3. The way the channel allocations are
> done in the US you won't find adjacent channels broadcasting in a given
> area so one or the other is supposed to work. Guys halfway between
> Philadelphia and New York City will of course explain why thats not
> always workable.
> Nowadays they have dropped in the digital channels, yes in VHF too, with
> no need to regard adjacent channels which turns the cake upside down.
> Given the capabilities of modern tuners it makes much more sense to have
> selectable UHF channel outputs on consumer gear. There's still some
> free slots in the most crowded metro areas...although the "digital data"
> people are lobbying hard to get access to those unused frequencies.
> >
>
> -Bill

Hi Bill,
digital here has been a mixed bag - where I am, its line of sight to
the hills which is full of UHF translators - thats not so bad for
analog, as you can "see" the QRM underneath the ch you have chosen as a
RF out. Digital, well, you dont get nothing on screen, so it looks like
the front end of the VCR has died. Took me a while to twig to that one
- even the local agents for a very well known brand didnt know it and
were trying to sell me a new front end to fix the problem!

Hitachi have had OSD of RF frequency out for a while now - Philips also
in some of their tv;s, and TEAC as well, so it will pretty well be
universal before long. The Chinese are really gearing up - they do make

some pretty sophisticated gear, but will happily sell us rubbish if we want it as well!

We also have a FM broadcast channel on the same tower as the VHF transmitters - it QRM's TV ch 10 depending on how good the tuner front end is. - Funnily enough, (well, it isnt really, more obvious) the older style rotary UHF tuners with ganged RF and LO tuning dont seem to have any trouble, only the varactor tuned ones. But then, they are the sweepings of the factory floors of Asia - bought on price rather than performance. Try telling the customer this tho....

Andrew VK3BFA

2876. Re: Identify High Current Power Supply Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-13 07:15:41 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1118646941.560998.92150@g47g2000cwa.googlegroups.com>
Source record: 18509

Usually the primary, or one of the primaries, begins at pin 1. If you get two windings that measure about the same resistance, and its a few ohms, it's probably a split primary. You can insure that you get the phasing right if you connect the two windings in series, and apply 120V to just one of the two. Then if you get about zero volts across the whole series connection, you have the two connected counter-phase, like dotted ends connected together. Try the other polarity for one winding and see if you get 2* the applied voltage across the whole series connected primary, which would be in phase (dotted end of one to the undotted end of the other.

It's helpful if you have a variac (NOT a lamp-dimmer triac) so you can run the voltage up slowly. An alternative that works nicely is an incandescent light bulb in series with the 120V supply. If the series lamp, 100 watts or so, lights very dimly or not visibly at all, with nearly all the voltage across the transformer winding, you've almost certainly got it connected to the primary. The light bulb will keep you from blowing breakers or fuses. If the transformer has an internal short or you're hooked to the secondary (or if you short the secondary or put a heavy load on it), the lamp will light much more brightly.

Of course, be careful. The primary side can give painful shocks, possibly leathal ones. And the secondary side can deliver enough current to make pieces of metal very hot.

Cheers,
Tom

2877. Re: Identify High Current Power Supply Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-13 07:18:24 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1118647104.376138.45130@g14g2000cwa.googlegroups.com>
Source record: 18510

Additional thought: you may be able to see wires connected to the terminals. If so, it should be obvious which windings are the higher current ones and which are the higher voltage ones.

It's also possible to make estimates of the current rating of the windings from the wire size.

Cheers,
Tom

2878. Re: ch3 video to uhf upconversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-13 07:41:49 UTC
From: -ex- <exray@coqui.net>
Message-ID: <626c$42ad38c4$4232bd1a$29416@COQUI.NET>
Source record: 18511

Andrew VK3BFA wrote:

>
> -ex- wrote:
>

> We also have a FM broadcast channel on the same tower as the VHF
> transmitters - it QRM's TV ch 10 depending on how good the tuner front
> end is. - Funnily enough, (well, it isnt really, more obvious) the
> older style rotary UHF tuners with ganged RF and LO tuning dont seem to
> have any trouble, only the varactor tuned ones. But then, they are the
> sweepings of the factory floors of Asia - bought on price rather than
> performance. Try telling the customer this tho....
>
> Andrew VK3BFA

The Keyword here is how 'bad' the tuner front end is :) Its probably a tossup if there's a harmonic being received instead of a mixing beat but at least tunable sets have a chance of getting away from it.

Here in the US, gear usually has options of off-air, cable, cable HRC (harmonically related channels) or cable IRC (incrementally related channels) . Depending on the freq of the FM station *sometimes* you can force the set away from the FM harmonic by selecting one of the oddballs. But if its beating with the video there's no cure.

Do you still have folks with rotary tuner sets down there? I haven't seen one in a customer's home for 30 years on this side!

-Bill

2879. Re: Identify High Current Power Supply Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-13 10:40:12 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <TO2dnXnxpfIS_zDfRVnyig@pipex.net>
Source record: 18512

> It's helpful if you have a variac (NOT a lamp-dimmer triac) so you can
> run the voltage up slowly. An alternative that works nicely is an
> incandescent light bulb in series with the 120V supply. If the series
> lamp, 100 watts or so, lights very dimly or not visibly at all, with
> nearly all the voltage across the transformer winding, you've almost
> certainly got it connected to the primary. The light bulb will keep
> you from blowing breakers or fuses. If the transformer has an internal
> short or you're hooked to the secondary (or if you short the secondary
> or put a heavy load on it), the lamp will light much more brightly.
==========

To check the windings of any transformer I always use another mains transformer with a low secondary winding output of say 12 or 6 volts. I connect the low voltage output to one of the windings of the 'mystery' transformer and with a DVM check the voltages on the other windings .This provides the winding ratios ,from which the actual operating voltages can be derived ,with additional information from winding resistances.

To check the current ratings of a secondary winding I increase the load on that winding until the output voltage is 95% of the 'no load' voltage . The corresponding current is the safe maximum current to flow through the winding .
Depending on the transformer's output voltage ,I use car bulbs or a lenght of fencing wire (iron) in a bucket with water for low voltages , light bulbs (parallel and/or in series) for voltages up to 500 V or even higher (be careful).

Frank GM0CSZ / KN6WH

2880. Re: ch3 video to uhf upconversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-13 14:49:43 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1118674183.009852.58100@g44g2000cwa.googlegroups.com>
Source record: 18513

-ex- wrote:
> Andrew VK3BFA wrote:
>
> >
> > -ex- wrote:
> >
>
> > We also have a FM broadcast channel on the same tower as the VHF
> > transmitters - it QRM's TV ch 10 depending on how good the tuner front
> > end is. - Funnily enough, (well, it isnt really, more obvious) the
> > older style rotary UHF tuners with ganged RF and LO tuning dont seem to
> > have any trouble, only the varactor tuned ones. But then, they are the
> > sweepings of the factory floors of Asia - bought on price rather than
> > performance. Try telling the customer this tho....
> >
> > Andrew VK3BFA
>
> The Keyword here is how 'bad' the tuner front end is :) Its probably a
> tossup if there's a harmonic being received instead of a mixing beat but
> at least tunable sets have a chance of getting away from it.
>
> Here in the US, gear usually has options of off-air, cable, cable HRC
> (harmonically related channels) or cable IRC (incrementally related
> channels) . Depending on the freq of the FM station *sometimes* you can
> force the set away from the FM harmonic by selecting one of the
> oddballs. But if its beating with the video there's no cure.
>
> Do you still have folks with rotary tuner sets down there? I haven't
> seen one in a customer's home for 30 years on this side!
>
> -Bill

Hi Bill, nope, not many left with rotary tuners (on UHF) - but I still
get called in to fix them occassionally, and even more so that some of
them still have good tubes in them!

Andrew VK3BFA

2881. Front panel patterns

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-13 17:48:33 UTC
From: gagnonrchrd@netscape.net
Message-ID: <1118684913.462814.5580@g43g2000cwa.googlegroups.com>
Source record: 18514

Hello All

I am building a LF/MW/HF Preselector and I would like to use my computer to layout a pattern, 4 inches (101.6mm) by 10 inches (254mm) using 2 variable capacitors, three rotary switches, two potentiometers and some toggle switches. Toggle switches are no problem but the other controls should be "calibrated" type of layouts. I have used MS Paint with only letters and numbers, reversed and applied to a clear transparency with a laser printer. This worked ok but to draw lines at an angle do not work. If I have a layout I can copy or scan I believe that would work ok. I have done ok with schematics.
I have some Dataq dry transfers but some are too small or too large. I tried scanning and resizing but I cannot get rid of the "blue" background.

I have some graphics programs but the learning curve is steep and I am not an artist so I do not understand much of the terminology such as "layers" etc.

Any suggestions would be appreciated. If you send a link, please make sure it is "direct" and not to a site where I have to figure out what you meant to tell me.

Thank you in advance.
Please answer to the group as this address is only for logging into Google Groups.

Richard

2882. Re: Front panel patterns

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-13 18:26:13 UTC
From: -ex- <exray@coqui.net>
Message-ID: <ad96$42adcfcb$4232bdba$30451@COQUI.NET>
Source record: 18515

gagnonrchrd@netscape.net wrote:

> I have some graphics programs but the learning curve is steep and I am
> not an artist so I do not understand much of the terminology such as
> "layers" etc.
>
> Any suggestions would be appreciated. If you send a link, please make
> sure it is "direct" and not to a site where I have to figure out what
> you meant to tell me.
>
> Thank you in advance.
> Please answer to the group as this address is only for logging into
> Google Groups.
>
> Richard
>

Hi,
If you'll email me what you have and give me some details I'll do you up
a nice file for printing. No charge. I like doing this stuff and am
pretty handy with Paint Shop Pro but can always use more practice.

-Bill WX4A

2883. Re: ch3 video to uhf upconversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-13 18:27:34 UTC
From: Roger Leone <raleoneTAKEOUT@sbcglobal.net>
Message-ID: <qekre.27540$J12.17596@newssvr14.news.prodigy.com>
Source record: 18516

One pitfall not already mentioned is that simply combining the R-G-B and sync signals coming out of a VGA card won't produce a US standard NTSC signal. A US television signal (NTSC compatible) uses a 15.750 kHz horizontal sweep rate. The lowest VGA resolution (640 X 480) uses a 31.5 kHz sweep. Higher resolutions use higher sweep rates. This scan rate incompatibility may complicate your project. Of course, there are some specialty video cards around that have an NTSC video output, in addition to VGA. Those cards have an on-board scan converter.

Good luck,

Roger K6XQ

2884. 12VAC to 24VAC Transformer -- Ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-13 19:39:44 UTC
From: htewam@yahoo.com
Message-ID: <1118691584.564149.255820@g14g2000cwa.googlegroups.com>
Source record: 18517

I need to find a transformer (converter?) that will allow me to upconvert from 12VAC to 24VAC in order to drive a small motorized device (50 watts) for continuous duty. I tried using a 110V/220V 'travel' transformer -- it gave me the correct voltage but not enough output wattage (probably not enough turns on the windings). I need a transformer rather than an electronic converter since I am driving an AC motor... isolation isn't an issue so I could go with an Autotransformer. Thanks.

2885. Re: 12VAC to 24VAC Transformer -- Ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-13 20:03:55 UTC
From: johan aeq <fam-j.hoekstra@zonnet.nl>
Message-ID: <b8394$42ade74a$52ad139c$24495@news.versatel.nl>
Source record: 18518

A simple transformer with two 12 windings would do the trick.
The primary windig will give you line voltage as an extra bonus.

<htewam@yahoo.com> schreef in bericht
news:1118691584.564149.255820@g14g2000cwa.googlegroups.com...
> I need to find a transformer (converter?) that will allow me to
> upconvert from 12VAC to 24VAC in order to drive a small motorized
> device (50 watts) for continuous duty. I tried using a 110V/220V
> 'travel' transformer -- it gave me the correct voltage but not enough
> output wattage (probably not enough turns on the windings). I need a
> transformer rather than an electronic converter since I am driving an
> AC motor... isolation isn't an issue so I could go with an
> Autotransformer. Thanks.
>

2886. Re: 12VAC to 24VAC Transformer -- Ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-13 21:06:47 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <Hzmre.398$kX4.99@newssvr30.news.prodigy.com>
Source record: 18519

Radio Shack has 115volt to 24 volt transformers But if you need to go from
12 to 24 you might look for a transformer with a 12 and 24 volt winding.
Feed your 12 volts to the 12 volt side of the transformer and use the 24.
Make sure you insulate the 115 volt leads as they will be hot.
If you cant find one go to Radio Shack and get a 12 and 24 volt transformer,
connect the 115 volt windings to each other, feed 12 volts in and and get 24
out.

--

73
Hank WD5JFR
"johan aeq" <fam-j.hoekstra@zonnet.nl> wrote in message
news:b8394$42ade74a$52ad139c$24495@news.versatel.nl...
>A simple transformer with two 12 windings would do the trick.
> The primary windig will give you line voltage as an extra bonus.
>
>
>
> <htewam@yahoo.com> schreef in bericht
> news:1118691584.564149.255820@g14g2000cwa.googlegroups.com...
>> I need to find a transformer (converter?) that will allow me to
>> upconvert from 12VAC to 24VAC in order to drive a small motorized
>> device (50 watts) for continuous duty. I tried using a 110V/220V
>> 'travel' transformer -- it gave me the correct voltage but not enough
>> output wattage (probably not enough turns on the windings). I need a
>> transformer rather than an electronic converter since I am driving an
>> AC motor... isolation isn't an issue so I could go with an
>> Autotransformer. Thanks.
>>
>
>

2887. Re: 12VAC to 24VAC Transformer -- Ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-13 21:13:45 UTC
From: htewam@yahoo.com
Message-ID: <1118697225.319199.104030@g44g2000cwa.googlegroups.com>
Source record: 18520

Duh... an obvious solution that I entirely missed -- thanks to Henry &
Johan as well!

2888. Re: ch3 video to uhf upconversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-13 21:57:11 UTC
From: eternalsquire@comcast.net
Message-ID: <1118699831.001713.33900@g49g2000cwa.googlegroups.com>
Source record: 18521

Roger,

Wouldn't this be be exactly double of NTSC, in which case the TV would see every other frame of the composited VGA? Or, because I am intending to run the card in Linux, could I create a resolution below 640X480? But you may be right, a surplus video card with S-video out would sidestep this problem.

The Eternal Squire

2889. Re: ch3 video to uhf upconversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-13 21:57:14 UTC
From: eternalsquire@comcast.net
Message-ID: <1118699834.499605.34460@g49g2000cwa.googlegroups.com>
Source record: 18522

Roger,

Wouldn't this be be exactly double of NTSC, in which case the TV would see every other frame of the composited VGA? Or, because I am intending to run the card in Linux, could I create a resolution below 640X480? But you may be right, a surplus video card with S-video out would sidestep this problem.

The Eternal Squire

2890. 6m and the 4-400A

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-13 23:54:17 UTC
From: Dan/W4NTI <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <J0pre.3519$eM6.2214@newsread3.news.atl.earthlink.net>
Source record: 18523

I am thinking of building up a single ended 4-400A for six. Mainly cuz I've got a old homebrew HF amp with a good bit of the "stuff" I need to do it with.

I wonder (since I'm a bit rusty these days), if I can Grid Drive it? I will only have a basic transverter output (8Watts) available.

Anyone point me to a site or material about the input and output circuitry needed?

Any thoughts?

Dan/W4NTI

2891. Re: 6m and the 4-400A

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-14 01:44:05 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <tBqre.4840$zm.2633@bignews4.bellsouth.net>
Source record: 18524

Dan/W4NTI wrote:
> I am thinking of building up a single ended 4-400A for six. Mainly cuz I've
> got a old homebrew HF amp with a good bit of the "stuff" I need to do it
> with.
>
> I wonder (since I'm a bit rusty these days), if I can Grid Drive it? I will
> only have a basic transverter output (8Watts) available.
>
> Anyone point me to a site or material about the input and output circuitry
> needed?
>
> Any thoughts?
>
> Dan/W4NTI
>
>
If you run the tube in class AB1 it won't need ANY driving power, just
voltage. So with the right input network your 8w exciter should do the
job. You WILL need to neutralize the 4-400A at 6 meters. At this
frequency the tube is below it's self neutralization frequency, so
a conventional neutralization network will work. (above the self
neutralization frequency you have to resort to tricks such as series
tuning of the screen leads).

There was an QST article some years back using a 3-500z on 6 meters.
The tank circuit used a copper tubing coil with a rotating shorted turn
for tuning instead of a variable capacitor. However a Pi network can
work on 6, though you might have to use a 'dual disk' capacitor and
tap the tuning cap down on the tank coil.

BTW the 4-400 is good for use up to about 110mhz.

2892. Re: 6m and the 4-400A

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-14 02:14:52 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <uafsa1p4odm054n56jihrq090lmt7tcigb@4ax.com>
Source record: 18525

On Mon, 13 Jun 2005 21:44:05 -0400, Ken Scharf
<wa2mzeNOTTHIS@bellsouth.net> wrote:

>Dan/W4NTI wrote:
>> I am thinking of building up a single ended 4-400A for six. Mainly cuz I've
>> got a old homebrew HF amp with a good bit of the "stuff" I need to do it
>> with.
>>
>> I wonder (since I'm a bit rusty these days), if I can Grid Drive it? I will
>> only have a basic transverter output (8Watts) available.
>>
>> Anyone point me to a site or material about the input and output circuitry
>> needed?
>>
>> Any thoughts?
>>
>> Dan/W4NTI
>>
>>
>If you run the tube in class AB1 it won't need ANY driving power,

Of course you will.

2893. Re: 12VAC to 24VAC Transformer -- Ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-14 02:19:59 UTC
From: nothermark <trash@gnomex.cotse.net>
Message-ID: <adfsa1tvg4jo6o9mprvtm2na5dhr3q439u@4ax.com>
Source record: 18526

On 13 Jun 2005 12:39:44 -0700, htewam@yahoo.com wrote:

>I need to find a transformer (converter?) that will allow me to
>upconvert from 12VAC to 24VAC in order to drive a small motorized
>device (50 watts) for continuous duty. I tried using a 110V/220V
>'travel' transformer -- it gave me the correct voltage but not enough
>output wattage (probably not enough turns on the windings). I need a
>transformer rather than an electronic converter since I am driving an
>AC motor... isolation isn't an issue so I could go with an
>Autotransformer. Thanks.

Try an electrical supply house and look for a 110/220 or 220/440 of
appropriate power rating. They are used for various industrial
control needs as well as power conversion off 1 phase of 3 phase
feeds. All you want is the turns ratio with enough iron and copper to
handle the wattage.

2894. Re: ch3 video to uhf upconversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-14 02:27:26 UTC
From: Roger Leone <raleoneTAKEOUT@sbcglobal.net>
Message-ID: <igrre.812$Pa5.468@newssvr21.news.prodigy.com>
Source record: 18527

> Wouldn't this be be exactly double of NTSC, in which case the TV would
> see every other frame of the composited VGA?

If the TV would ignore the sync pulses that arrived too soon, you might get two images, side by side. But that ignores the other complications that I didn't mention: VGA and NTSC don't use the same vertical sweep frequency. And NTSC is an interlaced vertical scan, meaning you get alternating lines of display, rather than a complete image scanned top down. NTSC requires two complete top down scans to get all lines of an image. VGA is non-interlaced.

>Or, because I am intending to run the card in Linux, could I create a resolution below
> 640X480? But you may be right, a surplus video card with S-video out would sidestep this problem.

The video card has more to do with the VGA scan rates than the operating system. You often see crystal controlled oscillators on video cards so you are locked into what the card manufacturer provides. I can't rule out some flexibility here, but I think a video card with NTSC video output would be the surest way to get this idea to work.

Roger

2895. Re: 12VAC to 24VAC Transformer -- Ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-14 03:39:58 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <liisa11or3b750een7hgm64o2u5dbopgrt@4ax.com>
Source record: 18528

On 13 Jun 2005 12:39:44 -0700 htewam@yahoo.com wrote:

>I need to find a transformer (converter?) that will allow me to
>upconvert from 12VAC to 24VAC in order to drive a small motorized
>device (50 watts) for continuous duty. I tried using a 110V/220V
>'travel' transformer -- it gave me the correct voltage but not enough
>output wattage (probably not enough turns on the windings).

The 110/220 transformer had more than enough turns, they were just
wound with wire that was too small for the current that you require.

You could try to find a similar 110/220 transformer with more current
capacity, but this would be big.

An alternative would be to pick up a transformer with 2 12V
secondaries. Ignore the primaries and put the secondaries in series.
Then you apply your 12V between one end and the "center tap" and you
get 24V between the 2 ends, assuming you have the phasing right.

The 2 12V secondaries have to be rated for the current you plan to
draw.

-

Jim Adney jadney@vwtype3.org
Madison, WI 53711 USA

2896. Re: Front panel patterns

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-14 06:50:46 UTC
From: John Hague <john.hague@philips.com>
Message-ID: <opssclawlnaito4q@news.philips.com>
Source record: 18529

On 13 Jun 2005 10:48:33 -0700, <gagnonrchrd@netscape.net> wrote:

> Hello All
>
> I am building a LF/MW/HF Preselector and I would like to use my
> computer to layout a pattern, 4 inches (101.6mm) by 10 inches (254mm)
> using 2 variable capacitors, three rotary switches, two potentiometers
> and some toggle switches. Toggle switches are no problem but the other
> controls should be "calibrated" type of layouts. I have used MS Paint
> with only letters and numbers, reversed and applied to a clear
> transparency with a laser printer. This worked ok but to draw lines at
> an angle do not work. If I have a layout I can copy or scan I believe
> that would work ok. I have done ok with schematics.
> I have some Dataq dry transfers but some are too small or too large. I
> tried scanning and resizing but I cannot get rid of the "blue"
> background.
>
> I have some graphics programs but the learning curve is steep and I am
> not an artist so I do not understand much of the terminology such as
> "layers" etc.
>
> Any suggestions would be appreciated. If you send a link, please make
> sure it is "direct" and not to a site where I have to figure out what
> you meant to tell me.
>
> Thank you in advance.
> Please answer to the group as this address is only for logging into
> Google Groups.
>
> Richard
>

Richard

I'v never tried this program, but it was posetd a while ago on one of the groups. Hope you find it to be of some help - it sounds like just what you were looking for.

http://www.hfradio.org/wb8rcr/panel.html

John, G4GOY

2897. Re: 12VAC to 24VAC Transformer -- Ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-14 10:01:04 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11atan6qakb14dd@corp.supernews.com>
Source record: 18530

Yet another possibility is to get a 110-to-12 volt transformer and a 110-to-24 volt transformer. Connect the 110 volt windings to each other, put your 12 volts into the 12 volt winding and take 24 out of the 24 volt winding. I'm sure you're getting the general idea. . .

Roy Lewallen, W7EL

Jim Adney wrote:
> On 13 Jun 2005 12:39:44 -0700 htewam@yahoo.com wrote:
>
>
>>I need to find a transformer (converter?) that will allow me to
>>upconvert from 12VAC to 24VAC in order to drive a small motorized
>>device (50 watts) for continuous duty. I tried using a 110V/220V
>>'travel' transformer -- it gave me the correct voltage but not enough
>>output wattage (probably not enough turns on the windings).
>
>
> The 110/220 transformer had more than enough turns, they were just
> wound with wire that was too small for the current that you require.
>
> You could try to find a similar 110/220 transformer with more current
> capacity, but this would be big.
>
> An alternative would be to pick up a transformer with 2 12V
> secondaries. Ignore the primaries and put the secondaries in series.
> Then you apply your 12V between one end and the "center tap" and you
> get 24V between the 2 ends, assuming you have the phasing right.
>
> The 2 12V secondaries have to be rated for the current you plan to
> draw.
>
> -
> ---
> Jim Adney jadney@vwtype3.org
> Madison, WI 53711 USA
> ---

2898. ** FLEA at MIT ** Sunday June 19th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-14 19:11:10 UTC
From: w1gsl@mit.edu
Message-ID: <42af2bce$0$560$b45e6eb0@senator-bedfellow.mit.edu>
Source record: 18531
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

This coming Sunday....

+++ Now even more Buyers Parking !!!
Thanks to TKT we have use of their new parking lot
across Albany St from the SWAPFEST !!!

!! ** More Buyers PARKING is available ** for details see
http://web.mit.edu/w1gsl/Public/flyer

*** !!!! In our Traditional GARAGE and the adjacent lot !!!! ****
so come rain or shine or super heat the Flea is on !!!

********* $1 buyers discount with hardcopy of this notice ********

COMPUTERS - ELECTRONICS - HAM RADIO - COMPUTERS - ELECTRONICS - HAM RADIO

FLEA all SUMMER at MIT
Sunday June 19th 2005
9AM-2PM

Come to the city for a great flea - plenty of free parking.

MIT's electronics and ham radio flea will take
place on the third Sunday of each month this summer,
April thru October.

There is tailgate space for over 600 sellers and
free, off-street parking for >2000 cars!

Buyers admission is $5 (you get $1 off if
you're lucky enough to have a copy of our ad)
and sellers spaces are $20 for the first and
$15 for each additional at the gate.

The flea will be held at the corner of Albany and
Main streets in Cambridge; right in the Kendall
Square area from 9AM to 2PM, with sellers set-up
time starting at 7AM.

SEASON PASS + Advance Seller Discount

A sellers discount season pass is available which
offers a 30% discount. By prepaying you get a
discount and earlier admission. See the registration form.

*** Attention Sellers ***
Prepaid vendors.. Season Pass or monthly,

will be admitted FIRST.
Separate lines will form prior to gate opening
for prepaid and nonprepaid vendors

!! RAIN or SHINE !! Have no fear of rain, a covered
well illuminated tailgate area is available for all
sellers (6'8" clearance).

Talk-in: 145.23- (PL 88.5) W1BOS/R and
W1XM/R-449.725/444.725 (PL 114.8/2A).

Sponsors: MIT Electronics Research Society
MIT UHF Repeater Association (W1XM)
MIT Radio Society (W1MX)
Harvard Wireless Club (W1AF)

For more info / advanced reservations 617 253 3776

********** $1 buyers discount with hard copy of this notice ***********

<<<<<<<<<<<<<<<<<<<<<< cut here >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

Mail the coupon below by the 5th of the month to be a Prepaid Vendor.

FLEA at MIT 2005 Rates

SELLERS

To use your prepaid spaces the named vendor MUST be present.
Rates include one admission per space.

Advance $17 First space - includes $10 Cambridge Vendor License
$12 Additional Spaces
Must be received by the 5th of the month.

Gate Admission $20 First Space - includes $10 Cambridge Vendor License
$15 Additional Spaces
Admission is after the prepaid vendors

Early Bird Buyer -Admission after the prepaid vendor line is admitted. ~ 7:15AM
** You may not sell. **
$15 per person at the gate.

****************************** cut here ******************************

FLEA at MIT 2005 Advance Space Application

____April ____May ____June ____ July ____Aug ___Sept ____Oct
@ $17 for the first each month + $12 each additional

Name _____ Call _____ $ Included_____

Address _____ Phone _____ Make Check to
The MIT Radio Society
City _____ State _____ Zip _____ PO Box 397082
Cambridge MA 02139

E-mail _____

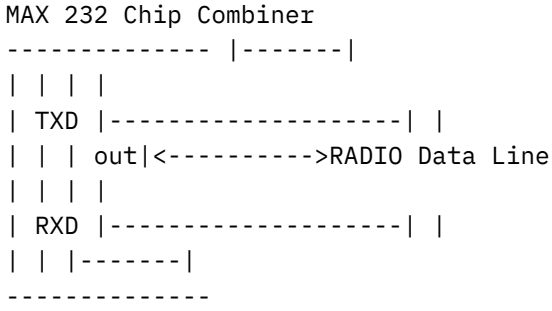
****
Steve Finberg W1GSL w1gsl@mit.edu
PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754
****

2899. Programming a Kenwood TK-690 VHF Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-15 12:52:36 UTC
From: pinpassion <mjdrum@comcast.net>
Message-ID: <1118839956.456599.133870@o13g2000cwo.googlegroups.com>
Source record: 18532

Hi Gang,

I am trying to work a circuit that I can use to
program a VHF receiver. I'm going to use the Maxim
MAX232 IC to do the TTL to RS-232 voltage conversion,
and this is very common. The trick I have to accomplish
is to take the TXD and RXD (transmitted data/received data)
on the TTL side of the chip, and combine it into 1 line
going to the radio.



Most interfaces are full duplex and they don't split up
the TXD and RXD signals. On this particular Kenwood radio,
they do. There is still data beng sent to the radio, and
data received from the radio. It is just using one line as
the pipe for both data lines. I was thinking two transistors
and a blocking diode. Anybody have any ideas? Kenwood sells
a cable that does this, but it's expensive and I am trying to
find a homebrew solution. All I need is the combiner circuit.
I already have the schematic for the MAX 232 circuit. This is
5 volts TTL. The radio is a Kenwood TK-690H.

Thanks in advance for any help.

Mike

2900. FA:WE Filter?,Galena xtal/holder + others stuff...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-15 14:12:39 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <rHWre.962844$w62.526755@bgtnsc05-news.ops.worldnet.att.net>
Source record: 18533
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Have a WE filter? in wooden box, Galena tall holder/detector for making urn
own tall set + other stuff at

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx heytubeguy

2901. Re: Programming a Kenwood TK-690 VHF Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-15 15:11:22 UTC
From: MadEngineer <glenn.b.dixon@gmail.com>
Message-ID: <1118848282.038465.303250@z14g2000cwz.googlegroups.com>
Source record: 18534

I'm assuming you have no control line on your side to set the dataflow direction, but that the radio enables its transmitter when required, and sets it to HiZ when receiving. It's possible that some obscure control character(s) or other RS232 line sets data direction, but let's assume the arrangement is simple (does your manual say anything about this?).

Simply tying the RXD line directly to the radio data line, and the TXD line to that with a 3K or so resistor ought to work. Anything you send will be echoed on your RXD line if you use this scheme, but under our simplicity assumption it is likely the Kenwood cable does this as well.

Note that I'm assuming RXD is the input to the MAX 232 and TXD is the output. RS232 nomenclature is ambiguous.

Regards,
Glenn Dixon AC7ZN

2902. Re: Programming a Kenwood TK-690 VHF Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-15 19:37:55 UTC
From: MadEngineer <glenn.b.dixon@gmail.com>
Message-ID: <1118864275.478858.65050@o13g2000cwo.googlegroups.com>
Source record: 18535

Oopsie, didn't read your post carefully enough--the radio uses TTL
levels so the MAX 232 is near the radio? I assumed the data line was
RS232 levels (dumb me--you said TTL twice). Lets see....well something
around 3K may still work, though the data line would have to be
short...

Glenn

2903. Re: Programming a Kenwood TK-690 VHF Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-15 21:24:06 UTC
From: Bernard <bernard.debbasch_removethis_@mail.com>
Message-ID: <Z%0se.2749$6o4.700@fed1read04>
Source record: 18536

This is not answer to the question but another way of achievieving the result:

I am assuming that the Kenwood I/F is similar to the Icom. Icom is also selling a quite expensive I/F. I did not want to buy the I/F and I was not in the build-my-own mood either.

My solution: I used a USB to serial converter and removed the level converter (it was not a MAX232). One of the Belkin USB-to-serial adapter I already had is bulky enough to allow me to do the surgery very easily. The plastic shell opens w/o problems. Since they are many uses for a serial adapter w/ "TTL" levels, I wired the input of the level converter to the 9-PIN connector.

This adapter is used to configure an IC706 MKII. My laptop has no serial line so I had to use a USB converter anyway. The cable from the DB9 to the IC706 combines RX and TX as described earlier.

Good luck.
"pinpassion" <mjdrum@comcast.net> wrote in message
news:1118839956.456599.133870@o13g2000cwo.googlegroups.com...
> Hi Gang,
>
> I am trying to work a circuit that I can use to
> program a VHF receiver. I'm going to use the Maxim
> MAX232 IC to do the TTL to RS-232 voltage conversion,
> and this is very common. The trick I have to accomplish
> is to take the TXD and RXD (transmitted data/received data)
> on the TTL side of the chip, and combine it into 1 line
> going to the radio.
>
> MAX 232 Chip Combiner
> -------------- |-------|
> | | | |
> | TXD |--------------------| |
> | | | out|<---------->RADIO Data Line
> | | | |
> | RXD |--------------------| |
> | | |-------|
> --------------
>
>
> Most interfaces are full duplex and they don't split up
> the TXD and RXD signals. On this particular Kenwood radio,
> they do. There is still data beng sent to the radio, and

> data received from the radio. It is just using one line as
> the pipe for both data lines. I was thinking two transistors
> and a blocking diode. Anybody have any ideas? Kenwood sells
> a cable that does this, but it's expensive and I am trying to
> find a homebrew solution. All I need is the combiner circuit.
> I already have the schematic for the MAX 232 circuit. This is
> 5 volts TTL. The radio is a Kenwood TK-690H.
>
> Thanks in advance for any help.
>
> Mike
>

2904. Re: 6m and the 4-400A

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-15 23:32:44 UTC
From: Dan/W4NTI <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <wU2se.4919$eM6.2732@newsread3.news.atl.earthlink.net>
Source record: 18537

Thanks Ken, I'll keep looking around. I used to keep all my QSTs, but
with all my traveling...well you know how that goes.

Im a league member, think they have a way to look that stuff up.

Dan/W4NTI

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
news:tBqre.4840$zm.2633@bignews4.bellsouth.net...
> Dan/W4NTI wrote:
>> I am thinking of building up a single ended 4-400A for six. Mainly cuz
>> I've got a old homebrew HF amp with a good bit of the "stuff" I need to
>> do it with.
>>
>> I wonder (since I'm a bit rusty these days), if I can Grid Drive it? I
>> will only have a basic transverter output (8Watts) available.
>>
>> Anyone point me to a site or material about the input and output
>> circuitry needed?
>>
>> Any thoughts?
>>
>> Dan/W4NTI
>>
>>
> If you run the tube in class AB1 it won't need ANY driving power, just
> voltage. So with the right input network your 8w exciter should do the
> job. You WILL need to neutralize the 4-400A at 6 meters. At this
> frequency the tube is below it's self neutralization frequency, so
> a conventional neutralization network will work. (above the self
> neutralization frequency you have to resort to tricks such as series
> tuning of the screen leads).
>
> There was an QST article some years back using a 3-500z on 6 meters.
> The tank circuit used a copper tubing coil with a rotating shorted turn
> for tuning instead of a variable capacitor. However a Pi network can
> work on 6, though you might have to use a 'dual disk' capacitor and
> tap the tuning cap down on the tank coil.
>
> BTW the 4-400 is good for use up to about 110mhz.

2905. Re: ch3 video to uhf upconversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-16 18:29:04 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <42B1C4E1.904618C4@earthlink.net>
Source record: 18538

eternalsquire@comcast.net wrote:
>
> Hi all,
>
> It's me again, attempting yet another mad science project, and I have
> practically googled the subject to death before thinking of asking this
> group for help:
>
> I am wanting to put video (preferably color but will settle for
> grayscale) onto a UHF TV channel for inhouse use only. I am
> considering doing it as follows:
>
> 1) Convert output of a VGA card to composite video using resistive
> combiner
> (found a few on net).
>
> 2) Place composite video on VHF channel 3 using a game modulator.
>
> 3) Upconvert the video signal on VHF to UHF by with a local oscillator
> whose frequence is the difference between the channels. I'd use an
> active mixer circuit from the VHF/UHF part of the Handbook to do this.
>
> 4) To test functionality, attempt to tune in using either an analog TV
> receiver or a TV tuner card.
>
> Question is this:
>
> Is point 3, upconverting video from VHF to UHF, a generally workable
> technique?
>
> Any other gotchas or pitfalls to my intended approach?
>
> Thanks in advance,
>
> The Eternal Squire

Motorola/Freescale has several ICs designed for video modulators that
use PLL tuning. One of them may do just what you want, rather than
building an upconverter.

http://www.elecdesign.com/Articles/Index.cfm?AD=1&ArticleID=4890

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

2906. Re: Programming a Kenwood TK-690 VHF Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-17 00:55:42 UTC
From: "Dr. Anton Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1d1bbf6cb30c2c01989681@192.168.42.131>
Source record: 18539

In article <1118839956.456599.133870@o13g2000cwo.googlegroups.com>, mjdrum@comcast.net says...

> Hi Gang,
>
> I am trying to work a circuit that I can use to
> program a VHF receiver. I'm going to use the Maxim

<snippety>

Are you 100% certain that this particular radio even uses TTL levels on the programming side?

I say this only because I work with TK-790's frequently, through my day job, and they do not require any sort of RS232 to TTL conversion. They're programmed through a custom cable
straight from the computer's serial port to the microphone connector.

Perhaps you should dig into the 690's service manual before expending much effort?

Happy hunting.

2907. FA: 4 new SMA coax adapters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-17 04:23:12 UTC
From: AAA RF Products <info@aaarfproducts.com>
Message-ID: <Wdsse.11181$6o4.1716@fed1read04>
Source record: 18540

Please see
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=7285&item=7524109971&rd=1&ssPageNam
e=WDVW or visit our web site @ www.aaarfproducts.com

2908. Re: 6m and the 4-400A

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-17 07:50:40 UTC
From: Roger <Delete-Invallid.stuff.groups@tm.net>
Message-ID: <8405b1tsnuv140efut7mn9vpfbr57thru4@4ax.com>
Source record: 18541

On Wed, 15 Jun 2005 23:32:44 GMT, "Dan/W4NTI"
<w4nti@mindNOSPAMATALLspring.com> wrote:

>Thanks Ken, I'll keep looking around. I used to keep all my QSTs, but
>with all my traveling...well you know how that goes.
>
>Im a league member, think they have a way to look that stuff up.

If you're a member just go to www.arrl.org and look it up. You should
be able to find whcih issue(s) had what you are looking for, if not
the actual article.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com
>
>Dan/W4NTI
>
>"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
>news:tBqre.4840$zm.2633@bignews4.bellsouth.net...
>> Dan/W4NTI wrote:
>>> I am thinking of building up a single ended 4-400A for six. Mainly cuz
>>> I've got a old homebrew HF amp with a good bit of the "stuff" I need to
>>> do it with.
>>>
>>> I wonder (since I'm a bit rusty these days), if I can Grid Drive it? I
>>> will only have a basic transverter output (8Watts) available.
>>>
>>> Anyone point me to a site or material about the input and output
>>> circuitry needed?
>>>
>>> Any thoughts?
>>>
>>> Dan/W4NTI
>>>
>>>
>> If you run the tube in class AB1 it won't need ANY driving power, just
>> voltage. So with the right input network your 8w exciter should do the
>> job. You WILL need to neutralize the 4-400A at 6 meters. At this
>> frequency the tube is below it's self neutralization frequency, so
>> a conventional neutralization network will work. (above the self
>> neutralization frequency you have to resort to tricks such as series
>> tuning of the screen leads).
>>
>> There was an QST article some years back using a 3-500z on 6 meters.

>> The tank circuit used a copper tubing coil with a rotating shorted turn
>> for tuning instead of a variable capacitor. However a Pi network can
>> work on 6, though you might have to use a 'dual disk' capacitor and
>> tap the tuning cap down on the tank coil.
>>
>> BTW the 4-400 is good for use up to about 110mhz.
>

2909. Re: Programming a Kenwood TK-690 VHF Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-17 13:33:04 UTC
From: pinpassion <mjdrum@comcast.net>
Message-ID: <1119015184.099848.43310@g14g2000cwa.googlegroups.com>
Source record: 18542

Hi,

Thanks everybody for the help and suggestions.

I have heard through other users of the Kenwood 90 series radios that the factory cable has the MAX232 chip within one of the connectors, as well as a data combiner circuit that sends/receives information over 1 data line through the radios microphone connector. The radio deals with 5 volt TTL signals and not the 12 volt rs-232 voltages. If you open your factory cable, you will probably see these circuits and can verify what I have heard.

Mike

2910. Re: ch3 video to uhf upconversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-17 23:54:54 UTC
From: eternalsquire@comcast.net
Message-ID: <1119052494.870375.77850@o13g2000cwo.googlegroups.com>
Source record: 18543

I looked at the article. Nice try, but I don't have the equipment or
eyesight to work with TSSOP-24 package,
nor the money to play with a $300 evaluation board :)

The Eternal Squire

2911. Re: ch3 video to uhf upconversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-18 03:29:35 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <42B3950E.1B5E3487@earthlink.net>
Source record: 18544

eternalsquire@comcast.net wrote:
>
> I looked at the article. Nice try, but I don't have the equipment or
> eyesight to work with TSSOP-24 package,
> nor the money to play with a $300 evaluation board :)
>
> The Eternal Squire

I wouldn't buy the evaluation board either. THere is a good chance
of finding the chip in some junk electronics with a module you can adapt
to your needs. Even if something only offers a ch 3 or 4 output doesn't
man it can't have the newer PLL modulator chip. Most equipment has a
microprocessor and supports the serial buss to talk to the chip so it
can be programmed for different markets.

I routinely soldered 244 pin packages under a stereo microscope, but
my vision has been poor since I was a kid.

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

2912. Re: ch3 video to uhf upconversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-18 14:03:59 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <i9a8b11n5qhvfdmes3unj2tbhp1v1d97e5@4ax.com>
Source record: 18545

On Sun, 12 Jun 2005 13:41:29 GMT, Doug Smith W9WI
<w9wi@invalid.invalid> wrote:

[snip]
>
>http://www.73.com/a/0019.shtml offers a "block converter". (among
>dozens of other items! It's about 3/4 down the page on the left-hand
>side, stock #AE047) It's a broadband frequency converter that will
>convert a US channel 3 RF signal up to US channel 37.

I called these bozos to inquire about buying one of these. You get an
answering machine but not the courtesy of a call back. The items have
also disappeared from their web site inventory.

Any other sources?

Wes N7WS

2913. Square Opening in Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-18 15:48:46 UTC
From: "amstereo@meduci.com" <amstereo@meduci.com>
Message-ID: <1119109726.455477.149050@z14g2000cwz.googlegroups.com>
Source record: 18546

I need to make a 1" x 0.5" square opening in the front panel of an aluminum enclosure. I can handle round openings, however how do you make a neat square opening? Thanks in advance.

Webmaster
Meduci
http://meduci.com

2914. Re: Square Opening in Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-18 15:59:05 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <dxXse.19459$tY4.12411@trnddc06>
Source record: 18547

Use a metal "nibbling" tool. Radio shack carries them:
http://www.radioshack.com/category.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F009%5F010%5F001&Page=1

Joe
W3JDR

<amstereo@meduci.com> wrote in message
news:1119109726.455477.149050@z14g2000cwz.googlegroups.com...
>I need to make a 1" x 0.5" square opening in the front panel of an
> aluminum enclosure. I can handle round openings, however how do you
> make a neat square opening? Thanks in advance.
>
> Webmaster
> Meduci
> http://meduci.com
>

2915. Re: Square Opening in Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-18 16:15:45 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <4vh8b198k1llboqauvmg16o3q062l9mqm6@4ax.com>
Source record: 18448

On 18 Jun 2005 08:48:46 -0700, "amstereo@meduci.com"
<amstereo@meduci.com> wrote:

>I need to make a 1" x 0.5" square opening in the front panel of an
>aluminum enclosure. I can handle round openings, however how do you
>make a neat square opening? Thanks in advance.
>
>Webmaster
>Meduci
>http://meduci.com

It is called a nibbling tool. You start with an undersized drilled
hole, and this tool nips away at the edges until you have what you
want. Slow, but versatile. Under $20 for a basic one.

A rotary tool like a Dremel, or one of the larger spiral saws, could
do this as well.

If you need to do many holes of the same size, and need precision,
look into Greenlee punches.

Happy trails,
Gary (net.yogi.bear)
--
At the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

2916. Re: 6m and the 4-400A

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-18 16:38:17 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <h%Xse.105461$IQ3.55461@bignews5.bellsouth.net>
Source record: 18449

Wes Stewart wrote:
> On Mon, 13 Jun 2005 21:44:05 -0400, Ken Scharf
> <wa2mzeNOTTHIS@bellsouth.net> wrote:
>
>
>>Dan/W4NTI wrote:
>>
>>>I am thinking of building up a single ended 4-400A for six. Mainly cuz I've
>>>got a old homebrew HF amp with a good bit of the "stuff" I need to do it
>>>with.
>>>
>>>I wonder (since I'm a bit rusty these days), if I can Grid Drive it? I will
>>>only have a basic transverter output (8Watts) available.
>>>
>>>Anyone point me to a site or material about the input and output circuitry
>>>needed?
>>>
>>>Any thoughts?
>>>
>>>Dan/W4NTI
>>>
>>>
>>
>>If you run the tube in class AB1 it won't need ANY driving power,
>
>
> Of course you will.
>
>
The TUBE won't require any driving power as it won't draw any
grid current. HOWEVER there WILL be losses in the input coupling
network so some power will be required to generate the required
driving voltage. My point was that 8 watts should be enough.

2917. Re: 12VAC to 24VAC Transformer -- Ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-18 16:41:13 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <12Yse.105466$lQ3.85658@bignews5.bellsouth.net>
Source record: 18450

Roy Lewallen wrote:
> Yet another possibility is to get a 110-to-12 volt transformer and a
> 110-to-24 volt transformer. Connect the 110 volt windings to each other,
> put your 12 volts into the 12 volt winding and take 24 out of the 24
> volt winding. I'm sure you're getting the general idea. . .
>
> Roy Lewallen, W7EL
>
> Jim Adney wrote:
>
>> On 13 Jun 2005 12:39:44 -0700 htewam@yahoo.com wrote:
>>
>>
>>> I need to find a transformer (converter?) that will allow me to
>>> upconvert from 12VAC to 24VAC in order to drive a small motorized
>>> device (50 watts) for continuous duty. I tried using a 110V/220V
>>> 'travel' transformer -- it gave me the correct voltage but not enough
>>> output wattage (probably not enough turns on the windings).
>>
>>
>>
>> The 110/220 transformer had more than enough turns, they were just
>> wound with wire that was too small for the current that you require.
>>
>> You could try to find a similar 110/220 transformer with more current
>> capacity, but this would be big.
>>
>> An alternative would be to pick up a transformer with 2 12V
>> secondaries. Ignore the primaries and put the secondaries in series.
>> Then you apply your 12V between one end and the "center tap" and you
>> get 24V between the 2 ends, assuming you have the phasing right.
>>
>> The 2 12V secondaries have to be rated for the current you plan to
>> draw.
>>
>> -
>> --
>> Jim Adney jadney@vwtype3.org
>> Madison, WI 53711 USA
>> --
I did that, but with identical transformers to replace a small
power transformer giving 115v@20ma and 6.3v@.6 amp
Used two 6.3v 1A transformers back to back and a bridge
rectifier on the 115v side.

2918. Re: Square Opening in Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-18 17:20:34 UTC
From: Chuck Olson <chuckolson01@REMOVETHIScomcast.net>
Message-ID: <E76dnXh-feZUyinfRVn-sw@comcast.com>
Source record: 18451

<amstereo@meduci.com> wrote in message
news:1119109726.455477.149050@z14g2000cwz.googlegroups.com...
> I need to make a 1" x 0.5" square opening in the front panel of an
> aluminum enclosure. I can handle round openings, however how do you
> make a neat square opening? Thanks in advance.
>
> Webmaster
> Meduci
> http://meduci.com
>
If neatness really counts, you might want to just drill four corner holes and use a coping or jig saw to cut from hole to hole. A bit of filing at the corners and where the saw strayed from the line should produce precision results.

The Adel Nibbler is good, but I find it hard to nibble to a line, and it requires a minimum 29/64" hole to start. It is also limited in the thickness of material it will work with.

73, Chuck W6PKP

2919. Re: Square Opening in Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-18 19:39:33 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <rH_se.107069$8S5.25769@bignews3.bellsouth.net>
Source record: 18452

Chuck Olson wrote:
> <amstereo@meduci.com> wrote in message
> news:1119109726.455477.149050@z14g2000cwz.googlegroups.com...
>
>>I need to make a 1" x 0.5" square opening in the front panel of an
>>aluminum enclosure. I can handle round openings, however how do you
>>make a neat square opening? Thanks in advance.
>>
>>Webmaster
>>Meduci
>>http://meduci.com
>>
>
> If neatness really counts, you might want to just drill four corner holes
> and use a coping or jig saw to cut from hole to hole. A bit of filing at
> the corners and where the saw strayed from the line should produce precision
> results.
>
> The Adel Nibbler is good, but I find it hard to nibble to a line, and it
> requires a minimum 29/64" hole to start. It is also limited in the thickness
> of material it will work with.
>
> 73, Chuck W6PKP
>
>
A rotozip type bit in a dremel will 'rout' out the required hole
You can buy a router base for the dremel tool to make the job
easier. You can make a frame with a square cutout to guide the
router base to make the exact size hole you need. Norm Abram does
this (with wood) on the New Yankee Workshop.

2920. FA: Double FT-243 Xtal Socket

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-19 02:56:46 UTC
From: Tom <tfarl@iowatelecom.net>
Message-ID: <O95te.65962$_o.6103@attbi_s71>
Source record: 18453
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Great for Homebrew.

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5783329975

Ends Saturday June-25 18:20:53 PDT (June-26 01:20:53 UTC)

Thanks,
Tom

2921. FA: 20's Vintage DPDT Knife Switch

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-19 03:00:30 UTC
From: Tom <tfarl@iowatelecom.net>
Message-ID: <id5te.65077$x96.7728@attbi_s72>
Source record: 18454
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5783322030

Ends Saturday June-25 17:23:51 PDT (Sunday June-26 00:23:51 UTC)

Thanks,
Tom

2922. Re: FA: Double FT-243 Xtal Socket

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-19 03:10:03 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <yf5te.107158$IQ3.27630@bignews5.bellsouth.net>
Source record: 18455
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Tom wrote:
> Great for Homebrew.
>
> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5783329975
>
> Ends Saturday June-25 18:20:53 PDT (June-26 01:20:53 UTC)
>
> Thanks,
> Tom
>
>
Nothing special. (You can use an octal tube socket for
the same purpose, cheaper!)

I have some weird double FT-243 crystals though.
Made for Uncle Sam, they house two crystals in one unit,
either a dual channel job, or one for the transmitter and
one for the receiver on the same channel.

2923. Re: Square Opening in Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-19 08:29:10 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1119169750.723460.189000@g14g2000cwa.googlegroups.com>
Source record: 18456

Ken Scharf wrote:
> Chuck Olson wrote:
> > <amstereo@meduci.com> wrote in message
> > news:1119109726.455477.149050@z14g2000cwz.googlegroups.com...
> >
> >>I need to make a 1" x 0.5" square opening in the front panel of an
> >>aluminum enclosure. I can handle round openings, however how do you
> >>make a neat square opening? Thanks in advance.
> >>
> >>Webmaster
> >>Meduci
> >>http://meduci.com
> >>
> >
> > If neatness really counts, you might want to just drill four corner holes
> > and use a coping or jig saw to cut from hole to hole. A bit of filing at
> > the corners and where the saw strayed from the line should produce precision
> > results.
> >
> > The Adel Nibbler is good, but I find it hard to nibble to a line, and it
> > requires a minimum 29/64" hole to start. It is also limited in the thickness
> > of material it will work with.
> >
> > 73, Chuck W6PKP
> >
> >
> A rotozip type bit in a dremel will 'rout' out the required hole
> You can buy a router base for the dremel tool to make the job
> easier. You can make a frame with a square cutout to guide the
> router base to make the exact size hole you need. Norm Abram does
> this (with wood) on the New Yankee Workshop.

Another useful thing is the "abrafile" or rodsaw - a round diamond
dust coated rod that fits in a hacksaw frame. Whichever way you do it,
its always a bugger of a job to get nice and neat! But after about 20
years, it does get easier. (or you get less fussy, anyway)

Andrew VK3BFA

2924. Re: 6m and the 4-400A

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-20 23:45:36 UTC
From: Dan/W4NTI <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <AyIte.8120$eM6.1974@newsread3.news.atl.earthlink.net>
Source record: 18458

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
news:h%Xse.105461$lQ3.55461@bignews5.bellsouth.net...
> Wes Stewart wrote:
>> On Mon, 13 Jun 2005 21:44:05 -0400, Ken Scharf
>> <wa2mzeNOTTHIS@bellsouth.net> wrote:
>>
>>
>>>Dan/W4NTI wrote:
>>>
>>>>I am thinking of building up a single ended 4-400A for six. Mainly cuz
>>>>I've got a old homebrew HF amp with a good bit of the "stuff" I need to
>>>>do it with.
>>>>
>>>>I wonder (since I'm a bit rusty these days), if I can Grid Drive it? I
>>>>will only have a basic transverter output (8Watts) available.
>>>>
>>>>Anyone point me to a site or material about the input and output
>>>>circuitry needed?
>>>>
>>>>Any thoughts?
>>>>
>>>>Dan/W4NTI
>>>>
>>>>
>>>
>>>If you run the tube in class AB1 it won't need ANY driving power,
>>
>>
>> Of course you will.
>>
>>
> The TUBE won't require any driving power as it won't draw any
> grid current. HOWEVER there WILL be losses in the input coupling
> network so some power will be required to generate the required
> driving voltage. My point was that 8 watts should be enough.

Thanks for the input.

Dan/W4NTI

2925. Need schematic / documentation on 2 Heath items

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-20 23:47:43 UTC
From: lennyw@comcast.net
Message-ID: <1119311263.845560.42970@z14g2000cwz.googlegroups.com>
Source record: 18457

I've got 2 hot hamfest finds so far this season and need documentation
both of them. If you have leads on schematics or mauals, I'd ppreciate
hearing from you.

Here are the items:

1. A Heath HA-201A 2 meter fm amplifier. A schematic would allow me to
figure out how to re-bias this amp for linear service. Please note that
this is quite different from the HA-201 (without the "A" suffix) for
which there IS documentation at the BAMA site.

3. A Heath IB-1102 nixie based frequency counter. It's currently in
working condition but it triggers poorly at high frequencies. A
schematic / manual would allwo me to re-adjust it / modify it for more
reiable opearation at > 100 MHz.
A kind member of rec.radio.amateur.eqipment was able to get me a
schematic for the similar IB-1101, and it will help some, but one for
the IB-1102 would help more !

The commercial sources for documentation on these 2 items are
asking very high (way more than the cost of the items themselves)
prices for the paper work.

Thanks in advance for any leads.

73,
Lenny W2BVH

2926. Need schematic / documentation on 2 Heath items

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-20 23:47:49 UTC
From: lennyw@comcast.net
Message-ID: <1119311269.636725.150390@f14g2000cwb.googlegroups.com>
Source record: 18459

I've got 2 hot hamfest finds so far this season and need documentation
both of them. If you have leads on schematics or mauals, I'd ppreciate
hearing from you.

Here are the items:

1. A Heath HA-201A 2 meter fm amplifier. A schematic would allow me to
figure out how to re-bias this amp for linear service. Please note that
this is quite different from the HA-201 (without the "A" suffix) for
which there IS documentation at the BAMA site.

3. A Heath IB-1102 nixie based frequency counter. It's currently in
working condition but it triggers poorly at high frequencies. A
schematic / manual would allwo me to re-adjust it / modify it for more
reiable opearation at > 100 MHz.
A kind member of rec.radio.amateur.eqipment was able to get me a
schematic for the similar IB-1101, and it will help some, but one for
the IB-1102 would help more !

The commercial sources for documentation on these 2 items are
asking very high (way more than the cost of the items themselves)
prices for the paper work.

Thanks in advance for any leads.

73,
Lenny W2BVH

2927. Re: Need schematic / documentation on 2 Heath items

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-21 00:10:30 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11bemnclrb8ms4b@corp.supernews.com>
Source record: 18460

lennyw@comcast.net wrote:

> I've got 2 hot hamfest finds so far this season and need documentation
> both of them. If you have leads on schematics or mauals, I'd ppreciate
> hearing from you.
>
>
> Here are the items:
>
> 1. A Heath HA-201A 2 meter fm amplifier. A schematic would allow me to
> figure out how to re-bias this amp for linear service. Please note that
> this is quite different from the HA-201 (without the "A" suffix) for
> which there IS documentation at the BAMA site.
>
>
> 3. A Heath IB-1102 nixie based frequency counter. It's currently in
> working condition but it triggers poorly at high frequencies. A
> schematic / manual would allwo me to re-adjust it / modify it for more
> reiable opearation at > 100 MHz.
> A kind member of rec.radio.amateur.eqipment was able to get me a
> schematic for the similar IB-1101, and it will help some, but one for
> the IB-1102 would help more !
>
>
> The commercial sources for documentation on these 2 items are
> asking very high (way more than the cost of the items themselves)
> prices for the paper work.
>
>
> Thanks in advance for any leads.
>
>
> 73,
> Lenny W2BVH
>
As of 15 years ago you could still call up Heath/Zenith and get manuals
for much of the old equipment -- I was astounded when it worked for me.
I have absolutely no idea if they still support the old stuff, but
there's nothing they can do to you over the phone that makes it not
worth a call (unless you know for a fact they don't support the old
heathkit stuff any more).

--

Tim Wescott

Wescott Design Services
http://www.wescottdesign.com

2928. TS 539S

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-21 09:16:57 UTC
From: steve carey <scarey@tds.net>
Message-ID: <42b7da87$1_3@newspeer2.tds.net>
Source record: 18461

Need new caps for TS 530S they are C22 and C24 500V at 100 MFD they need
to retrofit thanks Steve

2929. sound override from 2 way radio into car radio speakers?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-21 14:14:22 UTC
From: FrankW <fworm@mxznorpak.ca>
Message-ID: <yOmdncYRm6sAvSXfRVn-oQ@magma.ca>
Source record: 18462

Anyone every heard of a device that would override
the speaker of a stock stereo from a CB?
Something that would cut out the sound from the
stock car radio and put the CB sound into the stock speaker
Thanks in advance

2930. Re: Need schematic / documentation on 2 Heath items

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-21 22:35:32 UTC
From: lennyw@comcast.net
Message-ID: <1119393331.961335.5430@g49g2000cwa.googlegroups.com>
Source record: 18463

Thanks for the suggestion. I called Zenith (now LG Electronics) twice.
First to talk to "customer service" who never heard of Heathkit and
said they don't carry manuals. She had some trouble formulating a
complete English sentence, so I didn't trust her reply.
My second call was to "parts". After 15 minutes on hold, I decided it
wasn't worth any more time, given the (un) likelihood of a positive
response.
Well, I guess I'll try one more rec.radio.amateur subgroup and see what
happens. Hope springs eternal :-)

2931. Re: Need schematic / documentation on 2 Heath items

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-21 23:09:36 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11bh7h4f1i9jvd8@corp.supernews.com>
Source record: 18464

lennyw@comcast.net wrote:

> Thanks for the suggestion. I called Zenith (now LG Electronics) twice.
> First to talk to "customer service" who never heard of Heathkit and
> said they don't carry manuals. She had some trouble formulating a
> complete English sentence, so I didn't trust her reply.
> My second call was to "parts". After 15 minutes on hold, I decided it
> wasn't worth any more time, given the (un) likelihood of a positive
> response.
> Well, I guess I'll try one more rec.radio.amateur subgroup and see what
> happens. Hope springs eternal :-)
>
There's a www.heathkit.com that carries some of the same educational
kits that the old Heathkit used to, and it's in Michigan.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

2932. Re: Need schematic / documentation on 2 Heath items

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-22 06:11:40 UTC
From: john graesser <graesser@tca.net>
Message-ID: <11bhvsi4a4u9q60@corp.supernews.com>
Source record: 18465

> The commercial sources for documentation on these 2 items are
> asking very high (way more than the cost of the items themselves)
> prices for the paper work.

Welcome to the boatanchor world, for old computers it is even worse, documentation was rarely taken care of as well as radio docs. For my old computer collection, I regularly expect to pay more for docs than the computer.

Even setting up archives of this sort of material doesn't work past the death of the collector. The cp/m computer world lost the person who was collecting boot disks for all machines and now can't seem to get the disks back.
thanks, John.
KC5DWD

2933. Re: Need schematic / documentation on 2 Heath items

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-22 09:49:56 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <lLidnQB1JsioqSTfRVnytg@pipex.net>
Source record: 18468

> There's a www.heathkit.com that carries some of the same educational kits
> that the old Heathkit used to, and it's in Michigan.
==========
And even in the same place.
From the training kit on offer I recognise a similar design as the ET-3300
Laboratory Breadboard , I bought in kit form in the mid 1970s ,which I still
use on a regular basis.
Heathkit is definitely not dead,be it they now supply somewhat different
products,to suit today's world.....good to see that !

Frank GM0CSZ / KN6WH

2934. FA:Mcurdo Silver 5C,Extremely rare.later today

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-22 14:01:19 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <Paeue.1005915$w62.631269@bgtnsc05-news.ops.worldnet.att.net>
Source record: 18467
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

1932/33 McMurdo Silver 5C to be listed later (~9-9:30 PM CDT) today:
Extremely RARE and in working condition, a very nice McMurdo Silver 5C,
Super het of 1932/33 that was featured at the Science Exhibit at Chicago
Worlds Fair. BE ADVISED: if you are looking for a receiver that out performs
the likes of R-2000, HQ-180, etc, pse do not bid-have a nice day. This radio
is for the serious collector that appreciates such a exceptionally rare
antique. I copied SSB on 20 m and 70m this AM BUT I had only an attic
antenna so signals were not as strong as they should be. Covers 1.7-4, 5-12,
& 9-22 mhz. Mid-band is the 'hottest and 10 Mhz WWV is basically right on. I
received noise on 1.7-4 (ant?) but it is receiving a 4 Mhz sig generator
output quite well. Sensitivity drops on the higher band but receives AM
broadcast stations in the 18-9 Mhz region. Unpacked weight is 28 lbs and ~
34 lbs with the 11" speaker! I highly recommend professional packing, but I
will ship in a very large box for protection. FULL INSURANCE IS REQUIRED--NO
EXCEPTIONS. This unit is NOT MINT (which means NEW to me) and if I were to
keep it I would continue to make a few more corrections. It IS very clean.
All tubes check way beyond minimum. All shields in place though may not be
original. Front is crisp and clearly printed (repainted?). SPEAKER INCLUDED;
no cabinet however.Sounds great.
From: heytubeguy on ebay.

2935. Looking for SAV16L datasheet

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-22 14:43:47 UTC
From: HamVenezuela <elverde96@cantv.net>
Message-ID: <1119451427.642167.164730@o13g2000cwo.googlegroups.com>
Source record: 18469

Would appreciate if anyone could point me or send,
the datasheet for the Toshiba VHF Power Module SAV16L.

I'm working on a VHF transmitter project.

Many thanks to all.

HamVenezuela
elverde96 ..a,t.. cantv.net

2936. Re: Need schematic / documentation on 2 Heath items

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-22 18:12:21 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <d9c9m5$r8e$1@engnntp2.cig.mot.com>
Source record: 18466

There at least two (ham) places on line that sell old manuals (copies).
Several places on line with free download. I ordered a Heath tube checker
manual from one - don't remember which, but it was a ham.

Here are my bookmarks (all work today):
http://www.sarrio.com/sarrio/products.html
Go down to "Vintage Manuals for radios and test equipment:"
He shows Both of these
Heathkit (C) HA-201A Amplifier $20
...
Heathkit (C) IB-1102 Freq Counter $32

HEATHKIT KEY
C = COMPLETE MANUAL (EVERYTHING)
F = (F) (Photo, Specs., Schematic)
P = PARTIAL MANUAL (No construction detail)

http://www.btinternet.com/~geoffrey.brown3/manuals/

http://bama.sbc.edu/free.htm
(Looks like you know about this one)

Do a Google on "manuals Ham radio vintage" and you'll get many hits.

73, Steve, K;9.D,C'I

<lennyw@comcast.net> wrote in message
news:1119393331.961335.5430@g49g2000cwa.googlegroups.com...
> Thanks for the suggestion. I called Zenith (now LG Electronics) twice.
> First to talk to "customer service" who never heard of Heathkit and
> said they don't carry manuals. She had some trouble formulating a
> complete English sentence, so I didn't trust her reply.
> My second call was to "parts". After 15 minutes on hold, I decided it
> wasn't worth any more time, given the (un) likelihood of a positive
> response.
> Well, I guess I'll try one more rec.radio.amateur subgroup and see what
> happens. Hope springs eternal :-)
>

2937. Looking for 12V tube Rx project info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-22 18:56:26 UTC
From: Ed <Huckleberr_REMOVE_@bigvalley.net>
Message-ID: <Xns967D79AD24D7spectrumhogstarbandn@207.106.92.175>
Source record: 18470

I am looking for a nice schematic, and perhaps additional info, on a 12V (fil. & plate) tube superhet Rx; just something fairly simple for CW/SSB reception without bells and whistles, and preferably for 75M/40M reception.

Can anyone point me to info on this? Thanks.

Ed K7AAT

2938. YIG filters (and oscillators): How do they work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-22 19:10:10 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11bji34rmd33q8d@corp.supernews.com>
Source record: 18471

Just curious... how do tuneable filters, oscillators, phase shifters, etc. made from Yttrium Iron Garnet (YIG) materials work? Does an applied DC magnetic field alter the effective permeability of the material? Or is something more complex going on?

Also... what tends to limit YIG devices to not typically be used much below some "many hundreds" MHz? Is it just loss in the material starts to become prohibitive? Or something else?

I've done a little Googling, and although there's a lot about YIGs out there, it's usually at either a much lower level or much higher level than what I'm after here!

Thanks,
---Joel Kolstad

2939. Looking for John Roy Worthington EP2RW/GW3PNZ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-22 20:28:18 UTC
From: rusking <rusking@beeb.net>
Message-ID: <d9chph$5t0$2$8302bc10@news.beeb.net>
Source record: 18473

A friend of mine Peter is trying to trace someone he met in Iran in the
early sixties.
Roy's call sign was then EP2RW. He had been GW3PNZ in Colwyn bay.
If you can help you could leave a message at rus_kinjatyahoodotcodotuk.
(Hope the spammers didn't get that !)
Rus

2940. Re: YIG filters (and oscillators): How do they work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-22 20:30:16 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11bjiic81l09j0d@corp.supernews.com>
Source record: 18472

Joel Kolstad wrote:

> Just curious... how do tuneable filters, oscillators, phase shifters, etc.
> made from Yttrium Iron Garnet (YIG) materials work? Does an applied DC
> magnetic field alter the effective permeability of the material? Or is
> something more complex going on?
>
> Also... what tends to limit YIG devices to not typically be used much below
> some "many hundreds" MHz? Is it just loss in the material starts to become
> prohibitive? Or something else?
>
> I've done a little Googling, and although there's a lot about YIGs out there,
> it's usually at either a much lower level or much higher level than what I'm
> after here!
>
> Thanks,
> ---Joel Kolstad
>
>
I had a professor in a laser electronics class make an offhand comment
on how the ground energy state of ruby (ruby = YIG, here) lasers
seperates into a number of seperate states under bias, and this can be
used to make a microwave oscillator. Translated, that means that the
electrons in the material are what's actually resonating. I suspect
that this is the effect that's used for YIG oscillators.

As for the rest of the whys and wherefores -- I just don't know.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

2941. Looking for 40 uf 450 vdc ecltrolytic cap

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-22 21:12:12 UTC
From: Jozef <jozef@metaphoria.org>
Message-ID: <1119474755.630283@xwing.vermontel.net>
Source record: 18474

Does anyone have one of these available from their parts box. Will pay for it and shipping to VT. Please reply directly to jozef@sover.net

Jozef

2942. Re: Looking for 40 uf 450 vdc ecltrolytic cap

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-22 21:33:31 UTC
From: Gian Luca Cazzola <glcazzola@aliceposta.it>
Message-ID: <LOkue.30971$b5.1390581@news3.tin.it>
Source record: 18475

Search on Antique Electronic Supply:
www.tubesandmore.com
Search Sprague Atom capacitors in electrolitic capacitors. They have a full values range at 450V polarized.

Gian Luca

"Jozef" <jozef@metaphoria.org> ha scritto nel messaggio news:1119474755.630283@xwing.vermontel.net...
> Does anyone have one of these available from their parts box. Will pay
> for it and shipping to VT. Please reply directly to jozef@sover.net
>
> Jozef
>

2943. FA:Delux Signal Shifter Meissner + Coil Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-22 22:22:07 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <jwlue.348555$cg1.123874@bgtnsc04-news.ops.worldnet.att.net>
Source record: 18476
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

A DeLux Meissner Signal Shifter in very shape PLUS a complete set of Meissner Coils (listed separately) can be seen at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking....McMurdo Silver up for bids later today (22nd), heytubeguy

2944. Re: YIG filters (and oscillators): How do they work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-22 22:55:34 UTC
From: sdeyoreo@hotmail.com
Message-ID: <d1rjb15c2of1tb140jsc4oq9g16fimacr9@4ax.com>
Source record: 18477

A few good links on YIGs from Watkins-Johnson here:
http://www.wj.com/technotes/index.asp

On Wed, 22 Jun 2005 12:10:10 -0700, "Joel Kolstad"
<JKolstad71HatesSpam@yahoo.com> wrote:

>Just curious... how do tuneable filters, oscillators, phase shifters, etc.
>made from Yttrium Iron Garnet (YIG) materials work? Does an applied DC
>magnetic field alter the effective permeability of the material? Or is
>something more complex going on?
>
>Also... what tends to limit YIG devices to not typically be used much below
>some "many hundreds" MHz? Is it just loss in the material starts to become
>prohibitive? Or something else?
>
>I've done a little Googling, and although there's a lot about YIGs out there,
>it's usually at either a much lower level or much higher level than what I'm
>after here!
>
>Thanks,
>---Joel Kolstad
>

2945. Re: YIG filters (and oscillators): How do they work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-23 00:21:31 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1119486091.239030.83360@g43g2000cwa.googlegroups.com>
Source record: 18478

I was curious about that recently, and _somewhere_ I found a really nice explanation. Wish I could point you to it; I won't do it justice. But the basic idea is that magnetic dipoles (from the electrons in material) align with the DC magnetic field. If something perturbs them, they will oscillate with a natural frequency depending on their mass and the strength of the restoring force: the externally applied field. Think of a (tiny) bar magnet on a pivot, like a compass needle. If there is no damping, it will oscillate. The strength of the externally applied field determines the restoring force, and therefore the oscillation frequency. The reason given for making the YIG resonator a ball is to get a very uniform magnetic field through the whole ball so that all the atomic dipoles have as nearly as possible the same resonant frequency. The high Q resonance, of course, is what lets it be a filter or the tuning element of an oscillator. It's very handy that it's relatively easy to tune over an octave or more range. However, since the tuning involves changing a fairly large magnetic field, it's much slower than tuning with a varicap diode.

OK, now that I've written all that, of course it becomes easy to find the reference: http://pw1.netcom.com/~dstraigh/yig.html Oh, well.

Cheers,
Tom

2946. Re: YIG filters (and oscillators): How do they work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-23 00:31:43 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1119486703.004622.232070@g44g2000cwa.googlegroups.com>
Source record: 18479

About the freq limit: consider that the resonant freq depends on the applied magnetic field, and you can't perfectly shield the osc from ext fields: power line frequency things, Earth's field, etc. Since f is linearly proportional to the field strength, things are percentage-wise more immune to external fields if the field strength is high, and thus the resonant frequency is high. Also, other designs are relatively more practical at lower frequencies; it's no great trick to make a lumped LC oscillator at a couple hundred MHz (though electronic tuning over an octave range becomes a bit of a chore because of all the stray capacitance). So it's a matter of the frequency range over which they are relatively more practical and economical than the alternatives. And of course, there are many factors to the "practical" part of that.

Cheers,
Tom

2947. Re: YIG filters (and oscillators): How do they work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-23 00:44:08 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11bk1ck1roaf66b@corp.supernews.com>
Source record: 18480

Thanks, Tim, that helps a lot! For what you've said, if I were to apply a mass-spring analogy, the electrons would end up as the mass and the DC field strength would correspond to the spring constant.

I'll read up at the link you provided. It would appear that with no DC field applied, you'd get the lowest resonant frequency... at until not too long ago, that appeared to be in the ballpark of 1GHz. Now it's not uncommon to see 500MHz YIG filters... I wonder what changed?

The application I had in the back of my mind was for nice, sharp filters in the high VHF/low UHF range. I saw a circulator recently for 432MHz and, while it was large at about 4" square (but flat -- only about 1/4" thick), it still struck me as a pretty nice alternative to trying to build a transformer-based isolator at such frequencies. Hence the thought of perhaps being able to use YIG filters down there as well...

---Joel

2948. Re: sound override from 2 way radio into car radio speakers?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-23 01:04:47 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <FSnue.1455$_m1.1103@bignews6.bellsouth.net>
Source record: 18481

"FrankW" <fworm@mxznorpak.ca> wrote in message
news:yOmdncYRm6sAvSXfRVn-oQ@magma.ca...
> Anyone every heard of a device that would override
> the speaker of a stock stereo from a CB?
> Something that would cut out the sound from the
> stock car radio and put the CB sound into the stock speaker
> Thanks in advance

How about a relay?

J
>

2949. NEEDED: Stainless steel retainer rings for 3/16" rod

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-23 04:50:09 UTC
From: Photoman <photoman28@hotmail.com>
Message-ID: <WpCdnfx6u5zpoiffRVn-iw@adelphia.com>
Source record: 18482

I'm building a few yagis for 432 and two meters and need a source for stainless steel push on retainer rings, sometimes called push nuts (incorrectly) to fit element diameter of 3/16" aluminum rod. I know they are made but cannot find a source searching with Google. Any help here would be appreciated. I have the spring steel variety but they rust after 2 or 3 years so the antennas have to be taken down and the retainers replaced.

Thanks and 73,
Ken, KC4IH
Remove the (nospam) to reply or reply to the group.

--

Have your doctor check your blood sugar at least once a year.

2950. Re: NEEDED: Stainless steel retainer rings for 3/16" rod

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-23 05:18:48 UTC
From: -ex- <exray@coqui.net>
Message-ID: <25ccb$42ba463b$4232bd17$11463@COQUI.NET>
Source record: 18483

Photoman wrote:

> I'm building a few yagis for 432 and two meters and need a source for
> stainless steel push on retainer rings, sometimes called push nuts
> (incorrectly) to fit element diameter of 3/16" aluminum rod. I know they are
> made but cannot find a source searching with Google. Any help here would be
> appreciated. I have the spring steel variety but they rust after 2 or 3
> years so the antennas have to be taken down and the retainers replaced.
>
> Thanks and 73,
> Ken, KC4IH
> Remove the (nospam) to reply or reply to the group.
>

http://www.mcmaster.com/

Enter "push nuts" into the search.

HTH
-Bill

2951. Re: YIG filters (and oscillators): How do they work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-23 06:57:12 UTC
From: Alan Peake <adpeake@killspam.internode.on.net>
Message-ID: <42BA5D48.3010203@killspam.internode.on.net>
Source record: 18484

They use the spin of the electrons. If you apply a magnetic field to the YIG,the spinning electrons precess at a rate proportional to the magnetic field. This rate happens to fall in the microwave region and a typical range is from 8GHz to 18GHz.
The sphere is coupled to the oscillator circuitry by various means - a loop of wire for example - and the spinning electrons look like a resonator to the circuitry.
Alan

2952. Re: Looking for SAV16L datasheet

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-23 11:04:19 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <42BA9733.70902@bloomer.net>
Source record: 18485

You can order documentation for $1.50 (US Dollars) at:

http://www.rfparts.com/module.html

Hope this helps!

Scott
N0EDV

HamVenezuela wrote:
> Would appreciate if anyone could point me or send,
> the datasheet for the Toshiba VHF Power Module SAV16L.
>
> I'm working on a VHF transmitter project.
>
> Many thanks to all.
>
> HamVenezuela
> elverde96 ..a,t.. cantv.net
>

2953. Re: NEEDED: Stainless steel retainer rings for 3/16" rod

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-23 13:52:50 UTC
From: Photoman <photoman28@hotmail.com>
Message-ID: <vqWdnaVLgYA5lyffRVn-3A@adelphia.com>
Source record: 18486

Thanks Bill,
I don't see any stainless there, just zinc plated, dichromate and black finish. Did I miss something? I may have to use the zinc plated since they will probably last a few year longer than the black finish I have used in the past.
73, ken

"-ex-" <exray@coqui.net> wrote in message news:25ccb$42ba463b$4232bd17$11463@COQUI.NET...
> Photoman wrote:
>
>> I'm building a few yagis for 432 and two meters and need a source for
>> stainless steel push on retainer rings, sometimes called push nuts
>> (incorrectly) to fit element diameter of 3/16" aluminum rod. I know they
>> are made but cannot find a source searching with Google. Any help here
>> would be appreciated. I have the spring steel variety but they rust after
>> 2 or 3 years so the antennas have to be taken down and the retainers
>> replaced.
>>
>> Thanks and 73,
>> Ken, KC4IH
>> Remove the (nospam) to reply or reply to the group.
>>
>
> http://www.mcmaster.com/
>
> Enter "push nuts" into the search.
>
> HTH
> -Bill

2954. Re: NEEDED: Stainless steel retainer rings for 3/16" rod

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-23 14:23:45 UTC
From: -ex- <exray@coqui.net>
Message-ID: <55237$42bac5f4$4232bd16$6370@COQUI.NET>
Source record: 18487

Photoman wrote:
> Thanks Bill,
> I don't see any stainless there, just zinc plated, dichromate and black
> finish. Did I miss something? I may have to use the zinc plated since they
> will probably last a few year longer than the black finish I have used in
> the past.
> 73, ken

See the 'toothless' ones, p/n 97200A130 for example. $3.22/50 for 3/16th" .

Would that work?

-Bill

2955. Re: Looking for 12V tube Rx project info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-23 16:50:05 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <d9ep7t010ap@enews4.newsguy.com>
Source record: 18488

Ed wrote:

> I am looking for a nice schematic, and perhaps additional info, on a
> 12V (fil. & plate) tube superhet Rx; just something fairly simple
> for CW/SSB reception without bells and whistles, and preferably for
> 75M/40M reception.
>
> Can anyone point me to info on this? Thanks.

That design was common in the car radios of the late '50s to early '60s. They used tubes for all functions except the output amplifier, which was a transistor. You can probably find old Sams manuals on ebay, or just copy an existing HV schematic and substitute the 12v tubes. There isn't a very great difference.

Incidentally, if you have trouble finding the tubes designed for 12v on the plate, ordinary HV tubes worked fairly well but with somewhat lower gain. My first job after high school was repairing those radios.

Also, the 12v tubes were quite prone to develop microphonic problems. The design only lasted a few years until good transistors became available cheap. They are an interesting bit of electronic history, but not really practical today. A five cent transistor will outperform what has become a very scarce and expensive 12v tube.

But have fun anyway. :-)

--
Bill, W6WRT

2956. Re: Looking for 12V tube Rx project info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-23 19:56:12 UTC
From: LenAnderson@ieee.org
Message-ID: <1119556572.530653.109680@f14g2000cwb.googlegroups.com>
Source record: 18489

> I am looking for a nice schematic, and perhaps additional info, on a 12V
>(fil. & plate) tube superhet Rx; just something fairly simple for CW/SSB
>reception without bells and whistles, and preferably for 75M/40M reception.
>
> Can anyone point me to info on this? Thanks.

Operating tube plates down to 12 VDC supply is pushing things a
bit far, to be honest with you.

Setchell-Carlson managed to do it with loctal-base tubes running
off of a 24/28 VDC aircraft bus back in WW2 times. No dynamotor,
just that cute little box referred to as a "range receiver" or
BC-1206.

I bought a couple of them many years ago, surplus, principally
to get the nice compact 3-gang variable capacitor. Fired one
up in the company lab at 26 VDC and it was still in-spec although
those specs weren't the best. At 24 VDC the spec rating was
marginal. At 22 VDC it was below spec...but then the filaments
were also running cooler at 11 V each.

Don't remember what the IF (135 KHz) BW was, but, running with
a crystal-controlled converter ahead of it, the 195 to 500 KHz
tuning range could cover 75 or 40 meters no problem. A thought.

LenAnderson@ieee.org

2957. Re: NEEDED: Stainless steel retainer rings for 3/16" rod

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-23 20:26:42 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <oMSdnVWa4pyOhibfRVn-tA@comcast.com>
Source record: 18490

"Photoman" <photoman28(nospam)@hotmail.com> wrote in message
news:WpCdnfx6u5zpoiffRVn-iw@adelphia.com...
> I'm building a few yagis for 432 and two meters and need a source for
> stainless steel push on retainer rings, sometimes called push nuts
> (incorrectly) to fit element diameter of 3/16" aluminum rod. I know they
> are made but cannot find a source searching with Google. Any help here
> would be appreciated. I have the spring steel variety but they rust after
> 2 or 3 years so the antennas have to be taken down and the retainers
> replaced.
>
> Thanks and 73,
> Ken, KC4IH
> Remove the (nospam) to reply or reply to the group.

DX Engineering also has a variety of mounting methods - elements to boom.

Greg

2958. Re: Looking for SAV16L datasheet

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-23 23:00:36 UTC
From: HamVenezuela <elverde96@cantv.net>
Message-ID: <1119567636.499759.305530@o13g2000cwo.googlegroups.com>
Source record: 18491

Thanks Scott,

I'm located in Venezuela, South America, and it is impossible for me to pay the $1.50 to RF Parts as I have no international credit card.

I'll keep trying.

Best Regards.

HamVenezuela

2959. Re: NEEDED: Stainless steel retainer rings for 3/16" rod

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-24 02:27:52 UTC
From: Photoman <photoman28@hotmail.com>
Message-ID: <cqSdnebudJsE8ibfRVn-tg@adelphia.com>
Source record: 18492

Thanks, I will order a pack and see how they work out. I sure appreciate you
taking the time to help me out.
Ken

"-ex-" <exray@coqui.net> wrote in message
news:55237$42bac5f4$4232bd16$6370@COQUI.NET...
> Photoman wrote:
>> Thanks Bill,
>> I don't see any stainless there, just zinc plated, dichromate and black
>> finish. Did I miss something? I may have to use the zinc plated since
>> they will probably last a few year longer than the black finish I have
>> used in the past.
>> 73, ken
>
> See the 'toothless' ones, p/n 97200A130 for example. $3.22/50 for 3/16th"
> .
>
> Would that work?
>
> -Bill

2960. How big has Somerset, PA hamfest been in the past?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-24 02:40:22 UTC
From: straydog <aes1492@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.62.0506240237270.23725@sdf.lonestar.org>
Source record: 18493
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I think July 17, is the next Somerset PA hamfest and I've been thinking about going. Its a long drive from here (southern Delaware) and I was wondering how big and how good it has been in the past. Anyone got any recollections from the past?

Art, w4pon

2961. Re: NEEDED: Stainless steel retainer rings for 3/16" rod

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-24 02:51:36 UTC
From: -ex- <exray@coqui.net>
Message-ID: <d58cc$42bb753b$4232bd03$16111@COQUI.NET>
Source record: 18494

Photoman wrote:

> Thanks, I will order a pack and see how they work out. I sure appreciate you
> taking the time to help me out.
> Ken

Hope they work out for you.

-Bill
>

2962. Re: How big has Somerset, PA hamfest been in the past?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-24 12:25:27 UTC
From: Galen Watts <gwatts@nrao.edu>
Message-ID: <42BBFBB7.20706@nrao.edu>
Source record: 18495
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

straydog wrote:
>
> I think July 17, is the next Somerset PA hamfest and I've been thinking
> about going. Its a long drive from here (southern Delaware) and I was
> wondering how big and how good it has been in the past. Anyone got any
> recollections from the past?
>
> Art, w4pon

They have pictures of last year's fest at
http://www.k3smt.org/hf2004/

-W8LNA

2963. CX-1209/U

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-24 22:55:12 UTC
From: "James F. Mayer" <jfma@ix.netcom.com>
Message-ID: <kb0ve.12432$eM6.7987@newsread3.news.atl.earthlink.net>
Source record: 18496

I have an RT70A/GRC that needs a power connector I think that this particular radio has never been used sinceI bought it back in the mid '70's and I have not had it powered up for the lack of proper connectors or power supply. Now that I have power supplies to power it, I need the connector and cable to make it work.

2964. FS: Tube Sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-25 00:57:09 UTC
From: AAA RF Products <info@aaarfproducts.com>
Message-ID: <EY1ve.2108$Eo.1707@fed1read04>
Source record: 18497
Cross-posted to: alt.music-lover.audiophile.hardware,rec.audio.tubes,rec.radio.amateur.homebrew

For Sale Tube Sockets, unlimited quantities available:

02-685--------8 pin, Ceramic, for KT88/6550/EL34A------ $2.50 each
02-674--------4 pin, Ceramic, for 300B/2A3/811----------$2.50 each
02-675--------5 pin, Ceramic, for 807/FU-7---------------$2.50 each
02-676--------6 pin, Ceramic ------------------------------$2.75 each
02-678--------7 pin, Ceramic for 813/FU-13--------------$6.00 each
02-702--------Ceramic Cap for 807/6146B----------------$1.25 each

email: sales@aaarfproducts.com
call: 949 481 3154
fax: 949 388 5448
or mail: AAA RF Products, 949 Calle Amanecer, san Clemente, CA 92673

2965. Winlink and QRM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-25 14:51:49 UTC
From: Winlink 2000 QRM <noname@hotmail.net>
Message-ID: <dkrqb1d6uq9t4eg1hdf6ue0nm6frp1gjq8@4ax.com>
Source record: 18398
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.misc

Winlink and QRM - read info here:

http://www.zerobeat.net/bandgrab.shtml

2966. Re: Winlink and QRM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-25 17:01:19 UTC
From: Travis Jordan <no.one@no.net>
Message-ID: <z5gve.204849$JA.54611@fe01.news.easynews.com>
Source record: 18399
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.misc

Winlink 2000 QRM wrote:
> Winlink and QRM - read info here:

Sorry, but this sounds like the same complaint that the AM'ers had about SSB when it first started up on HF. I can certainly see the utility in the application.

2967. Re: Winlink and QRM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-25 18:26:10 UTC
From: "helmsman@mindspring.com" <helmsman@mindspring.com>
Message-ID: <kc8rb1pn51bu2oi4aggbcntq08oeidsgdr@4ax.com>
Source record: 18400
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.misc

"Travis Jordan" <no.one@no.net> wrote:

>Winlink 2000 QRM wrote:
>> Winlink and QRM - read info here:
>
>Sorry, but this sounds like the same complaint that the AM'ers had about
>SSB when it first started up on HF. I can certainly see the utility in
>the application.
>
Put it on the garage door frequencies!

2968. Re: Winlink and QRM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-25 18:38:06 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <jwhve.6227$B_3.4079@fe05.lga>
Source record: 18401
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.misc

"Travis Jordan" <no.one@no.net> wrote in message
news:z5gve.204849$JA.54611@fe01.news.easynews.com...
>
> Sorry, but this sounds like the same complaint that the AM'ers had about
> SSB when it first started up on HF. I can certainly see the utility in
> the application.

Not exactly.

On HF, it is fairly unusual that you can hear both sides of a conversation, unlike VHF where if I can hear one station, I can usually hear the other. So when I want to call someone, I listen first. Hearing nothing, I send QRL? (or on phone, "is this frequency in use"). If the station I can't hear gets my QRL, he sends C and I go off looking for another frequency.

Very few, if any, digis actually listen first. Even if they did, they don't have a way to say "Is this frequency in use" and understand the response. And even if they could, they really don't have the opportunity to change frequency, since they need to call on the frequency that the remote robot is listening. It seems as if it would be very difficult to make these automated stations be friendly to other users.

That being said, it looks as if Winlink 2000 is going to be come a significant part of our emergency response, which is one of the reasons we have access to these frequencies to begin with. We should be looking at reasonable solutions, perhaps developing new technologies to enable this sort of capability, rather than just flaming.

Both the pro and con in this argument are absolutely unwilling to listen to/believe the other side. We amateurs need to get our act together and figure out how we can expand the use of a technology like Winlink 2000 without making these automated systems even more of a nuisance than they already are.

..

2969. Re: Looking for SAV16L datasheet

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-25 19:11:07 UTC
From: fmmck@aol.com
Message-ID: <fmmck-2506051511080001@aca11caa.ipt.aol.com>
Source record: 18402

In article <1119567636.499759.305530@o13g2000cwo.googlegroups.com>,
"HamVenezuela" <elverde96@cantv.net> wrote:

> I'll keep trying.

HamVenezuela-

There is some limited data at
http://www.mmatthes.com/e/modul/module.html

It appears to be a five watt module for use in a walkie-talkie transmitter
made by Toshiba. However, it is not listed in the current Toshiba catalog
at
http://www.toshiba.com/taec/cgi-bin/display.cgi?table=Category&CategoryID=7255
so you might contact Toshiba directly and ask them to E-Mail you the PDF
file for the S-AV16L.

73, Fred, K4DII

2970. Re: Winlink and QRM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-25 20:23:32 UTC
From: David Stinson <arc5@ix.netcom.com>
Message-ID: <83jve.9167$jX6.1969@newsread2.news.pas.earthlink.net>
Source record: 18403
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.misc

xpyttl wrote:

> That being said, it looks as if Winlink 2000 is going to be come a
> significant part of our emergency response, which is one of the reasons we
> have access to these frequencies to begin with. We should be looking at
> reasonable solutions, perhaps developing new technologies to enable this
> sort of capability, rather than just flaming.
>
> Both the pro and con in this argument are absolutely unwilling to listen
> to/believe the other side. We amateurs need to get our act together and
> figure out how we can expand the use of a technology like Winlink 2000
> without making these automated systems even more of a nuisance than they
> already are.

There's plenty of space. We just don't manage it worth a darn.
If you listen to the ham bands, you'll find that the
vast majority of our allocation is wasted. For instance:
you could put every CW QSO during Sweepstakes into about 75 KC of
spectrum and have lots of elbow room.
For phone, probably 100-125 KCs would be a big plenty.
People want their freqs to end in "5" or "0" and that
is just poor spectrum management. Look at ten and six
meters, even at the peak of the sunspot cycle;
90% of it is empty, wasted space.
Every major city has 100+ repeater pairs allocated,
twenty or thirty repeaters on the air and maybe *three*
that get any sustained use.
That's pitiful and a matter of *ego,* not communication.
75 meters is "crowded" only because of our 5-n-10 KC mindset.
Our problem is ego and "we've always done it this way,"
not a lack of spectrum.

We're going to either make room for new and enhanced
modes or we're going to be swept aside like blacksmiths
and locomotive boiler makers, guys.
The times is passin' us by....

2971. Re: Winlink and QRM /Nice long rant

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-25 21:41:23 UTC
From: Woody <woody.shadetree@verizon.net>
Message-ID: <7ckve.385$B82.126@trnddc04>
Source record: 18404
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.misc

Well.... first things first, of course.. why are we always posting such discussion in all these groups for commerce?

Second, and I quote.... "Whatchu talkin' 'bout Willis?"
> If the station I can't hear gets my QRL, he sends C and I go off looking
> for another frequency.
<sorry to whoever posted that. :-) >

I would normally bypass these things but I've been thinking about getting another HF rig lately....and I've been considering why I keep selling them off, trying to warrant a purchase again. I'm thinking it has to do with the words "purpose" and "use".

So, I'm looking at getting back into it and doing something besides setting up a radio and just randomly playing with it or gluing the vfo on some nonsense gathering place.

So here are my questions and observations for your perusal and general flaming.

From the original link posted:

That the HISTORICALLY HIGH LEVEL OF INTERFERENCE BY PACTOR STATIONS to everyone else has demonstrated time and time again that even the operator-controlled Winlink Pactor stations don't care if a frequency is busy (because they can easily take it away), in their passion to get their email from the Internet, so they MUST NOT BE ALLOWED to mix with hams trying to COMMUNICATE WITH EACH OTHER!

Q: Someone please take a minute and point out a single coherent thought or plausible point in the above statement. Bearing in mind that tuning to any random freq can find people squawking over each other like the noise in a crowded room, or a CW freq sounding like my kid running down the "try me" aisle in the toy dept... When did it become impossible for my station to hear 2 other stations that can't hear each other?

Next, from the original link posted.

That ham radio is a HOBBY, not a quasi-commercial email "service" as Winlink provides, and that ham radio, from the very beginning, has always been mainly about hams communicating with other hams, and not about being used for unattended email gateways to the Internet, mostly for a few sailors, because the FCC Maritime Radio Frequencies were set aside for that purpose and are underused.

Observation: If it serves a legitimate purpose and assists a single sailor, military or civilian, it serves a greater purpose than your latest blathering, contest, or quasi-award. The author can 'pucker up and plant one' on that statement. Again, if it is a ham station to ham station, WHERE is the plausible point?? ..... I think I hear a tiny voice yelling "ME, ME, ME... I shall rule the world!"

Also from the original like posted:

That all unattended wideband digital operations, of any type, MUST be confined to the current sub-bands for automatically controlled digital stations, and not allowed to use any frequency they wish just in order to avoid having to wait a short time for a clear frequency in the sub-bands.

Observation: I think SHOULD is a better word. Also take the entire point and reverse it, maybe they feel the same way in a crowded band. Why can't YOU wait a short time for a clear frequency?? [I shall rule the world!!] Also, if you [and Winlink, and Amateur radio in general] wake up and smell the ALE, then you again have a moot point.
If you've ever been on a radio, you realize that attended or unattended matters not; due to world dominators. The problem you're having is with courtesy, not digital ops. Good luck freeing the world of jerks and morons. [and from experience, a dense population infiltration such as the one in ham radio would be a good place to point yer scattergun when you start.]
There's lots of people with lots of free time to build up their personal anger levels for whatever reason, then look for a [safe] place to vent frustrations.
It's the same with the www.
Also, if you paid any attention to Riley at any point, you'd know that he already said APCO25 is fair game on the phone bands, so you are actually showing up on Saturday for the Friday night fights. Sorry you missed us, but thanks for coming out.

And again from the link.....

To stop this attempted takeover, *[I WILL START MY OWN]*
EVERYONE ELSE needs to vote NOT to agree to the Winlink request, so ARRL does not get the wrong impression that the "majority" of hams want to sacrifice the frequencies they use for communicating, so that the less-than-1%, that are Winlink users, don't have to wait longer than 90 seconds to receive an email on HF or can't send picture attachments to the Internet.

Q: STILL trying to understand why he keeps saying "stop hams from communicating so that hams can communicate!" and "I'm not gonna wait 90 seconds on a bunch just because they can't wait 90 seconds!"
You know what... I think Winlink has something wrong....maybe... there're WITCHES!! Everyone chant and point at Winlink... "witch, witch, witch...."
Come to think of it... that pesky ECHOLINK is still going on too! Where's my echolink pitch-fork? C'mon, let's get 'em! Bunch of internet-connected morons sucking up my drivel time... LET'S GET ON THE INTERNET AND COMPLAIN, ESPECIALLY IN ALL THE PLACES WE SHOULDN'T BE! Hahahaha.... this is too funny.

[NOTE: If the author wants real results, he should get on Winlink and email his concerns to the Winlink users... that will complete his hypocritical circle and restore balance to the universe.]
Also,
IF THEY CONSIST OF LESS THAN 1%, HOW THE HECK ARE THEY IN YOUR WAY, BUBBA??
All you want is to have your 100%, right? Why can't people just understand that? It's a mad, mad, mad, world...

Researching the author, I see he is a QRP fan.... leaving me to wonder.... WHY would he want to purposefully limit himself to barely enough power to communicate when he has available a perfectly good 50-100w radio market?? That will give him plenty of power to be heard and not too much to drown anyone out.
I'm betting he operates QRP wherever he wishes, forcing others to WAIT while the do-good folks "give in" feeling sorry and letting the little guy have the time/freq.... what a power rush that must be.
Then again, it could be that he's simply experimenting and enjoying the hobby in the fashion he CHOSE by right, etc....
Nah, couldn't be that.

Before anyone jumps on that, be advised that I've already experienced the common orations on the post-nuclear advantages of QRP training. Here's a news-flash boys... after the smoke clears, your QRP station will either be lost in the new and improved noise floor, or be one of the new big-guns on the suddenly quiet bands.... so I still miss the point. But do I make a hole for you when I hear you? Yes, I do. [Refer to that courtesy thing mentioned above.]

Also, if anyone wonders/cares, I have few "friends" on the local repeater too, since I only use it for communicating when a telephone isn't suitable, or whatever the rules suggest.
Curse me for using simplex instead of the repeater most of the time! See, I had this stupid idea, that the repeater is only useful to me when the communication requirements exceed simplex range. I must be a fool.
It seems that contacting my wife on the repeater [preceeded by paging tones to my alert monitor...OMG!!!] then making my contact, passing necessary info and clearing the frequency is just absurd to the local jaw-breakers who inevitably pounce on any break in the silence, almost demanding attention. How rude I am for not sitting in my hot car in a parking lot for an extra 15 minutes every time I need to tell someone something simple and move on.

Don't get me wrong, I love to chat, ragchewing on a repeater [or HF] is no problem to me, but not every time I key a mic for goodness sakes! But, I digress...

I had a bumper sticker one time.... "I love Jesus, it's his groupies I can't stand.", and I wish I could find an analogous "I love radio, it's the operators I can't stand."

So, with my failure to "get it" along with my apparent stupidity, I now relinquish the floor to whomever.
rb

2972. Re: Looking for 12V tube Rx project info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-25 22:26:07 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <3Rkve.6758$Bm.4442@bignews5.bellsouth.net>
Source record: 18405

LenAnderson@ieee.org wrote:
>> I am looking for a nice schematic, and perhaps additional info, on a 12V
>>(fil. & plate) tube superhet Rx; just something fairly simple for CW/SSB
>>reception without bells and whistles, and preferably for 75M/40M reception.
>>
>> Can anyone point me to info on this? Thanks.
>
>
> Operating tube plates down to 12 VDC supply is pushing things a
> bit far, to be honest with you.
>
> Setchell-Carlson managed to do it with loctal-base tubes running
> off of a 24/28 VDC aircraft bus back in WW2 times. No dynamotor,
> just that cute little box referred to as a "range receiver" or
> BC-1206.
>
> I bought a couple of them many years ago, surplus, principally
> to get the nice compact 3-gang variable capacitor. Fired one
> up in the company lab at 26 VDC and it was still in-spec although
> those specs weren't the best. At 24 VDC the spec rating was
> marginal. At 22 VDC it was below spec...but then the filaments
> were also running cooler at 11 V each.
>
> Don't remember what the IF (135 KHz) BW was, but, running with
> a crystal-controlled converter ahead of it, the 195 to 500 KHz
> tuning range could cover 75 or 40 meters no problem. A thought.
>
> LenAnderson@ieee.org
>
I've got one of those in the junk box. I was thinking of converting
it to solid state using cascaded (J310-311 and 2N2222) transistors,
perhaps a differential set of J310's for the mixer and a single J310
for the oscillator. Not sure about the audio and detector stages yet.
There was an article in an old '73 magazine on converting one of those
sets to solid state and adding a crystal controled converter to receive
40 meters. I've misplaced that issue though.

2973. Re: Winlink and QRM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-25 22:50:47 UTC
From: Woody <woody.shadetree@verizon.net>
Message-ID: <bdlve.2132$Uc2.1251@trnddc03>
Source record: 18406
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.misc

Wow, someone with a clue....
Thank you, David.

A smart person once said that if the answer to any question is "Because
that's the way we always do it.", then it's time to seriously consider
changing the way you do it.
rb

2974. Re: Looking for 12V tube Rx project info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-26 01:15:38 UTC
From: LenAnderson@ieee.org
Message-ID: <1119748538.259718.166300@f14g2000cwb.googlegroups.com>
Source record: 18407

From: Ken Scharf on Jun 25, 6:26 pm

>LenAnder...@ieee.org wrote:
>>> I am looking for a nice schematic, and perhaps additional info, on a 12V
>>>(fil. & plate) tube superhet Rx; just something fairly simple for CW/SSB
>>>reception without bells and whistles, and preferably for 75M/40M reception.
>
>>> Can anyone point me to info on this? Thanks.
>
>> Setchell-Carlson managed to do it with loctal-base tubes running
>> off of a 24/28 VDC aircraft bus back in WW2 times. No dynamotor,
>> just that cute little box referred to as a "range receiver" or
>> BC-1206.

>> Don't remember what the IF (135 KHz) BW was, but, running with
>> a crystal-controlled converter ahead of it, the 195 to 500 KHz
>> tuning range could cover 75 or 40 meters no problem. A thought.
>
>I've got one of those in the junk box. I was thinking of converting
>it to solid state using cascaded (J310-311 and 2N2222) transistors,
>perhaps a differential set of J310's for the mixer and a single J310
>for the oscillator. Not sure about the audio and detector stages yet.
>There was an article in an old '73 magazine on converting one of those
>sets to solid state and adding a crystal controled converter to receive
>40 meters. I've misplaced that issue though.

Converting a "Q5-er" from tubes to FETs would be rather easy.
No real need for the 2N2222s. Would have gobs of space left over
inside an already compact box.

If the 135 KHz IF has an equivalent total Q of 100, the BW would
be about 1.3 KHz, not all that swift for CW and too shart for SSB.

However, the BC-1206 tuning range of 195 to 500 KHz results in
an image at the converter input of 390 to 1000 KHz away from the
desired band. That's worse than the 910 KHz image of an old
455 KHz IF.

The BC-1206 tuning drive wouldn't be fine enough for today's
narrowband style of operating so that would need a fair amount
of mechanical rework. User's choice there.

The linear-in-capacity rotation of the 3-gang variable is good
for an RX Noise Bridge having an expanded parallel-C range...
which is what I used them for. :-)

LenAnderson@ieee.org

2975. Re: Re: Winlink and QRM /Nice long rant

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-26 12:59:44 UTC
From: Odo Of Bayeux <noname@hotmail.net>
Message-ID: <si9tb19fau2pbng6n2pmvekvp942vfkndf@4ax.com>
Source record: 18408
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.misc

On Sat, 25 Jun 2005 21:41:23 GMT, "Woody"
<woody.shadetree@verizon.net> wrote:

>That the HISTORICALLY HIGH LEVEL OF INTERFERENCE BY PACTOR STATIONS to
>everyone else has demonstrated time and time again that even the
>operator-controlled Winlink Pactor stations don't care if a frequency is
>busy (because they can easily take it away), in their passion to get their
>email from the Internet, so they MUST NOT BE ALLOWED to mix with hams trying
>to COMMUNICATE WITH EACH OTHER!
>
>Q: Someone please take a minute and point out a single coherent thought or
>plausible point in the above statement.

It sounds like you have a severe case of "Comprehension Deficit," OM!

>Bearing in mind that tuning to any
>random freq can find people squawking over each other like the noise in a
>crowded room, or a CW freq sounding like my kid running down the "try me"
>aisle in the toy dept... When did it become impossible for my station to
>hear 2 other stations that can't hear each other?

Oh yeah... THAT was REALLY "coherent." LOL!
If people got ON the radio 5% as much as they speculated about it, we
would ALL be better off!

2976. N2PK's Vector Network Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-26 18:16:14 UTC
From: Richard <delete.this.rf.gillette@ieee.org>
Message-ID: <42BEF1BF.7060805@ieee.org>
Source record: 18409

If you missed it see:
http://users.adelphia.net/~n2pk/

I would like to build one so I asked on the
use net
http://groups.yahoo.com/group/N2PK-VNA/
if anyone had a parts kit.

The response I received to date has been
an offer for the PCB's and someone else
looking for a parts kit.

If there are a number of us, we would do best
with a group buy. If you have the desire to
build one and want to form a group let me know.

Please note the delete.this.
in my return email address.

Richard W9PE

2977. Re: How big has Somerset, PA hamfest been in the past?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-26 18:56:30 UTC
From: straydog <aes1492@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.62.0506261856170.28426@sdf.lonestar.org>
Source record: 18410
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On Fri, 24 Jun 2005, Galen Watts wrote:

> Date: Fri, 24 Jun 2005 08:25:27 -0400
> From: Galen Watts <gwatts@nrao.edu>
> To: straydog <aes1492@sdf.lonestar.org>
> Newsgroups: rec.radio.swap, rec.radio.amateur.boatanchors,
> rec.radio.amateur.equipment, rec.radio.amateur.homebrew
> Subject: Re: How big has Somerset, PA hamfest been in the past?
>
> straydog wrote:
>>
>> I think July 17, is the next Somerset PA hamfest and I've been thinking
>> about going. Its a long drive from here (southern Delaware) and I was
>> wondering how big and how good it has been in the past. Anyone got any
>> recollections from the past?
>>
>> Art, w4pon
>
> They have pictures of last year's fest at
> http://www.k3smt.org/hf2004/
>
> -W8LNA
>

Thanks for the info...

I had a look.

W4PON

2978. Re: N2PK's Vector Network Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-27 01:51:59 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <3ZIve.5060$xL1.169@trnddc08>
Source record: 18411

"Richard" <delete.this.rf.gillette@ieee.org> wrote in message
news:42BEF1BF.7060805@ieee.org...
> If you missed it see:
> http://users.adelphia.net/~n2pk/
>
> I would like to build one so I asked on the
> use net
> http://groups.yahoo.com/group/N2PK-VNA/
> if anyone had a parts kit.
>
> The response I received to date has been
> an offer for the PCB's and someone else
> looking for a parts kit.
>
> If there are a number of us, we would do best
> with a group buy. If you have the desire to
> build one and want to form a group let me know.
>
> Please note the delete.this.
> in my return email address.
>
> Richard W9PE
>
Greg Ordy did both a kit offering and completed boards about a year ago. Not
sure if he has more planned or not- it was a labor of love.
Dale W4OP

2979. Re: Looking for 12V tube Rx project info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-27 02:29:46 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <tvJve.7272$gr.2393@bignews1.bellsouth.net>
Source record: 18412

LenAnderson@ieee.org wrote:
> From: Ken Scharf on Jun 25, 6:26 pm
>
>
>>LenAnder...@ieee.org wrote:
>>
>>>>I am looking for a nice schematic, and perhaps additional info, on a 12V
>>>>(fil. & plate) tube superhet Rx; just something fairly simple for CW/SSB
>>>>reception without bells and whistles, and preferably for 75M/40M reception.
>>
>>>> Can anyone point me to info on this? Thanks.
>>
>>> Setchell-Carlson managed to do it with loctal-base tubes running
>>> off of a 24/28 VDC aircraft bus back in WW2 times. No dynamotor,
>>> just that cute little box referred to as a "range receiver" or
>>> BC-1206.
>
>
>>> Don't remember what the IF (135 KHz) BW was, but, running with
>>> a crystal-controlled converter ahead of it, the 195 to 500 KHz
>>> tuning range could cover 75 or 40 meters no problem. A thought.
>>
>>I've got one of those in the junk box. I was thinking of converting
>>it to solid state using cascaded (J310-311 and 2N2222) transistors,
>>perhaps a differential set of J310's for the mixer and a single J310
>>for the oscillator. Not sure about the audio and detector stages yet.
>>There was an article in an old '73 magazine on converting one of those
>>sets to solid state and adding a crystal controled converter to receive
>>40 meters. I've misplaced that issue though.
>
>
> Converting a "Q5-er" from tubes to FETs would be rather easy.
> No real need for the 2N2222s. Would have gobs of space left over
> inside an already compact box.
>
> If the 135 KHz IF has an equivalent total Q of 100, the BW would
> be about 1.3 KHz, not all that swift for CW and too shart for SSB.
>
> However, the BC-1206 tuning range of 195 to 500 KHz results in
> an image at the converter input of 390 to 1000 KHz away from the
> desired band. That's worse than the 910 KHz image of an old
> 455 KHz IF.
>
> The BC-1206 tuning drive wouldn't be fine enough for today's

> narrowband style of operating so that would need a fair amount
> of mechanical rework. User's choice there.
>
> The linear-in-capacity rotation of the 3-gang variable is good
> for an RX Noise Bridge having an expanded parallel-C range...
> which is what I used them for. :-)
>
> LenAnderson@ieee.org
>
If I convert it to solid state, I'll probably use it for it's original purpose as an aircraft NDB receiver. Although I don't fly anymore, I have a private pilot's license and still like to listen in. Most NDB's just send their call signs in A2 morse, but some also have live weather reports as well. Only problem is that it only goes up to 400khz and IIRC some of the NDB's in this area are a bit higher in frequency, I could modifiy the tuning range a bit.

2980. Re: Looking for 12V tube Rx project info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-27 02:41:26 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <tGJve.7325$gr.5181@bignews1.bellsouth.net>
Source record: 18413

LenAnderson@ieee.org wrote:
> From: Ken Scharf on Jun 25, 6:26 pm
>
>
>>LenAnder...@ieee.org wrote:
>>
>>>>I am looking for a nice schematic, and perhaps additional info, on a 12V
>>>>(fil. & plate) tube superhet Rx; just something fairly simple for CW/SSB
>>>>reception without bells and whistles, and preferably for 75M/40M reception.
>>
>>>> Can anyone point me to info on this? Thanks.
>>
>>> Setchell-Carlson managed to do it with loctal-base tubes running
>>> off of a 24/28 VDC aircraft bus back in WW2 times. No dynamotor,
>>> just that cute little box referred to as a "range receiver" or
>>> BC-1206.
>
>
>>> Don't remember what the IF (135 KHz) BW was, but, running with
>>> a crystal-controlled converter ahead of it, the 195 to 500 KHz
>>> tuning range could cover 75 or 40 meters no problem. A thought.
>>
>>I've got one of those in the junk box. I was thinking of converting
>>it to solid state using cascaded (J310-311 and 2N2222) transistors,
>>perhaps a differential set of J310's for the mixer and a single J310
>>for the oscillator. Not sure about the audio and detector stages yet.
>>There was an article in an old '73 magazine on converting one of those
>>sets to solid state and adding a crystal controled converter to receive
>>40 meters. I've misplaced that issue though.
>
>
> Converting a "Q5-er" from tubes to FETs would be rather easy.
> No real need for the 2N2222s. Would have gobs of space left over
> inside an already compact box.

This is the idea of a cascade fet-bipolar circuit. The drain of the fet
drives the emitter of the bipolar and the bipolar's base is biased so
that the base sits about half way up the power supply (two resistors).
The fet is self biased with a source resistor for the desired current.
The gain of this circuit is higher than a fet by itself, and the output
impedance will be higher.

```
____ __
->|_ \_/
| |
```

>
> If the 135 KHz IF has an equivalent total Q of 100, the BW would
> be about 1.3 KHz, not all that swift for CW and too shart for SSB.
>
The AnArc-5 Q5'ers had 6 tuned circuits in their If but the '1206
only has 3 or 4. So it's BW might be a tad wider. The 1206 also has
no bfo.

> However, the BC-1206 tuning range of 195 to 500 KHz results in
> an image at the converter input of 390 to 1000 KHz away from the
> desired band. That's worse than the 910 KHz image of an old
> 455 KHz IF.
>
The 1206's dial only goes up to 400khz, but it tunes past that. Maybe
it goes to 420 or 450khz, I don't think it goes as high as 500khz.
(so maybe I don't have to expand the range for my needs).

> The BC-1206 tuning drive wouldn't be fine enough for today's
> narrowband style of operating so that would need a fair amount
> of mechanical rework. User's choice there.
>
The vernier drive isn't that bad. I could put an elcheapo 1.5" vernier
dial to drive the tuning knob (if I modify the drive to remove the 180
degree stop). But I think all it really needs is a better bigger knob.

> The linear-in-capacity rotation of the 3-gang variable is good
> for an RX Noise Bridge having an expanded parallel-C range...
> which is what I used them for. :-)
>
True, but the rig is just to cute to canabilze.

> LenAnderson@ieee.org
>

2981. Re: N2PK's Vector Network Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-27 08:37:59 UTC
From: Ian White GM3SEK <g3sek@ifwtech.co.uk>
Message-ID: <zIIG02Lnr7vCFAu3@ifwtech.co.uk>
Source record: 18414

Dale Parfitt wrote:
>
>"Richard" <delete.this.rf.gillette@ieee.org> wrote in message
>news:42BEF1BF.7060805@ieee.org...
>> If you missed it see:
>> http://users.adelphia.net/~n2pk/
>>
>> I would like to build one so I asked on the
>> use net
>> http://groups.yahoo.com/group/N2PK-VNA/
>> if anyone had a parts kit.
>>
>> The response I received to date has been
>> an offer for the PCB's and someone else
>> looking for a parts kit.
>>
>> If there are a number of us, we would do best
>> with a group buy. If you have the desire to
>> build one and want to form a group let me know.
>>
>> Please note the delete.this.
>> in my return email address.
>>
>> Richard W9PE
>>
>Greg Ordy did both a kit offering and completed boards about a year ago. Not
>sure if he has more planned or not- it was a labor of love.

Sorting components into kits is *always* a labor of love. I regularly sort packages of about 1000 components into 10 kits of about 100 each, and almost every component has to be individually sorted into trays and repackaged by hand. Every hand movement takes time, and every second is multiplied by some number between 10 and 1000. I dread to think what kind of grunt-labor rate it's actually earning for me.

SMD components are even more difficult and time-consuming to handle, re-package and re-label. Having built an N2PK analyzer, I wouldn't ever consider sorting those parts into kits. It's actually easier to buy the parts yourself, and keep them in the marked bags from Digi-Key or Mouser.

N2PK provides a complete shopping list. For people outside of the USA, there is more information on my 'In Practice' pages.

Don't worry that the minimum order quantities of Rs and Cs are 50 or 100. SMD components are cheaper than wire-ended - and when an 0805 resistor vanishes into hyperspace, you'll be glad you have some extra! (Also ask yourself: how could a kit maker know which parts you're going to lose?)

Above all: if you're really interested, join the Yahoo group.

--
73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2982. Re: Winlink and QRM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-27 11:04:29 UTC
From: "obsidan ball"
Message-ID: <a039c$42bfdd4d$d1cc4136$20462@snip.allthenewsgroups.com>
Source record: 18415
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.misc

"Winlink 2000 QRM" <noname@hotmail.net> wrote in message
news:dkrqb1d6uq9t4eg1hdf6ue0nm6frp1gjq8@4ax.com...
> Winlink and QRM - read info here:

(much bs snipped)

Not only is you petition date expired, you're beginning to
sound alot like k1man, and that's bad. ;)

2983. Lightning and sporadic-E

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-27 21:02:28 UTC
From: Johnson <jdwalton@comt.net>
Message-ID: <LNKdnZcSdNcu-l3fRVn-qw@comcast.com>
Source record: 18416

This is the first paragraph of an article in the June 9th issue of Nature, pages 799-801 -- the authors have demonstrated that lightning intensifies the sporadic-E layer. Full article is available at your library.

Lightning-induced intensification of the ionospheric sporadic E layer
C. J. Davis1 and C. G. Johnson1

Top of pageA connection between thunderstorms and the ionosphere has been hypothesized since the mid-1920s1. Several mechanisms have been proposed to explain this connection2, 3, 4, 5, 6, 7, and evidence from modelling8 as well as various types of measurements9, 10, 11, 12, 13, 14 demonstrate that lightning can interact with the lower ionosphere. It has been proposed, on the basis of a few observed events15, that the ionospheric 'sporadic E' layer-transient, localized patches of relatively high electron density in the mid-ionosphere E layer, which significantly affect radio-wave propagation-can be modulated by thunderstorms, but a more formal statistical analysis is still needed. Here we identify a statistically significant intensification and descent in altitude of the mid-latitude sporadic E layer directly above thunderstorms. Because no ionospheric response to low-pressure systems without lightning is detected, we conclude that this localized intensification of the sporadic E layer can be attributed to lightning. We suggest that the co-location of lightning and ionospheric enhancement can be explained by either vertically propagating gravity waves that transfer energy from the site of lightning into the ionosphere, or vertical electrical discharge, or by a combination of these two mechanisms.

2984. Re: Looking for 12V tube Rx project info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-27 23:00:30 UTC
From: LenAnderson@ieee.org
Message-ID: <1119913230.190263.47320@g49g2000cwa.googlegroups.com>
Source record: 18417

From: Ken Scharf on Sun 26 Jun 2005 22:41

>LenAnderson@ieee.org wrote:
>> From: Ken Scharf on Jun 25, 6:26 pm
>>>LenAnder...@ieee.org wrote:
>>
>>>>>I am looking for a nice schematic, and perhaps additional info, on a 12V
>>>>>(fil. & plate) tube superhet Rx; just something fairly simple for CW/SSB
>>>>>reception without bells and whistles, and preferably for 75M/40M reception.
>>>
>>>> Setchell-Carlson managed to do it with loctal-base tubes running
>>>> off of a 24/28 VDC aircraft bus back in WW2 times. No dynamotor,
>>>> just that cute little box referred to as a "range receiver" or
>>>> BC-1206.

>> Converting a "Q5-er" from tubes to FETs would be rather easy.
>> No real need for the 2N2222s. Would have gobs of space left over
>> inside an already compact box.
>
>This is the idea of a cascade fet-bipolar circuit. The drain of the fet
>drives the emitter of the bipolar and the bipolar's base is biased so
>that the base sits about half way up the power supply (two resistors).
>The fet is self biased with a source resistor for the desired current.
>The gain of this circuit is higher than a fet by itself, and the output
>impedance will be higher.
> ____ __
> ->|_ _/
> | |
>
>> If the 135 KHz IF has an equivalent total Q of 100, the BW would
>> be about 1.3 KHz, not all that swift for CW and too shart for SSB.
>>
> The AnArc-5 Q5'ers had 6 tuned circuits in their If but the '1206
>only has 3 or 4. So it's BW might be a tad wider. The 1206 also has
>no bfo.

The ARC-5 LF version has IF TRANSFORMERS but the insides are
easy to see for detail. The 6 to 9 MHz version IFs (2830 KHz)
had only one tuned circuit in each IF can.

Can't remember what the BC-1206 used in their IF cans, but that
is easy to change inside the present can (it will look just the
same on the outside).

I can't see any advantage of going cascode (JFET-bipolar) when an
insulated gate FET would closely approximate a vacuum tube for

both input impedance (all capacitive) and drain/output impedance
(many hundreds of KOhms). Depends on what is available for the
vacuum-to-solid conversion.

Note: Both input and output impedances will affect the impedance
and Q of the tuned circuits...and the GAINS...for a conversion
with minimum circuit changes. All that has to be taken into
account.

>> However, the BC-1206 tuning range of 195 to 500 KHz results in
>> an image at the converter input of 390 to 1000 KHz away from the
>> desired band. That's worse than the 910 KHz image of an old
>> 455 KHz IF.
>>
>The 1206's dial only goes up to 400khz, but it tunes past that. Maybe
>it goes to 420 or 450khz, I don't think it goes as high as 500khz.
>(so maybe I don't have to expand the range for my needs).

The variable tuning capacitor max:min ratio is roughly 11:1 (no
external parallel capacity). Since the resonant tuning range is
the square root of that, you could have it tune 190 to 570 KHz
with a 9:1 max:min change in resonance capacity. The only real
problem is getting the variable LO tuning to track the front end
since it would tune 325 to 705 KHz (for the high-side) and that
would be a 2.169:1 frequency ratio or 4.706 capacity change ratio.

>> The linear-in-capacity rotation of the 3-gang variable is good
>> for an RX Noise Bridge having an expanded parallel-C range...
>> which is what I used them for. :-)
>>
>True, but the rig is just to cute to canabilze.

Heh heh heh. I agree with you there. It probably is most dense
of any other 1940s era design using 8-pin "medium" size tubes,
including the very compact ARC-5 receivers. Not quite as dense
as the SCR-300 Walkie-Talkie (BC-1000) which stuffed 18 7-pin
"miniature" tubes, a half-dozen coil/transformer cans, and a
five-gang (!) variable capacitor into an approximate 5" x 10"
chassis. [Galvin/Motorola did real good in packaging there]

KEEPING the tubes as-is, with the possible exception of the AF
out (28D7 ?) would yield a straight-AM receiver. ADDING a BFO
via under-chassis bipolar transistor would result in minimum
cannibalization (one extra switch on front panel)...RF and IF
could remain the same. I've forgotten the audio output circuit
of it but recall that AF output power for old aircraft was
rather high (ambient noise in old warbirds was terrible). In a
quiet land environment, the audio output needed is rarely 200
milliWatts into a speaker, much less for headphones. The SCR-300
walkie-talkie (headphones only) had a maximum of 3 mW audio out!

Hint on supply conversion: A 12.6 V "filament" transformer can do the job for all-12 V filaments in parallel. A voltage doubling rectifier (even a tripler if need be) will yield the quite-low B+ for plate and screen. I once did that (long time ago) with a single transformer and voltage tripler for B+, all working into a set of power resistor load boxes, all in a half hour of tack-soldering. Got 30 VDC for B+ at 115 VAC line, less than 5% ripple. Didn't have the BC-1206 then. A critic looking on said "that isn't a good enough test...gotta have the 'real' load on it to 'prove' it." :-) [some folks just aren't convinced until someone else has made a finished production product!]

LenAnderson@ieee.org

2985. rec.radio.amateur.antenna ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 00:32:10 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <eU0we.407$U61.382@newssvr11.news.prodigy.com>
Source record: 18418

I can make a post to the antenna group and wonder if anyone else has
experienced the problem?
tnx

--

73
Hank WD5JFR

2986. Re: rec.radio.amateur.antenna ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 01:15:08 UTC
From: Chuck Olson <chuckolson01@REMOVETHIScomcast.net>
Message-ID: <LMydndjnr4rBOV3fRVn-qQ@comcast.com>
Source record: 18419

"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
news:eU0we.407$U61.382@newssvr11.news.prodigy.com...
> I can make a post to the antenna group and wonder if anyone else has
> experienced the problem?
> tnx
>
> --
>
> 73
> Hank WD5JFR
>
Congratulations, I can too.

2987. Re: rec.radio.amateur.antenna ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 01:46:25 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <RZ1we.436$U61.4@newssvr11.news.prodigy.com>
Source record: 18420

Chuck
I had a typo..
It should have said "I can't make a post to the antenna group...
I didn't see my post to this group either but I see your response..
I wonder what is wrong with my newsgroups now that I can't see my own post?
tnx
Hank
"Chuck Olson" <chuckolson01@REMOVETHIScomcast.net> wrote in message
news:LMydndjnr4rBOV3fRVn-qQ@comcast.com...
>
> "Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
> news:eU0we.407$U61.382@newssvr11.news.prodigy.com...
>> I can make a post to the antenna group and wonder if anyone else has
>> experienced the problem?
>> tnx
>>
>> --
>>
>> 73
>> Hank WD5JFR
>>
> Congratulations, I can too.
>
>

2988. Re: rec.radio.amateur.antenna ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 02:15:36 UTC
From: drwxr-xr-x <nobody@frontier.net>
Message-ID: <slrndc1cm8.2r88.bit-bucket@shell.config.com>
Source record: 18421

On Tue, 28 Jun 2005 01:46:25 GMT, Henry Kolesnik wrote:
> Chuck
> I had a typo..
> It should have said "I can't make a post to the antenna group...
> I didn't see my post to this group either but I see your response..
> I wonder what is wrong with my newsgroups now that I can't see my own post?
> tnx
> Hank

Could it be:

http://www.cs.tut.fi/~jkorpela/usenet/brox.html

or, could it be:

Microsoft Outlook Express 6.00.2900.2180

?

2989. Re: Lightning and sporadic-E

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 02:17:18 UTC
From: drwxr-xr-x <nobody@frontier.net>
Message-ID: <slrndc1cpe.2r88.bit-bucket@shell.config.com>
Source record: 18422

On Mon, 27 Jun 2005 17:02:28 -0400, Johnson wrote:
> This is the first paragraph of an article in the June 9th issue of Nature,
> pages 799-801 -- the authors have demonstrated that lightning intensifies
> the sporadic-E layer. Full article is available at your library.

And this has _WHAT_ to do with homebrew?

2990. Question-Ramsey QRP20c(30c, 40c) and Bands

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 04:05:06 UTC
From: Scott Anderson <ascension_fl@hotmail.com>
Message-ID: <1119931506.119786.208130@o13g2000cwo.googlegroups.com>
Source record: 18423
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I am going to betray my entry-level lack of understanding about the inner workings of radio electronics here, but my question (out of curiosity, more than anything else) is this: Ramsey Electronics offers kits for QRP transmitters for the 20, 30 and 40-meter bands (http://www.ramseyelectronics.com/cgi-bin/commerce.exe?preadd=action&key=QRP-SERIES)... they are dual crystal control (they provide one, and leave space for one more)-- is it the frequency of the crystal *only* determining the operating band in *these particular radios* (and they are being marketed as being for the different bands based on the frequency of the one crystal provided), or is it something relating to the other circuitry itself that (again, with these particular transmitters) that is determining the operating band? I read the .pdf manual on the Ramsey site, but I am still not certain.

Thanks for any insight-
Scott Anderson

2991. Re: Question-Ramsey QRP20c(30c, 40c) and Bands

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 12:53:06 UTC
From: MadEngineer <glenn.b.dixon@gmail.com>
Message-ID: <1119963186.130614.38360@z14g2000cwz.googlegroups.com>
Source record: 18424
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Hi Scott,

I don't blame you for being confused--the manuals have no schematic!
But the inductors and capacitors in several places (such as the
oscillator and the low pass filter on the ouput) are different for each
band model, so you would not be able to switch a unit to a different
band just by changing the crystal.

Hope this helps (probably not what you wanted to hear),

Glenn Dixon, AC7ZN

2992. Re: Question-Ramsey QRP20c(30c, 40c) and Bands

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 15:05:46 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11c2ppula0iau8a@corp.supernews.com>
Source record: 18425
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Scott Anderson wrote:
> I am going to betray my entry-level lack of understanding about the
> inner workings of radio electronics here, but my question (out of
> curiosity, more than anything else) is this: Ramsey Electronics offers
> kits for QRP transmitters for the 20, 30 and 40-meter bands
> (http://www.ramseyelectronics.com/cgi-bin/commerce.exe?preadd=action&key=QRP-SERIES)...
> they are dual crystal control (they provide one, and leave space for
> one more)-- is it the frequency of the crystal *only* determining the
> operating band in *these particular radios* (and they are being
> marketed as being for the different bands based on the frequency of the
> one crystal provided), or is it something relating to the other
> circuitry itself that (again, with these particular transmitters) that
> is determining the operating band? I read the .pdf manual on the Ramsey
> site, but I am still not certain.
>
> Thanks for any insight-
> Scott Anderson
>
In general when you build a transmitter you need filters designed for
the frequency band -- if no where else, then there should be a final
filter that prevents harmonics getting out.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

2993. Re: Winlink and QRM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 16:04:05 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11c2t5ar6q6ht38@corp.supernews.com>
Source record: 18426
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.misc

"xpyttl" <xpyttl_NOSPAM@earthling.net> wrote in message
news:jwhve.6227$B_3.4079@fe05.lga...
> Very few, if any, digis actually listen first.

Yes, with "Winlink over Pactor III" being a very noticeable offender here, in that it happens to be so popular at the moment.

> It seems as if it would be very difficult to make these
> automated stations be friendly to other users.

SCAMP intends to address this, and it is a very important problem to be "fixed." There are many people who dislike the idea of using any amateur radio bands for linking Internet data/e-mail/etc. at all (my hypothesis is that they must not have been all that thrilled with packetmail either, but the Internet is the straw that's breaking their backs), but of those who aren't 100% opposed to the idea to begin with, Winlink not presently using busy detectors is a legitimate complaint.

> Both the pro and con in this argument are absolutely unwilling to listen
> to/believe the other side.

There's a lot of this going on, to be sure, but the fact that SCAMP is making slow and steady progress suggests that there are some level heads that will (hopefully) prevail.

---Joel Kolstad

2994. Re: Question-Ramsey QRP20c(30c, 40c) and Bands

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 16:57:41 UTC
From: TomS <nobody@home.com>
Message-ID: <d9rvi5oop1@avnika.corp.mot.com>
Source record: 18427
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

If you read the manual, I believe they have one manual for all models, you insert different components based on which band you are building. The various bands require different components in the amplifier matching, output filter, etc circuits.

Tom - AC9TS

"Scott Anderson" <ascension_fl@hotmail.com> wrote in message news:1119931506.119786.208130@o13g2000cwo.googlegroups.com...
> I am going to betray my entry-level lack of understanding about the
> inner workings of radio electronics here, but my question (out of
> curiosity, more than anything else) is this: Ramsey Electronics offers
> kits for QRP transmitters for the 20, 30 and 40-meter bands
>
(http://www.ramseyelectronics.com/cgi-bin/commerce.exe?preadd=action&key=QRP-SERIES)...
> they are dual crystal control (they provide one, and leave space for
> one more)-- is it the frequency of the crystal *only* determining the
> operating band in *these particular radios* (and they are being
> marketed as being for the different bands based on the frequency of the
> one crystal provided), or is it something relating to the other
> circuitry itself that (again, with these particular transmitters) that
> is determining the operating band? I read the .pdf manual on the Ramsey
> site, but I am still not certain.
>
> Thanks for any insight-
> Scott Anderson
>

2995. Amateur Newbie Questions: Homebrew RF Test Equipment?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 18:13:31 UTC
From: Timothy@tholtom.freeserve.co.uk
Message-ID: <1119982411.617759.270560@f14g2000cwb.googlegroups.com>
Source record: 18428

Amateur Newbie Questions

Question 1)

I studied Electrical Engineering (20 years ago
now...lots of theory and little practice...) I
remember we had access to very expensive RF test gear,
amongst which was a Hewlett-Packard RF Spectrum
Analyzer (US$200,000 (!!!) I seem to remember). A
very, very nice piece of equipment. At that time the
IT revolution/DSP was still very much gathering steam.
Now that PCs with 3.4 GHz processors are available,
plus pretty sophisticated DSP development systems, at
a reasonable cost (several hundreds of dollars), is
there a good homebrew RF spectrum analyzer
available... I've seen plenty of AF spectrum
analyzers available (Spectran etc.) ... What I'm
after is something like:

low cost development board +
high end PC +
GNURadio (or whatever) +
Extensions to GNURadio

= Pretty (or very) good RF spectrum analyzer

Question 2)

In a similar vein, though of course not as expensive,
Does anyone have circuit diagrams for a homebrewed
function generator, working against an accurate
internal reference, and putting out: pure sinusoids,
square waves, saw tooth functions, white noise ....
etc.

low cost development board (DAC??/Digitally Controlled
Oscillator) + Buffering and Amplification +
PC +
Homebrewed Software

= Pretty (or very) good software controlled, test lab,
function generator...

Anybody got any ideas...sorry if the answers to these
questions are blindingly obvious!!!

Thanks

Tim

2996. Re: Amateur Newbie Questions: Homebrew RF Test Equipment?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 18:18:37 UTC
From: Jer <Jer@spam.net>
Message-ID: <1wgwe.244$rF5.25@tornado.socal.rr.com>
Source record: 18429

Its a lot easier (unless you are just into building your own) to buy all
that old time expensive gear for peanuts on eBay! Usually goes for pennies
a pound these days. Still far better than anything you could hope to
build..Why reinvent the wheel?

Jer

<Timothy@tholtom.freeserve.co.uk> wrote in message
news:1119982411.617759.270560@f14g2000cwb.googlegroups.com...
> Amateur Newbie Questions
>
> Question 1)
>
> I studied Electrical Engineering (20 years ago
> now...lots of theory and little practice...) I
> remember we had access to very expensive RF test gear,
> amongst which was a Hewlett-Packard RF Spectrum
> Analyzer (US$200,000 (!!!) I seem to remember). A
> very, very nice piece of equipment. At that time the
> IT revolution/DSP was still very much gathering steam.
> Now that PCs with 3.4 GHz processors are available,
> plus pretty sophisticated DSP development systems, at
> a reasonable cost (several hundreds of dollars), is
> there a good homebrew RF spectrum analyzer
> available... I've seen plenty of AF spectrum
> analyzers available (Spectran etc.) ... What I'm
> after is something like:
>
> low cost development board +
> high end PC +
> GNURadio (or whatever) +
> Extensions to GNURadio
> --------------------------------
> = Pretty (or very) good RF spectrum analyzer
>
> Question 2)
>
> In a similar vein, though of course not as expensive,
> Does anyone have circuit diagrams for a homebrewed
> function generator, working against an accurate
> internal reference, and putting out: pure sinusoids,
> square waves, saw tooth functions, white noise ....
> etc.
>
> low cost development board (DAC??/Digitally Controlled

> Oscillator) + Buffering and Amplification +
> PC +
> Homebrewed Software
> --------------------------------
> = Pretty (or very) good software controlled, test lab,
> function generator...
>
> Anybody got any ideas...sorry if the answers to these
> questions are blindingly obvious!!!
>
> Thanks
>
> Tim
>

2997. Re: Amateur Newbie Questions: Homebrew RF Test Equipment?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 18:56:35 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11c378oe9gi5n27@corp.supernews.com>
Source record: 18430

Tim,

<Timothy@tholtom.freeserve.co.uk> wrote in message
news:1119982411.617759.270560@f14g2000cwb.googlegroups.com...
> Now that PCs with 3.4 GHz processors are available,
> plus pretty sophisticated DSP development systems, at
> a reasonable cost (several hundreds of dollars), is
> there a good homebrew RF spectrum analyzer
> available...

There are a couple out there. One with some of the best specs is the one designed by Tom McDermott that TAPR will offer as a kit and that TenTec will be manufacturing. More info: http://www.tapr.org/kits_vna.html?PHPSESSID=af26a6881baf8f52743f3c5d1a637bfc . The price was something in the ballpark of $600, which is nothing compared to a new HP, Rohde & Schwarz, etc. network analyzer (many such analyzers are still WELL above $20k...). If you can add another "0" to your price tag, though, items on eBay do start to look attractive. :-)

One of the design limitations of Tom's analyzer is that the upper end is 100MHz; another is that the dynamic range is something like 60dB.

> low cost development board +
> high end PC +
> GNURadio (or whatever) +
> Extensions to GNURadio
> -------------------------------
> = Pretty (or very) good RF spectrum analyzer

Well, not to put too much of a damper on your hopes here, but I'd have a couple of concerns: (1) the GNURadio USRP board isn't particularly designed for "really weak signal" work. Last time I asked (back at Dayton), they hadn't even measured how much noise was running around the board, but I'd be really surprised if it's anywhere near as quiet as a good spectrum analyzer. Secondarily, although there is already a lot of software out there for GNURadio and Tom's network analyzer board, it's nowhere near as "polished" as commercial offerings.

I think the USRP board is one of the best new things to come along in amateur radio in a long time -- it's opening up a wealth of opportunities for experimenting that would have been much more expensive to get into previously. Also, GNURadio is (at least in theory) not too tightly tied to the USRP (they started with some PCI ADC boards, after all), so designing a really quiet vector or scalar analyzer to plug into its "architecture" would be a pretty cool undertaking.

> Question 2)
>
> In a similar vein, though of course not as expensive,
> Does anyone have circuit diagrams for a homebrewed
> function generator, working against an accurate
> internal reference, and putting out: pure sinusoids,
> square waves, saw tooth functions, white noise ....
> etc.

This actually is a pretty good application for a USRP, at least if you don't need super tight control over stuff like phase noise. It's very easy to get the thing to output any arbitrary waveform you like.

---Joel Kolstad

2998. Re: Lightning and sporadic-E

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 19:05:31 UTC
From: Johnson <jdwalton@comt.net>
Message-ID: <N9SdnSAPQZtWAFzfRVn-qA@comcast.com>
Source record: 18431

"drwxr-xr-x" <nobody@frontier.net> wrote in message
news:slrndc1cpe.2r88.bit-bucket@shell.config.com...
> On Mon, 27 Jun 2005 17:02:28 -0400, Johnson wrote:
> > This is the first paragraph of an article in the June 9th issue of
Nature,
> > pages 799-801 -- the authors have demonstrated that lightning
intensifies
> > the sporadic-E layer. Full article is available at your library.
>
> And this has _WHAT_ to do with homebrew?

It has something to do with transmitting and receiving...and for those of us
who have hb'd our own receivers it makes a little sense out of the natural
world.

2999. Re: Amateur Newbie Questions: Homebrew RF Test Equipment?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 19:18:11 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <Tnhwe.97819$x96.56032@attbi_s72>
Source record: 18433

Check out the N2PK VNA, MORE than 120 dB DR thanks to innovative design and engineering, and meticulous documentation. Half the price, twice the DR of brand X, and MORE! A lab in a box.

www.N2PK.com

For a homebrew SA, DC to a GHz, more using Alias's.

http://groups.yahoo.com/group/spectrumanalyzer/

W4ZCB

3000. Re: Amateur Newbie Questions: Homebrew RF Test Equipment?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 19:18:21 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <1ohwe.97821$x96.38262@attbi_s72>
Source record: 18432

Check out the N2PK VNA, MORE than 120 dB DR thanks to innovative design and engineering, and meticulous documentation. Half the price, twice the DR of brand X, and MORE! A lab in a box.

www.N2PK.com

For a homebrew SA, DC to a GHz, more using Alias's.

http://groups.yahoo.com/group/spectrumanalyzer/

W4ZCB

3001. Re: rec.radio.amateur.antenna ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 20:01:45 UTC
From: Chuck Olson <chuckolson01@REMOVETHIScomcast.net>
Message-ID: <DOKdnc80mKZGMVzfRVn-gw@comcast.com>
Source record: 18434

Sorry, Hank,

I thought maybe you might be one of the current generation of young-uns who don't seem to be able to understand the meaning of the contracted "do not" or "can not", and I tried to poke a little fun in your direction. I know it's not cool to criticize the statement "I could care less" when the intended meaning is "couldn't care less", but sometimes I just can't control myself.

My newsreader used to miss posts all the time - - many threads started with '"re-", but it's getting better. At least your new post didn't meet up with dead silence.

73 Chuck W6PKP

"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message news:RZ1we.436$U61.4@newssvr11.news.prodigy.com...
> Chuck
> I had a typo..
> It should have said "I can't make a post to the antenna group...
> I didn't see my post to this group either but I see your response..
> I wonder what is wrong with my newsgroups now that I can't see my own post?
> tnx
> Hank
>

3002. Re: rec.radio.amateur.antenna ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 20:22:11 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <Tjiwe.1474$cb6.948@newssvr30.news.prodigy.com>
Source record: 18435

chuck
No worries, as the Aussies say. I finally got it going. I was blocking spam and fatfingered the keyboard and blocked myself. But when I unblocked me, it still didn't work and I rebooted both the PC and dsl modem and now it works.
As far as: "I could care less" when the intended meaning is "couldn't care less", both are correct and mean the same thing according to an article I read that was in the local paper. I don't agree but who am I, and who gives a shit about my opinon, no one!
The English language is not what it used to be, pretty well defined in the classroom. Today, useage by the masses can and does change meanings of terms. You gots to roll with dem punches if you don't wan ur ass kicked'

--

73
Hank WD5JFR
"Chuck Olson" <chuckolson01@REMOVETHIScomcast.net> wrote in message news:DOKdnc80mKZGMVzfRVn-gw@comcast.com...
> Sorry, Hank,
>
> I thought maybe you might be one of the current generation of young-uns
> who
> don't seem to be able to understand the meaning of the contracted "do not"
> or "can not", and I tried to poke a little fun in your direction. I know
> it's not cool to criticize the statement "I could care less" when the
> intended meaning is "couldn't care less", but sometimes I just can't
> control
> myself.
>
> My newsreader used to miss posts all the time - - many threads started
> with
> '"re-", but it's getting better. At least your new post didn't meet up
> with
> dead silence.
>
> 73 Chuck W6PKP
>
> "Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
> news:RZ1we.436$U61.4@newssvr11.news.prodigy.com...
>> Chuck
>> I had a typo..
>> It should have said "I can't make a post to the antenna group...
>> I didn't see my post to this group either but I see your response..
>> I wonder what is wrong with my newsgroups now that I can't see my own

> post?
>> tnx
>> Hank
>>
>
>

3003. Re: rec.radio.amateur.antenna ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 21:21:07 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11c3fq6jaop8p12@corp.supernews.com>
Source record: 18436

Chuck Olson wrote:
> Sorry, Hank,
>
> I thought maybe you might be one of the current generation of young-uns who
> don't seem to be able to understand the meaning of the contracted "do not"
> or "can not", and I tried to poke a little fun in your direction. I know
> it's not cool to criticize the statement "I could care less" when the
> intended meaning is "couldn't care less", but sometimes I just can't control
> myself.
> . . .

You just can't get too picky with a language in which "fat chance" and
"slim chance" mean the same thing.

Roy Lewallen, W7EL

3004. Re: Winlink and QRM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 22:00:31 UTC
From: Dan/W4NTI <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <3Mjwe.13222$pa3.6933@newsread2.news.atl.earthlink.net>
Source record: 18437
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.misc

"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> wrote in message
news:11c2t5ar6q6ht38@corp.supernews.com...
> "xpyttl" <xpyttl_NOSPAM@earthling.net> wrote in message
> news:jwhve.6227$B_3.4079@fe05.lga...
>> Very few, if any, digis actually listen first.
>
> Yes, with "Winlink over Pactor III" being a very noticeable offender here,
> in
> that it happens to be so popular at the moment.
>
>> It seems as if it would be very difficult to make these
>> automated stations be friendly to other users.
>
> SCAMP intends to address this, and it is a very important problem to be
> "fixed." There are many people who dislike the idea of using any amateur
> radio bands for linking Internet data/e-mail/etc. at all (my hypothesis is
> that they must not have been all that thrilled with packetmail either, but
> the
> Internet is the straw that's breaking their backs), but of those who
> aren't
> 100% opposed to the idea to begin with, Winlink not presently using busy
> detectors is a legitimate complaint.
>
>> Both the pro and con in this argument are absolutely unwilling to listen
>> to/believe the other side.
>
> There's a lot of this going on, to be sure, but the fact that SCAMP is
> making
> slow and steady progress suggests that there are some level heads that
> will
> (hopefully) prevail.
>
> ---Joel Kolstad
>
>
Put me down in the unconvinced column. I am against ANY un-attented digital
system in any segement other than that set aside for its SOLE use.

Dan/W4NTI

3005. Re: 2400 Baud modem chip

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 22:03:19 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11c3i8rev777g6e@corp.supernews.com>
Source record: 18438

Mebart wrote:

> Can someone suggest a chip for a 2400 MSK modem (which is FSK at 2400
> baud with the frequencies being 2400 and 1200 Hz). I'd like a simple
> chip that is suitable for a radio application.
>
>
> I'd like something simple, like the old (discontinued) MX614 chip.
>
>
> Thanks,
>
>
> Art
>

Decoding MSK as FSK will give you way less than optimum bit error rate vs. noise. Unless the MSK is coming in on an FM channel you should consider decoding it as PSK.

DsPIC + code -- that's a single-chip solution, and in current production!

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

3006. Re: rec.radio.amateur.antenna ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 22:53:20 UTC
From: Dan Richardson <k6mhe>
Message-ID: <t5l3c1l17ph3t4cmfpghidjun4mvidanrr@4ax.com>
Source record: 18439

On Tue, 28 Jun 2005 14:21:07 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>Chuck Olson wrote:
>> Sorry, Hank,
>>
>> I thought maybe you might be one of the current generation of young-uns who
>> don't seem to be able to understand the meaning of the contracted "do not"
>> or "can not", and I tried to poke a little fun in your direction. I know
>> it's not cool to criticize the statement "I could care less" when the
>> intended meaning is "couldn't care less", but sometimes I just can't control
>> myself.
>> . . .
>
>You just can't get too picky with a language in which "fat chance" and
>"slim chance" mean the same thing.
>

Does a house burn up or burn down?

73
Danny, K6MHE

3007. Tuned Preselectors - Looking for info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 23:08:10 UTC
From: Netgeek <no_spam@comcast.net>
Message-ID: <taqdnYDaTvfZRVzfRVn-og@comcast.com>
Source record: 18440

I've been looking for information on varactor-tuned front end/preselectors and really have not found much in the way of practical/DIY implementations.

I've seen the commercial offerings from (e.g.) www.polezero.com and vague references to others.

Can any of you here recommend a text/app notes/practical circuits that can be studied and/or emulated? I'm interested in VHF applications that could be uP controlled (via D/A, etc.)

Thanks,

Bill

3008. JOHNSON PART N° 520-9 8-76. CRYSTAL? HELP !!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-28 23:54:45 UTC
From: Heriberto <lu6dbu@tapalquenet.com.ar>
Message-ID: <42c1e0fa_1@x-privat.org>
Source record: 18441

Hi:
I have a part JoHnson Nro.520-9 8-76 it aparently a Crystal, but it
has 3 pines, not 2 pines. Anyone how wich element it is?
In top has write " T152.815" in the side "Johnson 520-9 8 -76
CAYM"
Excusme my bad english- Very elemental-. Sorry

Regards from Argentina
Heriberto
LU6DBU

3009. Re: JOHNSON PART Nº 520-9 8-76. CRYSTAL? HELP !!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-29 00:29:45 UTC
From: -ex- <exray@coqui.net>
Message-ID: <7bbb0$42c1eb7c$4232bd1a$24351@COQUI.NET>
Source record: 18442

Heriberto wrote:

> Hi:
> I have a part JoHnson Nro.520-9 8-76 it aparently a Crystal, but it
> has 3 pines, not 2 pines. Anyone how wich element it is?
> In top has write " T152.815" in the side "Johnson 520-9 8 -76
> CAYM"
> Excusme my bad english- Very elemental-. Sorry
>
> Regards from Argentina
> Heriberto
> LU6DBU
>
>
>
>
>
It would seem to be a 152.815 TRANSMIT xtal...the fundamental freq of course would be something different. The third wire could be a ground for the case of the xtal.

A mi me parece un cristal de 152.815 Mcs de salida para un transmisor. La frecuencia basica serï¿½ algo diferente, depende en el modelo del equipo, su frec. IF, etc. El alambre tercero serï¿½a una conecxion aterrizada del casco del cristal. 8-76 mas probable significa la fecha de fabricacion.

3010. Re: Tuned Preselectors - Looking for info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-29 01:07:14 UTC
From: dkelly42@cox.net
Message-ID: <1120007234.663298.322430@g44g2000cwa.googlegroups.com>
Source record: 18443

I think part of the reason for little information or enthusiam is the diodes tendancy for IMD on strong signals. This increases the complexity of the circuit. You might check with the ARRL and see if any information is available from past QEX articles. I am researching the same thing for a HF preselector. I am going to experiment with solid state relays. Just a suggestion. Try the Vishay site as(http://www.vishay.com/solid-state-relays/). I have found little info on varactor tuned pre-selectors

3011. FA: 100 SMA Male Connectors for RG-58 coax

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-29 02:37:06 UTC
From: AAA RF Products <info@aaarfproducts.com>
Message-ID: <hOnwe.4930$Eo.3475@fed1read04>
Source record: 18444
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

Please see:

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=7285&item=7527262089&rd=1&ssPageNam
e=WDVW

web: www.aaarfproducts.com
email: sales@aaarfproducts.com
call: 949 481 3154
fax: 949 388 5448
mail: AAA RF Products, 949 Calle Amanecer, san Clemente, CA 92673 USA

3012. FA: Tektronix 492A spectrum analyzer, 5 kHz - 8 GHz

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-29 02:57:32 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1d2bade25f77e4849896d5@news-central.giganews.com>
Source record: 18445
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.equipment

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=7527317808

These option-WJ models aren't very common; this is the first one I've seen. It tunes from 5 kHz-8 GHz in two bands which are both wider than normal 492/492A analyzers cover; you can see the spectrum from near DC to 4.2 GHz in a single sweep.

If you don't need full coverage to 21 GHz, this 492A may be a good alternative to the more-expensive entries in the 490 lineup!

-- john

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

3013. Re: ch3 video to uhf upconversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-29 05:51:25 UTC
From: hexter@blazenet.net
Message-ID: <11c4dmt8p5nncb4@corp.supernews.com>
Source record: 18446

In article <1118551002.975808.12970@o13g2000cwo.googlegroups.com>,
eternalsquire@comcast.net says...
>
>Hi all,
>
>It's me again, attempting yet another mad science project, and I have
>practically googled the subject to death before thinking of asking this
>group for help:
>
>I am wanting to put video (preferably color but will settle for
>grayscale) onto a UHF TV channel for inhouse use only. I am
>considering doing it as follows:
>
>1) Convert output of a VGA card to composite video using resistive
>combiner
> (found a few on net).
>

And what magic resistive combiner makes VGA into NTSC??? There is
no such thing. There are active models which do this, but if your
VGA output is 640X480 or more, then NTSC will make the video suck.
NTSC does not have the bandwidth. Yes you can take a properly modulated
channel 3 signal, run it into a balanced mixer (well almost any mixer)
and add your favorite local oscillator signal and get 2 signals in
the uhf band. LO + ch3 and LO - ch3.

Good luck. Here's looking at ya or at least the unviewable signal.

>2) Place composite video on VHF channel 3 using a game modulator.
>
>3) Upconvert the video signal on VHF to UHF by with a local oscillator
>whose frequence is the difference between the channels. I'd use an
>active mixer circuit from the VHF/UHF part of the Handbook to do this.
>
>4) To test functionality, attempt to tune in using either an analog TV
>receiver or a TV tuner card.
>
>Question is this:
>
>Is point 3, upconverting video from VHF to UHF, a generally workable
>technique?
>
>Any other gotchas or pitfalls to my intended approach?
>
>Thanks in advance,

>
>The Eternal Squire
>

3014. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-29 05:54:27 UTC
From: hexter@blazenet.net
Message-ID: <11c4dsjbq89ogf8@corp.supernews.com>
Source record: 18447
Cross-posted to: rec.radio.amateur.homebrew,hun.hobbi,alt.birthright

In article <2d5631c0.0506082158.39fb1c20@posting.google.com>,
pie_garnishment@lycos.com says...
>
>I'm an assassin and have to kill a mafia boss.I want to blow him up
>with a radio bomb.
>
>What do I need ?

Better bait, and a more powerful trolling motor.

3015. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-29 07:24:31 UTC
From: -ex- <exray@coqui.net>
Message-ID: <66a1c$42c24cb3$4232bd3c$15514@COQUI.NET>
Source record: 18348
Cross-posted to: rec.radio.amateur.homebrew,hun.hobbi,alt.birthright

Gudmundur wrote:

> In article <2d5631c0.0506082158.39fb1c20@posting.google.com>,
> pie_garnishment@lycos.com says...
>
>>I'm an assassin and have to kill a mafia boss.I want to blow him up
>>with a radio bomb.
>>
>>What do I need ?
>
>
> Better bait, and a more powerful trolling motor.

Hey, doubtful he's still taking in comments on a month old de-trolled post that has been nixxed by every usenet server in the universe...except yours.

You could have probably gotten a place of presence on his Website, maybe a photo?. No wait...that was also wacked a month ago. You weren't quick enough. Dammit.

Don't respond to trolls unless you can do it with good comedy within 24 hours....unless you are like me and will reply to anything.

-Bill

3016. FA:Last Day:McMurdo Silver 5C(RARE),Sig Shifter..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-29 13:05:48 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <M0xwe.1048132$w62.132701@bgtnsc05-news.ops.worldnet.att.net>
Source record: 18349
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

A working, very rare, very good condition, Mc Murdo Silver 5C + a Meissner Signal Shifter + a complete set of coils: see at :

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looing: heytubeguy

3017. FM conversion article in HR or QST or 73's

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-29 15:24:41 UTC
From: pdrunen@aol.com
Message-ID: <1120058681.420519.312450@o13g2000cwo.googlegroups.com>
Source record: 18350

Hi All,

Anyone recall or have a copy of the articles in Ham Radio, QST, or 73's which has the 455KHz FM detector and the other information for Cb conversion to 10m FM?

I recall that Melco did some kits, I recall the article but can not locate it in my library.

I believe I saw a FM demodulator either HR or HR Horzion.

thanks de KJ4UO.

3018. Re: Tuned Preselectors - Looking for info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-29 16:48:27 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11c5k6denqari6e@corp.supernews.com>
Source record: 18351

dkelly42@cox.net wrote:

> I think part of the reason for little information or enthusiam is the
> diodes tendancy for IMD on strong signals. This increases the
> complexity of the circuit. You might check with the ARRL and see if any
> information is available from past QEX articles. I am researching the
> same thing for a HF preselector. I am going to experiment with solid
> state relays. Just a suggestion. Try the Vishay site
> as(http://www.vishay.com/solid-state-relays/). I have found little info
> on varactor tuned pre-selectors
>
Are those things specified for RF? I wouldn't touch them with a 10-foot
pole if they aren't. If you're planning on tuning by switching elements
in and out have you considered PIN diodes? If you have them either all
the way on or all the way off they should be less susceptable to IMD
than varactors. Furthermore, I understand that if you're cheap you can
use the old 1N400x series of power diodes at HF (I haven't tried this,
though).

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

3019. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-29 17:00:00 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <42C2D380.C3F9AEC6@earthlink.net>
Source record: 18352
Cross-posted to: rec.radio.amateur.homebrew,hun.hobbi,alt.birthright

-ex- wrote:
>
> Don't respond to trolls unless you can do it with good comedy within 24
> hours....unless you are like me and will reply to anything.
>
> -Bill

Or anybody! ;-)

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

3020. Re: ch3 video to uhf upconversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-29 17:03:49 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <42C2D464.1FF6734C@earthlink.net>
Source record: 18353

Gudmundur wrote:
>
> In article <1118551002.975808.12970@o13g2000cwo.googlegroups.com>,
> eternalsquire@comcast.net says...
> >
> >Hi all,
> >
> >It's me again, attempting yet another mad science project, and I have
> >practically googled the subject to death before thinking of asking this
> >group for help:
> >
> >I am wanting to put video (preferably color but will settle for
> >grayscale) onto a UHF TV channel for inhouse use only. I am
> >considering doing it as follows:
> >
> >1) Convert output of a VGA card to composite video using resistive
> >combiner
> > (found a few on net).
> >
>
> And what magic resistive combiner makes VGA into NTSC??? There is
> no such thing. There are active models which do this, but if your
> VGA output is 640X480 or more, then NTSC will make the video suck.
> NTSC does not have the bandwidth. Yes you can take a properly modulated
> channel 3 signal, run it into a balanced mixer (well almost any mixer)
> and add your favorite local oscillator signal and get 2 signals in
> the uhf band. LO + ch3 and LO - ch3.
>
> Good luck. Here's looking at ya or at least the unviewable signal.

There are a number of video cards with a NTSC video output in the
S-video format. I still have a couple I used in old PCs to drive a
Commodore 1701 monitor to trick people. My Commodore 128 was connected
to an IBM PC Junior monitor in CGA mode. The look on people's faces was
worth the effort.

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

3021. Re: 2400 Baud modem chip

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-29 20:58:54 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11c62s1h5tjob0e@corp.supernews.com>
Source record: 18354

Mebart wrote:

>>Decoding MSK as FSK will give you way less than optimum bit error rate
>>vs. noise. Unless the MSK is coming in on an FM channel you should
>>consider decoding it as PSK.
>>
>
>
> I did find a chip that does 2400 baud MSK. But, why should I use a PSK
> method?
>
> PSK transmits one frequency, but inverts the amplitude of the
> modulation to represent a 1 (or 0).
>
> PSK has an advantage in bandwidth, which has less noise due to the
> narrower bandwidth. But, can a PSK modem actually decode MSK better?
>
> The ap is amplitude modulated VHF and I want the best weak signal
> perfirmance I can get. The AM carrier wastes some transmit power and
> has a disadvantage over a single sideband supressed carrier. But, it
> is still many db better than a very wasteful fm mode.
>
> Anyway, I can't control the transmitters, so I'm stuck with AM.
>
> Having the carrier received with the sidebands establishes the center
> frequency, so the tuning in the receiver is not quite so critical. AM
> is really quite practical in this case.
>
> Can you tell me some more about decoding the signal as though it was
> PSK?
>
> Thanks,
>
> Art

It acts as offset quadrature PSK with the bits weighted to be 1/2
cosines instead of rectangular pulses. You decode it just the way I said.

If you can find them the following two papers are quite useful. One of
them (the one from the IEEE Comm. Soc. IIRC) is easy enough that you can
just about design a demodulator straight from the paper.

[1] R. De Buda: "Coherent Demodulation of Frequency Shift Keying with
Low Deviation Ratio" -- IEEE Transactions, 1972, COM-20, pp. 429-435.

[2] S. Pasupathy: "Minimum Shift Keying: A Spectrally Efficient Modulation" -- IEEE Communications Society Magazine, July 1979, Vol 17, #4, pp 14-22.

And if you live in Worcester, MA, and you're wondering why I know:

[3] Tim Wescott: "A DGPS Radiobeacon Receiver for Minimum Shift Keying with Soft Decision Capabilities" -- Master's Thesis, Worcester Polytechnic Institute, 1990.

Stop by the library there -- I believe they'll have a copy.

Here's a summary of the reasoning (taken from Chapter 3 of [3] -- I like the author). This is much better with pictures (the clearer paper of [1] and [2] uses pictures, as does [3]):

The way that MSK works is to have FSK signal with a frequency shift that is exactly 1/2 the baud rate. Thus the phase shift from one bit time to the next is 90 degrees (1/4 of a circle).

Now consider a quadrature, offset PSK with 1/2 cosine weighting (really, do). Thus even-numbered bits are transmitted as either positive-going or negative-going cosine waves multiplied by the carrier, each one lasting for exactly 1/2 cycle of the cosine, and the cosine having a frequency of (bit rate/4). Odd-numbered bits are transmitted as either positive-going or negative going _sine_ waves multiplied by the quadrature of the carrier.

Take your bitstream, and make two signals a_i(t) and a_q(t). The signal a_i(t) is +1 if it's corresponding bit is 1, -1 if the bit is 0, and it only changes on boundaries of t = 2*k*T where T is the baud rate and k is the bit number. The signal a_q(t) is similar, but it changes on boundaries of t = (2*k+1)*T.

Then the transmitted signal is equal to

s(t) = a_i(t)*cos(pi*t/(2*T))*cos(2*pi*f*t) +
a_q(t)*sin(pi*t/(2*T))*sin(2*pi*f*t) (1)

where f is the carrier frequency (1200Hz in your case).

If you grind through those high school trig identities (1) becomes:

s(t) = cos(2*pi*f*t + b(t)*pi*t/(2*T) + phi(t)) (2)

where at any given moment b(t) = a_i(t) * a_q(t) and phi(t) = (a_i(t) + a_q(t))*pi/2. Assuming I haven't messed up my expression for phi(t) (the value I gave for it in my thesis is clearly a typo, I'm guessing here) this is a phase continuous FSK signal who's frequency is the carrier + 1/4 the baud rate for two consecutive 1's or two consecutive 0's, and carrier - 1/4 baud for a 1 followed by a 0 or visa-versa.

That's what MSK _is_, from a OQPSK sense, there's more about demodulating it -- let me know if you can't find the articles, or anything sensible on the web -- I'm thinking of scanning this stuff in...

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

3022. Re: JOHNSON PART N° 520-9 8-76. CRYSTAL? HELP !!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-29 21:12:07 UTC
From: Heriberto <lu6dbu@tapalquenet.com.ar>
Message-ID: <42c30c58$1_1@x-privat.org>
Source record: 18355

Thanks for your help
Heriberto
"-ex-" <exray@coqui.net> escribi° en el mensaje
news:7bbb0$42c1eb7c$4232bd1a$24351@COQUI.NET...
> Heriberto wrote:
>
> > Hi:
> > I have a part JoHnson Nro.520-9 8-76 it aparently a Crystal,
but it
> > has 3 pines, not 2 pines. Anyone how wich element it is?
> > In top has write " T152.815" in the side "Johnson 520-9 8 -76
> > CAYM"
> > Excusme my bad english- Very elemental-. Sorry
> >
> > Regards from Argentina
> > Heriberto
> > LU6DBU
> >
> >
> >
> >
> >
> It would seem to be a 152.815 TRANSMIT xtal...the fundamental freq of
> course would be something different. The third wire could be a ground
> for the case of the xtal.
>
> A mi me parece un cristal de 152.815 Mcs de salida para un transmisor.
> La frecuencia basica ser° algo diferente, depende en el modelo del
> equipo, su frec. IF, etc. El alambre tercero ser°a una conecxion
> aterrizada del casco del cristal. 8-76 mas probable significa la fecha
> de fabricacion.
>

3023. Re: ch3 video to uhf upconversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-29 23:25:30 UTC
From: hexter@blazenet.net
Message-ID: <11c6bfaki39tt96@corp.supernews.com>
Source record: 18356

In article <42C2D464.1FF6734C@earthlink.net>, mike.terrell@earthlink.net says...
>
>Gudmundur wrote:
> There are a number of video cards with a NTSC video output in the
>S-video format. I still have a couple I used in old PCs to drive a
>Commodore 1701 monitor to trick people. My Commodore 128 was connected
>to an IBM PC Junior monitor in CGA mode. The look on people's faces was
>worth the effort.
>

Come to think of it, yes, my ATI all-in-wonder card can do that.
It has the S-video jack. One of my oldies but moldies was Genius Video
from Kye. It plugged into the auxilliary connector of the SVGA card
and allowed an NTSC compatible capture, with NTSC in/out RCA connectors.

It has been so long since I have used them I totally forgot!

>--
>Former professional electron wrangler.
>
>Michael A. Terrell
>Central Florida

3024. Re: Winlink and QRM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-29 23:27:12 UTC
From: The Old Man <noname@hotmail.net>
Message-ID: <h6b6c1d8h8kphakgajrpk6hlqt0jq90htj@4ax.com>
Source record: 18357
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.misc

On Tue, 28 Jun 2005 22:00:31 GMT, "Dan/W4NTI"
<w4nti@mindNOSPAMATALLspring.com> wrote:

>Put me down in the unconvinced column. I am against ANY un-attented digital
>system in any segement other than that set aside for its SOLE use.

But Dan THAT would make too much SENSE! (grin)

The trouble is that the unattended robot train has already left the
station.
ARRL deliberately did this without carefully coinsidering the monster
that they created and now that they persuaded the FCC to go along
with it, the problem is too late to remedy.

One can only hope that they will learn from this horrendous blunder.
Looking at the latest proposal from this same committee, (segmenting
by bandwidth only) I see only more stupidity being foisted on a
majority by a small group in a smoke-filled room.

Most of us are finding out what they did each time, only after the
damage is done.

WHERE is even the basic polling of radio amateurs?
Did they ask amateurs in other countries that will be affected
by this?

Do 40m CW ops REALLY want to be HEMMED IN to the bottom 35 khZ?
OK the rules don't SAY that will happen, but if you give the
Mexican and VE SSB pests and the digital ops and MORE rope than
they have already taken, 40m CW could become a thing of the
past.

YMMV

The Old Man

3025. Re: Winlink and QRM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 01:22:31 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11c6iaql7nofha8@corp.supernews.com>
Source record: 18358
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.misc

I assumed you contacted your ARRL division director to make your views known? That's the mechanism by which decisions they make get input from everyday amateurs, so those amateurs' views can be represented in the "smoke-filled room".

After the ARRL's decision, how did your director explain to you how and why the decisions were made?

Or do you just sit and grouse and not bother to make your views known to someone who can actually do something about it?

P.S. If you identify yourself to your ARRL director only as "The Old Man", he's probably not going to pay much attention to you. And rightly so.

Roy Lewallen, W7EL

The Old Man wrote:
> On Tue, 28 Jun 2005 22:00:31 GMT, "Dan/W4NTI"
> <w4nti@mindNOSPAMATALLspring.com> wrote:
>
>
>>Put me down in the unconvinced column. I am against ANY un-attented digital
>>system in any segement other than that set aside for its SOLE use.
>
>
> But Dan THAT would make too much SENSE! (grin)
>
> The trouble is that the unattended robot train has already left the
> station.
> ARRL deliberately did this without carefully coinsidering the monster
> that they created and now that they persuaded the FCC to go along
> with it, the problem is too late to remedy.
>
> One can only hope that they will learn from this horrendous blunder.
> Looking at the latest proposal from this same committee, (segmenting
> by bandwidth only) I see only more stupidity being foisted on a
> majority by a small group in a smoke-filled room.
>
> Most of us are finding out what they did each time, only after the
> damage is done.
>
> WHERE is even the basic polling of radio amateurs?
> Did they ask amateurs in other countries that will be affected
> by this?

>
> Do 40m CW ops REALLY want to be HEMMED IN to the bottom 35 khZ?
> OK the rules don't SAY that will happen, but if you give the
> Mexican and VE SSB pests and the digital ops and MORE rope than
> they have already taken, 40m CW could become a thing of the
> past.
>
> YMMV
>
> The Old Man
>

3026. Re: Tuned Preselectors - Looking for info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 01:40:23 UTC
From: dkelly42@cox.net
Message-ID: <1120095623.851141.46050@f14g2000cwb.googlegroups.com>
Source record: 18359

Hi Tim,

I use 1N4007's or 1N4004's as a drive control in 3 homebrew transceivers but never for switching. I have used PIN diodes for the same application I am considering the SSR for. I looked at the the MosFET SSR's because I have usedIRF510's and IRF740B's to cathode key my tube transmitters. I was expecting that a MosFet relay would likely work in a similar manner to switch xtal converters for bandswitching. I chose the IRF740B for keying my TX due to the VDS of 400 but most due to low RDS > 1 ohm. The low price SSR have avg of 22 ohms but with low current that may not be a big minus. For a $1 to $3 investment each its worth an experiment.

Some are specified for RF up to Ghz but most SSR's for sensing and power control. And they are pricey.

I am really just looking for something different to switch convertors for 20 and 15 M on homebrew tube rx. I didn't comment correctly above in my reply. After I read it again he was looking for a way to tune a band pass filter and i am trying to switch a complete circuit. But I did look at the varactors too but that was when I considered premixing for the LO and tuning the front end. Gotta admit I have been building with tubes a long time.
I just didn't want to use plug in coils.

I looked at your web site and I know Worsester, MA. I was born in Newton and my dad went to MIT.

Don

3027. Data acquisition with Tektronix 492 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 06:14:30 UTC
From: La Crevette <spirou@nospam.fr>
Message-ID: <42c38da9$0$12684$626a14ce@news.free.fr>
Source record: 18360

Hi,
it is possible to use the J104 accessory connector of my Tektronix 492, for
data acquisition on a PC or Printer ?
Thanks Alain

3028. Re: Data acquisition with Tektronix 492 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 07:05:46 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1d2d39a6f93bf47a9896d6@news-central.giganews.com>
Source record: 18361

In article <42c38da9$0$12684$626a14ce@news.free.fr>, spirou@nospam.fr
says...
> Hi,
> it is possible to use the J104 accessory connector of my Tektronix 492, for
> data acquisition on a PC or Printer ?
> Thanks Alain
>
>
>

No; that connector is useful only for hookup of a factory test rig.
Someone was selling an outboard CPU module on eBay a few months ago that
had a GPIB port; it went for big bucks, and it was the only one I've
seen in probably 7-8 years of watching the market.

You will need to trade up to a P-suffix model for any type of data
acquisition or digital plotting.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

3029. Re: Data acquisition with Tektronix 492 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 08:14:55 UTC
From: La Crevette <spirou@nospam.fr>
Message-ID: <42c3a9df$0$9291$626a14ce@news.free.fr>
Source record: 18362

Hi,
Ok thank you for your information. Unfortunately, I do not have the GPIB
port on my 492 (I do not have the suffix "P")
Cordially Alain

"John Miles" <jmiles@pop.removethistomailme.net> a crit dans le message de
news: MPG.1d2d39a6f93bf47a9896d6@news-central.giganews.com...
> In article <42c38da9$0$12684$626a14ce@news.free.fr>, spirou@nospam.fr
> says...
>> Hi,
>> it is possible to use the J104 accessory connector of my Tektronix 492,
>> for
>> data acquisition on a PC or Printer ?
>> Thanks Alain
>>
>>
>>
>
> No; that connector is useful only for hookup of a factory test rig.
> Someone was selling an outboard CPU module on eBay a few months ago that
> had a GPIB port; it went for big bucks, and it was the only one I've
> seen in probably 7-8 years of watching the market.
>
> You will need to trade up to a P-suffix model for any type of data
> acquisition or digital plotting.
>
> -- jm
>
> ---
> http://www.qsl.net/ke5fx
> Note: My E-mail address has been altered to avoid spam
> ---

3030. WTB "The VHF/UHF DX Book Edited by Ian White, G3SEK"

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 08:22:04 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <1120119724.168589.257130@f14g2000cwb.googlegroups.com>
Source record: 18363

Hi All,

Anyone got a copy in good condition for sale ?

Ian, got a spare copy ?

Can pay using PayPal, US$ chq, UK pounds chq or NZ$ chq. I may have
some euros kicking around also.

Thanks,

Mark.

3031. Re: WTB "The VHF/UHF DX Book Edited by Ian White, G3SEK"

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 12:14:14 UTC
From: Ian White GM3SEK <g3sek@ifwtech.co.uk>
Message-ID: <17atAqTWI+wCFAnF@ifwtech.co.uk>
Source record: 18364

MarkAren wrote:
>Hi All,
>
>Anyone got a copy in good condition for sale ?
>
>Ian, got a spare copy ?
>

Sorry, not any more. Good luck!

--
73 from Ian G/GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

3032. Re: FM conversion article in HR or QST or 73's

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 12:48:22 UTC
From: "J. Reed" <jhreed@chilitech.net>
Message-ID: <da0pms01r0h@enews2.newsguy.com>
Source record: 18366

The most practical FM detector, for both fidelity and cost would be a phase-locked-loop chip...

<pdrunen@aol.com> wrote in message news:1120058681.420519.312450@o13g2000cwo.googlegroups.com...
> Hi All,
>
> Anyone recall or have a copy of the articles in Ham Radio, QST, or 73's
> which has the 455KHz FM detector and the other information for Cb
> conversion to 10m FM?
>
> I recall that Melco did some kits, I recall the article but can not
> locate it in my library.
>
> I believe I saw a FM demodulator either HR or HR Horzion.
>
> thanks de KJ4UO.
>

3033. Re: Winlink and QRM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 12:57:50 UTC
From: kludge@panix.com
Message-ID: <da0q8e$1uf$1@panix2.panix.com>
Source record: 18365
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.misc

Roy Lewallen <w7el@eznec.com> wrote:
>I assumed you contacted your ARRL division director to make your views
>known? That's the mechanism by which decisions they make get input from
>everyday amateurs, so those amateurs' views can be represented in the
>"smoke-filled room".

From my perspective, I can copy CW very well with a narrow filter, even
with a large amount of QRM from a digital system.

And, the digital system is probably not going to be able to deal with
my interference half as well as I can deal with its.

Since I am reading this on rec.radio.amateur.boatanchors, where it is
crossposted, may I recommend the use of the audio filter on the Collins
R-390A? It is frighteningly effective at getting rid of this trash.
--scott

--
"C'est un Nagra. C'est suisse, et tres, tres precis."

3034. Re: FM conversion article in HR or QST or 73's

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 13:23:45 UTC
From: Eskay <siebklaas@hotmail.com>
Message-ID: <1us86mrvyksk3.ov15ybr1jesy.dlg@40tude.net>
Source record: 18367

On 29 Jun 2005 08:24:41 -0700, pdrunen@aol.com wrote:

> Hi All,
>
> Anyone recall or have a copy of the articles in Ham Radio, QST, or 73's
> which has the 455KHz FM detector and the other information for Cb
> conversion to 10m FM?
>
> I recall that Melco did some kits, I recall the article but can not
> locate it in my library.
>
> I believe I saw a FM demodulator either HR or HR Horzion.
>
> thanks de KJ4UO.

HR magazine for Februari 1983 had an article on CB to 10M FM conversion
written by VE3AQN and VE3FIT, 7 pages in total.
Will copy and E-mail to you on request.
reply to siebk NO at Spam mycybernet.net
remove the obvious and close up the spaces

3035. Re: FM conversion article in HR or QST or 73's

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 13:37:56 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <da0sjk$s1b$1@theodyn.ncf.ca>
Source record: 18368

"J. Reed" (jhreed@chilitech.net) writes:
> The most practical FM detector, for both fidelity and cost would be a
> phase-locked-loop chip...
>
Well there was an article in QST by Bob Heil about converting a CB set
to FM, I'm pretty sure it was in 1981.

As I said here back in 1998:
Converting a CB set to FM, once the conversion to the appropriate
section of the 10M band has been accomplished, would consist of FM'ing
the transmitter (I can't remember, but I assume the articles disable the
AM modulation of the final amplifier, and feed some of the audio to
the VCO), and adding an FM detector to the receiver. The two articles
I can remember used IC detectors, which would add some IF
amplification and limiting before the detector. One thing worth
considering is that you can easily scrounge up a 455KHz FM IF strip from
a cordless phone, or a 49MHz superhet walkie talkie.

I wouldn't say fidelity is an issue here, given that it's narrow deviation
we are talking about and that's not a problem to get a linear discrimator.
YOu probably will get a better results with a full FM IF strip, and those
are really easy to pull from various things, either just the IC (any old
TV set will have one for the sound demodulator, at least in North America),
or for that matter any FM "stereo receiver", or as a full IF strip. The
advantage of the latter is that the discrimator is already aligned, and
you get not only the demodulator IC but the needed IF transformers and
FM-bandwidth filter(s).

You can find such strips in cordless phones (I found some a few weeks ago
that were for 2.4GHz, and they still had defineable IF strips with 10.7MHz
and then 455KHz conversions), or those 49MHz walkie talkies, or older
cellphones (which have the advantage of being cheap and don't have high
integration in the ICs). I've never found a scanner in the garbage, but they
too would have such IF strips. Even commercial 2-way equipment had such
IF strips, and even recent ones may (though since I'm not familiar with
recent equipment I don't know if they are still going down to 455KHz.)

Michael VE2BVW

> > <pdrunen@aol.com> wrote in message
> news:1120058681.420519.312450@o13g2000cwo.googlegroups.com...
>> Hi All,
>>
>> Anyone recall or have a copy of the articles in Ham Radio, QST, or 73's
>> which has the 455KHz FM detector and the other information for Cb
>> conversion to 10m FM?

>>
>> I recall that Melco did some kits, I recall the article but can not
>> locate it in my library.
>>
>> I believe I saw a FM demodulator either HR or HR Horzion.
>>
>> thanks de KJ4UO.
>>
>
>

3036. Re: Winlink and QRM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 14:25:09 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <dhTwe.2466$iv3.1072@fe02.lga>
Source record: 18369
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.misc

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:11c6iaql7nofha8@corp.supernews.com...

>I assumed you contacted your ARRL division director to make your views
>known?

Good answer, Roy. But I'm pretty sure that "The Old Man" isn't a League
member, or if he is, he takes no part in his Section. He said:

>> Most of us are finding out what they did each time, only after the damage
>> is done.

Certainly I heard about it well before hand, and expressed some concern, in
this case to our vice-director who happened to be dealing with this
particular issue. I got some additional feedback which reduced, but did not
eliminate, my concerns.

I suspect if "The Old Man" was on the radar of his section or division folks
as someone who was reasonably active, he would have had plenty of
opportunity for input early on. Most directors send out emails about stuff
like this to anyone in their division they suspect is active. Actually, if
I recall there was even a mention of this happening in QST well ahead of
time, but there is a lot of stuff in QST and something like this is easy to
miss.

Most folks, though, would rather bitch than take a few minutes to educate
their representatives. Kind of a shame, really, that so many folks can
spend so much energy bitching, but are unwilling to spend even a little
energy to make amateur radio better.

..

3037. Re: Winlink and QRM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 15:16:28 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11c833vl4cc0a75@corp.supernews.com>
Source record: 18370
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.misc

"Scott Dorsey" <kludge@panix.com> wrote in message
news:da0q8e$1uf$1@panix2.panix.com...
> And, the digital system is probably not going to be able to deal with
> my interference half as well as I can deal with its.

A frequency-hopping spread spectrum system with a reasonable amount of error correction won't be bothered much at all by iCW, as a matter of fact. :-)

3038. Re: Tuned Preselectors - Looking for info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 15:42:33 UTC
From: JB <SPAMac6tk@cybertime.net>
Message-ID: <da15nf$m7k$1@madmax.keyway.net>
Source record: 18373

Dittos. Also most electrically tuned circuits suffer from lower Q
and strays. It is hard enough to build hi Q cavities let alone try
to emulate one. It might be more worth while to build a motorized
cavity or electrical band switching of helicals, but who has room for
all that? Many manufacturers have concentrated on making RF stages
that can withstand very high levels without intermod. Of course none
of this will help you if you are at a congested site with mixes in
transmitters without circulators.

At HF it is practical to build a bandswitched set of bandpass filters
much like the ones found in some radios. Toroids can make them small
enough, but again you need to be careful not to overload them.

<dkelly42@cox.net> wrote in message
news:1120007234.663298.322430@g44g2000cwa.googlegroups.com...
> I think part of the reason for little information or enthusiam is
the
> diodes tendancy for IMD on strong signals. This increases the
> complexity of the circuit. You might check with the ARRL and see if
any
> information is available from past QEX articles. I am researching
the
> same thing for a HF preselector. I am going to experiment with
solid
> state relays. Just a suggestion. Try the Vishay site
> as(http://www.vishay.com/solid-state-relays/). I have found little
info
> on varactor tuned pre-selectors
>

3039. Re: 2400 Baud modem chip

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 15:46:37 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11c84v0dg1nmt9b@corp.supernews.com>
Source record: 18371

Mebart wrote:

> OK, I can see it working better in principle, but, without software
> writing, how do I do it???
>
> I've never seen a PSK modem chip. I had a tough time finding an MSK
> chip! It seems that software is the only presently accepted way to
> create a psk decoder. I have googled for PSK MODEM, and found mentions
> of it, but I cannot find a hardware solution.
>
> Do you know of a chip that does it (public domain)?
>
> Thanks.
>
> Art
>
>
>

Without software, no. When I built the radio for my thesis I started with an analog demodulator which occupied a 4.5x6 inch prototyping board -- I think it had 6-12 chips on it, and it had problems with thermal stability which is why the final version of the radio used a processor for the demodulation.

I'm eyeing my thesis, and my brand-new scanner. I keep thinking "36 pages? NO!". If I get the spare time I'll scan this in but right now I have a shortage on both time and round tuits.

You indicated on another one of your postings that you had found a suitable FSK chip -- this will work for you, but with far more noise sensitivity. But: if you started with that chip you could get a working device _now_; later on when you got all of the other bugs worked out you could circle around to the detector and upgrade it to something better.

What's this for, by the way?

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

3040. Re: sound override from 2 way radio into car radio speakers?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 16:11:14 UTC
From: JB <SPAMac6tk@cybertime.net>
Message-ID: <da15ng$m7k$2@madmax.keyway.net>
Source record: 18372

Switching on the speakers is risky. I have actually just paralleled the outputs of radios and stereos at the speaker with no problem as long as everything was DC blocked and the voltages present never exceed what the PA stages could handle.

I also did this by building a mixer stereo preamp that would take input from earphone jacks from an HT and portable scanner into the car stereo after its own volume control. The source radios had their own volume control and the stereo had its volume control. All this so I could run in a pickup truck. I had no muting, but this could be done with COR switching of mute gates.

An aftermarket add on may be more viable with stereos that have preamp outputs to various amps, but COR usually needs to be brought out of the radio.

I do remember seeing such a thing but not lately. It was activated by RF sensing so only muted when transmitting.

"Jerry" <joxendi@bellsouth.net> wrote in message
news:FSnue.1455$_m1.1103@bignews6.bellsouth.net...
>
> "FrankW" <fworm@mxznorpak.ca> wrote in message
> news:yOmdncYRm6sAvSXfRVn-oQ@magma.ca...
> > Anyone every heard of a device that would override
> > the speaker of a stock stereo from a CB?
> > Something that would cut out the sound from the
> > stock car radio and put the CB sound into the stock speaker
> > Thanks in advance
>
> How about a relay?
>
> J
> >
>
>

3041. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 16:12:59 UTC
From: JB <SPAMac6tk@cybertime.net>
Message-ID: <da16j3$mj9$1@madmax.keyway.net>
Source record: 18374
Cross-posted to: rec.radio.amateur.homebrew,hun.hobbi,alt.birthright

But how do you get him to sit on the radio?

"Gudmundur" <hexter@blazenet.net> wrote in message
news:11c4dsjbq89ogf8@corp.supernews.com...
> In article <2d5631c0.0506082158.39fb1c20@posting.google.com>,
> pie_garnishment@lycos.com says...
> >
> >I'm an assassin and have to kill a mafia boss.I want to blow him
up
> >with a radio bomb.
> >
> >What do I need ?
>
> Better bait, and a more powerful trolling motor.
>

3042. Re: Winlink and QRM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 16:31:46 UTC
From: kludge@panix.com
Message-ID: <da16pinvb1@panix2.panix.com>
Source record: 18375
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.misc

Joel Kolstad <JKolstad71HatesSpam@yahoo.com> wrote:
>"Scott Dorsey" <kludge@panix.com> wrote in message
>news:da0q8e$1uf$1@panix2.panix.com...
>> And, the digital system is probably not going to be able to deal with
>> my interference half as well as I can deal with its.
>
>A frequency-hopping spread spectrum system with a reasonable amount of error
>correction won't be bothered much at all by iCW, as a matter of fact. :-)

Yes, but a frequency hopping system should recognize that this individual
channel is currently not good, and stop using it!
--scott

--
"C'est un Nagra. C'est suisse, et tres, tres precis."

3043. Re: WTB "The VHF/UHF DX Book Edited by Ian White, G3SEK"

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 16:57:21 UTC
From: Gary Morton <gary@alma.demon.co.uk>
Message-ID: <RvVwe.59506$G8.27702@text.news.blueyonder.co.uk>
Source record: 18376

MarkAren wrote:
> Hi All,
>
> Anyone got a copy in good condition for sale ?
>
> Ian, got a spare copy ?
>
> Can pay using PayPal, US$ chq, UK pounds chq or NZ$ chq. I may have
> some euros kicking around also.
>
> Thanks,
>
> Mark.
>

Try Waters and Stanton.
I have just ordered a copy yesterday. I checked by phone that they had some copies in stock. The RSGB appear to have sold out and no longer have it available at radio rallies.

73

--Gary

3044. Re: WTB "The VHF/UHF DX Book Edited by Ian White, G3SEK"

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 19:10:03 UTC
From: Ian White GM3SEK <g3sek@ifwtech.co.uk>
Message-ID: <QdMEpnhLOExCFAJd@ifwtech.co.uk>
Source record: 18377

Gary Morton wrote:
>MarkAren wrote:
>> Hi All,
>> Anyone got a copy in good condition for sale ?
>> Ian, got a spare copy ?
>> Can pay using PayPal, US$ chq, UK pounds chq or NZ$ chq. I may have
>> some euros kicking around also.
>> Thanks,
>> Mark.
>>
>
>Try Waters and Stanton.
>I have just ordered a copy yesterday. I checked by phone that they had
>some copies in stock. The RSGB appear to have sold out and no longer
>have it available at radio rallies.
>

Well, that's news to me! (The W&S part, that is. I knew that RSGB and
ARRL had both sold out some time ago.)

Please let me know how it goes, because people do ask from time to time.

--
73 from Ian G/GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

3045. Re: Winlink and QRM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 20:25:27 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11c8l79pfoqh60b@corp.supernews.com>
Source record: 18378
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.misc

"Scott Dorsey" <kludge@panix.com> wrote in message
news:da16pinvb1@panix2.panix.com...
> Joel Kolstad <JKolstad71HatesSpam@yahoo.com> wrote:
> >A frequency-hopping spread spectrum system with a reasonable amount of
error
> >correction won't be bothered much at all by iCW, as a matter of fact. :-)
> Yes, but a frequency hopping system should recognize that this individual
> channel is currently not good, and stop using it!

If it can, certainly... but it's the standard "near-far" problem in that you
may be able to hear the interferer (the FHSS system) but he can't hear you.
:-(

3046. CB -->6M Conversion?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 21:23:03 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <XoZwe.14723$gm6.1600@trnddc05>
Source record: 18379

After seeing the post re CB to 10M FM conversion I got to wondering if anyone is aware of a conversion for the Hy Gain 02A boards to 6M AM or FM (Melco and many others used this board for the 10M FM conversion). I still have some boards left.
I built many of the Melco kits years back and another from HR or 73 that has 10M digital readout, noise squelch and repeater splits- still have the rig and in use.

Dale W4OP

3047. Re: CB -->6M Conversion?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 22:13:54 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11c8rl13ppop7e6@corp.supernews.com>
Source record: 18380

Dale Parfitt wrote:

> After seeing the post re CB to 10M FM conversion I got to wondering if
> anyone is aware of a conversion for the Hy Gain 02A boards to 6M AM or FM
> (Melco and many others used this board for the 10M FM conversion). I still
> have some boards left.
> I built many of the Melco kits years back and another from HR or 73 that
> has 10M digital readout, noise squelch and repeater splits- still have the
> rig and in use.
>
> Dale W4OP
>
>

That would be quite a bit more difficult -- Going from 27MHz CB to 29MHz amatuer radio bands is just a 10% frequency change. Going from 27MHz to 50MHz is almost a doubling, and with older components it may require not just different component values but even different circuit topologies to make it successful.

But it would be interesting if anyone made it work...

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

3048. Yaesu FT-8800R

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 22:32:24 UTC
From: Clinton <news2004@_nospam_telus.net>
Message-ID: <Yp_we.110546$tt5.76537@edtnps90>
Source record: 18381

Does anyone have a schematic for the FT-8800R computer interface cable?

Thanks
VE7KNL

Remove _nospam_ to reply via email.

3049. Re: CB -->6M Conversion?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-06-30 23:38:45 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <da1vq5hgo1@theodyn.ncf.ca>
Source record: 18382

"Dale Parfitt" (par@parelectronics.com) writes:
> After seeing the post re CB to 10M FM conversion I got to wondering if
> anyone is aware of a conversion for the Hy Gain 02A boards to 6M AM or FM
> (Melco and many others used this board for the 10M FM conversion). I still
> have some boards left.
> I built many of the Melco kits years back and another from HR or 73 that
> has 10M digital readout, noise squelch and repeater splits- still have the
> rig and in use.
>
> Dale W4OP
>
>

Yes, there was such a conversion article in "73", I want to say 1982, but
it might have been a year or two later. That's as specific as I can get.

The premise was that since the CB sets had high side injection, the image
was close to the 6meter band. YOu had to modify the output circuits of
the transmitter, and the front end of the receiver, but the PLL was almost
there. A shift of a few MHz, if I recall, and the solution I'm picturing
is a putting in a crystal oscillator to mix the VCO down to frequency
where the variable divider kicks in. (As standard, again from memory,
the 10.240MHz oscillator that is divided down to be the reference in
the PLL is normally used in this premixer.)

I seem to recall some years back finding a bibliography of all those
CB to ham conversion articles somewhere on the internet. It might
be worth doing some searching to narrow down exactly when that 6M conversion
article was.

Michael VE2BVW

3050. Re: CB -->6M Conversion?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-01 00:50:20 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <gr0xe.1689$aY6.1015@newsread1.news.atl.earthlink.net>
Source record: 18383

"Dale Parfitt" <par@parelectronics.com> wrote in message
news:XoZwe.14723$gm6.1600@trnddc05...
> After seeing the post re CB to 10M FM conversion I got to wondering if
> anyone is aware of a conversion for the Hy Gain 02A boards to 6M AM or FM
> (Melco and many others used this board for the 10M FM conversion). I still
> have some boards left.
> I built many of the Melco kits years back and another from HR or 73 that
> has 10M digital readout, noise squelch and repeater splits- still have the
> rig and in use.
>
> Dale W4OP

Date: 12-08-94 (05:55) Number: 642
From: ROB DENNIS Refer#: NONE
To: ALL Recvd: NO
Subj: cybernet >6meters Conf: (81) F-HAM

Something for those who want to do 6 meters on the cheap.
I have NOT tried this as I have yet to find a CYBERNET chassis to
work on that has not been "screwdrivered" by someone else.
This conoversion should work on all PTBM49A0X AM/SSB chassis boards.
This includes the :SEARS 60006
HyGain V
RCA CoPilot (14t302)
Citizen M-6 /MPL-5
DAK Mark X (ten)
Midland 6006
When I can find something to do this conversion on,I will post my
results.
If I can find or come up with any other mods for 11 to 6 conversion I
will post those.

CONVERSION BEGINS:excuse the typos,original authors.
___---
CYBERNET
From: VK3KAY@VK3IBM.VIC.AUS.OC
hello all
here is the mod for taking 11 metre cybernet radios to 6 m
as i have been asked by many people for it
so here it is:

Pearce Simpson Model A18
Conversion to 6M SSB
by VK4FXX / VK4ZGF

Here is 6M mod for Pearce Simpson Super Panther and other brands using the
Cybenet type circuit board. (Digital channel readout prefered)

****** Ensure CB is working correctly before starting mods ******

Replace X1 Xtal with one of the following of your choice....

10.97625 Mhz ..... Band 52.050 - 52.480 for 40 ch switch
10.15175 Mhz ..... Band 50.020 - 50.240 for 40 ch switch

Band 52.050 - 52.480 / 10Khz channel spacing ....

Xtal freq = (Freq TX - 10.692) + 2.55

Band 50.020 - 50.240 / 5Khz channel spacing .....

Xtal Freq = (Freq TX - 10.692) + 1.275

4

Receive Section

C 100 Replace with 8.2pf- 12pf until T7 peaks (see alignment)
T 8 Remove internal tubular cap and replace with 8.2pf on back
of PCB
T9 Same as T8
T7 No mods required
C 104 Replace with 1.8pf cap (all caps disc ceramic low voltage)

TX Section

C 42 Replace with 1.8pf
C 185 Remove (no cap)
C 47 22pf
C 53,54,55 By experiment can be varied from 100 - 150 pf fpr max tx OP
C 56 22pf
C 57 56 pf
C 184 Remove (no cap)

Coils and Transformers

T4,T5 Remove internal tubular caps and replace with 8.2pf under PCB
T 6 Leave same
L7 Leave 1 3/4 turns left
L11 Leave 2 1/2 turns left (remove one turn)
L13 Leave 1 1/2 turns left (experiment)
L12 leave 4 turns left (remove one turn)

L201 remove and replace with straight wire link (rear of SO 239)

CYBERNET.1
Final Transistors

Replace Q9 with 2SC1306 / replace Q10 with 2SC1307 fpr 10 watts OP
Original transistors will give approx 5 watts OP

PLL Alignment

Test gear required

Freq counter to 60 Mhz, Digital VOM, 15Mhz CRO

For 50 Mhz only....earth pin 4 of PLL 02A for 5Khz steps
Connect counter at TP2 through 1000pf cap and adjust CT3 for 10.240 Mhz

Connect CRO and counter at TP3 and adjust T3 for max amptitude.
Counter should show Xtal freq X2 (USB only)
Set clarifier at mid position
Adjust CT1 and CT2 so that TP3 reads 21.95272 approx on counter

FREQUENCIES AT IC2

Pin 4=21.95272 reference osc input
Pin 2=19.40272 vco input
Pin 9=2.55 approx loop error signal

VCO Alignment

Connect VOM to TP1 and adjust VCO slug for the following.....

40 Channel 10 khz spacings CH1 2.8-3 volts
CH40 3.8-4 volts

40 Channel 5 khz spacings CH1 2.0 volts
CH40 2.8 volts
(Voltages not critical)

Receiver Alignment

Peak T7 T8 T9 for max received signal
Peak T1 T2 T3 for max sensitivity

Transmitter Alignment

Align on USB only.....Adjust T4 T5 T6 / L7 L11 L12 L13 for
max. power OP.

NOTE If set oscilates in TX with no audio mod applied, go back and
re-adjust T4 T5 (reasonably critical)

Check for equal OP on CH 1 and CH40

3051. PIC SWR meter - help!!!!!!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-01 09:32:31 UTC
From: leszek SP5MNL <sp5mnl@o2.pl>
Message-ID: <1120210351.445890.104610@g43g2000cwa.googlegroups.com>
Source record: 18384

I'm looking for AA4FB' Project ,,PIC SWR meter". I find soft, but
I don't know where find a description, schematic and PCB. Could
anybody send me by mail these elements of this project.
ps.
This project is in ARRL archive, but only for members.

73!
Leszek
SP5MNL

3052. Re: CB -->6M Conversion?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-01 13:11:57 UTC
From: Eskay <siebklaas@hotmail.com>
Message-ID: <1gly5eje3e4ru$.1rrx94b7qo00a.dlg@40tude.net>
Source record: 18385

On Thu, 30 Jun 2005 21:23:03 GMT, Dale Parfitt wrote:

> After seeing the post re CB to 10M FM conversion I got to wondering if
> anyone is aware of a conversion for the Hy Gain 02A boards to 6M AM or FM
> (Melco and many others used this board for the 10M FM conversion). I still
> have some boards left.
> I built many of the Melco kits years back and another from HR or 73 that
> has 10M digital readout, noise squelch and repeater splits- still have the
> rig and in use.
>
> Dale W4OP

James Patterson KB5LF had an article in 73 Mag back in February 1985.
It also used the HY-Gain boards.
5 pages and I will scan on request.
See my E-mail address under the CB to 10 listing.
73 de VE3JUA

3053. IF question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-01 14:10:04 UTC
From: pdrunen@aol.com
Message-ID: <1120227004.611121.212400@g43g2000cwa.googlegroups.com>
Source record: 18386

Hi Group,

Radios like my FT-757 and FT-101 have an IF output. If I take this output to a spectrum analyizer and the SA center frequency is set the same as the IF frequency, will I have a spectrum monitor which will display over the complete bandwidth?

If so, is the BW of an IF generally large enought to view the complete band?

de KJ4UO

3054. Re: CB -->6M Conversion?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-01 14:26:24 UTC
From: atec <atec77@XXXhotmail.com>
Message-ID: <42c55237$1@dnews.tpgi.com.au>
Source record: 18387

Eskay wrote:
> On Thu, 30 Jun 2005 21:23:03 GMT, Dale Parfitt wrote:
>
>
>>After seeing the post re CB to 10M FM conversion I got to wondering if
>>anyone is aware of a conversion for the Hy Gain 02A boards to 6M AM or FM
>>(Melco and many others used this board for the 10M FM conversion). I still
>>have some boards left.
>>I built many of the Melco kits years back and another from HR or 73 that
>>has 10M digital readout, noise squelch and repeater splits- still have the
>>rig and in use.
>>
>>Dale W4OP
>
>
> James Patterson KB5LF had an article in 73 Mag back in February 1985.
> It also used the HY-Gain boards.
> 5 pages and I will scan on request.
> See my E-mail address under the CB to 10 listing.
> 73 de VE3JUA
http://members.tripod.com/~Malzev/radiodoc/sixmeter.htm

3055. Re: IF question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-01 14:30:11 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <da3k1jfhf1@puck.litech.org>
Source record: 18388

pdrunen@aol.com wrote:
> Hi Group,

> Radios like my FT-757 and FT-101 have an IF output. If I take this
> output to a spectrum analyizer and the SA center frequency is set the
> same as the IF frequency, will I have a spectrum monitor which will
> display over the complete bandwidth?

> If so, is the BW of an IF generally large enought to view the complete
> band?

You'll see the IF bandwidth if the SA is set that wide or wider; otherwise, you'll just see the SA bandwidth.

Most receiver IF bandwidths aren't particularly wide; some are, but they're designed for it. The receiver specs may (and, IIRC, typically do) show IF bandwidth.

--
On a Tee-shirt:
"I am a bomb technician. If you see
me running, try to keep up. "

3056. Re: PIC SWR meter - help!!!!!!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-01 15:20:57 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <da3n0e$el1$1@news.onet.pl>
Source record: 18389

Leszek, który numer qst?. Powinienem mieć w archiwach

MAc
sp9mrn

3057. Re: IF question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-01 17:20:13 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <dfuac11j3shg0m7eioqmdusmc41nt65b13@4ax.com>
Source record: 18390

Hi,

>Radios like my FT-757 and FT-101 have an IF output. If I take this
>output to a spectrum analyizer and the SA center frequency is set the
>same as the IF frequency, will I have a spectrum monitor which will
>display over the complete bandwidth?

While it will obviously depend on the particular radio, a lot
of rigs take their output from in front of the first IF filter and
so can diplay several MHz either side of center. My Kenwood
TS-850S(AT) and HP141T combo works fine in this way.

Cheers - Joe, G3LLV

3058. SB-200 QSK Mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-01 19:22:31 UTC
From: Win <w0lz@winlyn.us>
Message-ID: <9t5bc1l3bjued6ds6trn6bensdpuvgabse@4ax.com>
Source record: 18391

I am interesting in a good layout for this mod. Any food ideas out there?

Win, w0lz

3059. Re: SB-200 QSK Mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-01 19:27:43 UTC
From: Win <w0lz@winlyn.us>
Message-ID: <i66bc19rmdfv5vkpklj3vefakptlricpc1@4ax.com>
Source record: 18392

Make that "good ideas". Thats what I get working without glasses.

Win, w0lz

On Fri, 01 Jul 2005 14:22:31 -0500, Win <w0lz@winlyn.us> wrote:

>I am interesting in a good layout for this mod. Any food ideas out
>there?
>
>Win, w0lz

3060. SB-200 transformer(new) $75 + shipping

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-01 23:38:28 UTC
From: DOUGLAS SNOWDEN <SNOWDEN@peoplepc.com>
Message-ID: <Utkxe.14770$pa3.11220@newsread2.news.atl.earthlink.net>
Source record: 18393
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

This is an export transformer, meaning it is set up for 100 volts or so primary voltage. I was planning on using the HV section on 115volts for a single tube 3-500Z amp but have not gotten around to it. Wires have not been soldered - brand new.

Doug, N4IJ

3061. Re: SB-200 QSK Mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-02 03:59:00 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <kLednZcii6SYjFvfRVn-sA@comcast.com>
Source record: 18394

"Win" <w0lz@winlyn.us> wrote in message
news:9t5bc1l3bjued6ds6trn6bensdpuvgabse@4ax.com...
>I am interesting in a good layout for this mod. Any food ideas out
> there?
>
> Win, w0lz

Win -

Well, first you need some good RF relays for QSK.
You can use vacuum relays (Kilovac or Jennings) - MaxGain; Surplus Sales or
Fair Radio Sales
http://www.mgs4u.com/relay.htm
http://www.surplussales.com/Relays/REVacRel-1.html

and/or a fast RF reed relay like the Matsushita 1mS device.
http://www.somis.org/

w9gb

3062. Re: Yaesu FT-8800R

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-02 07:09:35 UTC
From: "Mike M." <notme@invalid.email.net>
Message-ID: <t8fcc1dbketd6j87ohlpklk4t9v32oag2j@4ax.com>
Source record: 18395

On Thu, 30 Jun 2005 22:32:24 GMT, "Clinton"
<news2004@_nospam_telus.net> wrotF:

>Does anyone have a schematic for the FT-8800R computer interface cable?
>
>Thanks
>VE7KNL
>---
>Remove _nospam_ to reply via email.
>
>

There are a couple here, the FT-8800R and FT8900 use the same cable.
You'll have to join the group to access the files section.

http://groups.yahoo.com/group/FT-8900/files/

3063. Re: Yaesu FT-8800R

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-02 11:54:21 UTC
From: Clinton <news2004@_nospam_telus.net>
Message-ID: <Nfvxe.124693$on1.87217@clgrps13>
Source record: 18396

Already done and got the info I was looking for. Thanks.

Remove _nospam_ to reply via email.

"Mike M." <notme@invalid.email.net> wrote in message
news:t8fcc1dbketd6j87ohlpklk4t9v32oag2j@4ax.com...
> On Thu, 30 Jun 2005 22:32:24 GMT, "Clinton"
> <news2004@_nospam_telus.net> wrotF:
>
>>Does anyone have a schematic for the FT-8800R computer interface cable?
>>
>>Thanks
>>VE7KNL
>>---
>>Remove _nospam_ to reply via email.
>>
>>
>
> There are a couple here, the FT-8800R and FT8900 use the same cable.
> You'll have to join the group to access the files section.
>
> http://groups.yahoo.com/group/FT-8900/files/
>

3064. FA:TUBES:811, 572B,5U4,12BH7..+MO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-02 12:43:51 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <b_vxe.379822$cg1.114169@bgtnsc04-news.ops.worldnet.att.net>
Source record: 18397
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Have 811A, 572B, 5U4 rectifiers + a few others and more coming after the 4th; see at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx and Happy Birthday America, heytubeguy

3065. Re: SB-200 QSK Mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-02 13:16:07 UTC
From: Win <w0lz@winlyn.us>
Message-ID: <4e4dc1t7iirohnb57g00g7g7rpp78fca9q@4ax.com>
Source record: 18248

On Fri, 1 Jul 2005 22:59:00 -0500, "gb" <onw9mapsgb@no.arrl.spam.net>
wrote:

>"Win" <w0lz@winlyn.us> wrote in message
>news:9t5bc1l3bjued6ds6trn6bensdpuvgabse@4ax.com...
>>I am interesting in a good layout for this mod. Any food ideas out
>> there?
>>
>> Win, w0lz
>
>Win -
>
>Well, first you need some good RF relays for QSK.
>You can use vacuum relays (Kilovac or Jennings) - MaxGain; Surplus Sales or
>Fair Radio Sales
>http://www.mgs4u.com/relay.htm
>http://www.surplussales.com/Relays/REVacRel-1.html
>
>and/or a fast RF reed relay like the Matsushita 1mS device.
>http://www.somis.org/
>
>w9gb
>

Thanks, Greg. Actually I picked up the relays and other parts from
Richard (somis.org). Now I am just thinking about where I will put
the circuits. I am thinking about putting most behind the meters over
the filiment transformer, and those associated with the relays under
the chassis where the old relay will be removed.

I was just looking for ideas from those who had layed this out before
me in this amp.

Read your QRZ bio. Me, too, 40 meters CW..........

Thanks

Win,/w0lz

3066. Re: SB-200 QSK Mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-02 16:08:54 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <O_qdndvCL8SEIVvfRVn-qg@comcast.com>
Source record: 18249

"Win" <w0lz@winlyn.us> wrote in message
news:4e4dc1t7iirohnb57g00g7g7rpp78fca9q@4ax.com...
> On Fri, 1 Jul 2005 22:59:00 -0500, "gb" <onw9mapsgb@no.arrl.spam.net>
> wrote:
>
>>"Win" <w0lz@winlyn.us> wrote in message
>>news:9t5bc1l3bjued6ds6trn6bensdpuvgabse@4ax.com...
>>>I am interesting in a good layout for this mod. Any food ideas out
>>> there?
>>>
>>> Win, w0lz
>>
>>Win -
>>
>>Well, first you need some good RF relays for QSK.
>>You can use vacuum relays (Kilovac or Jennings) - MaxGain; Surplus Sales
>>or
>>Fair Radio Sales
>>http://www.mgs4u.com/relay.htm
>>http://www.surplussales.com/Relays/REVacRel-1.html
>>
>>and/or a fast RF reed relay like the Matsushita 1mS device.
>>http://www.somis.org/
>>
>>w9gb
>>
>
> Thanks, Greg. Actually I picked up the relays and other parts from
> Richard (somis.org). Now I am just thinking about where I will put
> the circuits. I am thinking about putting most behind the meters over
> the filiment transformer, and those associated with the relays under
> the chassis where the old relay will be removed.
>
> I was just looking for ideas from those who had layed this out before
> me in this amp.
>
> Read your QRZ bio. Me, too, 40 meters CW.....
>
Well 40 meter CW is where I started over 30 years ago ..
when the Novice band was 7.15 to 7.20 !! Can't wait till the broadcasters
will move -- will be a first class early evening DX band (sans static!)

I did see a couple of Internet web pages with the conversion -- but those
web pages are now gone - I'll keep an eye open. I think Richard did do a

conversion on an earlier SB-200 ... you may also want to look at the Ameritron/MFJ QSK-5 PIN diode internal board approach (for ideas how or how not to do it).
http://www.ameritron.com/man/pdf/QSK-5PC.pdf

w9gb

3067. FREE Subscription to Ham Radio e-Zine - K9YA Telegraph

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-02 16:48:45 UTC
From: K9YA <no_reply@yahoo.com>
Message-ID: <Nzzxe.6761$RC6.78@newssvr33.news.prodigy.com>
Source record: 18250

Check out the latest issue of the K9YA Telegraph:

Fishing for QSOs By Philip Cala-Lazar, K9PL

My Lucky Dayton Trip By Steve Wolfcale, N9WAT

Ham Radio and Scouting By Art Steinke, WB9JKY, trustee, W9BSA

They Could Have and Should Have By Rod Newkirk, VA3ZBB/W9BRD

Liverpool's Skyline to Flash Morse Code Messages

Morse Tips & Quips

Subscribe for FREE at http://www.k9ya.org

3068. recharable soldering iron

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-02 18:08:31 UTC
From: m005kennedy <m005kennedy@netzero.net>
Message-ID: <1120327711.623121.41760@g49g2000cwa.googlegroups.com>
Source record: 18251

I usually do a small amout of soldering at once. I was thinking of getting a recharable soldering iron just for the convience factor. I was hoping to get a brand and supplier recomendation. I've seen them for around $60. I would think they would be fine for QRP type construction.

Mike
KB1IUI

3069. Re: SB-200 QSK Mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-02 18:47:04 UTC
From: Win <w0lz@winlyn.us>
Message-ID: <1rmdc1tt7mmc07j8fi3egdcofa3rrboatg@4ax.com>
Source record: 18252

Richard did an article in QSt many years ago on QSK for the SB-200.
But, as I am sure you know, Ameritron is well represented at the ARRL.
Somehow that articke is no longer in the archive.
>Well 40 meter CW is where I started over 30 years ago ..
>when the Novice band was 7.15 to 7.20 !! Can't wait till the broadcasters
>will move -- will be a first class early evening DX band (sans static!)
>
>I did see a couple of Internet web pages with the conversion -- but those
>web pages are now gone - I'll keep an eye open. I think Richard did do a
>conversion on an earlier SB-200 ... you may also want to look at the
>Ameritron/MFJ QSK-5 PIN diode internal board approach (for ideas how or how
>not to do it).
>http://www.ameritron.com/man/pdf/QSK-5PC.pdf
>
>w9gb

Richard did an article in QST many years ago on QSK for the SB-200.
But, as I am sure you know, Ameritron is now well represented at the
ARRL. Somehow that articke is no longer in the archive. I guess
articles on modifications to old amplifiers does not sell new
amplifiers.

Anyway, I think I have it figured out. Both of the connections to the
cathode bias swicth will be on the HV power supply board. I will just
place my circuit in proximity to that board. I will place the relays
where the old RF relay was. Should you come across anything, I would
like to see it, though.

In the early 60s I was rock bound to a DX-60 on a 40 meter dipole.
The receiver was an SX-101. I remember having a cigar box of rocks,
and tuning up and down the band after every call. It was a big thing
when I got my first, not so stable, VFO. But, looking back, those
were great days. I don't get the kinds of QSOs today I did back then.

Thanks again

Win, w0lz

>

3070. Re: recharable soldering iron

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-02 22:13:51 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11ce4d1ftdfska1@corp.supernews.com>
Source record: 18254

Years ago, Wahl (the hair clipper company) made one that was small, lightweight, quite well made, and one that should suit your purpose very well. You might check to see if they still make it.

I wanted a portable iron for outdoor soldering but it didn't have enough moxie for outdoor antenna work. A butane iron is much better for that purpose.

Roy Lewallen, W7EL

m005kennedy wrote:
> I usually do a small amout of soldering at once. I was thinking of
> getting a recharable soldering iron just for the convience factor. I
> was hoping to get a brand and supplier recomendation. I've seen them
> for around $60. I would think they would be fine for QRP type
> construction.
>
> Mike
> KB1IUI
>

3071. Re: recharable soldering iron

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-03 00:38:11 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <UImdnee1Q9bbrlrfRVnyhg@pipex.net>
Source record: 18255

"m005kennedy" <m005kennedy@netzero.net> wrote in message
news:1120327711.623121.41760@g49g2000cwa.googlegroups.com...
>I usually do a small amout of soldering at once. I was thinking of
> getting a recharable soldering iron just for the convience factor. I
> was hoping to get a brand and supplier recomendation. I've seen them
> for around $60. I would think they would be fine for QRP type
> construction.
==========
Suggest you consider a butane gas iron with choice of a number of tips with integral cathalitic burner . Gas flow can be adjusted ,hence the tip's temperature.
There are various makes . I happen to use the Portasol Professional iron ,made in the Republic of Ireland, but there are other cheaper but equally effective makes.

The iron's gas container with shut-off valve can be filled with a butane gas cannister as used for cigarette lighters.

The smaller tips are excellent for printed circuit boards involving ICs and the usual discrete components.
The larger tips are good for more heavy work like soldering PL259 plugs to coax .
A 'Jumbo' tip has an equivalent rating of 100 Watts
However for surface mount components you need a micro tip. For this type of work I use an electric cordless iron powered by 2 pcs 1.2V NiCad batteries. But after a number of joints the batteries must be charged by placing the complete iron in a stand . The unit I use is called ISOTIP ,made in USA by Wahl Clipper Corporation.
The iron was purchased in 1980 and used regularly ,however the charger is very primative (just a transformer with an embedded diode in the secondary low voltage winding), resulting in relatively short battery life . I now use the iron with a homebrew charger permitting 2 selectable charge rates being 300 and 10 mA , the first used while using the iron , the 10 mA rate when idle (trickle charging). Now the batteries hold their charge well and the iron is ready for use at all times . Battery replacement however is awkward .

Frank GM0CSZ / KN6WH

3072. How do you measure impedance a broadband transformer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-03 00:50:56 UTC
From: StarzAndStripes92999999@earthlink.net
Message-ID: <42c73578.200999@news.verizon.net>
Source record: 18256

How do you measure the impedance of a broadband transformer for a RF transistor amplifier? I'm referring to the input and output broadband tranformers just before and after the transistor finals.

3073. Re: recharable soldering iron

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-03 01:13:55 UTC
From: -ex- <exray@coqui.net>
Message-ID: <3b625$42c73bd6$4232bd90$21751@COQUI.NET>
Source record: 18257

Highland Ham wrote:

> However for surface mount components you need a micro tip. For this type of
> work I use an electric cordless iron powered by 2 pcs 1.2V NiCad batteries.
> But after a number of joints the batteries must be charged by placing the
> complete iron in a stand . The unit I use is called ISOTIP ,made in USA by
> Wahl Clipper Corporation.
> The iron was purchased in 1980 and used regularly ,however the charger is
> very primative (just a transformer with an embedded diode in the secondary
> low voltage winding), resulting in relatively short battery life . I now
> use the iron with a homebrew charger permitting 2 selectable charge rates
> being 300 and 10 mA , the first used while using the iron , the 10 mA rate
> when idle (trickle charging). Now the batteries hold their charge well and
> the iron is ready for use at all times . Battery replacement however is
> awkward .
>
> Frank GM0CSZ / KN6WH

That sounds like the one I had in the 80's. It soldered well enough but
didn't have enough gas in the battery tank to do any very serious work.
If it were to be used regularly Frank's comments about a trickle
charger are worth noting.

-Bill

3074. Re: Rechargable soldering iron (Wahl)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-03 02:31:58 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <UImdnd94C-2_01rfRVn-pw@comcast.com>
Source record: 18258

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:UImdnee1Q9bbrlrfRVnyhg@pipex.net...
>
> "m005kennedy" <m005kennedy@netzero.net> wrote in message
> news:1120327711.623121.41760@g49g2000cwa.googlegroups.com...
>>I usually do a small amout of soldering at once. I was thinking of
>> getting a recharable soldering iron just for the convience factor. I
>> was hoping to get a brand and supplier recomendation. I've seen them
>> for around $60. I would think they would be fine for QRP type
>> construction.
> ==========
> Suggest you consider a butane gas iron with choice of a number of tips
> with integral cathalitic burner . Gas flow can be adjusted ,hence the
> tip's temperature.
> There are various makes . I happen to use the Portasol Professional iron
> ,made in the Republic of Ireland, but there are other cheaper but equally
> effective makes.
>
> The iron's gas container with shut-off valve can be filled with a butane
> gas cannister as used for cigarette lighters.
>
> The smaller tips are excellent for printed circuit boards involving ICs
> and the usual discrete components.
> The larger tips are good for more heavy work like soldering PL259 plugs to
> coax .
> A 'Jumbo' tip has an equivalent rating of 100 Watts
> However for surface mount components you need a micro tip. For this type
> of work I use an electric cordless iron powered by 2 pcs 1.2V NiCad
> batteries. But after a number of joints the batteries must be charged by
> placing the complete iron in a stand . The unit I use is called ISOTIP
> ,made in USA by Wahl Clipper Corporation.
> The iron was purchased in 1980 and used regularly ,however the charger is
> very primative (just a transformer with an embedded diode in the secondary
> low voltage winding), resulting in relatively short battery life . I now
> use the iron with a homebrew charger permitting 2 selectable charge rates
> being 300 and 10 mA , the first used while using the iron , the 10 mA rate
> when idle (trickle charging). Now the batteries hold their charge well and
> the iron is ready for use at all times . Battery replacement however is
> awkward .
> Frank GM0CSZ / KN6WH
>
Wahl Corporation's HQ is about 100 miles due west of my QTH (outside of
Chicago).
http://www.iso-tip.com/html/soldering_irons.htm

They sell both the Iso-Tip cordless as well as an EZ Change model
Here are the web pages:
http://www.iso-tip.com/html/cordless_irons.htm
http://www.iso-tip.com/html/iso_tip_accessories.htm
http://www.iso-tip.com/html/ez_change.htm

They also sell a line of butane irons
http://www.iso-tip.com/html/butane_irons.htm

w9gb

3075. Re: recharable soldering iron

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-03 04:34:25 UTC
From: clfe <postmaster@clfurent.com>
Message-ID: <NSCxe.12711$Tf5.3386@newsread1.mlpsca01.us.to.verio.net>
Source record: 18253

"m005kennedy" <m005kennedy@netzero.net> wrote in message
news:1120327711.623121.41760@g49g2000cwa.googlegroups.com...
>I usually do a small amout of soldering at once. I was thinking of
> getting a recharable soldering iron just for the convience factor. I
> was hoping to get a brand and supplier recomendation. I've seen them
> for around $60. I would think they would be fine for QRP type
> construction.
>
> Mike
> KB1IUI
>

I have two of them, picked them both up at a hamfest for $5 each. Though they needed batteries and a tip, they - to me - were a steal.
All included, I got both for less than the price of one - new. I use mine extensively at times and got them for times when I'm trying to do repair work when no immediate electric source OR as is my luck, a damned storm comes and knocks out the power. At least with the Cordless, I can keep on working. Most of my work involves only a DMM and Soldering equipment, anything else can wait til power is available. I was able to get "very" small tips for the really fine soldering I do at times, saved me lots of grief. These are Iso-Tip brand. Very easy to maintain too. Not much to go wrong with them. Tip and batteries - two major parts, aside from the transformer in the charging base.

Even if ya have to buy one brand new, go for it..... "I" feel you'll make a good choice. Before I close out - I "do" hope you're referring to the "hot" kind, not the cold!!!!! The cold are JUNK.

clf

3076. Re: recharable soldering iron

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-03 04:40:14 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <42C76BE8.59F865DA@earthlink.net>
Source record: 18259

clfe wrote:
>
> "m005kennedy" <m005kennedy@netzero.net> wrote in message
> news:1120327711.623121.41760@g49g2000cwa.googlegroups.com...
> >I usually do a small amout of soldering at once. I was thinking of
> > getting a recharable soldering iron just for the convience factor. I
> > was hoping to get a brand and supplier recomendation. I've seen them
> > for around $60. I would think they would be fine for QRP type
> > construction.
> >
> > Mike
> > KB1IUI
> >
>
> I have two of them, picked them both up at a hamfest for $5 each. Though
> they needed batteries and a tip, they - to me - were a steal.
> All included, I got both for less than the price of one - new. I use mine
> extensively at times and got them for times when I'm trying to do repair
> work when no immediate electric source OR as is my luck, a damned storm
> comes and knocks out the power. At least with the Cordless, I can keep on
> working. Most of my work involves only a DMM and Soldering equipment,
> anything else can wait til power is available. I was able to get "very"
> small tips for the really fine soldering I do at times, saved me lots of
> grief. These are Iso-Tip brand. Very easy to maintain too. Not much to go
> wrong with them. Tip and batteries - two major parts, aside from the
> transformer in the charging base.
>
> Even if ya have to buy one brand new, go for it..... "I" feel you'll make
> a good choice. Before I close out - I "do" hope you're referring to the
> "hot" kind, not the cold!!!!! The cold are JUNK.
>
> clf

Add a 1N4000 (or similar small power) diode in series with the lamp
to extend the life. I was replacing the bulb every couple weeks, till I
did this.

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

3077. Re: recharable soldering iron

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-03 04:45:38 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <42C76D2B.C827CD4B@earthlink.net>
Source record: 18260

-ex- wrote:
>
> That sounds like the one I had in the 80's. It soldered well enough but
> didn't have enough gas in the battery tank to do any very serious work.
> If it were to be used regularly Frank's comments about a trickle
> charger are worth noting.
>
> -Bill

I had the Wahl orange, eight hour charge version. I added a switch
to the primary of the transformer to turn it off at night. It rarely
ran down in normal, day to day use, and I worked at least 40 hours a
week with it and a couple other irons on my bench.

PS: The first version was gray and took 16 to 24 hours to charge. The
orange model came next, followed by the red, one hour charge model. Of
course, it came out the week after I bought the orange one. :(

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

3078. Re: recharable soldering iron

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-03 05:01:32 UTC
From: -ex- <exray@coqui.net>
Message-ID: <5ae6b$42c7712d$4232bda0$7572@COQUI.NET>
Source record: 18261

Michael A. Terrell wrote:

>
> I had the Wahl orange, eight hour charge version. I added a switch
> to the primary of the transformer to turn it off at night. It rarely
> ran down in normal, day to day use, and I worked at least 40 hours a
> week with it and a couple other irons on my bench.

You should have kept that one.

-Bill

3079. Re: recharable soldering iron

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-03 06:11:43 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <42C78156.3773CABA@earthlink.net>
Source record: 18262

-ex- wrote:
>
> Michael A. Terrell wrote:
>
> >
> > > I had the Wahl orange, eight hour charge version. I added a switch
> > > to the primary of the transformer to turn it off at night. It rarely
> > > ran down in normal, day to day use, and I worked at least 40 hours a
> > > week with it and a couple other irons on my bench.
>
> You should have kept that one.
>
> -Bill

I did, for about 12 years. Finally, the transformer went bad, and
the third battery pack shorted out. It was starting to develop cracks
in the iron's body, so I reluctantly salvaged the only good parts, the
diode and the bulb.

--
Former professional electron wrangler.

Michael A. Terrell
Central Florida

3080. Re: How do you measure impedance a broadband transformer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-03 06:14:07 UTC
From: LenAnderson@ieee.org
Message-ID: <1120371247.127570.223330@f14g2000cwb.googlegroups.com>
Source record: 18263

From: Starz and Stripes on Jul 2, 8:50 pm

> How do you measure the impedance of a broadband transformer for a RF
>transistor amplifier? I'm referring to the input and output broadband
>tranformers just before and after the transistor finals.

With a broadband network analyzer and a set of resistive
terminations...over a wide bandwidth of frequencies. To be
very precise. But, you don't have to be that precise.

It's no different than checking an old audio transformer, such as
a vacuum tube output amplifier's transformer. Just count the
turns in each, square the ratio of the number of turns, and
you have the "impedance ratio." That's a rough approximation
which usually works well for most things.

All the answers depend on what you want to find out about this
solid-state RF amplifier. Please give more details on desires.

Most of the Motorola App-Note designs are detailed enough to
get the data direct, including designing your own particular
broadband transformer thingy. Helge Granberg did a nice job
very detailed in those App Notes.

LenAnderson@ieee.org

3081. Re: recharable soldering iron

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-03 15:33:09 UTC
From: clfe <postmaster@clfurent.com>
Message-ID: <kwMxe.12837$Tf5.11525@newsread1.mlpsca01.us.to.verio.net>
Source record: 18264

"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
news:42C76BE8.59F865DA@earthlink.net...
> clfe wrote:
>>
>> "m005kennedy" <m005kennedy@netzero.net> wrote in message
>> news:1120327711.623121.41760@g49g2000cwa.googlegroups.com...
>> >I usually do a small amout of soldering at once. I was thinking of
>> > getting a recharable soldering iron just for the convience factor. I
>> > was hoping to get a brand and supplier recomendation. I've seen them
>> > for around $60. I would think they would be fine for QRP type
>> > construction.
>> >
>> > Mike
>> > KB1IUI
>> >
>>
>> I have two of them, picked them both up at a hamfest for $5 each. Though
>> they needed batteries and a tip, they - to me - were a steal.
>> All included, I got both for less than the price of one - new. I use mine
>> extensively at times and got them for times when I'm trying to do repair
>> work when no immediate electric source OR as is my luck, a damned storm
>> comes and knocks out the power. At least with the Cordless, I can keep on
>> working. Most of my work involves only a DMM and Soldering equipment,
>> anything else can wait til power is available. I was able to get "very"
>> small tips for the really fine soldering I do at times, saved me lots of
>> grief. These are Iso-Tip brand. Very easy to maintain too. Not much to go
>> wrong with them. Tip and batteries - two major parts, aside from the
>> transformer in the charging base.
>>
>> Even if ya have to buy one brand new, go for it..... "I" feel you'll
>> make
>> a good choice. Before I close out - I "do" hope you're referring to the
>> "hot" kind, not the cold!!!!! The cold are JUNK.
>>
>> clf
>
>
> Add a 1N4000 (or similar small power) diode in series with the lamp
> to extend the life. I was replacing the bulb every couple weeks, till I
> did this.
>
> --
> Former professional electron wrangler.
>

> Michael A. Terrell
> Central Florida

Hmmmm... thanks for the tip, but as yet, I've not had this issue. But, no sense waiting for it to happen. I'll do that.

Thanks again,

clfe

3082. FA:TUBES Added: 6SN7GTB, 6V6Y, 5691

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-04 00:20:41 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <th%xe.384536$cg1.346772@bgtnsc04-news.ops.worldnet.att.net>
Source record: 18265
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

A few more tubes types added include 6SN7GTB, 6V6Y, 5691; see at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking, Happy Birthday America, heytubeguy

3083. Re: Rechargeable soldering irons (Wahl)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-04 10:23:09 UTC
From: David J Windisch <davidjw@cinci.rr.com>
Message-ID: <h68ye.33836$IL3.1566@tornado.ohiordc.rr.com>
Source record: 18266

Hi, all concerned:

I have 3 old, well-used Wahl rechargeables and charger-holders: 2 black "slow charge" units, and one orange "fast charge" unit. I used the beejeebers out of them in my spare-time-electronic-repairs-shop days.

New Wahl tips, batteriesamerica.com replacement solder-tab nimh C-cells, and some charger mods to work around the evils mentioned below, would rejuvenate them nicely.

Best offer gets the lot, and pls include $6 for shipping in your offer.

Tks for reading.

73, Dave, N3HE

SNIP
>> the complete iron in a stand . The unit I use is called ISOTIP ,made in
>> USA by Wahl Clipper Corporation.
>> The iron was purchased in 1980 and used regularly ,however the charger is
>> very primative (just a transformer with an embedded diode in the
>> secondary low voltage winding), resulting in relatively short battery
>> life . I now use the iron with a homebrew charger permitting 2
>> selectable charge rates being 300 and 10 mA , the first used while using
>> the iron , the 10 mA rate when idle (trickle charging). Now the batteries
>> hold their charge well and the iron is ready for use at all times .
>> Battery replacement however is awkward .
>> Frank GM0CSZ / KN6WH
>>
> Wahl Corporation's HQ is about 100 miles due west of my QTH (outside of
> Chicago).
> http://www.iso-tip.com/html/soldering_irons.htm
>
> They sell both the Iso-Tip cordless as well as an EZ Change model
> Here are the web pages:
> http://www.iso-tip.com/html/cordless_irons.htm
> http://www.iso-tip.com/html/iso_tip_accessories.htm
> http://www.iso-tip.com/html/ez_change.htm
>
> They also sell a line of butane irons
> http://www.iso-tip.com/html/butane_irons.htm
>
SNIP

3084. Re: WTB "The VHF/UHF DX Book Edited by Ian White, G3SEK"

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-04 17:31:54 UTC
From: Steve <se018c1813@blueyonder.co.uk>
Message-ID: <eoeye.109097$Vj3.81825@fe2.news.blueyonder.co.uk>
Source record: 18267

Ian White GM3SEK wrote:
> MarkAren wrote:
>
>> Hi All,
>>
>> Anyone got a copy in good condition for sale ?
>>
>> Ian, got a spare copy ?
>>
>
> Sorry, not any more. Good luck!
>
>

Ian,

It is a brilliant book. My "dog-eared" copy is now falling to pieces through overuse;-(

I suppose that times have changed and a reprint is now out of the question.

Would you, or any of the contributors, object to somebody putting it up on the internet, i.e. as PDF files in the same way as the Classic EIMAC "Care and feeding of power grid tubes" is?

Best wishes and thanks for "The Book"!

Steve G8IZY

3085. Unknown Component

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-04 18:15:21 UTC
From: Win <w0lz@winlyn.us>
Message-ID: <umuic195f1an5bvdl3mfam5dk3ku5cv1ua@4ax.com>
Source record: 18268

Pulled a high speed vacuum relay, Jennings RJ1A, out the other day that I was saving for a QSK mod to my old amp. There is component across the windings of this relay that I can not identify. It is soldered, or silver soldered, to the winding terminals. It is about 3/16 square, yellow, and has the following markings: JAVX 8652 AA M390 14/01 1553.

Here is a slightly out of focus picture.
http://home.alltel.net/winlyn/RJ1A.jpg

Anyone?????

Win, W0LZ

3086. Re: Unknown Component

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-04 18:28:42 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11civugrsqdb09a@corp.supernews.com>
Source record: 18269

Win wrote:

> Pulled a high speed vacuum relay, Jennings RJ1A, out the other day
> that I was saving for a QSK mod to my old amp. There is component
> across the windings of this relay that I can not identify. It is
> soldered, or silver soldered, to the winding terminals. It is about
> 3/16 square, yellow, and has the following markings: JAVX 8652 AA M390
> 14/01 1553.
>
> Here is a slightly out of focus picture.
> http://home.alltel.net/winlyn/RJ1A.jpg
>
> Anyone?????
>
> Win, W0LZ

It's a rectangular ceramic cap, _possibly_ 39pF ('cause of the "M390"
marking). Those things have military catalog numbers and don't
necessarily include the actual value printed on the cap, which is a pain
if you have a mixed bag of them, or if you have one on a board and want
to know it's value.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

3087. Re: Unknown Component

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-04 20:43:14 UTC
From: Win <w0lz@winlyn.us>
Message-ID: <jf7jc1trub7va6qe5hq110oaqev5q6n4rt@4ax.com>
Source record: 18270

On Mon, 04 Jul 2005 11:28:42 -0700, Tim Wescott <tim@seemywebsite.com>
wrote:

>Win wrote:
>
>> Pulled a high speed vacuum relay, Jennings RJ1A, out the other day
>> that I was saving for a QSK mod to my old amp. There is component
>> across the windings of this relay that I can not identify. It is
>> soldered, or silver soldered, to the winding terminals. It is about
>> 3/16 square, yellow, and has the following markings: JAVX 8652 AA M390
>> 14/01 1553.
>>
>> Here is a slightly out of focus picture.
>> http://home.alltel.net/winlyn/RJ1A.jpg
>>
>> Anyone?????
>>
>> Win, W0LZ
>
>It's a rectangular ceramic cap, _possibly_ 39pF ('cause of the "M390"
>marking). Those things have military catalog numbers and don't
>necessarily include the actual value printed on the cap, which is a pain
>if you have a mixed bag of them, or if you have one on a board and want
>to know it's value.

Thanks, Tim. I think you are correct. Rich Measures, KG6K, said it
could be an MOV, which is a capacitive device.. What eve it is,
exactly, I think I am going to leave it in the circuit. I can't see
it hurting anything.

win, w0lz

3088. Re: PIC SWR meter - help!!!!!!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-05 06:55:07 UTC
From: leszek SP5MNL <sp5mnl@o2.pl>
Message-ID: <1120546507.310136.220190@o13g2000cwo.googlegroups.com>
Source record: 18271

Grudzien 1999r.
Jest jeszcze jakies usprawnienie tego projektu w numerze kwiecien
2000

Leszek
SP%MNL

3089. Re: Unknown Component

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-05 07:06:52 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <gkqye.1083140$w62.458806@bgtnsc05-news.ops.worldnet.att.net>
Source record: 18272

It is a cap. I've got plenty of those things from thr Collins surplus sales.

Pete

"Win" <w0lz@winlyn.us> wrote in message
news:jf7jc1trub7va6qe5hq110oaqev5q6n4rt@4ax.com...
> On Mon, 04 Jul 2005 11:28:42 -0700, Tim Wescott <tim@seemywebsite.com>
> wrote:
>
>>Win wrote:
>>
>>> Pulled a high speed vacuum relay, Jennings RJ1A, out the other day
>>> that I was saving for a QSK mod to my old amp. There is component
>>> across the windings of this relay that I can not identify. It is
>>> soldered, or silver soldered, to the winding terminals. It is about
>>> 3/16 square, yellow, and has the following markings: JAVX 8652 AA M390
>>> 14/01 1553.
>>>
>>> Here is a slightly out of focus picture.
>>> http://home.alltel.net/winlyn/RJ1A.jpg
>>>
>>> Anyone?????
>>>
>>> Win, W0LZ
>>
>>It's a rectangular ceramic cap, _possibly_ 39pF ('cause of the "M390"
>>marking). Those things have military catalog numbers and don't
>>necessarily include the actual value printed on the cap, which is a pain
>>if you have a mixed bag of them, or if you have one on a board and want
>>to know it's value.
>
> Thanks, Tim. I think you are correct. Rich Measures, KG6K, said it
> could be an MOV, which is a capacitive device.. What eve it is,
> exactly, I think I am going to leave it in the circuit. I can't see
> it hurting anything.
>
> win, w0lz
>

3090. Looking for Specialty Crystal Filter, Please Help

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-05 15:30:31 UTC
From: ZenSafari <chris.rehorn@gmail.com>
Message-ID: <1120577431.428234.246660@g14g2000cwa.googlegroups.com>
Source record: 18273

I am currently looking for a crystal filter in the CF range of 70 to 100MHz. I know that these are rare and are not standard for FM radio, citizen's band, etc, but it would be most helpful for me to find one. Ideally, the filter should have a passpand of +/-3.75kHz about the CF (3dB). I've checked numerous manuf. who make these type of crystal filters (FOX, ILSI, Raltron, MCF, etc) but most of their products are vapor ware and have never been fabricated. Do any of you have a suggestion of where I might find a filter that meets this spec? My goal is to avoid another IF stage in my hardware...this is why I require the narrow bandwidth at the high CF. Even if you have a suggestion of where I might find a 70 to 100 MHz CF filter with a wider bandwidth I would appreciate it very much.

Thanks for the help.

3091. Re: Looking for Specialty Crystal Filter, Please Help

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-05 16:50:52 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <42CABA5A.35002C15@earthlink.net>
Source record: 18274

ZenSafari wrote:
>
> I am currently looking for a crystal filter in the CF range of 70 to
> 100MHz. I know that these are rare and are not standard for FM radio,
> citizen's band, etc, but it would be most helpful for me to find one.
> Ideally, the filter should have a passpand of +/-3.75kHz about the CF
> (3dB). I've checked numerous manuf. who make these type of crystal
> filters (FOX, ILSI, Raltron, MCF, etc) but most of their products are
> vapor ware and have never been fabricated. Do any of you have a
> suggestion of where I might find a filter that meets this spec? My goal
> is to avoid another IF stage in my hardware...this is why I require the
> narrow bandwidth at the high CF. Even if you have a suggestion of where
> I might find a 70 to 100 MHz CF filter with a wider bandwidth I would
> appreciate it very much.
>
> Thanks for the help.

The only off the shelf 70 MHz CF filters I've seen were used in
Satellite TV or Telemetry receivers. Microdyne built their own IF
filters For narrow frequencies like this, with switching to select one
of up to 12 internal bandwidths, and a few models allowed 12 external
filters, as well. The SAW filters for Satellite receivers is generally
+/- 10 MHz, so those won't help you. Its too bad, because there are old
C-band and early KU band junkers almost everywhere.

--
http://home.earthlink.net/~computersforvets/

Michael A. Terrell
Central Florida

3092. Re: Looking for Specialty Crystal Filter, Please Help

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-05 18:57:04 UTC
From: fmmck@aol.com
Message-ID: <fmmck-0507051457050001@aca33953.ipt.aol.com>
Source record: 18275

In article <1120577431.428234.246660@g14g2000cwa.googlegroups.com>,
"ZenSafari" <chris.rehorn@gmail.com> wrote:

> I am currently looking for a crystal filter in the CF range of 70 to
> 100MHz. I know that these are rare and are not standard for FM radio,
> citizen's band, etc, but it would be most helpful for me to find one.
> Ideally, the filter should have a passpand of +/-3.75kHz about the CF
> (3dB). I've checked numerous manuf. who make these type of crystal
> filters (FOX, ILSI, Raltron, MCF, etc) but most of their products are
> vapor ware and have never been fabricated. Do any of you have a
> suggestion of where I might find a filter that meets this spec? My goal
> is to avoid another IF stage in my hardware

Chris-

I recall such a product from about 25 years ago, but for the 155-165 MHz
range and somewhat wider bandwidth. It was from:

PTI - Piezo Technology, Inc.
http://www.piezotech.com/
2525 Shader Road
Orlando, FL 32804 USA
Phone: 407-298-2000
Fax: 407-293-2979

It might be worth contacting them, in case they still make the filters,
and can make them for your frequencies and bandwidth.

73, Fred, K4DII

3093. Re: Looking for Specialty Crystal Filter, Please Help

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-05 18:59:08 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <0MAye.134925$xm3.81103@attbi_s21>
Source record: 18276

> ZenSafari wrote:
> >
> > I am currently looking for a crystal filter in the CF range of 70 to
> > 100MHz. I know that these are rare and are not standard for FM radio,
> > citizen's band, etc, but it would be most helpful for me to find one.
> > Ideally, the filter should have a passpand of +/-3.75kHz about the CF
> > (3dB). I've checked numerous manuf. who make these type of crystal
> > filters (FOX, ILSI, Raltron, MCF, etc) but most of their products are
> > vapor ware and have never been fabricated. Do any of you have a
> > suggestion of where I might find a filter that meets this spec? My goal
> > is to avoid another IF stage in my hardware...this is why I require the
> > narrow bandwidth at the high CF. Even if you have a suggestion of where
> > I might find a 70 to 100 MHz CF filter with a wider bandwidth I would
> > appreciate it very much.

I have a couple of the Ten Tec filters that were used in their Paragon transceiver. 70 MHz center frequency, don't remember the bandwidth but could measure one. Or you could check with Ten Tec and if it fits your requirements, they're available.

W4ZCB

3094. Re: Looking for Specialty Crystal Filter, Please Help

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-05 20:57:03 UTC
From: ZenSafari <chris.rehorn@gmail.com>
Message-ID: <1120597023.483821.119790@g49g2000cwa.googlegroups.com>
Source record: 18277

Thank you all for your replies. These leads are extremely helpful to me. I will look into some of these options and get back to you.

Again, thanks for your input.

-Chris

3095. Polarity of 2SC1970 and 2SC1971

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-05 20:59:41 UTC
From: dumpjunkmailhere@yahoo.com
Message-ID: <1120597181.354388.75450@g47g2000cwa.googlegroups.com>
Source record: 18278
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Hi All,

Two RF transistors, 2SC1970 and 2SC1971 are supposed to have BEC pinouts according to data sheets. However, it seems that such transistors with BCE pinout also exist; resistors in one circuit caught on-fire when I plugged a 2SC1971 into a BEC socket (based on data sheets, I assumed the transistor had BEC pinout). After replacing the resistors and bending the leads of the transistor, the circuit worked properly. Yes, the socket was wired correctly for BEC pinout. Has anyone ever come across the BCE pinout versions of 2SC1970 and/or 2SC1971?

C.W.

3096. Re: Polarity of 2SC1970 and 2SC1971

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-05 22:01:50 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <TfqdnZBhmrm9nlbfRVnysg@pipex.net>
Source record: 18279
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

> Two RF transistors, 2SC1970 and 2SC1971 are supposed to have BEC
> pinouts according to data sheets. However, it seems that such
> transistors with BCE pinout also exist; resistors in one circuit caught
> on-fire when I plugged a 2SC1971 into a BEC socket (based on data
> sheets, I assumed the transistor had BEC pinout). After replacing the
> resistors and bending the leads of the transistor, the circuit worked
> properly. Yes, the socket was wired correctly for BEC pinout. Has
> anyone ever come across the BCE pinout versions of 2SC1970 and/or
> 2SC1971?
==========

According to Tower's International Transistor Selector , both 2SC1970 (Ic max=0.5A) and 2SC1971 (Ic max =1A) are NPN RF power transistors in a TO220 package
Pinout 2SC1970 is BCE
Pinout 2SC1971 is BEC

The above pinouts are confirmed by the (PDF format) datasheets which I found by doing a Google.

Frank GM0CSZ / KN6WH

3097. Re: Looking for Specialty Crystal Filter, Please Help

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-06 10:48:59 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <ONOye.3050$x82.219@fe03.lga>
Source record: 18280

"ZenSafari" <chris.rehorn@gmail.com> wrote in message
news:1120597023.483821.119790@g49g2000cwa.googlegroups.com...

> Thank you all for your replies. These leads are extremely helpful to
> me. I will look into some of these options and get back to you.

I think we would all be interested in what you discover. My own reaction is
that you're not going to find something that narrow at that IF, but if you
do, it might be useful in other contexts.

..

3098. New Coax Connector & Adapter Catalog Now Available

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-06 13:36:25 UTC
From: AAA RF Products <info@aaarfproducts.com>
Message-ID: <l6Rye.7585$Eo.4154@fed1read04>
Source record: 18281
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.components

Please email or call for your free copy of our latest coax connector,
adapter, cable assembly & bulk coaxial cable catalog.

No minimum order

No handling fees.

web: www.aaarfproducts.com
email: sales@aaarfproducts.com
call: 949 481 3154
fax: 949 388 5448
mail: AAA RF Products, 949 Calle Amanecer, San Clemente, CA 92673 USA

3099. Ham radio beginner?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-06 16:03:05 UTC
From: Ham Radio <webmaster@hamradiostarter.com>
Message-ID: <ZgTye.9708$H41.660@tornado.rdc-kc.rr.com>
Source record: 18282

If you want to get into ham radio and don't know how to start, check out:

http://www.hamradiostarter.com

You will find everything you need to get your license and get started in ham radio.

3100. Re: Polarity of 2SC1970 and 2SC1971

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-06 18:24:31 UTC
From: JB <SPAMac6tk@cybertime.net>
Message-ID: <dah7pn$2sa0$1@madmax.keyway.net>
Source record: 18283
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Scary!

I have noticed some with tabs isolated and some not. Gotta check the spec sheets. NTE replacements worked fine in TS2000 and are probably re-marked OEMs.

Analog VOM would help.

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message news:TfqdnZBhmrm9nlbfRVnysg@pipex.net...
> > Two RF transistors, 2SC1970 and 2SC1971 are supposed to have BEC
> > pinouts according to data sheets. However, it seems that such
> > transistors with BCE pinout also exist; resistors in one circuit caught
> > on-fire when I plugged a 2SC1971 into a BEC socket (based on data
> > sheets, I assumed the transistor had BEC pinout). After replacing the
> > resistors and bending the leads of the transistor, the circuit worked
> > properly. Yes, the socket was wired correctly for BEC pinout. Has
> > anyone ever come across the BCE pinout versions of 2SC1970 and/or
> > 2SC1971?
> ==========
> According to Tower's International Transistor Selector , both 2SC1970 (Ic
> max=0.5A) and 2SC1971 (Ic max =1A) are NPN RF power transistors in a TO220
> package
> Pinout 2SC1970 is BCE
> Pinout 2SC1971 is BEC
>
> The above pinouts are confirmed by the (PDF format) datasheets which I found
> by doing a Google.
>
> Frank GM0CSZ / KN6WH
>
>

3101. Re: How big has Somerset, PA hamfest been in the past?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-06 20:07:14 UTC
From: Bill Smith <kb3gun-nospam1@VERIZON.net>
Message-ID: <42cc39e2$0$52206$ec3e2dad@news.usenetmonster.com>
Source record: 18284
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

"straydog" <aes1492@sdf.lonestar.org> wrote in message
news:Pine.NEB.4.62.0506261856170.28426@sdf.lonestar.org...
>
>
> On Fri, 24 Jun 2005, Galen Watts wrote:
>
>> Date: Fri, 24 Jun 2005 08:25:27 -0400
>> From: Galen Watts <gwatts@nrao.edu>
>> To: straydog <aes1492@sdf.lonestar.org>
>> Newsgroups: rec.radio.swap, rec.radio.amateur.boatanchors,
>> rec.radio.amateur.equipment, rec.radio.amateur.homebrew
>> Subject: Re: How big has Somerset, PA hamfest been in the past?
>>
>> straydog wrote:
>>>
>>> I think July 17, is the next Somerset PA hamfest and I've been thinking
>>> about going. Its a long drive from here (southern Delaware) and I was
>>> wondering how big and how good it has been in the past. Anyone got any
>>> recollections from the past?
>>>
>>> Art, w4pon
>>
>> They have pictures of last year's fest at
>> http://www.k3smt.org/hf2004/
>>
>> -W8LNA
>>
>
> Thanks for the info...
>
> I had a look.
>
> W4PON
>
>

Hello Art,
This is only our second annual hamfest. Last year it was held in August, a day after the hurricane came thru. Our turnout was only about 300. Feedback so far this year says we should have between 500-750. Good odds for winning a door prize or the main drawing.
Worst case, we're only 6 miles from the 9/11 Flight 93 Crash Site / Memorial. That in itself would make the trip worth it. The Somerset

Somerfest is also running from Friday thru Sunday. Food, Music, Fun... I should work for the Chamber of Commerce...HiHi

Hope to see you here.
Bill kb3gun
http://www.k3smt.org

3102. Re: Ham radio beginner?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-06 21:04:49 UTC
From: Roger Conroy <rogerconroy@nospam.hotmail.com>
Message-ID: <dahh0naah1@ctb-nnrp2.saix.net>
Source record: 18285

"Ham Radio" <webmaster@hamradiostarter.com> wrote in message
news:ZgTye.9708$H41.660@tornado.rdc-kc.rr.com...
> If you want to get into ham radio and don't know how to start, check out:
>
> http://www.hamradiostarter.com
>
> You will find everything you need to get your license and get started in
> ham
> radio.
>
>
Why pay $10 for information you can get for free from many other sources?

3103. New program. Two SWR meters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-06 23:17:09 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <dahopl$110$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 18286

This program models the behaviour of a transmission line plus antenna.
The line impedance can have any Zo. The antenna feedpoint impedance
can be any value of R+jX. Line length can be any fraction and number
of wavelengths. Line overall attenuation can be any value of dBs.

There is an SWR meter located at each end of the line. The meters also
indicate the reflection coefficients at the locations. Meter Zo can
be set equal to line Zo or to the standard 50 ohms.

Line input impedance can be observed to change versus line length in
wave-lengths, line attenuation and antenna impedance. The transforming
action of the line can be demonstrated. The smaller SWR and reflection
coefficient at the transmitter end of the line can be seen. The exact
increase in loss due to standing waves on the line is calculated.

The program can be used in practical applications and also for
educational purposes. It is hoped it may prevent the outbreaks in
violence which frequently occur in newsgroups about the meanings of
SWR and the notions of reflected power.

Download program SWRARGUE from website below in a few seconds. File
size = 41 Kbytes. Run immediately. No unzipping inconvenience.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

3104. A DRM converter for Icom RTX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-07 08:59:21 UTC
From: PaoloC <ollollo@hotpop.com>
Message-ID: <42cceeaa_2@x-privat.org>
Source record: 18287

Hi.

I have successfully built a 12kHz downconverter for Icom (T)RXes that use a 2nd -and last- IF at 9MHz. The adapter can be used to receive DRM HF broadcasts with commercial HAM rigs/RXs and plugs on the optional filter socket (no soldering required).

Some devices that can mount optional 9MHz filters are:
IC-706/MKii/MKiiG, IC-725/726/728/729, IC-735, IC-R70/71/75 receivers.

A first test with a balcony homebrew antenna (http://spazioinwind.libero.it/ik1zyw/temp/IMG_0030.JPG) and an IC706MKiiG allowed me to receive bitXpress banner on 15.896 MHz and listen to Deutsche Welle on 6MHz broadcast band. I used "dream" software on Windows.

The same downconverter can also be used with SDRadio (http://www.sdradio.org/, without sideband rejection) in order to accomplish narrowband filtering, or SSB/CW/FM demodulation for some receivers (such as IC-725/728 that require an optional unit for FM reception).

I will soon carry on further reception tests as well as side-by-side comparison with 455-12 DRM converters on other receivers.

If there is enough interest I will publish a complete description of this downconverter, including the design involved. - unless I receive an offer to buy the whole project :-) -

Greetings,
Paolo IK1ZYW

QRPp-I #707 + www.paolocravero.tk + I QRP #476
SpamAssassin-based email antispam/antivirus solutions
Italian/English-to/from-Croatian translations

3105. Re: Ham radio beginner?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-07 20:22:55 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <Bagze.6804$is5.734293@news20.bellglobal.com>
Source record: 18288

An absolutely phenomenal mutual help group is at
http://groups.yahoo.com/group/HamRadioHelpGroup/. Its focus is primarily for
US licensees or wannabe's but the technical help is universal.

Tom

3106. Why don't many high power RF transistor amplifiers use emitter stabilizing resistor and AC by-pass capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-08 02:03:51 UTC
From: Just Cuz <JustCuz.Not.A.Real.Address@hotmail.com>
Message-ID: <spmrc1pbv0dd5ldstj3gks3eimllc1crsl@4ax.com>
Source record: 18289

I have been looking at a variety of RF transistor amplifier schematics including a 50 watt amp shown in the ARRL handbook (1996 - page 17.96) , and they do not have emitter stabilizing resistors and ac by-pass capacitors on the emitter leg of the final output transistors. Is there a good reason for not using emitter stabilizing resistors and ac by-pass capacitors in 100 watt output or more RF transistor amplifiers?

Here are some on-line schematics I found of high power RF power transistor amplifiers, and in all of them the emitter goes straight to ground.

http://www.ameritron.com/man/pdf/ALS-500M.pdf

http://www.cbtricks.com/Amp/txstar/250hdv_350hdv/graphics/ts_dx250hdv_dx350hdv_sch.gif

http://www.cbtricks.com/Amp/palomar/elite/palomar_elite500.pdf

3107. Re: Why don't many high power RF transistor amplifiers use emitter stabilizing resistor and AC by-pass capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-08 02:12:52 UTC
From: Bob Liesenfeld <wb0poq@visi.com>
Message-ID: <42CDE124.B70118B2@visi.com>
Source record: 18290

Just Cuz wrote:

> Is there a good reason for not using emitter stabilizing
> resistors and ac by-pass capacitors in 100 watt output or more RF
> transistor amplifiers?

My hunch would be that most of those amps probably use ballasted emitter transistors which mitagates the need for an emitter resistor. That, plus the fact that any impedance in the emitter lead is an invitation to oscillation, and obtaining a good low Z bypass is tough at HF especially at the current levels involved.

Bob WB0POQ

3108. Re: Looking for 12V tube Rx project info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-08 02:19:11 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <tnlze.27538$ho.26856@bignews6.bellsouth.net>
Source record: 18291

LenAnderson@ieee.org wrote:
> From: Ken Scharf on Sun 26 Jun 2005 22:41
>
>
>>LenAnderson@ieee.org wrote:
>>
>>>From: Ken Scharf on Jun 25, 6:26 pm
>>>
>>>>LenAnder...@ieee.org wrote:
>>>
>>>>>>I am looking for a nice schematic, and perhaps additional info, on a 12V
>>>>>>(fil. & plate) tube superhet Rx; just something fairly simple for CW/SSB
>>>>>>reception without bells and whistles, and preferably for 75M/40M reception.
>>>>
>>>>> Setchell-Carlson managed to do it with loctal-base tubes running
>>>>> off of a 24/28 VDC aircraft bus back in WW2 times. No dynamotor,
>>>>> just that cute little box referred to as a "range receiver" or
>>>>> BC-1206.
>
>
>>> Converting a "Q5-er" from tubes to FETs would be rather easy.
>>> No real need for the 2N2222s. Would have gobs of space left over
>>> inside an already compact box.
>>
>>This is the idea of a cascade fet-bipolar circuit. The drain of the fet
>>drives the emitter of the bipolar and the bipolar's base is biased so
>>that the base sits about half way up the power supply (two resistors).
>>The fet is self biased with a source resistor for the desired current.
>>The gain of this circuit is higher than a fet by itself, and the output
>>impedance will be higher.
>> ____ __
>> ->|_ _/
>> | |
>>
>>
>>> If the 135 KHz IF has an equivalent total Q of 100, the BW would
>>> be about 1.3 KHz, not all that swift for CW and too shart for SSB.
>>>
>>
>> The AnArc-5 Q5'ers had 6 tuned circuits in their If but the '1206
>>only has 3 or 4. So it's BW might be a tad wider. The 1206 also has
>>no bfo.
>
>

> The ARC-5 LF version has IF TRANSFORMERS but the insides are
> easy to see for detail. The 6 to 9 MHz version IFs (2830 KHz)
> had only one tuned circuit in each IF can.
>
> Can't remember what the BC-1206 used in their IF cans, but that
> is easy to change inside the present can (it will look just the
> same on the outside).
I seem to remember two trimmer caps so I guess there were a total
of four tuned circuits. I think the ham radio article I saw on
converting the rig did add a bfo using a tv horizontal coil cut
down as the bfo coil. I could also remove some wire from an old
BC453 bfo coil, of which I have a few in the junk box. (Not to
metion about a dozen 85khz if cans).

Which reminds me.....
I was thinking of building a solid state version of the old
Drake 2B receiver with it's 80meter first (tunable) IF, 455khz
second if, and 85khz third if (using Arc5 IF transformers) instead
of Drakes 50khz (close enough). I'd use a BC454 tuning cap padded
down to cover 3.5-4.1mhz just like Drake. The first oscillator
would be a PLL to cover everything (beats grinding on ft243 rocks).

>
> I can't see any advantage of going cascode (JFET-bipolar) when an
> insulated gate FET would closely approximate a vacuum tube for
> both input impedance (all capacitive) and drain/output impedance
> (many hundreds of KOhms). Depends on what is available for the
> vacuum-to-solid conversion.
Junction fets are rather low gain, though compared to tubes with
28 volts on their plates, probably a good match. The cascade circuit
can be built with either two jfets, or one jfet and one bipolar. The
jfet/bipolar version combines the high gain of a bipolar transistor
with the high input impedance of the fet. That's the reason I'd give
it a try (plus I enough of BOTH kinds in the junk box). I'd replace
the converter tube with three fets, two in differcial for the mixer,
and one for the oscillator.

>
> Note: Both input and output impedances will affect the impedance
> and Q of the tuned circuits...and the GAINS...for a conversion
> with minimum circuit changes. All that has to be taken into
> account.
>
>
>>> However, the BC-1206 tuning range of 195 to 500 KHz results in
>>> an image at the converter input of 390 to 1000 KHz away from the
>>> desired band. That's worse than the 910 KHz image of an old
>>> 455 KHz IF.
>>>
>>
>>The 1206's dial only goes up to 400khz, but it tunes past that. Maybe

>>it goes to 420 or 450khz, I don't think it goes as high as 500khz.
>>(so maybe I don't have to expand the range for my needs).
>
>
> The variable tuning capacitor max:min ratio is roughly 11:1 (no
> external parallel capacity). Since the resonant tuning range is
> the square root of that, you could have it tune 190 to 570 KHz
> with a 9:1 max:min change in resonance capacity. The only real
> problem is getting the variable LO tuning to track the front end
> since it would tune 325 to 705 KHz (for the high-side) and that
> would be a 2.169:1 frequency ratio or 4.706 capacity change ratio.
>
Well that doesn't take into account the distributed capacitance of the
coil windings, which would be considerable at this frequency what with
the required inductance. (ever wonder why a grid dipper covers a much
higher min-max frequency ratio as the frequency band goes up?) Also
IIRC there are trimmer caps in parallel with the tuning caps for
alignment as the coils are fixed. To make the oscillator track, a
series padder cap is used to reduce the max. capacitance value of the
oscillator section. -OR- a parallel padder could be used to swamp out
the range of the section.

>
>
>>> The linear-in-capacity rotation of the 3-gang variable is good
>>> for an RX Noise Bridge having an expanded parallel-C range...
>>> which is what I used them for. :-)
>>>
>>
>>True, but the rig is just to cute to canabilze.
>
>
> Heh heh heh. I agree with you there. It probably is most dense
> of any other 1940s era design using 8-pin "medium" size tubes,
> including the very compact ARC-5 receivers. Not quite as dense
> as the SCR-300 Walkie-Talkie (BC-1000) which stuffed 18 7-pin
> "miniature" tubes, a half-dozen coil/transformer cans, and a
> five-gang (!) variable capacitor into an approximate 5" x 10"
> chassis. [Galvin/Motorola did real good in packaging there]
>
> KEEPING the tubes as-is, with the possible exception of the AF
> out (28D7 ?) would yield a straight-AM receiver. ADDING a BFO
> via under-chassis bipolar transistor would result in minimum
> cannibalization (one extra switch on front panel)...RF and IF
> could remain the same. I've forgotten the audio output circuit
> of it but recall that AF output power for old aircraft was
> rather high (ambient noise in old warbirds was terrible). In a
> quiet land environment, the audio output needed is rarely 200
> milliWatts into a speaker, much less for headphones. The SCR-300
> walkie-talkie (headphones only) had a maximum of 3 mW audio out!

>
You can't get much power out of a tube at 28v on the plate. The 28D7
was up to the task being a double power pentode with the sections in
parallel (why not push pull?). I wouldn't call solid state conversion
canabilzing.

> Hint on supply conversion: A 12.6 V "filament" transformer can
> do the job for all-12 V filaments in parallel. A voltage
> doubling rectifier (even a tripler if need be) will yield the
> quite-low B+ for plate and screen. I once did that (long time
> ago) with a single transformer and voltage tripler for B+, all
> working into a set of power resistor load boxes, all in a half
> hour of tack-soldering. Got 30 VDC for B+ at 115 VAC line,
> less than 5% ripple. Didn't have the BC-1206 then. A critic
> looking on said "that isn't a good enough test...gotta have the
> 'real' load on it to 'prove' it." :-) [some folks just aren't
> convinced until someone else has made a finished production
> product!]
>
> LenAnderson@ieee.org
>

3109. Synch AM Special Interest Group Started

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-08 02:35:33 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <YDlze.7244$is5.794639@news20.bellglobal.com>
Source record: 18292

Information on and discussion of synchronous AM demodulators is scattered widely. There are sporadic discussions on a couple of Usenet news groups but they are restricted to text messages and it's hard to find the wheat in the chaff. This new group can accommodate schematics and pictures and provides a filtered view focussed on this one subject. In time, I hope that its collected files and discussions will make a strong starting or reference point for all with an interest in Synch AM.

Please join if you have ever designed or experimented with synch AM demodulators or intend to start. Visit the web site at http://groups.yahoo.com/group/Synch_AM/ to subscribe. Your designs, experiences and participation in the on-topic discussions to ensue will be welcomed.

Tom

3110. Re: Why don't many high power RF transistor amplifiers use emitter stabilizing resistor and AC by-pass capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-08 02:51:36 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11crqhn32qa2650@corp.supernews.com>
Source record: 18293

Just Cuz wrote:

>
> I have been looking at a variety of RF transistor amplifier
> schematics including a 50 watt amp shown in the ARRL handbook (1996 -
> page 17.96) , and they do not have emitter stabilizing resistors and
> ac by-pass capacitors on the emitter leg of the final output
> transistors. Is there a good reason for not using emitter stabilizing
> resistors and ac by-pass capacitors in 100 watt output or more RF
> transistor amplifiers?
>
> Here are some on-line schematics I found of high power RF power
> transistor amplifiers, and in all of them the emitter goes straight to
> ground.
>
> http://www.ameritron.com/man/pdf/ALS-500M.pdf
>
> http://www.cbtricks.com/Amp/txstar/250hdv_350hdv/graphics/ts_dx250hdv_dx350hdv_sch.gif
>
> http://www.cbtricks.com/Amp/palomar/elite/palomar_elite500.pdf
>
Power burnt in the emitter resistor is power that isn't going out the
antenna. So it makes sense to use a fancier bias network and no emitter
resistor.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

3111. Re: Why don't many high power RF transistor amplifiers use emitter stabilizing resistor and AC by-pass capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-08 06:12:12 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <dal5fs$49k$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 18294

> I have been looking at a variety of RF transistor amplifier
> schematics including a 50 watt amp shown in the ARRL handbook
(1996 -
> page 17.96) , and they do not have emitter stabilizing resistors and
> ac by-pass capacitors on the emitter leg of the final output
> transistors. Is there a good reason for not using emitter
stabilizing
> resistors and ac by-pass capacitors in 100 watt output or more RF
> transistor amplifiers?
>
==========

Most RF power transistors in the 50-100 watt range already have an internal emitter resistor. It's usually less than a tenth of an ohm, perhaps only a few hundreths of an ohm. Its purpose is to prevent thermal runaway and make the device more tolerant of overload due to momentary impedance mismatches. Internal resistors have an extemely low inductance. They are NOT wirewound. They are an integral part of the transistor construction and material. The manufacturer may not mention their existence in his catalogue or data book.

RF power transistors are usually multi-emitter devices - all in parallel. Each emitter has its own individual series resistor.

Such low-value external resistors are not available as discrete wire-ended circuit components. Inductance would be too high at HF and an invitation to self oscillation. Don't attempt to use normal circuit components in emitter leads unless a transistor manufacturer specifically recommends them.

HF and VHF power transistors are very fast fuses. They are worked very close to their maximum voltage and current ratings.

Reg, G4FGQ

3112. TV Tuner IF level

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-08 16:47:06 UTC
From: Hernán Sánchez <nanchez@gmail.com>
Message-ID: <1120841226.098662.244630@z14g2000cwz.googlegroups.com>
Source record: 18295

Hi.

I'm planning to do an spectrum "visualizer" using a TV-Tuner (113-198c on www.tvetuner.com).

The basic idea is to undersample the IF output of the TV-Tuner and do some digital process to that signal with a DSP.

I want to know the IF level on those tv tuners, I mean, the output impedance and voltage level. I haven't found that info in the datasheet I have for that tv-tuner.

Thanks

Hernán Sánchez

3113. tektronix storage scope for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-09 00:23:40 UTC
From: waz <wazungy@sympatico.ca>
Message-ID: <eOEze.12486$Ud.1337555@news20.bellglobal.com>
Source record: 18296

Tektronix 564B storage oscilliscope.
Type 3A72 dual trace amp.
Type 3B3 time base.

Powers up. I get a signal. It is too complicated for me, (I have a heathkit).
$40 Canadian. It must go by the first week of August.
Pickup in Montreal Quebec or pay shipping.

wazungy@sympatico.ca

3114. FA:Tubes:6L6,6V6Y,807,12AX7,6JS6C.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-09 00:48:02 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <69Fze.1105606$w62.46417@bgtnsc05-news.ops.worldnet.att.net>
Source record: 18297
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Added a few more tubes. Have a look, tnx:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

+ Amphenol 2 pin Mic connector set and 5691 tubes (red base). heytubeguy

3115. FA:5691 Red Base,2-pin mic plug + more tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-09 00:50:47 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <HbFze.401815$cg1.189726@bgtnsc04-news.ops.worldnet.att.net>
Source record: 18298
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Added a few more tubes. Have a look, tnx:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

+ Amphenol 2 pin Mic connector set and 5691 tubes (red base). heytubeguy

3116. Re: Looking for 12V tube Rx project info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-09 03:04:14 UTC
From: LenAnderson@ieee.org
Message-ID: <1120878254.783022.269970@g14g2000cwa.googlegroups.com>
Source record: 18299

From: Ken Scharf on Jul 7, 10:19 pm

>LenAnder...@ieee.org wrote:
>> From: Ken Scharf on Sun 26 Jun 2005 22:41
>>>LenAnder...@ieee.org wrote:
>>>>From: Ken Scharf on Jun 25, 6:26 pm
>>>>>LenAnder...@ieee.org wrote:

>>>The 1206's dial only goes up to 400khz, but it tunes past that. Maybe
>>>it goes to 420 or 450khz, I don't think it goes as high as 500khz.
>>>(so maybe I don't have to expand the range for my needs).
>
>> The variable tuning capacitor max:min ratio is roughly 11:1 (no
>> external parallel capacity). Since the resonant tuning range is
>> the square root of that, you could have it tune 190 to 570 KHz
>> with a 9:1 max:min change in resonance capacity. The only real
>> problem is getting the variable LO tuning to track the front end
>> since it would tune 325 to 705 KHz (for the high-side) and that
>> would be a 2.169:1 frequency ratio or 4.706 capacity change ratio.
>
>Well that doesn't take into account the distributed capacitance of the
>coil windings, which would be considerable at this frequency what with
>the required inductance. (ever wonder why a grid dipper covers a much
>higher min-max frequency ratio as the frequency band goes up?) Also
>IIRC there are trimmer caps in parallel with the tuning caps for
>alignment as the coils are fixed. To make the oscillator track, a
>series padder cap is used to reduce the max. capacitance value of the
>oscillator section. -OR- a parallel padder could be used to swamp out
>the range of the section.

As an aid to setting a tuning range, check out the February 1977
issue of Ham Radio magazine (under my byline). It covers adding
parallel caps, series caps, series-parallel and parallel-series
combinations. Easy formulas, all algebraic.

Worst case distributed capacity with typical inductances used at
this frequency might be 12 pFd.

Given a 32 to 352 pFd variable min:max, the C ratio = 11:1

Add 12 pFd to each section and C ratio = 8.0889:1 and F ratio =
2.8441:1. Add a total of 18 pFd in parallel and C ratio - 7.3800:1
with F ratio = 2.7166:1 and that is good from 190 to 516 KHz.

There's a near-infinite number of solutions for series-parallel
combinations for the LO but only a few will track adequately

with the antenna and RF amp stage. I suggest doing a simple computer program for that kind of thing. It can check resonance of the LO tank against the Antenna-RF tanks and find the difference in resonance at as many frequencies within range as you want.

LenAnderson@ieee.org

3117. Re: tektronix storage scope for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-09 04:37:54 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <otjuc1pui03viorm2e4prc3ugcqiptdfpu@4ax.com>
Source record: 18300

On Fri, 08 Jul 2005 20:23:40 -0400 waz <wazungy@sympatico.ca> wrote:

>Tektronix 564B storage oscilliscope.
>Type 3A72 dual trace amp.
>Type 3B3 time base.
>
>Powers up. I get a signal. It is too complicated for me, (I have a
>heathkit).

I understand that you may find it overwhelming, just because the Heath may be so simple, but the 564B is a really nice scope. It's only downfall is that it's only good to 10 MHz (and the 3A72 is only good to less than that.)

With a better plugin, like the 3A1 or the 3A6 this is a really versatile scope as long as you don't need higher bandwidth (and most people don't.) Your 3B3 is a good time base.

The nicest thing about the 564B is the fact that you can get lots of different plugins for it that do lots of interesting things, from 4 channels plugins to spectrum analyzers.

I'd encourage you to sell the Heath, but I'm biased. There's a 564B sitting just to the right of my PC. ;-)

-

Jim Adney jadney@vwtype3.org
Madison, WI 53711 USA

3118. Help needed to id components

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-09 07:50:05 UTC
From: Roger Conroy <rogerconroy@nospam.hotmail.com>
Message-ID: <danviv$o5c$1@ctb-nnrp2.saix.net>
Source record: 18301

I'd like to know the specs of the variable capacitors used in the MFJ-920 VHF Dual Band Tuner. There are no visible markings on them. They have 6 fixed and 7 moving semicircular plates about 33mm in diameter - spacing between the plates is in the region of 1mm. I want to recycle into something more useful - such as a HF tuner.

73
Roger ZR3RC

3119. Re: Help needed to id components

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-09 08:17:57 UTC
From: Polymath <invalid@invalid.invalid>
Message-ID: <42cf8949$1_2@x-privat.org>
Source record: 18302

1. Capacitance Meter? Be a _REAL_ Radio Ham by making one?

2. ISTR that C = nAe/d where n is the number of facing
surfaces?

"Roger Conroy" <rogerconroy@nospam.hotmail.com> wrote in message
news:danviv$o5c$1@ctb-nnrp2.saix.net...
> I'd like to know the specs of the variable capacitors used in the MFJ-920
> VHF Dual Band Tuner. There are no visible markings on them. They have 6
> fixed and 7 moving semicircular plates about 33mm in diameter - spacing
> between the plates is in the region of 1mm. I want to recycle into
> something more useful - such as a HF tuner.
>
> 73
> Roger ZR3RC
>

3120. Re: Help needed to id components

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-09 13:48:25 UTC
From: -ex- <exray@coqui.net>
Message-ID: <54b6f$42cfd5ab$4232bd15$14499@COQUI.NET>
Source record: 18303

Roger Conroy wrote:
> I'd like to know the specs of the variable capacitors used in the MFJ-920
> VHF Dual Band Tuner. There are no visible markings on them. They have 6
> fixed and 7 moving semicircular plates about 33mm in diameter - spacing
> between the plates is in the region of 1mm. I want to recycle into
> something more useful - such as a HF tuner.
>
> 73
> Roger ZR3RC
>
>
Just guessing, of course, I'd say thats about 40pf.

-Bill WX4A

3121. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-10 03:22:26 UTC
From: sean <singram@tds.net>
Message-ID: <42d09367_1@newspeer2.tds.net>
Source record: 18304
Cross-posted to: rec.radio.amateur.homebrew,hun.hobbi,alt.birthright

Dude, You Really, Really Need To Get Serious HELP!

Accept the following :

Then only you can choose to accept the following.

Only You can choose whether or not to be an assassin.
Only You can choose to not HAVE to kill.
You only choose to think to kill.
No one else chooses for you.

You have a choice.

You do not need to use a radio as a time-bomb!

You only choose to think that you really need to use radio for a time bomb.

So, your life as only you can choose it, means what?
(rhetorical)

"Winnie Oakbob" <pie_garnishment@lycos.com> wrote in message
news:2d5631c0.0506082158.39fb1c20@posting.google.com...
> I'm an assassin and have to kill a mafia boss.I want to blow him up
> with a radio bomb.
>
> What do I need ?

3122. Help with AM receiver circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-10 04:29:24 UTC
From: "dave.harper" <dave.harper@gmail.com>
Message-ID: <1120969763.958150.214480@g14g2000cwa.googlegroups.com>
Source record: 18305
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

I'm trying to build the simple AM receiver shown here:

http://www.electronics-lab.com/projects/rf/006/

The only modifications I've made are changing the 200uH inductor to a 100uH (ferrite rod) inductor. I'm using a 10-120pF variable capacitor (http://murata.com/catalog/t13/t13_09e.pdf), so I believe I should be able to pick up the higher AM frequencies (correct?). I haven't been able to get it to work yet (usually silence or static, sometimes a high-pitched buzz), and have a few questions:

1. One of the caps is labeled 100n. This would be the same as the other caps (.1uF). Is this a typo, or is the diagram just not consistant?

2. The first three voltage checks I'm getting withing a couple hundreths of a volt. The Q3(b) voltage (supposed to be 0.62V) is reading 7.06V. And the Q3(c) (supposed to be 3.87V) I'm getting 1.07V. Can anyone spot a connection error I might have made that would cause this?

Thanks in advance for any help on either question!
Dave

3123. Re: Help with AM receiver circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-10 04:57:34 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1120971454.390089.42170@z14g2000cwz.googlegroups.com>
Source record: 18306
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Something very fishy there with respect to the voltages at Q3. Notice that Q3-b is fed from Q3-c, so the potential there should be lower than Q3-c in any event. And if Q3 is OK and wired in correctly, since Q3-e is grounded, you can't reasonably have Q3-b much more than 0.7V above ground. It's just a forward-biased junction. So as a start, look for problems around Q3! Remove Q3 from the circuit, and check the voltage at the bottom of the 10k resistor...should be nearly the same as the battery voltage. And at the junction of the 560k and the 100nF, should be just slightly lower. Then if you ground the bottom of the 10k, the junction of the 560k and the 100nF should be zero volts. If it's not, perhaps the 100nF is bad (leaky or shorted). I'd say the 100nF (which is indeed 0.1uF) is way larger than needed in this circuit--100pF would likely be large enough.

The description says it's a "regenerative" circuit, but I'm not seeing any significant regeneration! Looks like a simple RF amplifier followed by detection in Q3's base-emitter junction, and Q3 amplifying the audio.

100uH and 10pF would tune about 5MHz, though stray capacitance and parasitic capacitance in the coil will make the net capacitance somewhat higher. 100uH and 120pF would tune about 1.45MHz, just the upper end of the medium wave broadcast band. I'd suggest you try for more inductance and/or more capacitance in the tuning system. For a quick trial, just parallel in 100pF or so; the tuning range will be limited but at least you'll be in the MW broadcast band more solidly.

Cheers,
Tom

3124. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-10 09:28:35 UTC
From: Polymath <invalid@invalid.invalid>
Message-ID: <42d0ea2e_1@x-privat.org>
Source record: 18307
Cross-posted to: rec.radio.amateur.homebrew,hun.hobbi,alt.birthright

Tell that to the cowardly murdering bastards who make up the
unlawful invading forces in Afghanistan and in Iraq.

"sean" <singram@tds.net> wrote in message
news:42d09367_1@newspeer2.tds.net...
> Only You can choose to not HAVE to kill.
> You only choose to think to kill.
> No one else chooses for you.
> You have a choice.

3125. Re: Help with AM receiver circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-10 18:25:40 UTC
From: "dave.harper" <dave.harper@gmail.com>
Message-ID: <1121019940.429261.209520@o13g2000cwo.googlegroups.com>
Source record: 18308
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

K7ITM wrote:
> Something very fishy there with respect to the voltages at Q3. Notice
> that Q3-b is fed from Q3-c, so the potential there should be lower than
> Q3-c in any event. And if Q3 is OK and wired in correctly, since Q3-e
> is grounded, you can't reasonably have Q3-b much more than 0.7V above
> ground. It's just a forward-biased junction. So as a start, look for
> problems around Q3! Remove Q3 from the circuit, and check the voltage
> at the bottom of the 10k resistor...should be nearly the same as the
> battery voltage. And at the junction of the 560k and the 100nF, should
> be just slightly lower. Then if you ground the bottom of the 10k, the
> junction of the 560k and the 100nF should be zero volts. If it's not,
> perhaps the 100nF is bad (leaky or shorted). I'd say the 100nF (which
> is indeed 0.1uF) is way larger than needed in this circuit--100pF would
> likely be large enough.
>
> The description says it's a "regenerative" circuit, but I'm not seeing
> any significant regeneration! Looks like a simple RF amplifier
> followed by detection in Q3's base-emitter junction, and Q3 amplifying
> the audio.
>
> 100uH and 10pF would tune about 5MHz, though stray capacitance and
> parasitic capacitance in the coil will make the net capacitance
> somewhat higher. 100uH and 120pF would tune about 1.45MHz, just the
> upper end of the medium wave broadcast band. I'd suggest you try for
> more inductance and/or more capacitance in the tuning system. For a
> quick trial, just parallel in 100pF or so; the tuning range will be
> limited but at least you'll be in the MW broadcast band more solidly.
>
> Cheers,
> Tom

Tom,
Fantastic, thanks for the help. I realized that one of the transistors was in backward, so that was one problem. The voltages are closer to those reported, although off by a couple tenths of a volt. I also put another 120pF variable cap in parallel with the first, so I have a range of 20 to 240pF. After some tinkering, I've managed to pick up a station. However, it's pretty poor quality (I can make out the words despite a constant, high pitched whine). I also used a 12k resistor in place of the 10k (as I'm out of 10k). So I'm led to a couple more questions:

1. The current circuit doesn't have an antenna. How could I attach one to this circuit? And what would be the best way to do so? (single

wire, x" long wire, etc?)
2. How much would attaching the circuit ground to a fence (or
something) help?
3. What might be the cause of the nearly constant background whine?
Is there anything I can try to fix it?

Thanks again for the help!
Dave

3126. Re: Help with AM receiver circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 00:10:58 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1121040658.624030.86730@g14g2000cwa.googlegroups.com>
Source record: 18309
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Dave,

Assuming the 100uH is a standard ferrite rod type antenna, you can likely give it a boost by winding just a couple turns (experiment: try from one to five turns, for example) of wire around it, grounding one end of that wire and extending the other end into a wire antenna several feet long, up in the air as best you can. I'd suggest ten feet minimum length, on up to maybe a hundred feet, but just do what you can. You can connect the circuit common to a "ground" made up of a ground rod driven into the earth, or just a wire on or close to the earth. Experiment! You're not likely to hurt anything, so long as you keep it away from power lines.

Dunno for sure about the background whine. Is it independent of tuning, or is it only there when listening to the station? Does the pitch change with changes in the tuning? Can you describe it better? It could be an oscillation in your circuit. Substituting the 12k for 10k should not be a problem. But I'd add a bypass capacitor across the battery voltage (and keep all the leads reasonably short) I'd use maybe 10uF at 16V or more, be sure the polarity matches the battery, and put it physically near Q3.

In troubleshooting things like the whine when you have limited test equipment, you can just try things like opening connections in the circuit to see which part of the circuit it's in. For example, disconnecting the 100n capacitor should tell you if it's a problem in the input section or output.

Good luck, and don't be afraid to experiment.

Cheers,
Tom

3127. How can a wire wound reisitor be non-inductive?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 01:21:34 UTC
From: KC4IH <nospam@no_server.com>
Message-ID: <K5GdnZRYW-cFVEzfRVn-gg@adelphia.com>
Source record: 18310

I need to build a 3db pad, 50 ohm, 10 watt, to reduce the drive to my 6 meter amp. I need 2 X 300 ohms and 1 X 18 Ohm resistors and thought it would be an easy matter to find them with enough current rating to do the job but can't find anything larger than 1 watt carbon (not film, which are somewhat inductive) resistors. I can find want is called non-inductive wire wound resistors. I can't understand how a wire wound resistor can be non-inductive. Could someone explain this?

3128. Re: How can a wire wound reisitor be non-inductive?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 01:37:16 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <g3kAe.1507$oZ.1011@newsread2.news.atl.earthlink.net>
Source record: 18311

"KC4IH" <nospam@no_server.com> wrote in message
news:K5GdnZRYW-cFVEzfRVn-gg@adelphia.com...
> I need to build a 3db pad, 50 ohm, 10 watt, to reduce the drive to my 6
> meter amp. I need 2 X 300 ohms and 1 X 18 Ohm resistors and thought it
would
> be an easy matter to find them with enough current rating to do the job
but
> can't find anything larger than 1 watt carbon (not film, which are
somewhat
> inductive) resistors. I can find want is called non-inductive wire wound
> resistors. I can't understand how a wire wound resistor can be
> non-inductive. Could someone explain this?
>
By winding the wire so the inductance cancels out you get a noninductive
resistor. They are really noninductive at low frequencies. Once you get
above the audio range they become inductive. I doubt they would work for
your case.

3129. Re: FM conversion article in HR or QST or 73's

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 01:40:33 UTC
From: CWB <cboone@nospam.earthlink.net>
Message-ID: <l6kAe.135798$PR6.74055@tornado.texas.rr.com>
Source record: 18312

Use a Motorola MC3357 or MC3359 IC for the FM rcvr section...you can easily put in in the 1st IF of the CB and get FM detection as well as noise squelch (while the AM CB uses level or S meter squelch)..I do have a HyGain 16 on 10FM with a true FM scanner IF in it ...worked great.

Chris
WB5ITT

<pdrunen@aol.com> wrote in message news:1120058681.420519.312450@o13g2000cwo.googlegroups.com...
> Hi All,
>
> Anyone recall or have a copy of the articles in Ham Radio, QST, or 73's
> which has the 455KHz FM detector and the other information for Cb
> conversion to 10m FM?
>
> I recall that Melco did some kits, I recall the article but can not
> locate it in my library.
>
> I believe I saw a FM demodulator either HR or HR Horzion.
>
> thanks de KJ4UO.
>

3130. Re: How can a wire wound reisitor be non-inductive?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 02:36:19 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <FZCdnfoRPpAwSkzfRVn-rg@adelphia.com>
Source record: 18313

KC4IH wrote:
> I need to build a 3db pad, 50 ohm, 10 watt, to reduce the drive to my 6
> meter amp. I need 2 X 300 ohms and 1 X 18 Ohm resistors and thought it would
> be an easy matter to find them with enough current rating to do the job but
> can't find anything larger than 1 watt carbon (not film, which are somewhat
> inductive) resistors. I can find want is called non-inductive wire wound
> resistors. I can't understand how a wire wound resistor can be
> non-inductive. Could someone explain this?

Either there are two stacked windings, wound with opposite rotations,
or the winding is a zig zag, one turn one way, followed by one turn
the other way.

3131. Re: How can a wire wound reisitor be non-inductive?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 02:38:27 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11d3mst6p914f23@corp.supernews.com>
Source record: 18314

KC4IH wrote:
> I need to build a 3db pad, 50 ohm, 10 watt, to reduce the drive to my 6
> meter amp. I need 2 X 300 ohms and 1 X 18 Ohm resistors and thought it would
> be an easy matter to find them with enough current rating to do the job but
> can't find anything larger than 1 watt carbon (not film, which are somewhat
> inductive) resistors. I can find want is called non-inductive wire wound
> resistors. I can't understand how a wire wound resistor can be
> non-inductive. Could someone explain this?
>
>
>
There used to be great big resistors -- essentially carbon composition
-- that were truely noninductive. I suspect they're still available.
My 1988 handbook has a UHF dummy load design that features a Carborundum
part number 889SP500K. With coolant it's good for more than 1500 watts,
so it may be oversized for you...

You can still find the occasional 2W or 5W carbon comp resistor -- if
you're working at HF you can easily parallel these to get the resistance
that you need.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

3132. Re: How can a wire wound reisitor be non-inductive?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 03:23:52 UTC
From: KC4IH <nospam@no_server.com>
Message-ID: <EYWdnR2n2r3ee0zfRVn-pw@adelphia.com>
Source record: 18316

Thanks Ralph, that is what I was thinking but when they are advertised as non-inductive you would think "non-inductive" wouldn't you. I guess I'll have to dig around in some old junk boxes or parallel several 1 watters to get them to work.
I appreciate your information.
Ken

"Ralph Mowery" <rmowery28146@earthlink.net> wrote in message news:g3kAe.1507$oZ.1011@newsread2.news.atl.earthlink.net...
>
> "KC4IH" <nospam@no_server.com> wrote in message
> news:K5GdnZRYW-cFVEzfRVn-gg@adelphia.com...
>> I need to build a 3db pad, 50 ohm, 10 watt, to reduce the drive to my 6
>> meter amp. I need 2 X 300 ohms and 1 X 18 Ohm resistors and thought it
> would
>> be an easy matter to find them with enough current rating to do the job
> but
>> can't find anything larger than 1 watt carbon (not film, which are
> somewhat
>> inductive) resistors. I can find want is called non-inductive wire wound
>> resistors. I can't understand how a wire wound resistor can be
>> non-inductive. Could someone explain this?
>>
> By winding the wire so the inductance cancels out you get a noninductive
> resistor. They are really noninductive at low frequencies. Once you get
> above the audio range they become inductive. I doubt they would work for
> your case.
>
>

3133. Re: How can a wire wound reisitor be non-inductive?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 03:24:25 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <wYudnQVZoYNuf0zfRVn-pQ@adelphia.com>
Source record: 18315

Tim Wescott wrote:
> KC4IH wrote:
>
>> I need to build a 3db pad, 50 ohm, 10 watt, to reduce the drive to my
>> 6 meter amp. I need 2 X 300 ohms and 1 X 18 Ohm resistors and thought
>> it would be an easy matter to find them with enough current rating to
>> do the job but can't find anything larger than 1 watt carbon (not
>> film, which are somewhat inductive) resistors. I can find want is
>> called non-inductive wire wound resistors. I can't understand how a
>> wire wound resistor can be non-inductive. Could someone explain this?
>>
>>
>>
> There used to be great big resistors -- essentially carbon composition
> -- that were truely noninductive. I suspect they're still available. My
> 1988 handbook has a UHF dummy load design that features a Carborundum
> part number 889SP500K. With coolant it's good for more than 1500 watts,
> so it may be oversized for you...
>
> You can still find the occasional 2W or 5W carbon comp resistor -- if
> you're working at HF you can easily parallel these to get the resistance
> that you need.
>
These are a smaller version:
http://www.ohmite.com/catalog/pdf/a_series.pdf

3134. Re: How can a wire wound reisitor be non-inductive?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 03:33:29 UTC
From: -ex- <exray@coqui.net>
Message-ID: <7a312$42d1e88c$4232bdf0$6132@COQUI.NET>
Source record: 18317

KC4IH wrote:

> Thanks Ralph, that is what I was thinking but when they are advertised as
> non-inductive you would think "non-inductive" wouldn't you. I guess I'll
> have to dig around in some old junk boxes or parallel several 1 watters to
> get them to work.
> I appreciate your information.
> Ken

Crazy idea but I'll throw it out here anyway.

We know that carbon film resistors have some worriable inductance at 6 meters. If a guy were to take a group of say 1-watters to make up the power rating, could you count on the consistency of the outer markings to the extent that you could group them somehow in parallel/inverted so that they cancel each other's inductance in this application?

-Bill

3135. Re: How can a wire wound reisitor be non-inductive?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 04:13:30 UTC
From: dplatt@radagast.org
Message-ID: <11d3sfahhkb36a9@corp.supernews.com>
Source record: 18318

In article <EYWdnR2n2r3ee0zfRVn-pw@adelphia.com>,
KC4IH <nospam@no_server.com> wrote:

>Thanks Ralph, that is what I was thinking but when they are advertised as
>non-inductive you would think "non-inductive" wouldn't you. I guess I'll
>have to dig around in some old junk boxes or parallel several 1 watters to
>get them to work.
>I appreciate your information.

Check out the Caddock and Vishay noninductive metal-foil resistors.
As I understand it they use a serpentine-path foil pattern, which
cancels out the inductance quite nicely. Some of them are advertised
as having an inductance equivalent to an equal-length piece of wire.

They're available in packages such as TO-220, and can be attached
directly to a heatsink (no insulator required).

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3136. Re: How can a wire wound reisitor be non-inductive?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 04:18:07 UTC
From: KC4IH <nospam@no_server.com>
Message-ID: <-qSdnaWxE4hkb0zfRVn-hw@adelphia.com>
Source record: 18319

I just figured the power rating on the three resistors I need and it looks like I may have some 2 watt resistors in the junk box that are carbon that will work. I'm trying to pad the input to an amp that needs 5 watts drive and my rig puts out 10 watts. It appears except for one resistor (the series resistor) 2 watt resistors will work fine. I can parallel X2 of the value of the series resistor and get the power rating I need. Thanks for all your help. I've been out of this stuff so long that I have brain fade occasionally.
73,
Ken

"-ex-" <exray@coqui.net> wrote in message
news:7a312$42d1e88c$4232bdf0$6132@COQUI.NET...
> KC4IH wrote:
>
>> Thanks Ralph, that is what I was thinking but when they are advertised as
>> non-inductive you would think "non-inductive" wouldn't you. I guess I'll
>> have to dig around in some old junk boxes or parallel several 1 watters
>> to get them to work.
>> I appreciate your information.
>> Ken
>
> Crazy idea but I'll throw it out here anyway.
>
> We know that carbon film resistors have some worriable inductance at 6
> meters. If a guy were to take a group of say 1-watters to make up the
> power rating, could you count on the consistency of the outer markings to
> the extent that you could group them somehow in parallel/inverted so that
> they cancel each other's inductance in this application?
>
> -Bill

3137. Re: How can a wire wound reisitor be non-inductive?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 07:44:22 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <j544d1h038g2pa4rrmhmkm4gtckkc6ljb8@4ax.com>
Source record: 18320

On Sun, 10 Jul 2005 21:21:34 -0400, "KC4IH" <nospam@no_server.com>
wrote:

>I need to build a 3db pad, 50 ohm, 10 watt, to reduce the drive to my 6
>meter amp. I need 2 X 300 ohms and 1 X 18 Ohm resistors and thought it would
>be an easy matter to find them with enough current rating to do the job but
>can't find anything larger than 1 watt carbon (not film, which are somewhat
>inductive) resistors. I can find want is called non-inductive wire wound
>resistors. I can't understand how a wire wound resistor can be
>non-inductive. Could someone explain this?

Look up for bifilar winding.

If your exciter is reasonably clean so that you do not think about
proper termination also for the harmonics, you just need an attenuator
for a single frequency, which should simplify things a bit.

Even if a "non-inductive" resistor has some inductance at 50 MHz, it
should not be too hard to compensate for the inductance and turn the
system into a very lossy series resonant circuit, in which the
impedance is dominated by the resistance in the area around the
resonance. An other alternative would be to put a capacitor in
parallel with the resistor to form a parallel resonant circuit at 50
MHz and the actual resistance would heavily damp the resonance. If the
inductance is sufficiently low, you will end up with capacitances that
are practical (i.e. not affected too much by stray capacitances).

This kind of approach should work at a single frequency(band), but if
multiple bands are needed or if the harmonics also needs to be
correctly matched, this approach does not work.

Paul OH3LWR

3138. Re: How can a wire wound reisitor be non-inductive?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 08:36:23 UTC
From: -ex- <exray@coqui.net>
Message-ID: <38247$42d22f8b$4232bd49$21611@COQUI.NET>
Source record: 18321

> On Sun, 10 Jul 2005 21:21:34 -0400, "KC4IH" <nospam@no_server.com>
> wrote:
>
>
>>I need to build a 3db pad, 50 ohm, 10 watt, to reduce the drive to my 6
>>meter amp. I need 2 X 300 ohms and 1 X 18 Ohm resistors and thought it would
>>be an easy matter to find them with enough current rating to do the job but
>>can't find anything larger than 1 watt carbon (not film, which are somewhat
>>inductive) resistors. I can find want is called non-inductive wire wound
>>resistors. I can't understand how a wire wound resistor can be
>>non-inductive. Could someone explain this?

I found a graph that I copied off the web sometime back showing the reactance of various R vs freq for metal film resistors. The 10-1000 ohm range of resistors show as being dead flat at 50 MHz compared to DC...and well beyond. Above and below values tend to go nuts with frequency, the high >100k values in particular.

I don't remember where I found this graph but based on it I'd think you have a good chance of making those particular values work using garden variety ten-cent 1-watt resistors...thinking along the lines that manufacturing of plain old carbon film resistors would follow the same trend.

I think its worth a try.

-Bill

3139. Re: How big has Somerset, PA hamfest been in the past?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 10:07:59 UTC
From: straydog <aes1492@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.62.0507111002200.21971@mx.freeshell.org>
Source record: 18322
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On Wed, 6 Jul 2005, Bill Smith wrote:

> Date: Wed, 6 Jul 2005 16:07:14 -0400
> From: Bill Smith <kb3gun-nospam1@VERIZON.net>
> Newsgroups: rec.radio.swap, rec.radio.amateur.boatanchors,
> rec.radio.amateur.equipment, rec.radio.amateur.homebrew
> Subject: Re: How big has Somerset, PA hamfest been in the past?
>
>
> "straydog" <aes1492@sdf.lonestar.org> wrote in message
> news:Pine.NEB.4.62.0506261856170.28426@sdf.lonestar.org...
>>
>>
>> On Fri, 24 Jun 2005, Galen Watts wrote:
>>
>>> Date: Fri, 24 Jun 2005 08:25:27 -0400
>>> From: Galen Watts <gwatts@nrao.edu>
>>> To: straydog <aes1492@sdf.lonestar.org>
>>> Newsgroups: rec.radio.swap, rec.radio.amateur.boatanchors,
>>> rec.radio.amateur.equipment, rec.radio.amateur.homebrew
>>> Subject: Re: How big has Somerset, PA hamfest been in the past?
>>>
>>> straydog wrote:
>>>>
>>>> I think July 17, is the next Somerset PA hamfest and I've been thinking
>>>> about going. Its a long drive from here (southern Delaware) and I was
>>>> wondering how big and how good it has been in the past. Anyone got any
>>>> recollections from the past?
>>>>
>>>> Art, w4pon
>>>
>>> They have pictures of last year's fest at
>>> http://www.k3smt.org/hf2004/
>>>
>>> -W8LNA
>>>
>>
>> Thanks for the info...
>>
>> I had a look.
>>
>> W4PON
>>

>>
>
> Hello Art,
> This is only our second annual hamfest. Last year it was held in August, a
> day after the hurricane came thru. Our turnout was only about 300. Feedback
> so far this year says we should have between 500-750. Good odds for winning
> a door prize or the main drawing.
> Worst case, we're only 6 miles from the 9/11 Flight 93 Crash Site /
> Memorial. That in itself would make the trip worth it. The Somerset
> Somerfest is also running from Friday thru Sunday. Food, Music, Fun... I
> should work for the Chamber of Commerce...HiHi
>
> Hope to see you here.
> Bill kb3gun
> http://www.k3smt.org
>
>
>

Thanks for the further information. However, here is my problem: first,
for me its a long drive one way (5-6 hours and I'd have to stay in a
motel Sat night, come back home Sunday, PM). Then, I was driving around
yesterday and the bigger problem: sticker shock at the gas pump
(I was gazing at a sign that showed $2.30+/gal for low test regular) . I'd
be spending more money on gas for the round trip than I'd expect to spend on
goodies, toys, parts, etc at the fest itself. :-(

Art
W4PON

3140. Re: How can a wire wound reisitor be non-inductive?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 13:01:19 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <z4uAe.5729$Zy6.3230@trnddc04>
Source record: 18323

"KC4IH" <nospam@no_server.com> wrote in message
news:K5GdnZRYW-cFVEzfRVn-gg@adelphia.com...
> I need to build a 3db pad, 50 ohm, 10 watt, to reduce the drive to my 6
> meter amp. I need 2 X 300 ohms and 1 X 18 Ohm resistors and thought it
would
> be an easy matter to find them with enough current rating to do the job
but
> can't find anything larger than 1 watt carbon (not film, which are
somewhat
> inductive) resistors. I can find want is called non-inductive wire wound
> resistors. I can't understand how a wire wound resistor can be
> non-inductive. Could someone explain this?
>
>
Wind up approx 40' of RG-174 into a small coil and tie wrap it. It will
handle 100W + at 50 MHz and have a great return loss.
Lots easier than fooling around with resistors of questionable
characteristics and heating problems.
Dale W4OP

3141. Re: How can a wire wound reisitor be non-inductive?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 13:46:02 UTC
From: JB <SPAMac6tk@cybertime.net>
Message-ID: <datusj$6lr$2@madmax.keyway.net>
Source record: 18326

Use a length of lossy coax for only 3 db. A lot cheaper. None of the non-inductive wirewound or laser cut resistors will be truly non-inductive at those frequencies. Realize that the values need not be exact, because return loss will keep the SWR down. If you can't get Carbon, Use the coax. You might also want to adjust Drive or ALC in the amp.

The Collins 30L-1 used to come with a length of lossy coax for this reason.

ac6tk
http://tekstuff.freespaces.com

"KC4IH" <nospam@no_server.com> wrote in message
news:K5GdnZRYW-cFVEzfRVn-gg@adelphia.com...
> I need to build a 3db pad, 50 ohm, 10 watt, to reduce the drive to
my 6
> meter amp. I need 2 X 300 ohms and 1 X 18 Ohm resistors and thought
it would
> be an easy matter to find them with enough current rating to do the
job but
> can't find anything larger than 1 watt carbon (not film, which are
somewhat
> inductive) resistors. I can find want is called non-inductive wire
wound
> resistors. I can't understand how a wire wound resistor can be
> non-inductive. Could someone explain this?
>
>
>

3142. Re: How can a wire wound reisitor be non-inductive?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 13:51:05 UTC
From: KC4IH <nospam@no_server.com>
Message-ID: <h6-dnQpqANPf5E_fRVn-hQ@adelphia.com>
Source record: 18324

Now there is a great idea and I have a 100' roll of RG-174 in the closet. Sounds like a winner. It's a shame that we can't get parts like were available 30 years ago. I'd like to build some old design tube receivers and transmitters. I was born in 46 and just got a 1946 ARRL handbook off Ebay with a lot of things that look interesting.

Thanks to everyone for their input on this matter.... and not one flame in all of the answers, that's rare on the user groups anymore!
73 to all,
Ken, KC4IH

"Dale Parfitt" <par@parelectronics.com> wrote in message
news:z4uAe.5729$Zy6.3230@trnddc04...
>
> "KC4IH" <nospam@no_server.com> wrote in message
> news:K5GdnZRYW-cFVEzfRVn-gg@adelphia.com...
>> I need to build a 3db pad, 50 ohm, 10 watt, to reduce the drive to my 6
>> meter amp. I need 2 X 300 ohms and 1 X 18 Ohm resistors and thought it
> would
>> be an easy matter to find them with enough current rating to do the job
> but
>> can't find anything larger than 1 watt carbon (not film, which are
> somewhat
>> inductive) resistors. I can find want is called non-inductive wire wound
>> resistors. I can't understand how a wire wound resistor can be
>> non-inductive. Could someone explain this?
>>
>>
> Wind up approx 40' of RG-174 into a small coil and tie wrap it. It will
> handle 100W + at 50 MHz and have a great return loss.
> Lots easier than fooling around with resistors of questionable
> characteristics and heating problems.
> Dale W4OP
>
>

3143. Re: Why don't many high power RF transistor amplifiers use emitter stabilizing resistor and AC by-pass capacitors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 13:51:36 UTC
From: JB <SPAMac6tk@cybertime.net>
Message-ID: <datusk$6lr$3@madmax.keyway.net>
Source record: 18325

> Most RF power transistors in the 50-100 watt range already have an
> internal emitter resistor. It's usually less than a tenth of an
ohm,
> perhaps only a few hundreths of an ohm. Its purpose is to prevent
> thermal runaway and make the device more tolerant of overload due
to
> momentary impedance mismatches. Internal resistors have an extemely
> low inductance. They are NOT wirewound. They are an integral part
of
> the transistor construction and material. The manufacturer may not
> mention their existence in his catalogue or data book.
>
> RF power transistors are usually multi-emitter devices - all in
> parallel. Each emitter has its own individual series resistor.
>
> Such low-value external resistors are not available as discrete
> wire-ended circuit components. Inductance would be too high at HF
and
> an invitation to self oscillation. Don't attempt to use normal
circuit
> components in emitter leads unless a transistor manufacturer
> specifically recommends them.
>
> HF and VHF power transistors are very fast fuses. They are worked
very
> close to their maximum voltage and current ratings.
> ----
> Reg, G4FGQ
>
yup!

3144. Re: How big has Somerset, PA hamfest been in the past?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 14:58:02 UTC
From: Bill KB3GUN <kb3gun@swronline.com>
Message-ID: <42d288da$0$52197$ec3e2dad@news.usenetmonster.com>
Source record: 18327
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

```
"straydog" <aes1492@sdf.lonestar.org> wrote in message
news:Pine.NEB.4.62.0507111002200.21971@mx.freeshell.org...
>
>
> On Wed, 6 Jul 2005, Bill Smith wrote:
>
>> Date: Wed, 6 Jul 2005 16:07:14 -0400
>> From: Bill Smith <kb3gun-nospam1@VERIZON.net>
>> Newsgroups: rec.radio.swap, rec.radio.amateur.boatanchors,
>> rec.radio.amateur.equipment, rec.radio.amateur.homebrew
>> Subject: Re: How big has Somerset, PA hamfest been in the past?
>>
>> "straydog" <aes1492@sdf.lonestar.org> wrote in message
>> news:Pine.NEB.4.62.0506261856170.28426@sdf.lonestar.org...
>>>
>>>
>>> On Fri, 24 Jun 2005, Galen Watts wrote:
>>>
>>>> Date: Fri, 24 Jun 2005 08:25:27 -0400
>>>> From: Galen Watts <gwatts@nrao.edu>
>>>> To: straydog <aes1492@sdf.lonestar.org>
>>>> Newsgroups: rec.radio.swap, rec.radio.amateur.boatanchors,
>>>> rec.radio.amateur.equipment, rec.radio.amateur.homebrew
>>>> Subject: Re: How big has Somerset, PA hamfest been in the past?
>>>>
>>>> straydog wrote:
>>>>>
>>>>> I think July 17, is the next Somerset PA hamfest and I've been
>>>>> thinking
>>>>> about going. Its a long drive from here (southern Delaware) and I was
>>>>> wondering how big and how good it has been in the past. Anyone got any
>>>>> recollections from the past?
>>>>>
>>>>> Art, w4pon
>>>>
>>>> They have pictures of last year's fest at
>>>> http://www.k3smt.org/hf2004/
>>>>
>>>> -W8LNA
>>>>
>>>
>>> Thanks for the info...
>>>
```

>>> I had a look.
>>>
>>> W4PON
>>>
>>>
>>
>> Hello Art,
>> This is only our second annual hamfest. Last year it was held in August,
>> a
>> day after the hurricane came thru. Our turnout was only about 300.
>> Feedback
>> so far this year says we should have between 500-750. Good odds for
>> winning
>> a door prize or the main drawing.
>> Worst case, we're only 6 miles from the 9/11 Flight 93 Crash Site /
>> Memorial. That in itself would make the trip worth it. The Somerset
>> Somerfest is also running from Friday thru Sunday. Food, Music, Fun... I
>> should work for the Chamber of Commerce...HiHi
>>
>> Hope to see you here.
>> Bill kb3gun
>> http://www.k3smt.org
>>
>>
>>
>
> Thanks for the further information. However, here is my problem: first,
> for me its a long drive one way (5-6 hours and I'd have to stay in a
> motel Sat night, come back home Sunday, PM). Then, I was driving around
> yesterday and the bigger problem: sticker shock at the gas pump (I was
> gazing at a sign that showed $2.30+/gal for low test regular) . I'd be
> spending more money on gas for the round trip than I'd expect to spend on
> goodies, toys, parts, etc at the fest itself. :-(
>
>
>
> Art
> W4PON
>

I understand completely, Art. I'm in the same boat when it comes to distant hamfests. I have to run premium in my jeep and it's running $2.50 now.

Thanks anyway for you interest.

73
Bill kb3gun
Somerset PA Hamfest
http://www.k3smt.org/hamfest

3145. Re: How can a wire wound reisitor be non-inductive?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 19:50:25 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1121111425.545161.278530@g14g2000cwa.googlegroups.com>
Source record: 18328

At 50MHz, you should find that metal-oxide resistors will work fine.
You're just making a power-wasting pad, not a precision attenuator.
(Carbon comps wouldn't be appropriate for precision work, either...)
The low-value metal-oxides I've tested on RF component analyzers have
all been fine for non-precision applications out to 150MHz. Try, for
example, Vishay FP69 series 2W parts or TT/IRC GS-3 series.

A couple years ago, I went through my stock of carbon composition
resistors and found more than half of them to be out of tolerance at
DC. They don't age well at all, even while not dissipating power.

1/8-W SMT resistors are so cheap that you could just use
series-parallel combinations of them to get what you need, too. For
more serious power dissipation, Caddock (and some others) have power
film resistors in TO-220-like packages which are low enough inductance
to be quite useful up into VHF and maybe above.

Cheers,
Tom

3146. Re: How can a wire wound reisitor be non-inductive?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 21:58:27 UTC
From: Ian White GM3SEK <g3sek@ifwtech.co.uk>
Message-ID: <I4LSQGeDuu0CFAA9@ifwtech.co.uk>
Source record: 18329

K7ITM wrote:
>At 50MHz, you should find that metal-oxide resistors will work fine.
>You're just making a power-wasting pad, not a precision attenuator.
>(Carbon comps wouldn't be appropriate for precision work, either...)
>The low-value metal-oxides I've tested on RF component analyzers have
>all been fine for non-precision applications out to 150MHz. Try, for
>example, Vishay FP69 series 2W parts or TT/IRC GS-3 series.
>
>A couple years ago, I went through my stock of carbon composition
>resistors and found more than half of them to be out of tolerance at
>DC. They don't age well at all, even while not dissipating power.
>
The other half of them would probably be out of tolerance too, after having been soldered.

I just came across an attempt to use carbon comp resistors (obtained with some difficulty) as RF impedance "standards" - completely hopeless. Small wire-ended metal film resistors would have been just fine, because they don't change value significantly when soldered.

Wire-ended metal film resistors can be quite good for RF, but the parasitic inductance can vary. They are made by cutting a spiral track into a basic resistive tube, and the pitch of the spiral is changed to produce a range of resistor values. When the spiral becomes too fine, the process steps up to a higher-resistance 'blank' and the whole cycle starts again with about a one-turn spiral.

Thus the number of spiral turns can vary between about 1 and maybe 10. You have to scrape the paint off to see. The inductance can then be estimated using the standard formula based on diameter, number of turns and length, and it varies from a few nH up to maybe 100nH.

The problem is that different manufacturers make the steps at different resistance values, so resistors of the same DC value may have very different values of parasitic inductance. If parasitic inductance is critical, circuits that worked perfectly well with one make of resistor may have problems with a different make (as Elecraft recently discovered).

>1/8-W SMT resistors are so cheap that you could just use
>series-parallel combinations of them to get what you need, too. For
>more serious power dissipation, Caddock (and some others) have power
>film resistors in TO-220-like packages which are low enough inductance
>to be quite useful up into VHF and maybe above.

Yes, easily. The only problem with the TO220 packages is the shunt capacitance to the grounded tab - and the power dissipation is very low if the tab is not grounded.

--
73 from Ian G/GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

3147. SP-600 Transmitter project

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 22:06:13 UTC
From: GBrown <gkbrown@gwi.net>
Message-ID: <tbudndlEEerLcE_fRVn-hw@gwi.net>
Source record: 18330

I just got done restoring an SP-600JX-1. I am now looking for an SP-600 front panel, side supports and the two window escutcheons. The reason being..... I am going to reverse the panel and build an AM transmitter using the reverse panel as the front panel to the home brew transmitter. Thinking about a single 813 with maybe some 6146's as modulator. I don't care what the condition of the panel is. I would also like to find some SP-600 knobs. I am going to use a VFO from a junker HT-37 and just run 75 and 40 meter AM/CW. I think this is going to be a fun project. Any one have a suggestion as to a model number for this homebrew xmtr? Something along the line that will go good with "SP-600"

--
Regards,
Gary...WZ1M

3148. Re: How big has Somerset, PA hamfest been in the past?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 22:21:48 UTC
From: straydog <aes1492@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.62.0507112215390.4471@mx.freeshell.org>
Source record: 18331
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On Mon, 11 Jul 2005, Bill KB3GUN wrote:

> Date: Mon, 11 Jul 2005 10:58:02 -0400
> From: Bill KB3GUN <kb3gun@swronline.com>
> Reply-To: Bill KB3GUN <kb3gunlessspam@swronline.com>
> Newsgroups: rec.radio.swap, rec.radio.amateur.boatanchors,
> rec.radio.amateur.equipment, rec.radio.amateur.homebrew
> Subject: Re: How big has Somerset, PA hamfest been in the past?
>
>
> "straydog" <aes1492@sdf.lonestar.org> wrote in message
> news:Pine.NEB.4.62.0507111002200.21971@mx.freeshell.org...
>>
>>
>> On Wed, 6 Jul 2005, Bill Smith wrote:
>>
>>> Date: Wed, 6 Jul 2005 16:07:14 -0400
>>> From: Bill Smith <kb3gun-nospam1@VERIZON.net>
>>> Newsgroups: rec.radio.swap, rec.radio.amateur.boatanchors,
>>> rec.radio.amateur.equipment, rec.radio.amateur.homebrew
>>> Subject: Re: How big has Somerset, PA hamfest been in the past?
>>>
>>> "straydog" <aes1492@sdf.lonestar.org> wrote in message
>>> news:Pine.NEB.4.62.0506261856170.28426@sdf.lonestar.org...
>>>>
>>>>
>>>> On Fri, 24 Jun 2005, Galen Watts wrote:
>>>>
>>>>> Date: Fri, 24 Jun 2005 08:25:27 -0400
>>>>> From: Galen Watts <gwatts@nrao.edu>
>>>>> To: straydog <aes1492@sdf.lonestar.org>
>>>>> Newsgroups: rec.radio.swap, rec.radio.amateur.boatanchors,
>>>>> rec.radio.amateur.equipment, rec.radio.amateur.homebrew
>>>>> Subject: Re: How big has Somerset, PA hamfest been in the past?
>>>>>
>>>>> straydog wrote:
>>>>>>
>>>>>> I think July 17, is the next Somerset PA hamfest and I've been
>>>>>> thinking
>>>>>> about going. Its a long drive from here (southern Delaware) and I was
>>>>>> wondering how big and how good it has been in the past. Anyone got any
>>>>>> recollections from the past?
>>>>>>

>>>>>> Art, w4pon
>>>>>
>>>>> They have pictures of last year's fest at
>>>>> http://www.k3smt.org/hf2004/
>>>>>
>>>>> -W8LNA
>>>>>
>>>>
>>>> Thanks for the info...
>>>>
>>>> I had a look.
>>>>
>>>> W4PON
>>>>
>>>>
>>>
>>> Hello Art,
>>> This is only our second annual hamfest. Last year it was held in August,
>>> a
>>> day after the hurricane came thru. Our turnout was only about 300.
>>> Feedback
>>> so far this year says we should have between 500-750. Good odds for
>>> winning
>>> a door prize or the main drawing.
>>> Worst case, we're only 6 miles from the 9/11 Flight 93 Crash Site /
>>> Memorial. That in itself would make the trip worth it. The Somerset
>>> Somerfest is also running from Friday thru Sunday. Food, Music, Fun... I
>>> should work for the Chamber of Commerce...HiHi
>>>
>>> Hope to see you here.
>>> Bill kb3gun
>>> http://www.k3smt.org
>>>
>>>
>>>
>>
>> Thanks for the further information. However, here is my problem: first,
>> for me its a long drive one way (5-6 hours and I'd have to stay in a
>> motel Sat night, come back home Sunday, PM). Then, I was driving around
>> yesterday and the bigger problem: sticker shock at the gas pump (I was
>> gazing at a sign that showed $2.30+/gal for low test regular) . I'd be
>> spending more money on gas for the round trip than I'd expect to spend on
>> goodies, toys, parts, etc at the fest itself. :-(
>>
>>
>>
>> Art
>> W4PON
>>
>

> I understand completely, Art. I'm in the same boat when it comes to distant
> hamfests. I have to run premium in my jeep and it's running $2.50 now.
>
> Thanks anyway for you interest.
>
> 73
> Bill kb3gun
> Somerset PA Hamfest
> http://www.k3smt.org/hamfest

Well, thanks again.

FWIW, it sure would be nice if for some of these fests
someone could go around, at the end, with a video camera or d-cam and take
pictures (something like for that URL of the last one) of the unsold major
stuff (and maybe guys selling parts?) and post these on the club website
as a "possibly still available" item and an email address (or something
like that).

All a guy would need is: a cardstock with price and email address in felt
tip pen ink, held in front of the gear. That shouldn't be too hard, or the
guy selling the stuff could provide his own jpeg images on a floppy disk.

I'm not particularly interested in eBay/auctionering stuff
(since you have to play the escalating price game, then the shipping
question, etc). But, if a guy said "Here is X, I'd like Y dollars for it,
and subject to negotiations" I could get more interested in this.

Art, W4PON

3149. Re: How can a wire wound reisitor be non-inductive?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-11 22:22:37 UTC
From: KC4IH <nospam@no_server.com>
Message-ID: <BNqdncTRVIC7bE_fRVn-2Q@adelphia.com>
Source record: 18332

I just found an old Narda 3db pad in my junk box. It checks good and is rated at 5 watts. Since I am concerned with SSB only, I can cut the carrier back on CW, I think the Narda will work with the SSB signal since it won't be continuous duty and the pad is rated at 5 watts continuous. I'll give it a try... I don't even remember having this thing!

"KC4IH" <nospam@no_server.com> wrote in message
news:K5GdnZRYW-cFVEzfRVn-gg@adelphia.com...
>I need to build a 3db pad, 50 ohm, 10 watt, to reduce the drive to my 6
>meter amp. I need 2 X 300 ohms and 1 X 18 Ohm resistors and thought it
>would be an easy matter to find them with enough current rating to do the
>job but can't find anything larger than 1 watt carbon (not film, which are
>somewhat inductive) resistors. I can find want is called non-inductive
>wire wound resistors. I can't understand how a wire wound resistor can be
>non-inductive. Could someone explain this?
>
>
>

3150. Re: How can a wire wound reisitor be non-inductive?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-12 01:25:02 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <4u66d1lkvtcvhv6i6ue3dlc94q4p3pvm9e@4ax.com>
Source record: 18333

On Mon, 11 Jul 2005 18:22:37 -0400, "KC4IH" <nospam@no_server.com>
wrote:

>I just found an old Narda 3db pad in my junk box. It checks good and is
>rated at 5 watts. Since I am concerned with SSB only, I can cut the carrier
>back on CW, I think the Narda will work with the SSB signal since it won't
>be continuous duty and the pad is rated at 5 watts continuous. I'll give it
>a try... I don't even remember having this thing!

Fifty feet of RG-174 would do it too.
>
>
>"KC4IH" <nospam@no_server.com> wrote in message
>news:K5GdnZRYW-cFVEzfRVn-gg@adelphia.com...
>>I need to build a 3db pad, 50 ohm, 10 watt, to reduce the drive to my 6
>>meter amp. I need 2 X 300 ohms and 1 X 18 Ohm resistors and thought it
>>would be an easy matter to find them with enough current rating to do the
>>job but can't find anything larger than 1 watt carbon (not film, which are
>>somewhat inductive) resistors. I can find want is called non-inductive
>>wire wound resistors. I can't understand how a wire wound resistor can be
>>non-inductive. Could someone explain this?
>>
>>
>>
>

3151. Re: SP-600 Transmitter project

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-12 15:19:53 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrndd7nsp.1vs9.bit-bucket@shell.config.com>
Source record: 18334

On Mon, 11 Jul 2005 18:06:13 -0400, GBrown wrote:
> Any one have a suggestion as to a model number for this homebrew xmtr?
> Something along the line that will go good with "SP-600"

006-PS ?

It does sound like a fun and creative project. gl.

Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
Pueblo, Colorado | @ | Jonesy | OS/2 __
38.24N 104.55W | config.com | DM78rf | SK

3152. Re: SP-600 Transmitter project

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-12 16:43:56 UTC
From: Dave <nospam@hotmail.com>
Message-ID: <1121186639.c6617136487cc476519a22f2267db457@meganetnews2>
Source record: 18335

"GBrown" <gkbrown@gwi.net> wrote in message
news:tbudndlEEerLcE_fRVn-hw@gwi.net...
>I just got done restoring an SP-600JX-1. I am now looking for an SP-600
> front panel, side supports and the two window escutcheons. The reason
> being..... I am going to reverse the panel and build an AM transmitter
> using the reverse panel as the front panel to the home brew transmitter.
> Thinking about a single 813 with maybe some 6146's as modulator. I don't
> care what the condition of the panel is. I would also like to find some
> SP-600 knobs. I am going to use a VFO from a junker HT-37 and just run 75
> and 40 meter AM/CW. I think this is going to be a fun project. Any one
> have
> a suggestion as to a model number for this homebrew xmtr? Something along
> the line that will go good with "SP-600"

Neat project! Call it TX-600 or HB-600 ("Home Brew")

3153. How to build an amplifier chassis????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-12 16:56:09 UTC
From: Curious George <llhfllllllllzzzz@earthlink.net>
Message-ID: <a5t7d1lduu0iovas3k854cabmje2o1vbpd@4ax.com>
Source record: 18336

I've seen several books that detail the electronic how to when it comes to building an HF RF amplifier from 100 watts to 2 KW. Great! They also show the amps sitting in these finely crafted metal cabinets. Ok well.... I don't know how to build a nice metal cabinet, and the books don't tell me. So....Now that I've decided I really want to build one of those nice home brew amps I need to know how to make the metal cabinet to put all those electronic parts in. Is there a book or web page that teaches how to build a nice metal cabinet to put those homebrew amplifiers in?

Curious George

3154. Re: How to build an amplifier chassis????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-12 17:19:03 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1121188743.628871.171620@z14g2000cwz.googlegroups.com>
Source record: 18337

In the traditional world, the chassis and enclosure are related but separate items. The common technique is:

1. Electronics built on aluminum chassis box. Available pre-fabricated from Hammond etc. Or make your own from sheet metal.

2. Front panel bolted to the chassis box. Knobs and switches and meters go on the front panel. And are either wired to the stuff inside the chassis or control variable caps etc. on the chassis via long shafts. Front panel for a big project is often 19" wide rack-mount panel (again a standard size available from Hammond et al.)

3. Enclosure is a sheet metal box that slides on from behind. Made using sheet metal tools.

At the high end, "sheet metal tools" are a big shear for cutting and a brake for bending. At the low end you make you own brake out of 2x4's and hinges, and cut with hacksaw/table saw/aircraft snips (depending on type of cut, thickness, and material.)

For the really classy look all the holes you need can be cut with punches. More likely for a hobbyist is drills and hacksaws and files and the most valuable tool of all: the nibbler.

Tim.

3155. Re: How to build an amplifier chassis????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-12 17:48:43 UTC
From: Zack <zlau@arrl.org>
Message-ID: <1121190523.199712.96010@g49g2000cwa.googlegroups.com>
Source record: 18338

Electronic Techniques: Shop Practices and Construction (Hardcover)
by Robert S. Villanucci, Alexander W. Avtgis, William F. Megow

Zack Lau W1VT

3156. Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-12 20:12:46 UTC
From: "dave.harper" <dave.harper@gmail.com>
Message-ID: <1121199166.494373.59190@g49g2000cwa.googlegroups.com>
Source record: 18339
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

I had a couple of questions regarding recievers that I haven't been able to figure out. I'd appreciate it if anyone could give me some insight...

How well-defined is the gain for a cap-coil loop, like in an AM radio? (i.e., how fast does the gain droppoff as you move up or down from the 'tuned' frequency?) Is it a function of L and C? Or just frequency? (different combinations of L and C will tune to the same frequency, but is the gain the same?)

How come the coils on many of the CR schematics I've seen have multiple tap locations? It seems that with a variable cap, you should be able to tune to whatever frequency that's in your range. Is it to increase the range of your radio's coverage? Or because the gain at certain frequencies is better with different C/L combinations?

Thanks in advance for any insight!
Dave

3157. Re: Help with AM receiver circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-12 20:17:10 UTC
From: "dave.harper" <dave.harper@gmail.com>
Message-ID: <1121199430.430109.110780@g43g2000cwa.googlegroups.com>
Source record: 18340
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

K7ITM wrote:
> Dave,
>
> Assuming the 100uH is a standard ferrite rod type antenna, you can
> likely give it a boost by winding just a couple turns (experiment: try
> from one to five turns, for example) of wire around it, grounding one
> end of that wire and extending the other end into a wire antenna
> several feet long, up in the air as best you can. I'd suggest ten feet
> minimum length, on up to maybe a hundred feet, but just do what you
> can. You can connect the circuit common to a "ground" made up of a
> ground rod driven into the earth, or just a wire on or close to the
> earth. Experiment! You're not likely to hurt anything, so long as you
> keep it away from power lines.

Tom,
Thanks again for the advice. I originally attached a 10ft wire
directly to the L-C loop, and that helped a lot. But I've read
somewhere that it's best to magnetically couple it instead of directly
attach. Why is that?

I figured out the background noise... I had a TV, 3 lights, and a fan
motor going within about 15 ft of me. The background noise dropped off
a lot once I cut them off.

Dave

3158. Re: How to build an amplifier chassis????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-12 20:19:18 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <db18k6$n3d$3@puck.litech.org>
Source record: 18341

Tim Shoppa <shoppa@trailing-edge.com> wrote:
> In the traditional world, the chassis and enclosure are related but
> separate items. The common technique is:

> 1. Electronics built on aluminum chassis box. Available
> pre-fabricated from Hammond etc. Or make your own from sheet metal.

> 2. Front panel bolted to the chassis box. Knobs and switches and
> meters go on the front panel. And are either wired to the stuff inside
> the chassis or control variable caps etc. on the chassis via long
> shafts. Front panel for a big project is often 19" wide rack-mount
> panel (again a standard size available from Hammond et al.)

> 3. Enclosure is a sheet metal box that slides on from behind. Made
> using sheet metal tools.

> At the high end, "sheet metal tools" are a big shear for cutting and a
> brake for bending. At the low end you make you own brake out of 2x4's
> and hinges, and cut with hacksaw/table saw/aircraft snips (depending on
> type of cut, thickness, and material.)

> For the really classy look all the holes you need can be cut with
> punches. More likely for a hobbyist is drills and hacksaws and files
> and the most valuable tool of all: the nibbler.

And if there's a good sheet metal shop in your area (there is in mine), you
may be able to get the owner to custom-make stuff for you for prices that
merely make you want to scream. But that way you'll get what you want, or
at least what you told the owner you wanted.

My preference, when I get to indulge it, is for rackmount panels with one
or more chassis boxes bolted to it, and subchassis inside those as seems
appropriate.

--
Mike Andrews W5EGO 5WPM
mikea@mikea.ath.cx Extra
Tired old sysadmin working on his code speed

3159. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-12 21:01:00 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11d8bpfoa35o6c3@corp.supernews.com>
Source record: 18342
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

"dave.harper" <dave.harper@gmail.com> wrote in message
news:1121199166.494373.59190@g49g2000cwa.googlegroups.com...
> How well-defined is the gain for a cap-coil loop, like in an AM radio?
> (i.e., how fast does the gain droppoff as you move up or down from the
> 'tuned' frequency?) Is it a function of L and C? Or just frequency?

For the L-C resonator itself, the falloff will be 6dB per octave (doubling of frequency) once you're well outside of the center (tuned) frequency. The 3dB bandwidth will be determined by the Q of the circuit, and this is often not particularly well defined during the design stage -- often a well-defined bandpass filter somewhere "down the line" (e.g., at an IF stage) will ultimately define what the radio receives.

The 6dB/octave drop comes from just looking at the impedance or transfer function of an LC(R) resonator -- you'll end up with an s^2 (frequency squared) term in the denominator of the equation.

> (different combinations of L and C will tune to the same frequency, but
> is the gain the same?)

No, although for low Q resonators, it's often pretty close.

> How come the coils on many of the CR schematics I've seen have multiple
> tap locations? It seems that with a variable cap, you should be able
> to tune to whatever frequency that's in your range. Is it to increase
> the range of your radio's coverage? Or because the gain at certain
> frequencies is better with different C/L combinations?

They're usually trying to match the impedance of the LC circuit to the input impedance of "the next stage" (i.e., a transistor amplifier) to maximize power transfer. So, while it's not really "gain" (we haven't amplified anything yet -- this is more like a resistive divider), the output will be higher with different C/L combinations.

Generally speaking, most relatively simple AM receivers are really only intended to pick up relatively strong, nearby transmitters. As such, you can get away with an awful lot of "cut and try" when it comes to designing the circuit (largely ignore matching impedances, Q's, etc.) and still obtain acceptable results.

---Joel

3160. Re: Help with AM receiver circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-13 00:12:04 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1121213524.688803.91290@g43g2000cwa.googlegroups.com>
Source record: 18343
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi Dave,

Well, you can couple the signal from the antenna into the radio in different ways, and though multiple ways may work, one may be more practical than another, and may be more efficient with available parts. The feedpoint of an antenna--the place you couple signals in or out--may look like a low impedance or a high impedance; it may have quite a bit of reactance in it (what look like capacitance or inductance). Getting the most signal out depends on matching to that impedance. Fortunately, for most medium-wave signals (standard broadcast), you can have inefficient coupling and still have a very useable signal, because the signals have to be pretty strong to be useable. They have to be larger than the atmospheric noise, which is rather high at those frequencies.

A disadvantage of simply connecting an antenna wire to the "hot" side of the LC at the receiver input is that a random wire will likely have quite a bit of effective capacitance, causing the LC to be detuned from what you expect. And if the wire is fairly long, it may represent a relatively low resistance, which will make the tuning much less sharp--it will lower the LC (tank circuit) Q--and you'll be listening to more than one signal at a time with your simple receiver design.

It can be an advantage to make the coupling variable. You can do that by changing the number of turns, or by moving the ferrite rod into or out of those turns, with the inductive coupling. Or you can connect the wire to the "hot" side of the LC tuning tank through a small "trimmer" capacitor.

There's a lot more to the story, which you'll learn by studying, experimenting, and keeping an open mind and high level of curiosity about things. Joel in your other thread told you some about bandwidth of LC tanks...you can determine the Q by measuring the 3dB bandwidth of the tank. Then the Q is center frequency divided by bandwidth. If you have a good coil and capacitor, and no circuit loading the LC, the Q might be, say, 200, limited by losses in the coil and capacitor themselves. If you add a resistor--either a part designed to be a resistor or a circuit that has an effective resistance--it will lower the Q and broaden the bandwidth. If the power lost in the resistor is equal to the power lost in the coil and capacitor, you will have a Q that's half as large--100 in this case. A receiver designer will pick a Q that doesn't limit the bandwidth too much, but gets rid of interfering signals. And if the receiver relies on two or more LC tanks to track together, the Q will be picked a bit lower to allow

errors in tracking without hurting the performance.

Again...this is only scratching the surface. You should probably look for some books like "Radio Amateur's Handbook" for a lot more discussion of things like tuned circuits.

Cheers,
Tom

3161. Re: How to build an amplifier chassis????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-13 00:50:11 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <cYmdnWL_rrPV-EnfRVn-uA@comcast.com>
Source record: 18344

"Curious George" <llhfllllllllzzzz@earthlink.net> wrote in message
news:a5t7d1lduu0iovas3k854cabmje2o1vbpd@4ax.com...
>
> I've seen several books that detail the electronic how to when it
> comes to building an HF RF amplifier from 100 watts to 2 KW. Great!
> They also show the amps sitting in these finely crafted metal
> cabinets. Ok well.... I don't know how to build a nice metal cabinet,
> and the books don't tell me. So....Now that I've decided I really
> want to build one of those nice home brew amps I need to know how to
> make the metal cabinet to put all those electronic parts in. Is
> there a book or web page that teaches how to build a nice metal
> cabinet to put those homebrew amplifiers in?
>
> Curious George
>

CG -

Chris, G3WOS has a nice story with extensive photos of building a 50 MHz
DXpedition amplifier using the Eimac 8877.
http://www.gare.co.uk/amplifier/

He built an actual cardboard mock-up of the amplifier case
http://www.gare.co.uk/amplifier/dxpedition_amplifier_mock_up.htm

created a set of cabinet plans (Adobe Acrobat) from that mock-up
http://www.gare.co.uk/amplifier/DXpedition%20Amplifier%20case%20design.pdf

then had a metal fabrication shop to build the actual cabinet.
http://www.gare.co.uk/amplifier/dxpedition_amplifier_case_design.htm

Chris also used the G3SEK Triode board !
http://www.ifwtech.co.uk/g3sek/boards/triode/triode-1.htm

w9gb

3162. Buy and Sell your Tube Gear!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-13 01:22:54 UTC
From: Jeff James <cbstv@optonline.net>
Message-ID: <O1_Ae.136438$mx5.105404@fe08.lga>
Source record: 18345

You never know what you'll find..
http://www.dealamerica.com/deal/cgi-bin/ads/bcads.cgi
FREE ads Dedicated to Vintage Amateur Radio...

3163. Why does a change in jumper length change amplifer outout?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-13 02:42:56 UTC
From: Jim <Jim.not.my.address@hotmail.com>
Message-ID: <8cv8d11adq3khsi653abthf78u126399ta@4ax.com>
Source record: 18347

I have an external RF transistor amplifier (AB1) using 2 MRF455 transistors in common emitter mode. I have a resistive T pad with an approximate impedance of 50 ohms on the input side of the transistors. The SWR on the input of the amp shows 1.3:1. When I use a 2 foot jumper between the radio and the amp the amp puts out about 100 watts max, but when I switch to a 9 foot jumper the amp puts out about 40 watts max. The receive stays the same no matter which jumper is used. Why does changing the length of the jumper between the radio and the amp make such a drastic change in how much the amp puts out?

3164. Re: Why does a change in jumper length change amplifer outout?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-13 02:56:22 UTC
From: Bob Liesenfeld <wb0poq@visi.com>
Message-ID: <42D482D6.CC5E4879@visi.com>
Source record: 18199

Jim wrote:

>
> I have an external RF transistor amplifier (AB1) using 2 MRF455
> transistors in common emitter mode.

What type of cable and connectors are the two jumpers?

3165. Re: Why does a change in jumper length change amplifer outout?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-13 03:10:41 UTC
From: Jim <Jim.not.my.address@hotmail.com>
Message-ID: <qg19d19jjqmoitb5cqgndrlh06mrb9urlr@4ax.com>
Source record: 18198

On Tue, 12 Jul 2005 21:56:22 -0500, Bob Liesenfeld <wb0poq@visi.com>
wrote:

>
>
>Jim wrote:
>
>>
>> I have an external RF transistor amplifier (AB1) using 2 MRF455
>> transistors in common emitter mode.
>
> What type of cable and connectors are the two jumpers?

RG-58 cable with PL-259 connectors.

3166. Re: Why does a change in jumper length change amplifer outout?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-13 03:21:07 UTC
From: tim gorman <tgorman2@cox.net>
Message-ID: <3b12bd.52j.ln@tg6124.ab0wr.net>
Source record: 18346

Jim wrote:

>
>
>
> I have an external RF transistor amplifier (AB1) using 2 MRF455
> transistors in common emitter mode. I have a resistive T pad with an
> approximate impedance of 50 ohms on the input side of the transistors.
> The SWR on the input of the amp shows 1.3:1. When I use a 2 foot
> jumper between the radio and the amp the amp puts out about 100 watts
> max, but when I switch to a 9 foot jumper the amp puts out about 40
> watts max. The receive stays the same no matter which jumper is used.
> Why does changing the length of the jumper between the radio and the
> amp make such a drastic change in how much the amp puts out?

Are you sure the 9 foot jumper is good?

What frequency is this occurring at?

Is the SWR 1.3:1 for both jumpers? Measure the SWR, forward power, and reflected power levels at the transmitter end for both jumpers and then measure it at the amplifier end for both jumpers. See if everything stays the same for both jumpers.

Do you have an RF probe you can use to measure the voltages at each end of the link?

Unless you are using rg174 the 7 foot of extra cable should not make this much difference unless the input impedance of the amplifer is not 50ohm resistive. If it is not purely resistive then changing the cable length can impact the SWR seen at the transmitter end significantly. This could cause foldback in the RF amplifier in the transmitter thus affecting the output of the amplifier. This would all be seen in the measurements of SWR, forward power, and reflected power levels in the measurements above.

Let us know what you find.

tim ab0wr

3167. High Voltage Techniques

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-13 04:36:37 UTC
From: Bob <none@thistime>
Message-ID: <5fOdnQ8Hy6LPB0nfRVn-qw@giganews.com>
Source record: 18200

Since Curious George asked a basic question, I will ask one also. For those of us that are used to working with low voltage equipment, what is a good book for learning to work with the high voltages of tubes?

3168. Re: Why does a change in jumper length change amplifer outout?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-13 04:39:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11d96oksfgpfa03@corp.supernews.com>
Source record: 18201

tim gorman wrote:
> . . .
> Unless you are using rg174 the 7 foot of extra cable should not make this
> much difference unless the input impedance of the amplifer is not 50ohm
> resistive. If it is not purely resistive then changing the cable length can
> impact the SWR seen at the transmitter end significantly. . .

Changing the cable length won't change the SWR on the cable regardless of the kind of load impedance and, if the SWR meter is designed for the cable's Z0, it won't change the SWR meter reading, either. Except, of course, that cable loss will always lower the SWR -- but that shouldn't be a significant factor with such short cables.

Changing the cable length *will* change the impedance looking into the cable, whether or not the load is purely resistive. The only exception to this is if the load is resistive *and equal to the line's characteristic impedance* in which case the impedance looking in will be Z0 for any length cable.

Transmitters will often put up with some mismatched impedances better than others, even if the SWR is the same, and sometimes changing the cable length between it and a mismatched load will cause it to see a more or less favorable impedance. But if the SWR really is 1.3:1, I doubt that's the cause of this problem.

I agree with the suggestion that the OP measure the SWR and if possible the power at both ends with both cables. Something else is going on, like maybe a bad cable or connector.

I don't think the OP said what frequency this is happening at. That might give some additional clues.

Roy Lewallen, W7EL

3169. Re: How to turn a radio into a time-bomb???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-13 08:29:25 UTC
From: sean <singram@tds.net>
Message-ID: <42d4d0c7$1_1@newspeer2.tds.net>
Source record: 18202
Cross-posted to: rec.radio.amateur.homebrew,hun.hobbi,alt.birthright

I'm not talking to them.

I'm talking to the one who posted this topic.

Now, You can tell those whatever forces if you'd like.

Why do you want someone to do what you should do yourself?

"Polymath" <invalid@invalid.invalid> wrote in message
news:42d0ea2e_1@x-privat.org...
> Tell that to the cowardly murdering bastards who make up the
> unlawful invading forces in Afghanistan and in Iraq.
>
> "sean" <singram@tds.net> wrote in message
> news:42d09367_1@newspeer2.tds.net...
> > Only You can choose to not HAVE to kill.
> > You only choose to think to kill.
> > No one else chooses for you.
> > You have a choice.
>
>

3170. Re: Why does a change in jumper length change amplifer outout?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-13 10:46:13 UTC
From: Mike Willis <M.J.Willis@rl.ac.uk>
Message-ID: <db2rcmfjf1@blackmamba.itd.rl.ac.uk>
Source record: 18206

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:11d96oksfgpfa03@corp.supernews.com...
> tim gorman wrote:

>
> I agree with the suggestion that the OP measure the SWR and if possible
> the power at both ends with both cables. Something else is going on,
> like maybe a bad cable or connector.

I am assuming this is VHF and if so I would say that there is a bad connector at both ends - PL259s. These are not good enough connenctors for use anywhere above HF, the are simply screened banana plugs. If this is a ready made jumper for the CB market, the cable might not be anything like 50 ohms.

Mike

3171. Frequency multipliers: Usable modulation formats?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-13 15:13:06 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11dabp5hfvvv25@corp.supernews.com>
Source record: 18211

I was over on comp.dsp exposing my ignorance the other day when it eventually dawned on me that a frequency multiplier will, in the frequency domain, just convolve whatever the input signal is with itself. This got me to thinking... why is it that frequency multipliers work as well as they do for something like FM? Assuming a sine wave modulating signal, the FM spectra is a sum harmonics with amplitudes dictated by a Bessel function; frequency multiplying this would seem to add new harmonic content to the mix besides just doubling the frequency of what's already present. So... does it turn out, mathematically, that frequency multiplying an FM signal just so happens to end up what nothing more than a "frequency scaled" spectra of what was originally present? Or is some amount of distortion added in the process (assuming perfect mixers used as the frequency multipliers and the DC component of the mixers' outputs removed).

I've been told that, in general, frequency multiplier can be effectively applied to most any modulation scheme that has a reasonably constant envelope, e.g., FM, PM, FSK, even QPSK. Is this generally accepted knowledge?

Thanks,
---Joel Kolstad

3172. Re: High Voltage Techniques

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-13 16:46:39 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1121273199.297781.91510@g44g2000cwa.googlegroups.com>
Source record: 18203

Try any of the older Radio Amateur's Handbooks for a start, for practical stuff. Are you looking for how to work safely with high voltages, or for practical circuits, or for theory? Are you interested in RF power amplifiers, or something else?

Cheers,
Tom

3173. Re: Frequency multipliers: Usable modulation formats?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-13 17:10:45 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <pWbBe.171082$nG6.41411@attbi_s22>
Source record: 18212

Suppose a 1 MHz signal is frequency modulated by a 1 kHz sine wave. The frequency deviates over some frequency range, for example +/- 5 kHz. If we put that signal into a times-ten multiplier the FM signal is at 10 MHz and the frequency deviatioon is ten times greater (+/- 50 kHz). However, the *rate* at which the 10 MHz signal traverses the greater frequency deviation is still 1 kHz. That does not change and that is what the FM detector output delivers.

Bill W0IYH

"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> wrote in message news:11dabp5hfvvv25@corp.supernews.com...
>I was over on comp.dsp exposing my ignorance the other day when it >eventually
> dawned on me that a frequency multiplier will, in the frequency domain,
> just
> convolve whatever the input signal is with itself. This got me to
> thinking...
> why is it that frequency multipliers work as well as they do for something
> like FM? Assuming a sine wave modulating signal, the FM spectra is a sum
> harmonics with amplitudes dictated by a Bessel function; frequency
> multiplying
> this would seem to add new harmonic content to the mix besides just
> doubling
> the frequency of what's already present. So... does it turn out,
> mathematically, that frequency multiplying an FM signal just so happens to
> end
> up what nothing more than a "frequency scaled" spectra of what was
> originally
> present? Or is some amount of distortion added in the process (assuming
> perfect mixers used as the frequency multipliers and the DC component of
> the
> mixers' outputs removed).
>
> I've been told that, in general, frequency multiplier can be effectively
> applied to most any modulation scheme that has a reasonably constant
> envelope,
> e.g., FM, PM, FSK, even QPSK. Is this generally accepted knowledge?
>
> Thanks,
> ---Joel Kolstad
>
>

3174. Re: High Voltage Techniques

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-13 17:34:18 UTC
From: LenAnderson@ieee.org
Message-ID: <1121276058.511776.33610@g44g2000cwa.googlegroups.com>
Source record: 18204

From: "Bob" on Tues 12 Jul 2005 23:36

>Since Curious George asked a basic question, I will ask one also. For those
>of us that are used to working with low voltage equipment, what is a good
>book for learning to work with the high voltages of tubes?

The "best book" is simply COMMON SENSE. Use your eyes and brain.

If the voltage and current through your body in the path of the
heart is above 30 Volts and greater than 30 mA, you have the
approximate threashold of cardiac fibrillation...where the
heart loses its normal oscillation and begins to "flutter"
and not pump blood. Potentially fatal if this "30-30" rule
is exceeded.

DON'T GRAB LIVE HIGH VOLTAGES WITH BOTH HANDS. [guess where
the heart is located in this body "circuit"?]

A common mistake of the above is leaning on a conductive surface
touching it somehow when probing with the other hand...the
"circuit" has been completed even though it may not enter
awareness.

Be AWARE of the maximum voltage limitations on all your measuring
equipment. If a manufacturer says "input voltage 500 V max"
that IS what they mean...there's a "fudge factor" in that rating
but try NOT to use it. Do not destruct expensive test machines
or the circuit you're testing.

THINK about what you are doing around high voltage. Thinking
will enable you to continue living to think some more about
other things.

RESPECT high voltage. It ain't no kiddie toy to fool with.

LenAnderson@ieee.org

[a high voltage survivor in the biz since 1948]

3175. Re: Why does a change in jumper length change amplifer outout?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-13 18:11:00 UTC
From: LenAnderson@ieee.org
Message-ID: <1121278260.793227.217240@o13g2000cwo.googlegroups.com>
Source record: 18205

From: Roy Lewallen on Jul 13, 12:39 am

>tim gorman wrote:
>> . . .
>> Unless you are using rg174 the 7 foot of extra cable should not make this
>> much difference unless the input impedance of the amplifer is not 50ohm
>> resistive. If it is not purely resistive then changing the cable length can
>> impact the SWR seen at the transmitter end significantly. . .

>I agree with the suggestion that the OP measure the SWR and if possible
>the power at both ends with both cables. Something else is going on,
>like maybe a bad cable or connector.
>
>I don't think the OP said what frequency this is happening at. That
>might give some additional clues.

Good suggestions on simple checking of a cable AND connectors.

The six-decade-old design of the PL-259 is not the best on "wiping" action of contacts on the sleeve (outer conductor portion). It is a license-free standard design, standard because it is relatively cheap. Cheap silver plating can corrode fairly easily (rhodium flash over silver plating is much better but costs more)

Yesterday my "ancient" HP-722 inkjet printer had no primary power. Check of the AC cord, external supply, said that was okay. Turns out that the coaxial connection to the back of the printer had developed some kind of minor corrosion. Simple unplugging and re-plugging that DC connector brought back primary power.

Three decades ago I was involved in a seemingly "unsolveable" problem in Navy-flown L-Band R&D system. Signals would just cut out at altitude, said altitude varying depending on day of flight test. System AND RF cables (to top and bottom fuselage antennas) all checked out fine on the ground. Nothing intermittent. Blade antennas were taken off and checked okay, put back. All type N connectors, good ones. Trouble was in an unlikely form of a "doubler plate."

"Doubler plates" are often used in retro-fitting antennas and other things on aircraft, just a sheet of metal to re-enforce strength of the metal skin. The doubler plate drawings had clearance holes just too close to type N connector sleeve outer diameter. Connectors mated, but NOT fully. As altitude

increases, temperature drops. The not-fully mated center conductor pin just contracted until it lost contact at cold temps. Enlarging the doubler plate clearance hole allowed full mating, no shrinkage of contacts. Unlikely problem solved at about quarter to 8 PM in a cold hangar. :-(

Sometimes the "unlikely" not-described-in-text things are to blame.

LenAnderson@ieee.org

3176. Re: Why does a change in jumper length change amplifer outout?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-13 18:30:56 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11danf69ajpf5f1@corp.supernews.com>
Source record: 18214

LenAnderson@ieee.org wrote:
> . . .
> "Doubler plates" are often used in retro-fitting antennas and
> other things on aircraft, just a sheet of metal to re-enforce
> strength of the metal skin. The doubler plate drawings had
> clearance holes just too close to type N connector sleeve
> outer diameter. Connectors mated, but NOT fully. As altitude
> increases, temperature drops. The not-fully mated center
> conductor pin just contracted until it lost contact at cold
> temps. Enlarging the doubler plate clearance hole allowed
> full mating, no shrinkage of contacts. Unlikely problem
> solved at about quarter to 8 PM in a cold hangar. :-(
>
> Sometimes the "unlikely" not-described-in-text things are to
> blame.

I was in Anchorage when color TV was first being broadcast there (mid-'60s) and people were using outside antennas with coax feed for the first time. The center pin of a male type F connector is just the center conductor of the RG-59 cable, and on a cold day the center conductor would shrink enough on a long cable run to pull the pin out of the female connector.

Anybody who has spent some time as a technician (as I did) has a long list of tales to tell about strange problems. Among my favorites are a car with the battery installed backward (a Corvair -- car started and ran, but gauges were funky and the radio blew), and a piece of copper pipe with 300 ohms DC resistance. But those are just a couple. . .

Roy Lewallen, W7EL

3177. QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-13 21:05:17 UTC
From: Timothy@tholtom.freeserve.co.uk
Message-ID: <1121288717.540109.24910@g14g2000cwa.googlegroups.com>
Source record: 18209

My knowledge of vacuum tubes and kV power supplies is limited. I have
been reading an article in the ARRL Handbook detailing the construction
of a 1kW HF Linear. I'd like to try my hand at building something like
this. I found the article a little intimidating: Ceramic insulators,
parasitic suppressors, thermal and mechanical engineering etc. Is
there some book that details this type of thing with an explanation of
the whys as well as the whats and hows. My priorities are:

1) Safety. I'd like to be alive to make my first 1kW QSO
2) Avoiding equipment destruction, arc overs, black smoke, explosions
etc
3) Safetly troubleshooting this kind of equipment, loading testing
etc.
4) How to deal with tubes: warm up, care, etc...
5) Avoiding TVI (ITV), parasitic oscillations etc.
6) Longevity and Duty Cycle issues etc.
7) Costs and sources.

Hope someone can help.

Thanks,

Tim

3178. QUESTION: Spectrally pure DDS Output?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-13 21:18:40 UTC
From: Timothy@tholtom.freeserve.co.uk
Message-ID: <1121289520.683685.321330@o13g2000cwo.googlegroups.com>
Source record: 18210

I have the following question regarding DDS chips:

The amqrp website and others detail techniques for using Analog Devices', DDS chip as an accurate digitally controller oscillator. One of the issues that needs to be bourne in mind according to the articles is the spectral purity of this chip's output. There seem to be various schemes using PLL and filtering to kill the harmonics and spectral "grass" that these things seem to generate. Given the onward march of technology, is there any chip similar to the Analog Devices DDS, that would give be a spectrally pure, low noise sinusoid with any further filtering or PLL? I'd like something good enough to be a high quality VFO for an HF receiver (I and Q available)?? Is such a thing available, preferably offering a presoldered evaluation board (I don't want to go blind soldering it!!) for 30 or 40 bucks kind of price range??

Thanks,

Tim

3179. Murata Ceramic Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-13 21:26:19 UTC
From: Jim Barnard <jbarnard@ftc-i.net>
Message-ID: <db40tp$5lgb$1@news3.infoave.net>
Source record: 18207

Does anyone know of a retail vendor that would sell the Murata ceramic filter CFJ455K5 without a $25-$5000 minimum order? I just need one piece for a Ten-tec radio. Thanks Jim

3180. QUESTION: Cheap Accurate Shaft Position Encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-13 21:28:31 UTC
From: Timothy@tholtom.freeserve.co.uk
Message-ID: <1121290111.687842.193790@g49g2000cwa.googlegroups.com>
Source record: 18208

Does anyone know of a cheap and accurate shaft encoder assembly,
suitable for that "professional rig feel" for spindle position to
frequency encoding. I'm thinking about some sort of integrated unit
that contains the encoder, code wheel, assembly, bearings etc.

Can anyone help....

Tim

3181. Re: QUESTION: Cheap Accurate Shaft Position Encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-13 21:47:54 UTC
From: dplatt@radagast.org
Message-ID: <11db30a5vibm695@corp.supernews.com>
Source record: 18213

In article <1121290111.687842.193790@g49g2000cwa.googlegroups.com>,
<Timothy@tholtom.freeserve.co.uk> wrote:

>Does anyone know of a cheap and accurate shaft encoder assembly,
>suitable for that "professional rig feel" for spindle position to
>frequency encoding. I'm thinking about some sort of integrated unit
>that contains the encoder, code wheel, assembly, bearings etc.

HP used to make very nice optical rotary encoders - e.g. the HEDS-7500
"digital potentiometer" (which has its own shaft and mounting), and
the HEDS-5000 series optical encoders (which mount on an existing
shaft). These are from a 1989 catalog, and the current versions or
equivalents are no doubt different. www.newark.com lists a bunch of
them.

I would not call them "cheap".

According to Digikey's catalog, Grayhill and Clarostat and Iwatsu and
Bourns all make similar rotary optical encoders with reasonably high
pulse-per-revolution counts (128 or 256).

It looks to me as if you're probably facing a price of $40 - $60 per
piece, in single quantities, for any commercially-made rotary encoder
of this caliber.

For anything very much less expensive, you'll probably have to
homebrew something (e.g. a couple of simple interruption-type
photosensors, and a code wheel laserprinted on a piece of plastic) and
mount it on an existing spindle/shaft.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3182. Re: Why does a change in jumper length change amplifer outout?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-13 23:07:58 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <wKadnbeEiZ9WA0jfRVnyvQ@pipex.net>
Source record: 18215

"> I have an external RF transistor amplifier (AB1) using 2 MRF455
> transistors in common emitter mode. I have a resistive T pad with an
> approximate impedance of 50 ohms on the input side of the transistors.
> The SWR on the input of the amp shows 1.3:1. When I use a 2 foot
> jumper between the radio and the amp the amp puts out about 100 watts
> max, but when I switch to a 9 foot jumper the amp puts out about 40
> watts max. The receive stays the same no matter which jumper is used.
> Why does changing the length of the jumper between the radio and the
> amp make such a drastic change in how much the amp puts out?
===>
If this is a 2m transmission system 2ft of coax equals 610 mm. Assuming a coax velocity factor of 0.67 ,the electrical length is 1/ 0.67 * 610 equals 915mm which is about 'half a wavelength'.
Half a wave lenght of transmission line is an 'impedance repeater'
Hence if tx output- and amplifier input impedance are about the same ,there is max power transfer.

Nine feet of coax for the above does NOT equal a multiple of half wavelenghts hence the reduced power input to the amplifier and subsequent lower amplifier output.

Just try to reduce the nine feet coax cable to about 8 ft which would be about 4 half wavelengths . The result should be an amplifier output > 40 Watts

You can readily make multiples of (electrical)half wavelength by using an MFJ259B antenna analyer or even better a spectrum analyser..

An electrical half wave (or multiple half waves) 'shorted' stub has a LOW impedance at the other end .

Take a piece of coax which is slightly longer than a multiple of (electrical) half wavelengths.
Fit a suitable connector at one end and connect to impedance measuring instrument . Now penetrate the coax with a needle at the other end , observe the impedance.
The needle shorts the coax centre conductor with the braid.
Change frequency up or down finding the nearest freq where impedance is minimal .
By penetrating the coax nearer the connected end you can find the length where the impedance is minimal at the desired freq. That length is a multiple of elctrical half wavelengths , and hence the optimal length of your lead.

If you don't like the 'needle operation' , you can make an electrical quarter wave '0pen' stub .

Again you start with a length of coax slightly longer , check the freq for which the stub shows minimal impedance and subsequently cut tiny bits off the stub until the instrument shows minimal impedance at the desired freq.

The lead you need between transceiver and amplifier is to be an EVEN multiple of the remaining length of coax

I have done the above to optimise power transfer between a vintage Yaesu FT290 ,2m transceiver (2.5W) and a 30 Watts power amplifier.

Note : The characteristics of open-ended and shorted transmission line sections is well described in the ARRL Extra Class License Manual (my copy is from 1990)

Frank GM0CSZ / KN6WH

>

3183. Re: High Voltage Techniques

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 00:07:02 UTC
From: Bill Janssen <billj9@ieee.org>
Message-ID: <G0iBe.1133$cg.780@news02.roc.ny>
Source record: 18216

LenAnderson@ieee.org wrote:

>From: "Bob" on Tues 12 Jul 2005 23:36
>
>
>
>>Since Curious George asked a basic question, I will ask one also. For those
>>of us that are used to working with low voltage equipment, what is a good
>>book for learning to work with the high voltages of tubes?
>>
>>
>
>
>
An RCA tube manual and the warnings as stated below.

Bill K7NOM

> The "best book" is simply COMMON SENSE. Use your eyes and brain.
>
> If the voltage and current through your body in the path of the
> heart is above 30 Volts and greater than 30 mA, you have the
> approximate threashold of cardiac fibrillation...where the
> heart loses its normal oscillation and begins to "flutter"
> and not pump blood. Potentially fatal if this "30-30" rule
> is exceeded.
>
> DON'T GRAB LIVE HIGH VOLTAGES WITH BOTH HANDS. [guess where
> the heart is located in this body "circuit"?]
>
> A common mistake of the above is leaning on a conductive surface
> touching it somehow when probing with the other hand...the
> "circuit" has been completed even though it may not enter
> awareness.
>
> Be AWARE of the maximum voltage limitations on all your measuring
> equipment. If a manufacturer says "input voltage 500 V max"
> that IS what they mean...there's a "fudge factor" in that rating
> but try NOT to use it. Do not destruct expensive test machines
> or the circuit you're testing.
>
> THINK about what you are doing around high voltage. Thinking
> will enable you to continue living to think some more about
> other things.
>

> RESPECT high voltage. It ain't no kiddie toy to fool with.
>
> LenAnderson@ieee.org
>
> [a high voltage survivor in the biz since 1948]
>
>
>

3184. Re: QUESTION: Cheap Accurate Shaft Position Encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 00:09:24 UTC
From: Bill Janssen <billj9@ieee.org>
Message-ID: <U2iBe.1134$cg.272@news02.roc.ny>
Source record: 18217

Dave Platt wrote:

>In article <1121290111.687842.193790@g49g2000cwa.googlegroups.com>,
> <Timothy@tholtom.freeserve.co.uk> wrote:
>
>
>
>>Does anyone know of a cheap and accurate shaft encoder assembly,
>>suitable for that "professional rig feel" for spindle position to
>>frequency encoding. I'm thinking about some sort of integrated unit
>>that contains the encoder, code wheel, assembly, bearings etc.
>>
>>
>
>HP used to make very nice optical rotary encoders - e.g. the HEDS-7500
>"digital potentiometer" (which has its own shaft and mounting), and
>the HEDS-5000 series optical encoders (which mount on an existing
>shaft). These are from a 1989 catalog, and the current versions or
>equivalents are no doubt different. www.newark.com lists a bunch of
>them.
>
>I would not call them "cheap".
>
>According to Digikey's catalog, Grayhill and Clarostat and Iwatsu and
>Bourns all make similar rotary optical encoders with reasonably high
>pulse-per-revolution counts (128 or 256).
>
>It looks to me as if you're probably facing a price of $40 - $60 per
>piece, in single quantities, for any commercially-made rotary encoder
>of this caliber.
>
>For anything very much less expensive, you'll probably have to
>homebrew something (e.g. a couple of simple interruption-type
>photosensors, and a code wheel laserprinted on a piece of plastic) and
>mount it on an existing spindle/shaft.
>
>
>
Or take apart a computer mouse as they each have two.

Bill K7NOM

3185. Re: QUESTION: Spectrally pure DDS Output?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 00:12:04 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1121299924.484129.167110@z14g2000cwz.googlegroups.com>
Source record: 18218

Wellll... I know a company that sell a DDS-based LO VME module with very low spurious, but the price isn't "30 or 40 bucks." More like 500 times that. They are pretty tight-lipped about just how they do it.

Cheers,
Tom

3186. Re: QUESTION: Cheap Accurate Shaft Position Encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 00:15:18 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1121300118.113768.107730@f14g2000cwb.googlegroups.com>
Source record: 18219

But nothing like 256 pulses/rev.

Cheers,
Tom

3187. Re: QUESTION: Cheap Accurate Shaft Position Encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 01:00:45 UTC
From: Roger Leone <raleoneTAKEOUT@sbcglobal.net>
Message-ID: <1PiBe.2051$_%4.856@newssvr14.news.prodigy.com>
Source record: 18220

Tim:

There used to be a website with info on using surplus stepper motors as precision shaft encoders. I have been doing Google searches without success. Perhaps someone else will be able to provide a URL. It was Australian, I believe.

Good luck.

Roger K6XQ

3188. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 01:29:21 UTC
From: straydog <aes1492@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.62.0507140106450.21443@mx.freeshell.org>
Source record: 18221

On Wed, 13 Jul 2005 Timothy@tholtom.freeserve.co.uk wrote:

> Date: 13 Jul 2005 14:05:17 -0700
> From: Timothy@tholtom.freeserve.co.uk
> Newsgroups: rec.radio.amateur.homebrew
> Subject: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies
>
> My knowledge of vacuum tubes and kV power supplies is limited. I have
> been reading an article in the ARRL Handbook detailing the construction
> of a 1kW HF Linear. I'd like to try my hand at building something like
> this. I found the article a little intimidating: Ceramic insulators,
> parasitic suppressors, thermal and mechanical engineering etc. Is
> there some book that details this type of thing with an explanation of
> the whys as well as the whats and hows. My priorities are:
>
> 1) Safety. I'd like to be alive to make my first 1kW QSO
> 2) Avoiding equipment destruction, arc overs, black smoke, explosions
> etc
> 3) Safetly troubleshooting this kind of equipment, loading testing
> etc.
> 4) How to deal with tubes: warm up, care, etc...
> 5) Avoiding TVI (ITV), parasitic oscillations etc.
> 6) Longevity and Duty Cycle issues etc.
> 7) Costs and sources.
>
> Hope someone can help.
>
> Thanks,
>
> Tim

When I was a kid, I was building 10kV HV transformers, 100kV Tesla coils, spark coils, discharging HV capacitors that make "bangs" about as loud as medium sized firecrackers, smoked resistors, shorting outputs on 100 amp transformers just to see the sparks fly, etc., and so I have an intuitive feeling for various stuff. I've gotten shocks maybe a dozen or two times in my life. Nasty. Most of the time these were from a finger to thumb and not through my heart. When current was involved, I'd get a button of burned flesh on my skin and that really hurts plus burnt flesh really stinks like almost nothing else except dead flesh that has been dead long enough at room temperatures to really stink. RF burns...you don't feel the pain (which also really hurts) until after the burn and you get that burnt flesh stink, too. Even from 50 watt rigs they can be bad.

My experience includes mechanical devices, electric drills, bolts and nuts, threaders, chassis punches, electric drills, band saws for cutting metal sheets, etc.

If you have never done anything "hands on" in your life, then your grand plan dream may be an undertaking that you would be wise to avoid. On the other hand, if you are mechanically inclined and practical and NOT a klutz (definitely not a klutz), then I'd suggest starting with a smaller and easier project and then move up.

At points where you start working with lethal voltages and currents, you do need to be careful. Very very careful. They say when the power is on and the cabinet is open, you need to keep one hand in one of your pockets. Stand on a piece of dry wood at least 1/2" thick, etc. Yes, arcs and smoke can be intimidating. Just the surprise from an arc can make you jump in an unpredictable way and if not hurt yourself from the electrical shock, then you'll bang your head or something else.

Parasitic oscillations and TVI: At least start with a KW level dummy load and know what the book says about neutralization and how to test for it and adjust it. Also, you cannot have enough meters to measure everything. Even filament voltage and current. I'd have a meter for every circuit: plate, screen grid, control grid, cathode current, and voltages on all of them.

Weirdest discoveries: serious RF noise from solid-state diodes. Also, serious RF noise from HV transformers (output connected to absolutely nothing, but AC on primary and can hear the noise across the SW band). Weirdest lightning effect: blew out a very big (1 kW) plate transformer (2200-0-2200 v) and bypass capacitors to ground and nothing else in the hamshack was affected (collins S line, Drake twins, ten tec rig, etc.).

Key warning: know what you can and can't get away with using HV silicon diodes.

Building your own gear: I have had no sense of pride, accomplishment, and usefulness like building my own. Especially from junk in the junk box. My biggest rigs were 500 watt linears using 4-400As, and a few others. Built kits (Knight, Heath [too bad they are not around any more]), too.

W4PON

3189. Stornophone 4000 Conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 01:38:08 UTC
From: 4621vol@volcanomail.com
Message-ID: <1121305088.266884.52890@f14g2000cwb.googlegroups.com>
Source record: 18222

Hello,

I have a Stornophone 4000 in my possession and I was hopeing to
convert to 70 cm. Does any know of a conversion artical that appeared
in HRT, I dont know the date, or any other information would be very
useful

Thank you,

Jim

3190. Re: Why does a change in jumper length change amplifer outout?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 01:50:15 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <rxjBe.20066$O56.15156@trnddc07>
Source record: 18223

```
> If this is a 2m transmission system 2ft of coax equals 610 mm. Assuming a
> coax velocity factor of 0.67 ,the electrical length is 1/ 0.67 * 610
equals
> 915mm which is about 'half a wavelength'.
> Half a wave lenght of transmission line is an 'impedance repeater'
> Hence if tx output- and amplifier input impedance are about the same
,there
> is max power transfer.
>
>MRF455 is a 60W HF transistor- i.e. 30 MHz and down- from memory.
Dale W4OP
```

3191. Re: QUESTION: Cheap Accurate Shaft Position Encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 02:03:58 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <db4h6ecrc1@theodyn.ncf.ca>
Source record: 18224

"Roger Leone" (raleoneTAKEOUT@sbcglobal.net) writes:
> Tim:
>
> There used to be a website with info on using surplus stepper motors as
> precision shaft encoders. I have been doing Google searches without
> success. Perhaps someone else will be able to provide a URL. It was
> Australian, I believe.
>
> Good luck.
>
> Roger K6XQ
>
>

There was an article in "Radio Electronics" (or maybe it had morphed
into "Electronics Now" by that point), I'd say around 1994 or
so. The concept isn't much more than taking the outputs of the stepper
and putting them through comparators to get a binary waveform. But of course,
picking the right stepper is important since you need the fine steps, and I
know when I brought this up before, someone had something to say against
the concept, though I sure can't remember what they felt was wrong
with the concept.

Michael VE2BVW

3192. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 02:34:03 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <l9kBe.53456$qm.7452@bignews5.bellsouth.net>
Source record: 18225

Timothy@tholtom.freeserve.co.uk wrote:
> My knowledge of vacuum tubes and kV power supplies is limited. I have
> been reading an article in the ARRL Handbook detailing the construction
> of a 1kW HF Linear. I'd like to try my hand at building something like
> this. I found the article a little intimidating: Ceramic insulators,
> parasitic suppressors, thermal and mechanical engineering etc. Is
> there some book that details this type of thing with an explanation of
> the whys as well as the whats and hows. My priorities are:
>
> 1) Safety. I'd like to be alive to make my first 1kW QSO
> 2) Avoiding equipment destruction, arc overs, black smoke, explosions
> etc
> 3) Safetly troubleshooting this kind of equipment, loading testing
> etc.
> 4) How to deal with tubes: warm up, care, etc...
> 5) Avoiding TVI (ITV), parasitic oscillations etc.
> 6) Longevity and Duty Cycle issues etc.
> 7) Costs and sources.
>
> Hope someone can help.
>
> Thanks,
>
> Tim
>
I built a homebrew KW about 15 years ago using a pair of 4-400 in
grounded grid. It worked fine on 80-20 but I never did get the tank
Q adjusted well enough for good output above that. Not that it couldn't
have been done with a bit more tinkering.

The power supply put out about 4000 volts no load. I used a time delay
circuit with a relay and a power resistor to limit the in-rush current
while the capacitor filter bank charged. It had a relay whose ac coil
was across the primary of the plate transformer that shorted out a power
resistor in series with the primary. As the caps charged and the input
current fell so did the voltage drop across the power resistor until the
primary voltage rose to the relay's pull in voltage shorting out the
resistor. (Idea from ARRL HB).

A second time delay circuit did the same thing for the filaments of the
4-400's. This relay also locked out a second relay that applied power
to the plate transformer. Result, the plate supply couldn't be turned
on until the 4-400 filaments were warm, that delay was about 1-2 seconds
during which a power resistor in the filament transformer primary
limited the 4-400 filaments to half voltage.

The filter caps were 10 330uf 450v computer grade units in series, each cap bridged by a 50k 25W power resistor to even the voltage across the caps and act as a bleeder resistor. A 1ma meter with a suitable multiplier resistor in series served as a voltmeter across the capacitors (I forget how many meg ohm it was). The meter case was thick enough plastic to be insulated enough from the chassis (and and besides the main plumbing was behind several meg ohms). The meter read 5000v full scale.

I always assumed there was voltage across the caps when I worked on the rig. First pull the plug(s). Wait till the voltmeter drops to zero. THEN put a heavy screwdriver with a well insulated handle from ground to the HV terminal to be sure! (I used to do that to picture tubes when working on tv sets). Keep on hand in the pocket if you need to adjust anything when it's hot. BTW an RF burn can be more deadly than a DC jolt. (Think microwave oven).

HV isn't the only thing that can get you. High current can give you a nasty surprise. Like the guy replacing some batteries on a golf cart. He was using a ratchet wrench to tighten the battery clamps and he ended on the most positive battery terminal. The handle of the wrench hit the chassis of the golf cart putting it between 36 volts and ground of some VERY HEAVY DUTY batteries. Ever see a Sears ratchet wrench glow WHITE HOT? (and melt?)

3193. Coax Cable, Connector & Adapter Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 03:14:47 UTC
From: AAA RF Products <info@aaarfproducts.com>
Message-ID: <sLkBe.8787$Eo.8606@fed1read04>
Source record: 18226
Cross-posted to: alt.audio.equipment,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.swap

Please email or call for your free copy of our latest coax connector,
adapter, cable assembly & bulk coaxial cable catalog.

No minimum order

No handling fees.

email: sales@aaarfproducts.com
call: 949 481 3154
fax: 949 388 5448
mail: AAA RF Products, 949 Calle Amanecer, San Clemente, CA 92673 USA

3194. Re: Frequency multipliers: Usable modulation formats?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 03:51:42 UTC
From: LenAnderson@ieee.org
Message-ID: <1121313102.527656.254520@g44g2000cwa.googlegroups.com>
Source record: 18227

From: "Joel Kolstad" on Wed 13 Jul 2005 08:13

>I was over on comp.dsp exposing my ignorance the other day when it eventually
>dawned on me that a frequency multiplier will, in the frequency domain, just
>convolve whatever the input signal is with itself. This got me to thinking...
>why is it that frequency multipliers work as well as they do for something
>like FM? Assuming a sine wave modulating signal, the FM spectra is a sum
>harmonics with amplitudes dictated by a Bessel function; frequency multiplying
>this would seem to add new harmonic content to the mix besides just doubling
>the frequency of what's already present. So... does it turn out,
>mathematically, that frequency multiplying an FM signal just so happens to end
>up what nothing more than a "frequency scaled" spectra of what was originally
>present? Or is some amount of distortion added in the process (assuming
>perfect mixers used as the frequency multipliers and the DC component of the
>mixers' outputs removed).

No distortion per se, but, in multiplying the carrier by an
integer number, you also multiply the deviation by that same
number. You do the math, I did that a long, long time ago. :-)

>I've been told that, in general, frequency multiplier can be effectively
>applied to most any modulation scheme that has a reasonably constant envelope,
>e.g., FM, PM, FSK, even QPSK. Is this generally accepted knowledge?

It has been accepted - and done - since at least 1939 for
FM and PM.

The first dedicated radio relay sets for the U.S. military,
using Type C Carrier equipment in/out (four voice channels
frequency-multiplexed within 12 KHz bandwidth), did that
with crystal control, a reactance modulator, and lots of
multiplication to reach VHF. See AN/TRC-1, -3, -4 70-90
MHz sets. Long-lived sturdy-bird radios they were.

Had there been distortion in the multiplying process, the
Carrier equipment it worked with wouldn't have functioned
properly. However, it worked just dandy. :-)

Most of the early FM radio transmitters were of the crystal
oscillator into a reactance modulator and then into Class
C frequency multipliers...broadcasting to police car
radios. About the only way to get FM or PM in the very
early days was by a reactance modulator. In the post-war
period there were some specialized tubes made for FM/PM
modulation but those are collector's pieces now. Took lots
more years before the variable-capacitance diodes appeared

to mess with an oscillator's tank for FM.

See "Carson's Rule" and things of that nature in a search.
[John R. Carson, not of the old Tonight Show...:-)]

LenAnderson@ieee.org

3195. Re: QUESTION: Spectrally pure DDS Output?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 05:35:13 UTC
From: Ivan Makarov <miv@hotmail.com>
Message-ID: <BrqdnQKaNOUTZEjfRVn-gw@rogers.com>
Source record: 18228

A DDS chip on its own may cost more than 30...40 dollars, unless the manufacturer is willing to send you a sample. And what is wrong with AD 995X series DDS? They are of a very low "spectral grass". You can also get an idea for how much AD sells their DDS evaluation boards by browsing their product catalog.

<Timothy@tholtom.freeserve.co.uk> wrote in message news:1121289520.683685.321330@o13g2000cwo.googlegroups.com...
> I have the following question regarding DDS chips:
>
> The amqrp website and others detail techniques for using Analog
> Devices', DDS chip as an accurate digitally controller oscillator. One
> of the issues that needs to be bourne in mind according to the articles
> is the spectral purity of this chip's output. There seem to be various
> schemes using PLL and filtering to kill the harmonics and spectral
> "grass" that these things seem to generate. Given the onward march of
> technology, is there any chip similar to the Analog Devices DDS, that
> would give be a spectrally pure, low noise sinusoid with any further
> filtering or PLL? I'd like something good enough to be a high quality
> VFO for an HF receiver (I and Q available)?? Is such a thing
> available, preferably offering a presoldered evaluation board (I don't
> want to go blind soldering it!!) for 30 or 40 bucks kind of price
> range??
>
> Thanks,
>
> Tim
>

3196. Class C amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 05:53:05 UTC
From: rkrishnan <mrkrishnan@gmail.com>
Message-ID: <1121320385.670687.309640@g44g2000cwa.googlegroups.com>
Source record: 18229

I am reading through the excellent book "Solid State Design" by Wes Hayward et al. I have a specific question on Class C amplifier. On chapter 2 Fig 15, a Clas C amplifier is shown with a buffer amplifier link coupled in front.

Why is link coupling needed here, can't the collector be directly connected to the base? It is for impedance matching or is there any other motives behind this structure?

73
Ramakrishnan, vu3rdd

3197. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 07:48:01 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11dc65rbamb6qf2@corp.supernews.com>
Source record: 18230

straydog wrote:
> . . .
> arcs and smoke can be intimidating. Just the surprise from an arc can
> make you jump in an unpredictable way and if not hurt yourself from the
> electrical shock, then you'll bang your head or something else. . .

In a previous life, I was reaching way to the back of a cabinet of radar equipment for some reason. I was lying on my stomach, my arm was extended all the way, and my head was into the cabinet doorway about at the forehead level, with a couple of inches clearance above and below. Of course all the safety precautions were followed -- some of the heavy ground radar stuff I worked on was easily lethal. But there was some charged capacitor, something hot from another cabinet of gear, I don't recall, and I got a minor shock. My instinctive reaction was to jerk my head up, and it hit the top of the doorway. That hurt and made me reflexively jerk my head downward, hitting the bottom of the doorway with my forehead. That caused a jerk back upward, hitting the top again, and so forth. There I was, oscillating up and down, beating my head to a pulp, knowing exactly what was happening but helpless to do anything about it. It continued for what seemed like a long time, until I was sore enough that I couldn't feel one more whack, when I was finally able to stop and extract my head and arm. I guess I've felt as stupid a few times since, but only a few times.

And when you bend your arm every which way in order to get at something, it might go in all twisted contorted, but it comes out fast and straight when you get bit. I've lost a bit of skin that way, too.

Roy Lewallen, W7EL

3198. Re: Class C amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 08:02:12 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11dc709s7hv8273@corp.supernews.com>
Source record: 18231

rkrishnan wrote:
> I am reading through the excellent book "Solid State Design" by Wes
> Hayward et al. I have a specific question on Class C amplifier. On
> chapter 2 Fig 15, a Clas C amplifier is shown with a buffer amplifier
> link coupled in front.
>
> Why is link coupling needed here, can't the collector be directly
> connected to the base? It is for impedance matching or is there any
> other motives behind this structure?

It's for impedance matching. As usual, there are several ways it can be done, each with its own advantages and disadvantages. That method is probably the simplest for the particular application, but you have to watch the flux density in the transformer primary if it's wound on a ferrite core with no air gap (such as a toroid core) and make sure the D.C. current won't cause core saturation. Other methods allow you to separate the RF choke from the transformer, like in Fig. 16, so you can optimize the RF choke for its job and the transformer for its job. Or you can use several types of LC network to do the job.

Roy Lewallen, W7EL

3199. Re: QUESTION: Cheap Accurate Shaft Position Encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 09:53:31 UTC
From: MadEngineer <glenn.b.dixon@gmail.com>
Message-ID: <1121334811.401173.310790@g49g2000cwa.googlegroups.com>
Source record: 18232

Steppers have no output unless the shaft is moving. Steppers used this
way are really a velocity encoder and not a position encoder.

Regards,
Glenn AC7ZN

3200. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 11:38:29 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <42D64EAD.9090207@invalid.invalid>
Source record: 18233

Ken Scharf wrote:
> The filter caps were 10 330uf 450v computer grade units in series, each

Probably dumb (and WAY off topic) question:

What's the *intended* purpose of a 450v "computer grade" capacitor?

--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

3201. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 11:45:41 UTC
From: straydog <aes1492@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.62.0507141136210.11313@mx.freeshell.org>
Source record: 18234

On Thu, 14 Jul 2005, Roy Lewallen wrote:

> Date: Thu, 14 Jul 2005 00:48:01 -0700
> From: Roy Lewallen <w7el@eznec.com>
> Newsgroups: rec.radio.amateur.homebrew
> Subject: Re: QUESTION: Fun with Svetlanas or Staying alive with kV power
> supplies
>
> straydog wrote:
>> . . .
>> arcs and smoke can be intimidating. Just the surprise from an arc can make
>> you jump in an unpredictable way and if not hurt yourself from the
>> electrical shock, then you'll bang your head or something else. . .
>
> In a previous life, I was reaching way to the back of a cabinet of radar
> equipment for some reason. I was lying on my stomach, my arm was extended all
> the way, and my head was into the cabinet doorway about at the forehead
> level, with a couple of inches clearance above and below. Of course all the
> safety precautions were followed -- some of the heavy ground radar stuff I
> worked on was easily lethal. But there was some charged capacitor, something
> hot from another cabinet of gear, I don't recall, and I got a minor shock. My
> instinctive reaction was to jerk my head up, and it hit the top of the
> doorway. That hurt and made me reflexively jerk my head downward, hitting the
> bottom of the doorway with my forehead. That caused a jerk back upward,
> hitting the top again, and so forth. There I was, oscillating up and down,
> beating my head to a pulp, knowing exactly what was happening but helpless to
> do anything about it. It continued for what seemed like a long time, until I
> was sore enough that I couldn't feel one more whack, when I was finally able
> to stop and extract my head and arm. I guess I've felt as stupid a few times
> since, but only a few times.
>
> And when you bend your arm every which way in order to get at something, it
> might go in all twisted contorted, but it comes out fast and straight when
> you get bit. I've lost a bit of skin that way, too.
>
> Roy Lewallen, W7EL
>

Yep. Great story. Reminds me about that sad/funny joke about the guy, his
tower, bucket of tools in a wooden barrel, ropes, pully, and somehow he
goes up and down the tower, wooden barrel breaks so the counterweight
disappears and he goes down again....broken bones, cracked skull, all
kinds of hospital damage. Funny/sad. Similar to the chainsaw joke. Anyone
remember or have those jokes stored away somewhere that they can drag them
out?

I didn't think I had any "funny" jokes like the tower joke, etc., but I definitely had some non-fatal "war stories" to tell. I also built a couple of those "repulsion coils" as a kid. Aluminum ring & coat hanger wire core & couple hundred turns of number 14 gauge wire, plug into AC line and the ring would shoot up 1-2 feet. Neat. Playing around with a high turns coil on it one day and didn't realize my fingers were on some terminals and I must have gotten a thousand volts pressed against my thumb: ergo, two burned spots on my thumb. And, that burnt flesh stench. Gawd did it stink. And, it hurt like hell.

Radar? I've heard a couple of stories of guys who walked in front of those dishes not knowing they were putting out KWs of microwaves and they got their tummy microwaved into cooked beef. Killed em dead. Better have a buddy around and you can ask him: "Hey, I think this thing is turned off...Am I thinking right? Please go look at all the switches and check, tubes lit up, fans running, hum from transformers, other noises? Please?"

Art, W4PON

3202. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 11:57:25 UTC
From: Adrian Brentnall <"adrian-the papers and the trash"@ambquality.co.uk>
Message-ID: <shkcd11so6dra2b8dor9kqikkntuejro62@4ax.com>
Source record: 18235

Hi

On Thu, 14 Jul 2005 11:45:41 +0000, straydog
<aes1492@sdf.lonestar.org> wrote:

>
>
>On Thu, 14 Jul 2005, Roy Lewallen wrote:
>
>> Date: Thu, 14 Jul 2005 00:48:01 -0700
>> From: Roy Lewallen <w7el@eznec.com>
>> Newsgroups: rec.radio.amateur.homebrew
>> Subject: Re: QUESTION: Fun with Svetlanas or Staying alive with kV power
>> supplies
>>
>> straydog wrote:
>>> . . .
>>> arcs and smoke can be intimidating. Just the surprise from an arc can make
>>> you jump in an unpredictable way and if not hurt yourself from the
>>> electrical shock, then you'll bang your head or something else. . .
>>
>> In a previous life, I was reaching way to the back of a cabinet of radar
>> equipment for some reason. I was lying on my stomach, my arm was extended all
>> the way, and my head was into the cabinet doorway about at the forehead
>> level, with a couple of inches clearance above and below. Of course all the
>> safety precautions were followed -- some of the heavy ground radar stuff I
>> worked on was easily lethal. But there was some charged capacitor, something
>> hot from another cabinet of gear, I don't recall, and I got a minor shock. My
>> instinctive reaction was to jerk my head up, and it hit the top of the
>> doorway. That hurt and made me reflexively jerk my head downward, hitting the
>> bottom of the doorway with my forehead. That caused a jerk back upward,
>> hitting the top again, and so forth. There I was, oscillating up and down,
>> beating my head to a pulp, knowing exactly what was happening but helpless to
>> do anything about it. It continued for what seemed like a long time, until I
>> was sore enough that I couldn't feel one more whack, when I was finally able
>> to stop and extract my head and arm. I guess I've felt as stupid a few times
>> since, but only a few times.
>>
>> And when you bend your arm every which way in order to get at something, it
>> might go in all twisted contorted, but it comes out fast and straight when
>> you get bit. I've lost a bit of skin that way, too.
>>
>> Roy Lewallen, W7EL
>>
>

>Yep. Great story. Reminds me about that sad/funny joke about the guy, his
>tower, bucket of tools in a wooden barrel, ropes, pully, and somehow he
>goes up and down the tower, wooden barrel breaks so the counterweight
>disappears and he goes down again....broken bones, cracked skull, all
>kinds of hospital damage. Funny/sad. Similar to the chainsaw joke. Anyone
>remember or have those jokes stored away somewhere that they can drag them
>out?
>

That'd be http://monologues.co.uk/004/Bricklayers_Story.htm - at
least, that's the original one from Gerard Hoffnung - which dates back
a few years.

I used to play the tape of this as part of my 'Quality Awareness'
sessions - trying to make the point about forward planning, and
avoiding situations that are going to cause problems.....

There are further versions of this relating to towers and ham radio -
a google for Hoffnung + Bricklayer will turn them up

Probably funnier to read about than be involved with <g>

Take care
Adrian
Suffolk UK

======return email munged=================
take out the papers and the trash to reply

3203. Re: Class C amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 11:59:24 UTC
From: rkrishnan <mrkrishnan@gmail.com>
Message-ID: <1121342364.694431.41560@z14g2000cwz.googlegroups.com>
Source record: 18236

Roy Lewallen wrote:
> It's for impedance matching. As usual, there are several ways it can be
> done, each with its own advantages and disadvantages. That method is
> probably the simplest for the particular application, but you have to
> watch the flux density in the transformer primary if it's wound on a
> ferrite core with no air gap (such as a toroid core) and make sure the
> D.C. current won't cause core saturation. Other methods allow you to
> separate the RF choke from the transformer, like in Fig. 16, so you can
> optimize the RF choke for its job and the transformer for its job. Or
> you can use several types of LC network to do the job.

Roy,

Thanks a lot for the comments. I hope to homebrew some of those early
projects in SSD and then move to bigger projects elsewhere, as I have
not much of hands-on experience in building.

Thanks
Ramakrishnan

3204. What would cause the SWR to go up drastically when I turn my amp on?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 14:31:05 UTC
From: Joeseph <NOSPAM+++++@earthlink.net>
Message-ID: <cpscd1pntms4h0jgucumopkr80r98iotdu@4ax.com>
Source record: 18237
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

This is a very screwy problem. First lets get the set-up of my
radio equipment;

The amp puts out about 100 watts on HF.

RADIO----->2 TRANSISTOR AMP----->SWR METER------> ANTENNA

Note the SWR meter comes AFTER the 2 transistor amp.

Ok, when I check the SWR on my antenna it shows 1.1. When I turn the
amp on it shows over 3.x SWR. The antenna is rated at 5 KW. The amp
only puts out about 100 watts.

Hmmm.....Ok lets see what happens when I use my 1 KW oil filled dummy
load.

RADIO-----> 2 TRANSISTOR AMP---->SWR METER------->1 KW DUMMY LOAD

Same thing. The SWR is about 1.5 in to the dummy load, but as soon as
I turn the amp on the SWR meter shows 3.x plus.

Ok, Maybe my SWR meter is screwy, so lets use my Dentron MT3000
tuner with a built in 200 watt dry dummy load and built in SWR meter.

RADIO ---->2 TRANSISTOR AMP---->DENTRON MT3000

Same thing. The SWR is low without the amp on and goes high when the
amp gets turned on.

Ok, Lets see what happens when I use my Drake L-4B amp instead of the
2 transistor amp.

RADIO----->Drake L-4B----->SWR METER------->Dummy load

Now the SWR stays low when I turn on the Drake L-4B for both the 1 KW
dummy load and the external antenna.

The transistor uses MRF455 transistors. Why would the SWR meter go up
significantly when I turn on the 2 transisor amp, but stay low when I
turn on a Drake L-4B.

I've duplicated this scenario with three different SWR meters, and
different patch cables. Lets me say for the record the SWR meter
comes after the amp, so I'm not looking at a high SWR on the input
side of the amp. This is on the output side of the amp.

?????

3205. Re: Frequency multipliers: Usable modulation formats?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 15:04:36 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11dcvl5ao1dsf29@corp.supernews.com>
Source record: 18238

Thanks for the detailed reply, Len... I'll sit down and work through some of the math if/when I get a moment.

Could you tell which of the following is correct? -- Say I amplitude modulate my voice onto a carrier and feed it through a frequency multiplier. Besides shifting the carrier, does it just make me sound like a chipmunk (i.e., if I manage to hum a perfect 1kHz sine wave, the demodulated signal is me humming a 2kHz sine wave with a 2x mulitplier)? Or is there far more serious distortion present?

---Joel

3206. Re: What would cause the SWR to go up drastically when I turn my amp on?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 15:31:14 UTC
From: Bill Janssen <billj9@ieee.org>
Message-ID: <6zvBe.1589$j21.575@news01.roc.ny>
Source record: 18239
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Joeseph wrote:

>
> This is a very screwy problem. First lets get the set-up of my
>radio equipment;
>
>The amp puts out about 100 watts on HF.
>
>RADIO----->2 TRANSISTOR AMP----->SWR METER------> ANTENNA
>
>Note the SWR meter comes AFTER the 2 transistor amp.
>
>Ok, when I check the SWR on my antenna it shows 1.1. When I turn the
>amp on it shows over 3.x SWR. The antenna is rated at 5 KW. The amp
>only puts out about 100 watts.
>
>Hmmm.....Ok lets see what happens when I use my 1 KW oil filled dummy
>load.
>
>
>RADIO-----> 2 TRANSISTOR AMP---->SWR METER------->1 KW DUMMY LOAD
>
>Same thing. The SWR is about 1.5 in to the dummy load, but as soon as
>I turn the amp on the SWR meter shows 3.x plus.
>
>Ok, Maybe my SWR meter is screwy, so lets use my Dentron MT3000
>tuner with a built in 200 watt dry dummy load and built in SWR meter.
>
>
>RADIO ---->2 TRANSISTOR AMP---->DENTRON MT3000
>
>Same thing. The SWR is low without the amp on and goes high when the
>amp gets turned on.
>
>
>Ok, Lets see what happens when I use my Drake L-4B amp instead of the
>2 transistor amp.
>
>
>RADIO----->Drake L-4B----->SWR METER------->Dummy load
>
>Now the SWR stays low when I turn on the Drake L-4B for both the 1 KW
>dummy load and the external antenna.

>
>The transistor uses MRF455 transistors. Why would the SWR meter go up
>significantly when I turn on the 2 transisor amp, but stay low when I
>turn on a Drake L-4B.
>
>I've duplicated this scenario with three different SWR meters, and
>different patch cables. Lets me say for the record the SWR meter
>comes after the amp, so I'm not looking at a high SWR on the input
>side of the amp. This is on the output side of the amp.
>
>?????
>
>
>
>
Check the frequency (or frequencies) coming out of the amplifier. I will bet
that what comes out is not equal to what goes in. The antenna is not a
good match for those other frequencies.

Bill k7NOM

3207. MOV protection of 120vac circuits with high freq content

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 16:05:22 UTC
From: tjs <anon@anon.net>
Message-ID: <42d69178_1@news1.prserv.net>
Source record: 18240
Cross-posted to: rec.radio.amateur.homebrew,sci.engr.electrical.sys-protection

Not a REC.Radio issue but still appropriate here...

Question: will 1-10khz harmonics riding along on 60 hz power cause protective MOVs to charge and short out thusly drawing damaging currents.

The scenario: I have an Allen Bradley PLC digital input card and it contains 1 MOV across ac input channel terminals (I think they are MDC Z181 spec). They are there to protect against high voltages at the terminals which I contend never occurs, never seen it happen. What does happens is that a 232 ohm 1/8th watt (current limiting?) resistor just ahead of the MOV will slowly heat up and burn to open circuit in about 30 seconds after connection. Using 0.125W (P=I^2 x R) 232 leads me to exceeding a current of ~25ma drawn to burn the resistor.

The IO being monitored is motor run status from a VFD driven motor (variable frequency drive, PWM type, naturally using ~50-100khz synthesis methods). The control power is riddled with harmonics from 500hz to 10khz, and I estimate 10vp-p maybe less (as seen on the oscilloscope). As soon as I close the electrical connector to the IO card the resistors start heating up, smoke, then fail.

I know I need to isolate the control power and rid the plc of the harmonics. I just want to confirm the high frequency components can cause MOVs to short as if there was a high voltage event when there isnt one. I beleive the capacitor model of a MOV means it should charge up at higher frequency, and maybe this is why it takes 30 seconds for smoke to appear.

Regards
Tim KF8XW

3208. Re: Frequency multipliers: Usable modulation formats?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 16:24:15 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <db63jf$9b6$1@theodyn.ncf.ca>
Source record: 18242

"Joel Kolstad" (JKolstad71HatesSpam@yahoo.com) writes:
> Thanks for the detailed reply, Len... I'll sit down and work through some of
> the math if/when I get a moment.
>
> Could you tell which of the following is correct? -- Say I amplitude modulate
> my voice onto a carrier and feed it through a frequency multiplier. Besides
> shifting the carrier, does it just make me sound like a chipmunk (i.e., if I
> manage to hum a perfect 1kHz sine wave, the demodulated signal is me humming a
> 2kHz sine wave with a 2x mulitplier)? Or is there far more serious distortion
> present?
>
Virtually all multipliers we see work by overdriving a stage. This strips
off any amplitude modulation, so there's no modulation at the output of
the multiplier.

Michael VE2BVW

3209. Re: MOV protection of 120vac circuits with high freq content

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 16:31:40 UTC
From: jk <klessig@cox.net>
Message-ID: <im4dd1t5b0hp2ivr7e4421pb6tfl7oqf15@4ax.com>
Source record: 18241
Cross-posted to: rec.radio.amateur.homebrew,sci.engr.electrical.sys-protection

"tjs" <anon@anon.net> wrote:

>Not a REC.Radio issue but still appropriate here...

Well this isn't rec radio either!
A mov does not model as a "capacitor" it models as a (verY) non linear
resistor.

What is the continuous rating of the MOV.

>Question: will 1-10khz harmonics riding along on 60 hz power cause
>protective MOVs to charge and short out thusly drawing damaging currents.
>
>The scenario: I have an Allen Bradley PLC digital input card and it contains
>1 MOV across ac input channel terminals (I think they are MDC Z181 spec).
>They are there to protect against high voltages at the terminals which I
>contend never occurs, never seen it happen. What does happens is that a 232
>ohm 1/8th watt (current limiting?) resistor just ahead of the MOV will
>slowly heat up and burn to open circuit in about 30 seconds after
>connection. Using 0.125W (P=I^2 x R) 232 leads me to exceeding a current
>of ~25ma drawn to burn the resistor.
>
>The IO being monitored is motor run status from a VFD driven motor (variable
>frequency drive, PWM type, naturally using ~50-100khz synthesis methods).
>The control power is riddled with harmonics from 500hz to 10khz, and I
>estimate 10vp-p maybe less (as seen on the oscilloscope). As soon as I
>close the electrical connector to the IO card the resistors start heating
>up, smoke, then fail.
>
>I know I need to isolate the control power and rid the plc of the harmonics.
>I just want to confirm the high frequency components can cause MOVs to short
>as if there was a high voltage event when there isnt one. I beleive the
>capacitor model of a MOV means it should charge up at higher frequency, and
>maybe this is why it takes 30 seconds for smoke to appear.
>
>Regards
>Tim KF8XW
>

jk

3210. Re: QUESTION: Cheap Accurate Shaft Position Encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 17:09:33 UTC
From: Roger Leone <raleoneTAKEOUT@sbcglobal.net>
Message-ID: <h%wBe.2234$mN1.2173@newssvr13.news.prodigy.com>
Source record: 18243

> Steppers have no output unless the shaft is moving. Steppers used this
> way are really a velocity encoder and not a position encoder.
> Regards,
> Glenn AC7ZN
>

Glenn:

I'm sure that limits stepper motors to certain uses, but I think this thread/post may be incorrectly titled. Unless I misunderstand the intended application, I don't think a "position encoder" is what he is looking for. Rather he wants something that, when rotated, feeds pulses to an up/down counter for frequency synthesis. The position of the shaft is not important as long as its rotation can be used to generate pulses for the counter.

Roger

3211. Re: What would cause the SWR to go up drastically when I turn my amp on?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 17:11:52 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11dd76n2b9qua1d@corp.supernews.com>
Source record: 18244
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Bill Janssen wrote:

> Joeseph wrote:
>
>>
>> This is a very screwy problem. First lets get the set-up of my
>> radio equipment;
>>
>> The amp puts out about 100 watts on HF.
>>
>> RADIO----->2 TRANSISTOR AMP----->SWR METER------> ANTENNA
>>
>> Note the SWR meter comes AFTER the 2 transistor amp.
>>
>> Ok, when I check the SWR on my antenna it shows 1.1. When I turn the
>> amp on it shows over 3.x SWR. The antenna is rated at 5 KW. The amp
>> only puts out about 100 watts.
>>
>> Hmmm.....Ok lets see what happens when I use my 1 KW oil filled dummy
>> load.
>>
>>
>> RADIO-----> 2 TRANSISTOR AMP---->SWR METER------->1 KW DUMMY LOAD
>>
>> Same thing. The SWR is about 1.5 in to the dummy load, but as soon as
>> I turn the amp on the SWR meter shows 3.x plus.
>>
>> Ok, Maybe my SWR meter is screwy, so lets use my Dentron MT3000
>> tuner with a built in 200 watt dry dummy load and built in SWR meter.
>>
>>
>> RADIO ---->2 TRANSISTOR AMP---->DENTRON MT3000
>>
>> Same thing. The SWR is low without the amp on and goes high when the
>> amp gets turned on.
>>
>>
>> Ok, Lets see what happens when I use my Drake L-4B amp instead of the
>> 2 transistor amp.
>>
>> RADIO----->Drake L-4B----->SWR METER------->Dummy load
>>
>> Now the SWR stays low when I turn on the Drake L-4B for both the 1 KW

>> dummy load and the external antenna.
>>
>> The transistor uses MRF455 transistors. Why would the SWR meter go up
>> significantly when I turn on the 2 transisor amp, but stay low when I
>> turn on a Drake L-4B.
>>
>> I've duplicated this scenario with three different SWR meters, and
>> different patch cables. Lets me say for the record the SWR meter
>> comes after the amp, so I'm not looking at a high SWR on the input
>> side of the amp. This is on the output side of the amp.
>> ?????
>>
>>
>>
>>
> Check the frequency (or frequencies) coming out of the amplifier. I will
> bet
> that what comes out is not equal to what goes in. The antenna is not a
> good match for those other frequencies.
>
> Bill k7NOM

What Bill is trying to tell you is that your amplifier is probably oscillating or putting out way bad harmonics. That certainly fits the symptoms with the antenna attached; it's a bit surprising with your dummy load unless the dummy load is only good to two meters (chances are your oscillation is higher than 2M, and harmonics certainly would be). You could also see odd results if the SWR meters aren't good beyond 2M, but I don't know which direction they tend to go with way high frequencies.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

3212. Re: Class C amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 17:16:44 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11dd7fr9bsuoo82@corp.supernews.com>
Source record: 18247

rkrishnan wrote:

> I am reading through the excellent book "Solid State Design" by Wes
> Hayward et al. I have a specific question on Class C amplifier. On
> chapter 2 Fig 15, a Clas C amplifier is shown with a buffer amplifier
> link coupled in front.
>
> Why is link coupling needed here, can't the collector be directly
> connected to the base? It is for impedance matching or is there any
> other motives behind this structure?
>
> 73
> Ramakrishnan, vu3rdd
>

Any coupling circuit to a class C bipolar transistor amplifier not only needs to match impedance, it also needs to supply DC current to the base of the class C stage. Inductive coupling is nice because the average voltage at the base is nailed at zero and the inductor will guarantee that enough DC current flows. If you should capacitively couple then you need to load the base of the final stage with a back-biased diode or a resistor to provide the current -- otherwise your coupling capacitor will just charge up until no current flows into your final's base and you no longer get amplification.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

3213. Re: What would cause the SWR to go up drastically when I turn my amp on?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 17:17:46 UTC
From: Joeseph <NOSPAM+++++@earthlink.net>
Message-ID: <l07dd19msvfv5k1olrg5dm3sap3p27tnfm@4ax.com>
Source record: 18245
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Thu, 14 Jul 2005 15:31:14 GMT, Bill Janssen <billj9@ieee.org>
wrote:

>
>>
>Check the frequency (or frequencies) coming out of the amplifier. I will bet
>that what comes out is not equal to what goes in. The antenna is not a
>good match for those other frequencies.
>
>Bill k7NOM

Smart guy you are! I never thought of that, but it makes perfect
sense. I don't have a spectrum analyzer, but since the 2nd harmonic
and higher lands above 30 MHz then I should be able to place my Barker
and Williamson low pass filter (30 MHz cut off) between the amp and
the SWR meter. Hopefully the low pass filter will allow the
fundamental through, and stop the higher frequencies (assuming they
are normal multiples of the fundamental frequency). If the
attenuation is great enough the SWR meter should not show the SWR jump
since the unwanted frequencies should be attenuated before they get to
the SWR meter.
Assuming you are correct my next problem will stopping the extra
frequencies from getting out of the amp in the first place.

J.

3214. Re: MOV protection of 120vac circuits with high freq content

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 17:32:30 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <lvmdndmURcSuA0vfRVn-3Q@adelphia.com>
Source record: 18246
Cross-posted to: rec.radio.amateur.homebrew,sci.engr.electrical.sys-protection

tjs wrote:
> Not a REC.Radio issue but still appropriate here...
>
>
> Question: will 1-10khz harmonics riding along on 60 hz power cause
> protective MOVs to charge and short out thusly drawing damaging currents.
>
> The scenario: I have an Allen Bradley PLC digital input card and it contains
> 1 MOV across ac input channel terminals (I think they are spec).
> They are there to protect against high voltages at the terminals which I
> contend never occurs, never seen it happen. What does happens is that a 232
> ohm 1/8th watt (current limiting?) resistor just ahead of the MOV will
> slowly heat up and burn to open circuit in about 30 seconds after
> connection. Using 0.125W (P=I^2 x R) 232 leads me to exceeding a current
> of ~25ma drawn to burn the resistor.
>
> The IO being monitored is motor run status from a VFD driven motor (variable
> frequency drive, PWM type, naturally using ~50-100khz synthesis methods).
> The control power is riddled with harmonics from 500hz to 10khz, and I
> estimate 10vp-p maybe less (as seen on the oscilloscope). As soon as I
> close the electrical connector to the IO card the resistors start heating
> up, smoke, then fail.
>
> I know I need to isolate the control power and rid the plc of the harmonics.
> I just want to confirm the high frequency components can cause MOVs to short
> as if there was a high voltage event when there isnt one. I beleive the
> capacitor model of a MOV means it should charge up at higher frequency, and
> maybe this is why it takes 30 seconds for smoke to appear.
>

If the MOV voltage is well below its conduction threshold, then it
looks to the outside world, much like a small capacitor. So you can
expect that a signal with significant high frequency content will pass
more current through it than one with only line frequency content.

I don't recognize the part number of your MOV, but this data sheet for
some small MOVs lists the capacitance for a 132 volt AC unit is only
21 pF.
http://rocky.digikey.com/WebLib/Littelfuse/Web%20Data/MA%20Varistor%20Series.pdf

This bigger disc type lists the capacitance for the 130 VAC unit as
100 pF.
http://rocky.digikey.com/WebLib/Littelfuse/Web%20Data/ZA%20%20Varistor%20Series.pdf

If you can find a data sheet for your unit, the capacitance should be listed.

3215. Re: What would cause the SWR to go up drastically when I turn my amp on?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 17:46:23 UTC
From: big Boss <goodlookin_hardpunchin@yahoo.com>
Message-ID: <PxxBe.13884$yC5.3489@tornado.ohiordc.rr.com>
Source record: 18098
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Your transistor amp is putting out garbage; transmitting harmonics that your
SWR Meter is responding to. You need tuning/lowpass filters on both input
and output.

"Joeseph" <NOSPAM+++++@earthlink.net> wrote in message
news:cpscd1pntms4h0jgucumopkr80r98iotdu@4ax.com...
>
>
>
> This is a very screwy problem. First lets get the set-up of my
> radio equipment;
>
> The amp puts out about 100 watts on HF.
>
> RADIO----->2 TRANSISTOR AMP----->SWR METER------> ANTENNA
>
> Note the SWR meter comes AFTER the 2 transistor amp.
>
> Ok, when I check the SWR on my antenna it shows 1.1. When I turn the
> amp on it shows over 3.x SWR. The antenna is rated at 5 KW. The amp
> only puts out about 100 watts.
>
> Hmmm.....Ok lets see what happens when I use my 1 KW oil filled dummy
> load.
>
>
> RADIO-----> 2 TRANSISTOR AMP---->SWR METER------->1 KW DUMMY LOAD
>
> Same thing. The SWR is about 1.5 in to the dummy load, but as soon as
> I turn the amp on the SWR meter shows 3.x plus.
>
> Ok, Maybe my SWR meter is screwy, so lets use my Dentron MT3000
> tuner with a built in 200 watt dry dummy load and built in SWR meter.
>
>
> RADIO ---->2 TRANSISTOR AMP---->DENTRON MT3000
>
> Same thing. The SWR is low without the amp on and goes high when the
> amp gets turned on.
>
>
> Ok, Lets see what happens when I use my Drake L-4B amp instead of the
> 2 transistor amp.

>
>
> RADIO----->Drake L-4B----->SWR METER-------->Dummy load
>
> Now the SWR stays low when I turn on the Drake L-4B for both the 1 KW
> dummy load and the external antenna.
>
> The transistor uses MRF455 transistors. Why would the SWR meter go up
> significantly when I turn on the 2 transisor amp, but stay low when I
> turn on a Drake L-4B.
>
> I've duplicated this scenario with three different SWR meters, and
> different patch cables. Lets me say for the record the SWR meter
> comes after the amp, so I'm not looking at a high SWR on the input
> side of the amp. This is on the output side of the amp.
>
> ?????
>
>

3216. Re: What would cause the SWR to go up drastically when I turn my amp on?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 17:46:57 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11dd98gggfp0f01@corp.supernews.com>
Source record: 18099
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Joeseph wrote:
> On Thu, 14 Jul 2005 15:31:14 GMT, Bill Janssen <billj9@ieee.org>
> wrote:
>
>
>>Check the frequency (or frequencies) coming out of the amplifier. I will bet
>>that what comes out is not equal to what goes in. The antenna is not a
>>good match for those other frequencies.
>>
>>Bill k7NOM
>
>
>
> Smart guy you are! I never thought of that, but it makes perfect
> sense. I don't have a spectrum analyzer, but since the 2nd harmonic
> and higher lands above 30 MHz then I should be able to place my Barker
> and Williamson low pass filter (30 MHz cut off) between the amp and
> the SWR meter. Hopefully the low pass filter will allow the
> fundamental through, and stop the higher frequencies (assuming they
> are normal multiples of the fundamental frequency). If the
> attenuation is great enough the SWR meter should not show the SWR jump
> since the unwanted frequencies should be attenuated before they get to
> the SWR meter.
> Assuming you are correct my next problem will stopping the extra
> frequencies from getting out of the amp in the first place.
>
> J.
>
Be sure to verify that it's not oscillating, and that any excessive
harmonics don't indicate some other problem with the amp (if you're in
the process of homebrewing it then it just means you forgot the dang
lowpass filter, but if the amp is a commercial unit & you're using it as
intended then there may be something broke).

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

3217. Re: What would cause the SWR to go up drastically when I turn my amp on?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 17:53:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11dd9ksc9hoeab5@corp.supernews.com>
Source record: 18100
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Joeseph wrote:
> , , ,
> Assuming you are correct my next problem will stopping the extra
> frequencies from getting out of the amp in the first place.

No, your problem should be figuring out how to prevent them from getting generated in the first place. If the harmonic or spurious content is that high, there's something seriously wrong.

Roy Lewallen, W7EL

3218. Re: What would cause the SWR to go up drastically when I turn my amp on?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 17:56:16 UTC
From: dplatt@radagast.org
Message-ID: <11dd9q0s5ok066e@corp.supernews.com>
Source record: 18101
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

>RADIO----->Drake L-4B----->SWR METER------->Dummy load
>
>Now the SWR stays low when I turn on the Drake L-4B for both the 1 KW
>dummy load and the external antenna.
>
>The transistor uses MRF455 transistors. Why would the SWR meter go up
>significantly when I turn on the 2 transisor amp, but stay low when I
>turn on a Drake L-4B.

If I had to guess, I'd guess that your MRF455 amplifier may have some instability issues, and may have a nasty parasitic oscillation going on. You might also want to check its grounding, and the RF relay which I presume switches it into or out of the circuit. I'm guessing that you've got RF flowing where it shouldn't.

I picked up a few MRF455 transistors last year and have toyed with the idea of using them as a PA in a homebrew rig, but from what I can see in the application notes they require a goodly amount of care in the amplifier design and circuit layout. If they aren't used properly it looks to me as if they can be quite prone to misbehave, oscillate, etc.

If you can borrow a spectrum analyzer, take a careful look at the amp's output, and wave a probe around the amp itself (prior to the low-pass output filter). It would not surprise me if you find that you're spurring the horse a bit :-)

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3219. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 18:05:33 UTC
From: dplatt@radagast.org
Message-ID: <11ddabdajqbpde1@corp.supernews.com>
Source record: 18102

In article <l9kBe.53456$qm.7452@bignews5.bellsouth.net>,
Ken Scharf <wa2mzeNOTTHIS@bellsouth.net> wrote:

>I always assumed there was voltage across the caps when I worked on the
>rig. First pull the plug(s). Wait till the voltmeter drops to zero.

A trick, courtesy of Bob Pease: whenever you build a power supply
circuit which carries line voltage or higher, stick an NE-2 neon bulb
and a suitable dropping resistor across the caps, and place the bulb
where it's clearly visible when the case is opened.

If the bulb is lit (at all) the caps have enough voltage in them to
give you a nasty bite.

>THEN put a heavy screwdriver with a well insulated handle from ground
>to the HV terminal to be sure!

I've heard cautionary notes about this... if you do this prematurely,
the arc can be scary (and dangerous in some cases - "arc flash" burns
can be severe) and I believe it's possible to damage or wreck some
caps as a side effect of a catastrophic high-current discharge.

A heavy grounding wire, with alligator clips, and with a
current-limiting resistor is another possible solution. You want a
low enough impedance to drain away any charge which may come out of
the cap's dielectric "soakage", but high enough to avoid a dangerous
arc flash when you first hook it up.

> Keep on hand in the pocket if you need to
>adjust anything when it's hot.

That's one of the best single pieces of advice around! Also, be aware
of what sort of grounded metal is around your workbench. Doesn't help
much to keep one hand in your pocket, if you lean your belly against a
grounded metal bench!

>
>HV isn't the only thing that can get you. High current can give you
>a nasty surprise. Like the guy replacing some batteries on a golf cart.
>He was using a ratchet wrench to tighten the battery clamps and he
>ended on the most positive battery terminal. The handle of the wrench
>hit the chassis of the golf cart putting it between 36 volts and ground
>of some VERY HEAVY DUTY batteries. Ever see a Sears ratchet wrench
>glow WHITE HOT? (and melt?)

Haven't seen that myself, but I've heard of people who have had
screwdrivers, etc. literally vaporized under such circumstances.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3220. Re: MOV protection of 120vac circuits with high freq content

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 18:12:00 UTC
From: tjs <anon@anon.net>
Message-ID: <42d6af25_3@news1.prserv.net>
Source record: 18103
Cross-posted to: rec.radio.amateur.homebrew,sci.engr.electrical.sys-protection

Sorry , I crossposted to rec.radio.amateur.homebrew and sci.eng.electrical
sys-protection

I'm having trouble finding data on the MOVs. The markings MDC Z181 04UL seem
to point to a 175 vac 225vdc 17-19 joule device with 130 pf capacitance,
1200 amps Ipeak, 25mW transient dissipation. I searched Digikey and NTE. It
is about 10mm diameter disk type, maybe 8.5mm per some datasheets.

Tim

"tjs" <anon@anon.net> wrote in message news:42d69178_1@news1.prserv.net...
> Not a REC.Radio issue but still appropriate here...
>
>
> Question: will 1-10khz harmonics riding along on 60 hz power cause
> protective MOVs to charge and short out thusly drawing damaging currents.
>
> The scenario: I have an Allen Bradley PLC digital input card and it
contains
> 1 MOV across ac input channel terminals (I think they are MDC Z181 spec).
> They are there to protect against high voltages at the terminals which I
> contend never occurs, never seen it happen. What does happens is that a
232
> ohm 1/8th watt (current limiting?) resistor just ahead of the MOV will
> slowly heat up and burn to open circuit in about 30 seconds after
> connection. Using 0.125W (P=I^2 x R) 232 leads me to exceeding a current
> of ~25ma drawn to burn the resistor.
>
> The IO being monitored is motor run status from a VFD driven motor
(variable
> frequency drive, PWM type, naturally using ~50-100khz synthesis methods).
> The control power is riddled with harmonics from 500hz to 10khz, and I
> estimate 10vp-p maybe less (as seen on the oscilloscope). As soon as I
> close the electrical connector to the IO card the resistors start heating
> up, smoke, then fail.
>
> I know I need to isolate the control power and rid the plc of the
harmonics.
> I just want to confirm the high frequency components can cause MOVs to
short
> as if there was a high voltage event when there isnt one. I beleive the
> capacitor model of a MOV means it should charge up at higher frequency,
and
> maybe this is why it takes 30 seconds for smoke to appear.

>
> Regards
> Tim KF8XW
>
>

3221. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 18:32:47 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11ddbuepk3jjr77@corp.supernews.com>
Source record: 18104

Dave Platt wrote:
> In article <l9kBe.53456$qm.7452@bignews5.bellsouth.net>,
> Ken Scharf <wa2mzeNOTTHIS@bellsouth.net> wrote:
snip
>>HV isn't the only thing that can get you. High current can give you
>>a nasty surprise. Like the guy replacing some batteries on a golf cart.
>>He was using a ratchet wrench to tighten the battery clamps and he
>>ended on the most positive battery terminal. The handle of the wrench
>>hit the chassis of the golf cart putting it between 36 volts and ground
>>of some VERY HEAVY DUTY batteries. Ever see a Sears ratchet wrench
>>glow WHITE HOT? (and melt?)
>
>
> Haven't seen that myself, but I've heard of people who have had
> screwdrivers, etc. literally vaporized under such circumstances.
>
My brother came home from a business trip once with a scar on his wrist
5/8 inches wide and all the way around -- the truck was having
electrical problems & he shorted his metal watch band through the 12V
battery (there was a wrench involved in there somehow, of course).

I felt for him, but I was very glad that _he_ was the one to learn this
first hand, rather than me...

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

3222. Re: What would cause the SWR to go up drastically when I turn my amp on?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 18:50:17 UTC
From: Joeseph <NOSPAM+++++@earthlink.net>
Message-ID: <tscdd1d3a3g0o4jsr1m8qglt91l2n90u4c@4ax.com>
Source record: 18105
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Thu, 14 Jul 2005 10:31:05 -0400, Joeseph
<NOSPAM+++++@earthlink.net> wrote:

Thanks for all your help guys. I think you've hit the nail on the
head. Now it is time for me to do some more reading, and fix this
puppy.

J

3223. Re: MOV protection of 120vac circuits with high freq content

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 18:54:33 UTC
From: tjs <anon@anon.net>
Message-ID: <42d6b91e_4@news1.prserv.net>
Source record: 18107
Cross-posted to: rec.radio.amateur.homebrew,sci.engr.electrical.sys-protection

This is close the exact component I have.
http://www.maida.com/content/products/varistors/standard/fullRecord.asp?iACVolts=180&iDCVolts=0&iDiskSize=10&stylenum=D6121ZOV181RA04
It shows 320pF. Its marked 04UL is supposed to mean 40 joules, although the
data sheet says 60J.
Tim

I want to conclude that the MOV can short pulling over 25ma thru the 1/8th
watt resistor, heating it up, due to 10khz components on the voltage, and
not an actual high voltage. Would this be a true statement?

Thanks

"tjs" <anon@anon.net> wrote in message news:42d6af25_3@news1.prserv.net...
> Sorry , I crossposted to rec.radio.amateur.homebrew and sci.eng.electrical
> sys-protection
>
> I'm having trouble finding data on the MOVs. The markings MDC Z181 04UL
seem
> to point to a 175 vac 225vdc 17-19 joule device with 130 pf capacitance,
> 1200 amps Ipeak, 25mW transient dissipation. I searched Digikey and NTE.
It
> is about 10mm diameter disk type, maybe 8.5mm per some datasheets.
>
> Tim
>
>
>
> "tjs" <anon@anon.net> wrote in message news:42d69178_1@news1.prserv.net...
> > Not a REC.Radio issue but still appropriate here...
> >
> >
> > Question: will 1-10khz harmonics riding along on 60 hz power cause
> > protective MOVs to charge and short out thusly drawing damaging
currents.
> >
> > The scenario: I have an Allen Bradley PLC digital input card and it
> contains
> > 1 MOV across ac input channel terminals (I think they are MDC Z181
spec).
> > They are there to protect against high voltages at the terminals which I
> > contend never occurs, never seen it happen. What does happens is that a
> 232
> > ohm 1/8th watt (current limiting?) resistor just ahead of the MOV will

> > slowly heat up and burn to open circuit in about 30 seconds after
> > connection. Using 0.125W (P=I^2 x R) 232 leads me to exceeding a
current
> > of ~25ma drawn to burn the resistor.
> >
> > The IO being monitored is motor run status from a VFD driven motor
> (variable
> > frequency drive, PWM type, naturally using ~50-100khz synthesis
methods).
> > The control power is riddled with harmonics from 500hz to 10khz, and I
> > estimate 10vp-p maybe less (as seen on the oscilloscope). As soon as I
> > close the electrical connector to the IO card the resistors start
heating
> > up, smoke, then fail.
> >
> > I know I need to isolate the control power and rid the plc of the
> harmonics.
> > I just want to confirm the high frequency components can cause MOVs to
> short
> > as if there was a high voltage event when there isnt one. I beleive the
> > capacitor model of a MOV means it should charge up at higher frequency,
> and
> > maybe this is why it takes 30 seconds for smoke to appear.
> >
> > Regards
> > Tim KF8XW
> >
> >
>
>

3224. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 18:56:57 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <db6chpbjf6@puck.litech.org>
Source record: 18106

Dave Platt <dplatt@radagast.org> wrote:
> In article <l9kBe.53456$qm.7452@bignews5.bellsouth.net>,
> Ken Scharf <wa2mzeNOTTHIS@bellsouth.net> wrote:

>>HV isn't the only thing that can get you. High current can give you
>>a nasty surprise. Like the guy replacing some batteries on a golf cart.
>>He was using a ratchet wrench to tighten the battery clamps and he
>>ended on the most positive battery terminal. The handle of the wrench
>>hit the chassis of the golf cart putting it between 36 volts and ground
>>of some VERY HEAVY DUTY batteries. Ever see a Sears ratchet wrench
>>glow WHITE HOT? (and melt?)

> Haven't seen that myself, but I've heard of people who have had
> screwdrivers, etc. literally vaporized under such circumstances.

The canonical "Take-Your-Rings-Off" reminder in our electronics shop
in Japan, back when I was in the AF, was a color image, taken at our
base hospital, of a finger burnt to the bone all the way around: one of
the techs had got his wedding ring between ground and a high-current
low-voltage supply.

--
Mike Andrews W5EGO 5WPM
mikea@mikea.ath.cx Extra
Tired old sysadmin working on his code speed

3225. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 19:04:03 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnddddp2.2ph2.bit-bucket@shell.config.com>
Source record: 18108

On Thu, 14 Jul 2005 11:32:47 -0700, Tim Wescott wrote:
> Dave Platt wrote:
>> In article <l9kBe.53456$qm.7452@bignews5.bellsouth.net>,
>> Ken Scharf <wa2mzeNOTTHIS@bellsouth.net> wrote:
> snip
>>>HV isn't the only thing that can get you. High current can give you
>>>a nasty surprise. Like the guy replacing some batteries on a golf cart.
>>>He was using a ratchet wrench to tighten the battery clamps and he
>>>ended on the most positive battery terminal. The handle of the wrench
>>>hit the chassis of the golf cart putting it between 36 volts and ground
>>>of some VERY HEAVY DUTY batteries. Ever see a Sears ratchet wrench
>>>glow WHITE HOT? (and melt?)
>>
>>
>> Haven't seen that myself, but I've heard of people who have had
>> screwdrivers, etc. literally vaporized under such circumstances.
>>
> My brother came home from a business trip once with a scar on his wrist
> 5/8 inches wide and all the way around -- the truck was having
> electrical problems & he shorted his metal watch band through the 12V
> battery (there was a wrench involved in there somehow, of course).
>
> I felt for him, but I was very glad that _he_ was the one to learn this
> first hand, rather than me...

My dad (the first W3DHJ) told me a similar story.

It was in the late 20's. He was working on _his_ dad's Ford utility truck. (Grandpa owned a dairy in Big Bear, Calif.) Six volts here. The truck was parked in the driveway -- just outside the garage. When my dad caught his ring between the positive terminal and the truck frame, my Grandpa picked him up bodily -- ran him over to the rain barrel at the corner of the garage -- and stuffed my dad's entire left arm (and much of his upper torso) into the barrel.

(*The worst* thing you could do in a situation like that is try to _pull_ the ring off.)

My dad was a 90-day wonder in WW II. He then spent 25+ years in the U.S. Army Corps of Engineers (we traveled the planet....) Most of his duty assignments were as Post Engineer -- with the added responsibity as Post Safety Officer. I always knew him to be evangelically anal about safety. I'm sure that incident with the old Ford truck had a wee bit to do with it.

Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
Pueblo, Colorado | @ | Jonesy | OS/2 __
38.24N 104.55W | config.com | DM78rf | SK

3226. Re: MOV protection of 120vac circuits with high freq content

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 19:41:41 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <g7Sdnbgh8tnnIUvfRVn-tg@adelphia.com>
Source record: 18109
Cross-posted to: rec.radio.amateur.homebrew,sci.engr.electrical.sys-protection

tjs wrote:
> This is close the exact component I have.
> http://www.maida.com/content/products/varistors/standard/fullRecord.asp?iACVolts=180&iDC
Volts=0&iDiskSize=10&stylenum=D6121ZOV181RA04
> It shows 320pF. Its marked 04UL is supposed to mean 40 joules, although the
> data sheet says 60J.
> Tim
>
> I want to conclude that the MOV can short pulling over 25ma thru the 1/8th
> watt resistor, heating it up, due to 10khz components on the voltage, and
> not an actual high voltage. Would this be a true statement?

Without having the exact waveform, it is impossible to say exactly how
much current the MOV capacitance allows through. I suggest you try an
experiment of removing one of the MOVs and see how much cooler the
resistor runs.

3227. Re: QUESTION: Fun with Svetlanas or Staying alive with kV powersupplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 19:56:25 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <42D6C357.AB6D9035@earthlink.net>
Source record: 18110

Doug Smith W9WI wrote:
>
> Ken Scharf wrote:
> > The filter caps were 10 330uf 450v computer grade units in series, each
>
> Probably dumb (and WAY off topic) question:
>
> What's the *intended* purpose of a 450v "computer grade" capacitor?
>
> --
> Doug Smith W9WI
> Pleasant View (Nashville), TN EM66
> http://www.w9wi.com

They were used on the input side of large switching supplies for
minicomputers, and some later mainframes. I pulled about 100 of them
from the multiple switching supplies in an Amdal mainframe about 10 or
12 years ago.

--
Link to my "Computers for disabled Veterans" project website deleted
after threats were telephoned to my church.

Michael A. Terrell
Central Florida

3228. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 20:27:57 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11ddimdf7ssksb4@corp.supernews.com>
Source record: 18111

Don't forget about "soak", also known as dielectric absorption or dielectric hysteresis. In some capacitors, particularly electrolytics, charge "soaks" into the dielectric and can take from seconds to days to work its way out. The result is a "discharged" capacitor that seems to spontaneously recharge itself. (One story I heard during my broadcast days was someone who put a screwdriver across a "discharged" capacitor. After he picked himself up off the floor, he found just the handle of the screwdriver. He was lucky his eyes weren't hit with molten metal. You'll often find large capacitors stored with a shorting wire across them -- a good idea.) I recommend leaving a heavy cliplead in place across the high voltage capacitors for the entire time you're working on the unit. Put some tape over the on/off switch and/or a tag on the plug to remind you to remove it before turning the power back on.

As a side note, the aquadag coating of a CRT is notorious for this. I've gotten a healthy bite off a CRT the day after it was discharged for an hour or more with a cliplead.

Roy Lewallen, W7EL

3229. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 20:30:20 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11ddiqsnpp42r5f@corp.supernews.com>
Source record: 18112

Mike Andrews wrote:
>
> The canonical "Take-Your-Rings-Off" reminder in our electronics shop
> in Japan, back when I was in the AF, was a color image, taken at our
> base hospital, of a finger burnt to the bone all the way around: one of
> the techs had got his wedding ring between ground and a high-current
> low-voltage supply.

What we got was a nice photograph of a finger in a dish with the ring,
right beside the newly customized hand.

Roy Lewallen, W7EL

3230. Re: Frequency multipliers: Usable modulation formats?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 21:30:04 UTC
From: Mark <makolber@yahoo.com>
Message-ID: <1121376604.674866.94510@g49g2000cwa.googlegroups.com>
Source record: 18113

and it will NOT work with QPSK

Mark

3231. Re: TV Tuner IF level

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 21:35:13 UTC
From: Mark <makolber@yahoo.com>
Message-ID: <1121376912.978378.142560@f14g2000cwb.googlegroups.com>
Source record: 18114

typical TV tuner will have a 50 Ohm output and 10 to 20 dB of gain with
an AGC control line that can cut back the gain.

Mark

3232. Re: Frequency multipliers: Usable modulation formats?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 21:40:01 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11ddmtfrscao0f5@corp.supernews.com>
Source record: 18115

Mark wrote:

> and it will NOT work with QPSK
>
> Mark
>

It would work to the extent that if you go 4x you could phase lock for a reference -- but you wouldn't have QPSK any more.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

3233. Re: Looking for Specialty Crystal Filter, Please Help

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 21:40:56 UTC
From: Mark <makolber@yahoo.com>
Message-ID: <1121377256.638561.25490@g43g2000cwa.googlegroups.com>
Source record: 18116

the aircraft navigation marker beacon band is 75 MHz and there were many crystal filters make with a 75 MHz CF and a BW of maybe 20 kHz or so.

you may be able to find one.

Mark

3234. Re: QUESTION: Fun with Svetlanas or Staying alive with kV powersupplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-14 22:33:29 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <BIudnfF4ssmmdUvfRVnyjg@pipex.net>
Source record: 18117

```
>> What's the *intended* purpose of a 450v "computer grade" capacitor?
====================
Switch mode power suppplies ??

Frank GM0CSZ / KN6WH
```

3235. Re: Frequency multipliers: Usable modulation formats?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 00:31:16 UTC
From: LenAnderson@ieee.org
Message-ID: <1121387476.916774.218850@g44g2000cwa.googlegroups.com>
Source record: 18118

From: et472@FreeNet.Carleton.CA (Michael Black) on Thurs 14 Jul 2005
16:24

>"Joel Kolstad" (JKolstad71HatesSpam@yahoo.com) writes:
>> Thanks for the detailed reply, Len... I'll sit down and work through some of
>> the math if/when I get a moment.
>>
>> Could you tell which of the following is correct? -- Say I amplitude modulate
>> my voice onto a carrier and feed it through a frequency multiplier. Besides
>> shifting the carrier, does it just make me sound like a chipmunk (i.e., if I
>> manage to hum a perfect 1kHz sine wave, the demodulated signal is me humming a
>> 2kHz sine wave with a 2x mulitplier)? Or is there far more serious distortion
>> present?
>
>Virtually all multipliers we see work by overdriving a stage. This strips
>off any amplitude modulation, so there's no modulation at the output of
>the multiplier.

Well, that IS rather serious distortion...! :-)

True, the multipliers (or any following over-driven stage) will
strip off all the amplitude variations/modulations. But FM and
PM don't "modulate" the amplitude...even if the match APPEARS
that there are various amplitude sidebands present. Those
various resulting sidebands of FM/PM are the result of the
carrier "swinging" due to modulation and the various amplitude
sidebands are the RESULT of the constant swinging.

One of the ways of calibrating the DEVIATION of FM or PM, as
in checking a modulation monitor meter, is to (actually) look
for ZERO carrier frequency amplitude content, either by a
spectrum analyzer or a narrowband receiver. That's been an
accepted method of calibrating broadcast transmitter air
monitor meters for years and years. [for a hint on how that
is done, check them Bessel Function "zero-crossings" found in
many texts to derive the modulation test frequency and the
deviation]

Multiplying the carrier of FM/PM changes the DEVIATION of the
carrier (frequency for FM, phase for PM, a little of both
actually when there is some distortion happening). The rate of
change of the modulation itself has NOT changed, hence no
"chipmunk" voice sounds. Note that, all youse guys what is
locked into AM thinking. :-)

For a good treatment of the various modulation processes, I suggest "Electronic Designers' Handbook" by Robert W. Landee, Donovan C. Davis, Albert P. Albrecht, McGraw-Hill 1957, section Five (45 pages). Vacuum tube oriented (note copyright of 1957) but the modulation basics are there...the basics apply to all active devices.

For "chipmunk sounds" (which I used to do for funsies at WRRR many yarns ago) just use a tape deck with a different speed capstan for play-back. The rate of change of modulation is altered by the fractional (not integer) tape transport speed, thus the change in voice frequencies. The same thing can be done with recorded digital audio recovered with a DIFFERENT clock rate on read-out compared to sampling/recording. That's not just "multiplying frequencies" but rather changing the RATE OF CHANGE of the WHOLE sound. Not the same as multiplying just the carrier wave.

"Chipmunk" secret, the easy way: Use a 50 Hz capstan on the Magnecord reel-to-reel to record, play back with the standard 60 Hz capstan to get the increased rate of change of sound. Done in 1956, hardly any transistors on the market then, certainly NO integrated circuits having on-board A-D things. :-) Alas, reel-to-reel analog tape units are things of antiquity in 2005. :-)

LenAnderson@ieee.org

3236. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 00:31:53 UTC
From: straydog <aes1492@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.62.0507150026220.18363@mx.freeshell.org>
Source record: 18119

On Thu, 14 Jul 2005, Tim Wescott wrote:

> Date: Thu, 14 Jul 2005 11:32:47 -0700
> From: Tim Wescott <tim@seemywebsite.com>
> Newsgroups: rec.radio.amateur.homebrew
> Subject: Re: QUESTION: Fun with Svetlanas or Staying alive with kV power
> supplies
>
> Dave Platt wrote:
>> In article <l9kBe.53456$qm.7452@bignews5.bellsouth.net>,
>> Ken Scharf <wa2mzeNOTTHIS@bellsouth.net> wrote:
> snip
>>> HV isn't the only thing that can get you. High current can give you
>>> a nasty surprise. Like the guy replacing some batteries on a golf cart.
>>> He was using a ratchet wrench to tighten the battery clamps and he
>>> ended on the most positive battery terminal. The handle of the wrench hit
>>> the chassis of the golf cart putting it between 36 volts and ground
>>> of some VERY HEAVY DUTY batteries. Ever see a Sears ratchet wrench
>>> glow WHITE HOT? (and melt?)
>>
>>
>> Haven't seen that myself, but I've heard of people who have had
>> screwdrivers, etc. literally vaporized under such circumstances.
>>
> My brother came home from a business trip once with a scar on his wrist 5/8
> inches wide and all the way around -- the truck was having electrical
> problems & he shorted his metal watch band through the 12V battery (there was
> a wrench involved in there somehow, of course).
>
> I felt for him, but I was very glad that _he_ was the one to learn this first
> hand, rather than me...

I've got a related story to tell: I saw many years ago two guys try to jump start another guy in the winter time. I only saw a few seconds and surmised the following. These guys must have used the jumper cables to connect the two twelve volt batteries in series, not parallel. Why? The jumper cables were, themselves, literally smoking and not just a little bit. Figure 24 volt power at, what, something like 500 amps(?) split between heating up the interior of the two batteries and those jumper cables (that are usually like #4 or #6 gauge?). How many seconds would it take for on the order of 5000 watts to cause jumper cables to get up to 200-300+ degrees Farenheit? Those guys scrambled to tear those cables off the batteries and I could tell by how they were handling the cable that it had to be hot. They could have warped the lead plates.

> --
> --
> Tim Wescott
> Wescott Design Services
> http://www.wescottdesign.com
>

3237. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 00:38:10 UTC
From: straydog <aes1492@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.62.0507150034010.18363@mx.freeshell.org>
Source record: 18120

On Thu, 14 Jul 2005, Roy Lewallen wrote:

> Date: Thu, 14 Jul 2005 13:27:57 -0700
> From: Roy Lewallen <w7el@eznec.com>
> Newsgroups: rec.radio.amateur.homebrew
> Subject: Re: QUESTION: Fun with Svetlanas or Staying alive with kV power
> supplies
>
> Don't forget about "soak", also known as dielectric absorption or dielectric
> hysteresis. In some capacitors, particularly electrolytics, charge "soaks"
> into the dielectric and can take from seconds to days to work its way out.
> The result is a "discharged" capacitor that seems to spontaneously recharge
> itself. (One story I heard during my broadcast days was someone who put a
> screwdriver across a "discharged" capacitor.

Yep, I can vouch for this effect. I've seen it, too. Short the cap with
alligator clip-tipped wire for a few seconds if you want that voltage down
to microvolts. I think it is not "soak" but simple RC time constant decay.
Just like radioactive half-life. Residual voltage on a cap _never_ goes to
true zero, only according to the decay equation. However, there is a
so-called "electret" effect which really sounds like your "soak" effect.

After he picked himself up off
> the floor, he found just the handle of the screwdriver. He was lucky his eyes
> weren't hit with molten metal. You'll often find large capacitors stored with
> a shorting wire across them -- a good idea.)

D'arsonval meters, especially sensitive ones, are also best stored with a
shorting wire accross the terminals.

I recommend leaving a heavy
> cliplead in place across the high voltage capacitors for the entire time
> you're working on the unit. Put some tape over the on/off switch and/or a tag
> on the plug to remind you to remove it before turning the power back on.
>
> As a side note, the aquadag coating of a CRT is notorious for this. I've
> gotten a healthy bite off a CRT the day after it was discharged for an hour
> or more with a cliplead.
>
> Roy Lewallen, W7EL
>

3238. TAKE A MINUTE EVERYONE

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 00:40:57 UTC
From: Edward Pereira <pereira_99@sympatico.ca>
Message-ID: <vDDBe.10625$6e3.647578@news20.bellglobal.com>
Source record: 18122

Basic Facts A while back, I was browsing these newsgroups, just like you are now, and came across an article similar to this that said you could make thousands of CASH within weeks with only an initial investment of $6.00 plus stamps!
So I thought, "Yeah, right, this must be a scam!" But like most of us I was curious and kept reading. It said that if you send $1.00 to each of the 6 names and addresses listed in the article, you could make thousands in a very short period of time.
You then place your own name and address at the bottom of the list at #6, and post the article to at least 300 newsgroups. (There are about 32,000 of them out there and that's quite a large market pool). No catch, that was it. Even though the investment was a measly $6, I had three questions that needed to be answered before I could get involved in this sort of thing.
Pay Attention 1. IS THIS REALLY LEGAL? I called a lawyer first. The lawyer was a little sceptical that I would actually make any CASH but he said it WAS LEGAL if I wanted to try it. I told him it sounded a lot like a chain letter but the details of the system (SEE BELOW) actually made it a legitimate legal business.
2. IS OK WITH THE POST OFFICE OR IS IT MAIL FRAUD? I called them: 1_800_725_2161 and they confirmed THIS IS ABSOLUTELY LEGAL! (See 18, h sections1302 NS 1341 of Postal Lottery Laws). This clarifies the program of collecting names and addresses for a mailing list.
3. IS IT RIGHT? Well, everyone who sends me a buck has a good chance of getting A LOT of CASH ... a much better chance than buying a lottery ticket!!! So, having these questions answered, I invested EXACTLY $7.92 ... six $1.00 bills and six 32 cent postage stamps ... and boy am I glad I did!!! Within 7 days, I started getting CASH in the mail! I was shocked! I figured it would end soon and didn't give it another thought. But the CASH continued coming in. In my first week I made between $20 to $30. By the end of the second week I had a made a total of $1,000.00. In the third week I had over $10,000.00 and it was still growing. This is now my fourth week and I have made a total of just over $42,000 and it's still coming in .....
It's certainly worth $6.00 and 6 stamps !!! Also, make sure you print a copy of this article NOW, so you can get the information off of it as you need it. I promise you that if you follow the directions exactly, that you will start making more CASH than you thought possible by doing something so easy! Suggestion: Read this entire message carefully! (print it out or download it.)
Follow the simple directions and watch the CASH come in! It's easy. It's legal. And, your investment is only $6.00 (Plus postage)
IMPORTANT: This is not a rip off; it is not indecent; it is not illegal; and it is virtually no risk it really works!!!! If all of the following instructions are adhered to, you will receive extraordinary dividends.
PLEASE NOTE: Please follow these directions EXACTLY, and $50,000 or more

can be yours in 20 to 60 days.
This program remains successful because of the honesty and integrity of the participants. Please continue its success by carefully adhering to the instructions. You will now become part of the Mail Order business. In this business your product is not solid and tangible, it's a service. You are in the business of developing Mailing Lists. Many large corporations are happy to pay big bucks for quality lists. However, the CASH made from the mailing lists is secondary to the income which is made from people like you and me asking to be included in that list.
Here are the 4 easy steps to success:

STEP 1: Get 6 separate pieces of paper and write the following on each piece of paper "PLEASE PUT ME ON YOUR MAILING LIST." Now get 6 US $1.00 bills and place ONE inside EACH of the 6 pieces of paper so the bill will not be seen through the envelope (to prevent thievery). Place one paper in each of the 6 envelopes and seal them. You should now have 6 sealed envelop es, each with a piece of paper stating the above phrase, your name and address, and a $1.00 bill. What you are doing is creating a service. THIS IS ABSOLUTELY LEGAL! You are requesting a legitimate service and you are paying for it! Like most of us I was a little skeptical and a little worried about the legal aspects of it all. So I checked it out with the U.S. Post Office (1_800_725_2161) and they confirmed that it is indeed legal! Mail the 6 envelopes to the following addresses:

#1) J.E. Grey 245 Stone Bridge Ct. Fredericton, NB E3A 1J2, Canada
#2) R. Hanson 1214 Junor Ave. Saskatoon, SK S7L 7K1, Canada
#3) Leo Dapanas PO Box 6453 Stockton, CA 95206
#4) D.DiBenedetto 226 Pruden st. Thunder Bay ON. P7C 2J8 Canada
#5)Jeff Anderson 4833 N County Rd 11 C Loveland, CO 80538
#6)Edward Pereira PO Box 12, 4-1855 Dundas St. E., Mississauga ON. L4X 1M1 Can.
Are You Paying Attention? Good.

STEP 2: Now take the #1 name off the list that you see above, move the other names up (6 becomes 5, 5 becomes 4, etc...) and add YOUR Name as number 6 on the list.

STEP 3: Change anything you need to, but try to keep this article as close to original as possible. Now, post your amended article to at least 300 newsgroups. (I think there are close to 32,000 groups) All you need is 300, but remember, the more you post, the more CASH you make! This is perfectly legal! If you have any doubts, refer to 18 Sec. 1302 & 1341 of the Postal lottery laws. Keep a copy of these steps for yourself and, whenever you need CASH, you can use it again, and again. PLEASE REMEMBER that this program remains successful because of the honesty and integrity of the participants and by their carefully adhering to the directions. Look at it this way. If you are a person of integrity, the program will continue and the CASH that so many others have received will come your way.
NOTE: You may want to retain every name and address sent to you, either on a computer or hard copy and keep the notes people send you. This VERIFIES that you are truly providing a service. (Also, it might be a good

idea to wrap the $1 bill in dark paper to reduce the risk of mail theft.) So, as each post is downloaded and the directions carefully followed, six members will be reimbursed for their participation as a List Developer with one dollar each. Your name will move up the list geometrically so that when your name reaches the #1 position you will be receiving thousands of CASH in CASH!!! What an opportunity for only $6.00 ($1.00 for each of the first six people listed above) Send it now, add your own name to the list and you're in business!

___DIRECTIONS _____ FOR HOW TO POST TO NEWSGROUPS

Step 1) You do not need to re_type this entire letter to do your own posting. Simply put your cursor at the beginning of this letter and drag your cursor to the bottom of this letter, and select 'copy' from the edit menu. This will copy the entire letter into the computer's memory.
Step 2) Open a blank 'notepad' file and place your cursor at the top of the blank page. From the 'edit' menu select 'paste'. This will paste a copy of the letter into notepad so that you can add your name to the list.
Step 3) Save your new notepad file as a .txt file. If you want to do your postings in different settings, you'll always have this file to go back to.
Step 4) Use Netscape or Internet explorer and try searching for various newsgroups (on_line forums, message boards, chat sites, discussions.)
Step 5) Visit these message boards and post this article as a new message by highlighting the text of this letter and selecting paste from the edit menu. Fill in the Subject, this will be the header that everyone sees as they scroll through the list of postings in a particular group, click the post message button. You're done with your first one! Congratulations...THAT'S IT! All you have to do is jump to different newsgroups and post away, after you get the hang of it, it will take about 30 seconds for each newsgroup!
REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE CASH YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 300 That's it! You will begin receiving CASH from around the world within days! You may eventually want to rent a P.O.Box due to the large amount of mail you will receive. If you wish to stay anonymous, you can invent a name to use, as long as the postman will deliver it. **JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT.**
Now the WHY part: Out of 300 postings, say I receive only 7 replies (a very low example). So then I made $7.00 with my name at #6 on the letter. Now, each of the 7 persons who just sent me $1.00 make the MINIMUM 300 postings, each with my name at #5 and only 7 persons respond to each of the 7 original 7, that is another $49.00 for me, now those 49 each make 300 MINIMUM posts with my name at #4 and only 7 replies each, I will bring in an additional $343.00! Now, those 343 persons turn around and post the MINIMUM 300 with my name at #3 and only receive 7 replies each, I will make an additional $2401.00! OK, now here is the fun part, each of those 2401 persons post a MINIMUM 300 letters with my name at #2 and they each only receive 7 replies, that just made me $16,807.00!!! Those 16807 persons will all deliver this message to 300 newsgroups with my name at #1 and if still 7 persons per 300 Newsgroups react I will receive $117,649.00! With an original investment of only $6.00! And some stamps. AMAZING! When your

name is no longer on the list, you just take the latest posting in the newsgroups, and send out another $6.00 to names on the list, putting your name at number 6 again. And start posting again. The thing to remember is: do you realize that thousands of people all over the world are joining the internet and reading these articles everyday? JUST LIKE YOU are now!! So, can you afford $6.00 and see if it really works?? I think so... People have said, "what if the plan is played out and no one sends you the CASH? So what! What are the chances of that happening when there are tons of new honest users and new honest people who are joining the internet and newsgroups pay your taxes. By doing this you prove your business intentions. Keep an eye on the newsgroups and when the cash has stopped coming (that means your name is no longer on the list), you just take the latest posting at the newsgroups, send another $6.00 to the names stated on the list, make your corrections (put your name at #6) and start posting again.

NOTES:

*1. In some countries, the export of the country's exchange is illegal. But you can get the license to do this from the post office, explaining the above statements (that you have an online business, etc. You may have to pay an extra tax, but that's OK, the amount of the incoming CASH is HUGE! And as I said, a few countries have that restriction .

*2. You may want to buy mailing and e_mail lists for future CASH. (Or Database or Spreadsheet software.)

*3. If you're really not sure or still think this can't be for real, please print a copy of this article and give it to someone who really needs the CASH, and see what happens.

*4. You will start getting responses within 1_2 weeks, it depends.

ALSO REMEMBER SEND YOUR $1 OUT TO EVERYONE ON THE LIST, EVEN IF THEY ARE NOT FROM THE U.S. OR CANADA.

GOOD LUCK AND ENJOY!!!

3239. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 00:48:50 UTC
From: straydog <aes1492@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.62.0507150041540.18363@mx.freeshell.org>
Source record: 18121

I forgot to tell my "parasitic" story..see below...

On Wed, 13 Jul 2005 Timothy@tholtom.freeserve.co.uk wrote:

> Date: 13 Jul 2005 14:05:17 -0700
> From: Timothy@tholtom.freeserve.co.uk
> Newsgroups: rec.radio.amateur.homebrew
> Subject: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies
>
> My knowledge of vacuum tubes and kV power supplies is limited. I have
> been reading an article in the ARRL Handbook detailing the construction
> of a 1kW HF Linear. I'd like to try my hand at building something like
> this. I found the article a little intimidating: Ceramic insulators,
> parasitic suppressors, thermal and mechanical engineering etc. Is
> there some book that details this type of thing with an explanation of
> the whys as well as the whats and hows. My priorities are:
>
> 1) Safety. I'd like to be alive to make my first 1kW QSO
> 2) Avoiding equipment destruction, arc overs, black smoke, explosions
> etc
> 3) Safetly troubleshooting this kind of equipment, loading testing
> etc.
> 4) How to deal with tubes: warm up, care, etc...
> 5) Avoiding TVI (ITV), parasitic oscillations etc.

I built this two 811-a linear amplifier way long ago. Basically ave power 300 watts DC input. So, I made my own parasitic suppressors (turns of wire over, say, a ten ohm two watt carbon resistor. Or adjust turns). This was for a 75 meter phone band.

So, on launch day it sits there like a scared bird. Turn on fil power, plate power (this is grounded-grid for stability and minimal if not zero need for neutralizations), and tune (no drive) the plate capacitor. Result: dang, RF output through the power meter AND smoke comes out the top of the amp and I stand up, look down, and the coils of wire (made of #22 or 24 gauge wire, can't remember) around the resistors are glowing red hot! Too many turns of wire, so next time around I cut back to half and all was OK. Including no self-oscillation in the two 811-As.

That's called trial and error. Or, try, smoke, fix. Like if ready, fire, aim does not work, change the order to ready, aim, fire.

Art, W4PON

> 6) Longevity and Duty Cycle issues etc.
> 7) Costs and sources.

>
> Hope someone can help.
>
> Thanks,
>
> Tim
>
>

3240. Re: What would cause the SWR to go up drastically when I turn my amp on?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 00:59:38 UTC
From: straydog <aes1492@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.62.0507150052350.18363@mx.freeshell.org>
Source record: 18123
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

After reading all the other replies up to this moment, let me ask if you:
1. remove the radio (i.e. run the amp without the radio connected at all)
what do you get (if any reading of forward and/or reflected power), and
2. leave the radio connected to the amp, but run the amp without drive
power at all, then what do you get?
3. Can you vary the drive level (say down to lower levels) and still see
the SWR go up.
From what was written below, its not clear for sure if you are implying
that the amp did have a proper level of RF drive or not. But, I'd still be
interested in knowing if you get forward power and/or reflected power with
the amp turned on but without drive. I've actually had amplifiers where
the application of power and certain tuning conditions cause extra
frequencies to come out in addition to what was supposed to come out. And,
sometimes I got self-oscillation if the amplifier was NOT being driven
with input drive.

---------- No change to below, included for reference and context---

On Thu, 14 Jul 2005, Joeseph wrote:

> Date: Thu, 14 Jul 2005 10:31:05 -0400
> From: Joeseph <NOSPAM+++++@earthlink.net>
> Newsgroups: rec.radio.amateur.homebrew, rec.radio.amateur.equipment
> Subject: What would cause the SWR to go up drastically when I turn my amp on?
>
>
>
>
> This is a very screwy problem. First lets get the set-up of my
> radio equipment;
>
> The amp puts out about 100 watts on HF.
>
> RADIO----->2 TRANSISTOR AMP----->SWR METER------> ANTENNA
>
> Note the SWR meter comes AFTER the 2 transistor amp.
>
> Ok, when I check the SWR on my antenna it shows 1.1. When I turn the
> amp on it shows over 3.x SWR. The antenna is rated at 5 KW. The amp
> only puts out about 100 watts.
>
> Hmmm.....Ok lets see what happens when I use my 1 KW oil filled dummy
> load.
>

>
> RADIO-----> 2 TRANSISTOR AMP---->SWR METER------->1 KW DUMMY LOAD
>
> Same thing. The SWR is about 1.5 in to the dummy load, but as soon as
> I turn the amp on the SWR meter shows 3.x plus.
>
> Ok, Maybe my SWR meter is screwy, so lets use my Dentron MT3000
> tuner with a built in 200 watt dry dummy load and built in SWR meter.
>
>
> RADIO ---->2 TRANSISTOR AMP---->DENTRON MT3000
>
> Same thing. The SWR is low without the amp on and goes high when the
> amp gets turned on.
>
>
> Ok, Lets see what happens when I use my Drake L-4B amp instead of the
> 2 transistor amp.
>
>
> RADIO----->Drake L-4B----->SWR METER------->Dummy load
>
> Now the SWR stays low when I turn on the Drake L-4B for both the 1 KW
> dummy load and the external antenna.
>
> The transistor uses MRF455 transistors. Why would the SWR meter go up
> significantly when I turn on the 2 transisor amp, but stay low when I
> turn on a Drake L-4B.
>
> I've duplicated this scenario with three different SWR meters, and
> different patch cables. Lets me say for the record the SWR meter
> comes after the amp, so I'm not looking at a high SWR on the input
> side of the amp. This is on the output side of the amp.
>
> ?????
>
>
>

3241. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 01:01:10 UTC
From: dplatt@radagast.org
Message-ID: <11de2mmjseb1k48@corp.supernews.com>
Source record: 18124

In article <Pine.NEB.4.62.0507150034010.18363@mx.freeshell.org>,
straydog <aes1492@sdf.lonestar.org> wrote:

>> Don't forget about "soak", also known as dielectric absorption or dielectric
>> hysteresis. In some capacitors, particularly electrolytics, charge "soaks"
>> into the dielectric and can take from seconds to days to work its way out.
>> The result is a "discharged" capacitor that seems to spontaneously recharge
>> itself. (One story I heard during my broadcast days was someone who put a
>> screwdriver across a "discharged" capacitor.
>
>Yep, I can vouch for this effect. I've seen it, too. Short the cap with
>alligator clip-tipped wire for a few seconds if you want that voltage down
>to microvolts. I think it is not "soak" but simple RC time constant decay.
>Just like radioactive half-life. Residual voltage on a cap _never_ goes to
>true zero, only according to the decay equation. However, there is a
>so-called "electret" effect which really sounds like your "soak" effect.

Yup. Formally "dielectric absorbtion". In a lot of types of
capacitor, enough stored charge can come back out, over the course of
a few minutes, to raise the open-circuit terminal voltage of the cap
to a significant percentage of its fully-charged level, even if you
had previously discharged the cap all the way to a zero reading.

It can be enough to give you a nasty bite.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3242. Re: TAKE A MINUTE EVERYONE

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 01:18:21 UTC
From: -ex- <exray@coqui.net>
Message-ID: <4f494$42d70ee0$4232bd6a$14940@COQUI.NET>
Source record: 18125

Edward Pereira wrote:

> Basic Facts A while back, I was browsing these newsgroups, just like you
> are now, and came across an article similar to this that said you could
> make thousands of CASH within weeks with only an initial investment of
> $6.00 plus stamps!
> So I thought, "Yeah, right, this must be a scam!"

Smart guy.
-BM

3243. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 01:55:18 UTC
From: "dave.harper" <dave.harper@gmail.com>
Message-ID: <1121392518.226007.109060@g44g2000cwa.googlegroups.com>
Source record: 18126
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Joel Kolstad wrote:

> No, although for low Q resonators, it's often pretty close.
>
> Generally speaking, most relatively simple AM receivers are really only
> intended to pick up relatively strong, nearby transmitters. As such, you can
> get away with an awful lot of "cut and try" when it comes to designing the
> circuit (largely ignore matching impedances, Q's, etc.) and still obtain
> acceptable results.

Thanks for the response Joel. So if I understand correctly, Q is
basically an indicator of how well the LC circuit resonates? Could you
think of Q as the inverse of a dampening coefficient?

If so, I guess ideally you'd get the best Q with an iron-core inductor,
thick windings, and as few windings as possible?

Dave

3244. Re: QUESTION: Fun with Svetlanas or Staying alive with kV powersupplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 02:04:59 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <db75kb$r8t$1@theodyn.ncf.ca>
Source record: 18127

"Highland Ham" (abcgm0csz.kn6whxyz@dsl.pipex.com) writes:
>>> What's the *intended* purpose of a 450v "computer grade" capacitor?
> ====================
> Switch mode power suppplies ??
>
>
> Frank GM0CSZ / KN6WH
>
>
I thought "computer grade" was either a marketing name, or at the
very most defined a certain design of capacitor.

In other words, they weren't designed for computers, but saw a lot of
use in them. They weren't cheap electrolytics of the type you'd
see in the average consumer equipment of thirty years ago.

You'd see them promoted in the surplus ads, and the ones I remember
were metal-cased, and had screw terminals for connections. I still
have one around I bought at a hamfest for a 12V power supply. It
was about 10,000uF (which was a fairly large size capacitor circa
1973 or so), had a voltage rating of about 16volts, and was the size
of a can of coke. Obviously a lot more impressive than the average
electrolytic of the day.

So once you had that style, it wasn't whether they were used in
computers or not, so of course you could have high voltage "computer
grade" capacitors.

I have no idea if it was a marketing ploy, "hey those are used in
computers [which were still uncommon at the time, and usually big
and very expensive], they must be good capacitors", or if there
was something about their design that made them better than the
average electrolytic of the time.

Michael VE2BVW

3245. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 02:40:07 UTC
From: -ex- <exray@coqui.net>
Message-ID: <6ff44$42d7220c$4232bd6a$2073@COQUI.NET>
Source record: 18128
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

dave.harper wrote:

> Joel Kolstad wrote:
>
>
>>No, although for low Q resonators, it's often pretty close.
>>
>>Generally speaking, most relatively simple AM receivers are really only
>>intended to pick up relatively strong, nearby transmitters. As such, you can
>>get away with an awful lot of "cut and try" when it comes to designing the
>>circuit (largely ignore matching impedances, Q's, etc.) and still obtain
>>acceptable results.
>
>
> Thanks for the response Joel. So if I understand correctly, Q is
> basically an indicator of how well the LC circuit resonates? Could you
> think of Q as the inverse of a dampening coefficient?
>
> If so, I guess ideally you'd get the best Q with an iron-core inductor,
> thick windings, and as few windings as possible?
>
> Dave
>
If I may jump in....
The case of crystal receivers is somewhat different than a "powered"
radio in that you want to keep things at as high a Q as possible to
match the high impedance of the circuit. High Q is desirable in any
case but moreso in a crystal set.

After having established a good high Q with the LC configuration you can
count on the circuit/antenna loading it down somewhat so then it becomes
a matter of selecting appropriate diodes, decoupling the ant, etc. so it
always helps to start out with as much as possible.

Textbook Q of more C/less L is dictated simply by resistance. In
practice, at least for BCB xtal radios, the dielectric of the coil, skin
effects of the wire, interwinding capacitance are the key players.
Thats why certain coil dimensions, use of litz wire and certain winding
techniques can generally be counted on for the highest Q.

The Q of a coil, and/or complete circuit, will have a curve of its own.
With BCB, what is good at 600kc may be better at 800kc and
(relatively) terrible at 1600kc.

I've had good success with ferrite toroids approaching Q=400, although ferrites are by nature very unpredictable Q-wise. This is as good as one can expect with something like a 3-4" diameter coil of #18 wire on a good coil form. OTOH, the toroid stops there. That same 4" coil wound with 660-strand litz can get up into the Q=800 stratosphere with a basket-wind technique.

There's always a downside. A big, hi-Q coil needs to be kept well away from ANYTHING or else the Q will take a nosedive and then lead capacitance starts biting you from the backside.

I find xtal sets fascinating. I've been radioing for 35-40 years and never gained a full appreciation for L, C and Q until I got into DXing with xtal sets. Logged 105 BCB stations in the competition earlier this year including two in Brazil!

-Bill

3246. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 02:47:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11de8ts392ut099@corp.supernews.com>
Source record: 18129

straydog wrote:
>
> Yep, I can vouch for this effect. I've seen it, too. Short the cap with
> alligator clip-tipped wire for a few seconds if you want that voltage
> down to microvolts. I think it is not "soak" but simple RC time constant
> decay. Just like radioactive half-life. Residual voltage on a cap
> _never_ goes to true zero, only according to the decay equation.
> However, there is a so-called "electret" effect which really sounds like
> your "soak" effect.

No, it's not a simple time constant -- the slope is much different. A reasonably good model of it is a series R, shunt C, series R, shunt C, etc. A large number of Rs and Cs with various time constants have to be used to imitate it reasonably well.

I don't know about an "electret effect". An electret is a dielectric with a permanently trapped charge, so it produces a static electric field. It's the analog of a magnet, with permanently trapped flux and producing a permanent magnetic field. A magnet that's not moving can't produce a current (much to the dismay of the perpetual motion crowd), and an electret that's not moving can't produce a voltage.

>
> D'arsonval meters, especially sensitive ones, are also best stored with
> a shorting wire accross the terminals.

That's for an entirely different reason -- to protect the meter from damage, rather than the user.

Roy Lewallen, W7EL

3247. Re: Murata Ceramic Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 03:36:51 UTC
From: "Michael St. Angelo" <mstangelo@comcast.net>
Message-ID: <wbOdnbysyYjZskrfRVn-oA@comcast.com>
Source record: 18130

Jim,

If they were used in a Japanese radio (Alinco Icom Kenwood Yaesu) you may be
able
getting replacement parts from the US representative.

I wanted some CFJ455K8 filters. They were used in the Alinco DX-70. I
contacted Alinco America
and ordered a couple of filters. The price was reasonable since they were
removed from parts radios
Alinco had on hand.

73,

Mike N2MS
"Jim Barnard" <jbarnard@ftc-i.net> wrote in message
news:db40tp$5lgb$1@news3.infoave.net...
> Does anyone know of a retail vendor that would sell the Murata ceramic
> filter CFJ455K5 without a $25-$5000 minimum order? I just need one piece
> for a Ten-tec radio. Thanks Jim
>

3248. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 03:44:52 UTC
From: LenAnderson@ieee.org
Message-ID: <1121399092.652378.311780@z14g2000cwz.googlegroups.com>
Source record: 18131
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

From: "dave.harper" on Thurs 14 Jul 2005 18:55

>Joel Kolstad wrote:
>
>> No, although for low Q resonators, it's often pretty close.
>>
>> Generally speaking, most relatively simple AM receivers are really only
>> intended to pick up relatively strong, nearby transmitters. As such, you can
>> get away with an awful lot of "cut and try" when it comes to designing the
>> circuit (largely ignore matching impedances, Q's, etc.) and still obtain
>> acceptable results.
>
>Thanks for the response Joel. So if I understand correctly, Q is
>basically an indicator of how well the LC circuit resonates? Could you
>think of Q as the inverse of a dampening coefficient?

In a way, you might think that. For going to more advanced things
besides "simple AM receivers," I'd suggest thinking of Q as a
built-in LOSS element.

For parallel-tuned circuits, the loss can be modeled as a resistor
in parallel with the L and C. This equivalent resistor value is
the reactance of either L or C (they are equal at resonance)
multiplied by Q. A high Q indicates least loss in a parallel
circuit, a high value of equivalent parallel resistance.

But, for series-tuned circuits, the loss is equal to a resistor
in series with L and C. That resistor value is equal to the
reactance of either L or C divided by Q. A high Q in a series-
tuned resonance would have the lesser value of series resistance.

>If so, I guess ideally you'd get the best Q with an iron-core inductor,
>thick windings, and as few windings as possible?

Yes and NO. Q will vary by MANY things. Generally, physically
big coils will have higher Q, physically big windings will have
higher Q. Shape factor, like length versus diameter of a
solenoidal winding has an optimum value. Nearby shielding will
tend to reduce Q; one reason why toroidal forms have higher Q
than solenoidal or cylindrical windings.

CORE MATERIAL IS FREQUENCY SENSITIVE! "Iron core" has to be
defined. Power transformer laminations are okay at up to
about 10 KHz and then become more lossy with increasing
frequency. Special iron (tape shape, usually) is used for

higher frequencies in the supersonic range. At LF and higher, various kinds of iron POWDER are used to enhance Q (within their specified frequency range).

Q applies to capacitors also...and is affected by things like plate area, plate material, dielectric if other than air, and (to some degree) physical shape factors. Generally, though, the Q of most resonating capacitors is 10 to 100 times larger than inductors and can usually be neglected in most calculations of tuned circuits. Inductor Q rules! :-)

For self-education, I'd suggest spending some time with a good Q Meter and trying out measurements on various kinds of inductors. That will probably give you the best Q picture in your mind.

LenAnderson@ieee.org

3249. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 03:48:16 UTC
From: LenAnderson@ieee.org
Message-ID: <1121399296.200297.165740@g44g2000cwa.googlegroups.com>
Source record: 18132

From: straydog on Fri 15 Jul 2005 00:48

>That's called trial and error. Or, try, smoke, fix. Like if ready, fire,
>aim does not work, change the order to ready, aim, fire.

All electronics works on smoke. If the smoke leaks out,
it won't work...

LenAnderson@ieee.org

3250. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 04:42:01 UTC
From: LenAnderson@ieee.org
Message-ID: <1121402521.763416.59680@z14g2000cwz.googlegroups.com>
Source record: 18133
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

From: dave.harper on Jul 12, 4:12 pm

>I had a couple of questions regarding recievers that I haven't been
>able to figure out. I'd appreciate it if anyone could give me some
>insight...
>
>How well-defined is the gain for a cap-coil loop, like in an AM radio?
>(i.e., how fast does the gain droppoff as you move up or down from the
>'tuned' frequency?) Is it a function of L and C? Or just frequency?
>(different combinations of L and C will tune to the same frequency, but
>is the gain the same?)

"Gain" of a crystal radio depends on the bigness of the antenna.

If you are talking about a loop antenna on an AM [BC band]
radio, then it's a different story. The loop antenna on an
AM receiver is small/tiny/micro-stuff relative to the 200+
meters of AM BC wavelengths. The received signal VOLTAGE
is directly dependent on the number of turns in that loop and
the physical size of the loop.

A loop antenna is into what some folks call a "magetic antenna";
i.e., very small relative to wavelength, therefore it intercepts
only the magnetic part of the electro-magnetic wavefront radiated
by a transmitter. The more turns in that loop, the greater the
voltage induced in the loop.

A humungous-long wire is going to supply the greatest amount of
POWER to a crystal receiver. POWER drives the headphones. But,
the amount of power coupled in involves IMPEDANCE and that, right
away, gets into a complicated mess of more electrical rules.

Simple crystal receivers want to keep impedances very high at
both input, middle, and output. ["crystal" or piezo-electric
headphones are the best for that, next best is the highest
impedance magnetic headphones (2000 Ohms or higher) you can get]

For the typical parallel-tuned L-C input to a crystal set, the
inductor Q will make a difference. It must be as high as is
practical; Qs of 200 to 300 have been done. But, the Q of the
coil is dependent on a LOT of different factors which I noted
in the other message.

>How come the coils on many of the CR schematics I've seen have multiple
>tap locations? It seems that with a variable cap, you should be able
>to tune to whatever frequency that's in your range.

Mostly, that is just old-time tradition! :-) [I kid you not]

The formula for resonance is: F^2 = 1 / (39.478 * L * C)

With F being frequency in Hz, L in Hy, C in Fd.

To check this out, a 2.5 mHy inductor and 1000 pFd capacitor will be resonant very close to 100 KHz.

The maximum to minimum variable capacitance ratio is equal to the square of the maximum to minimum frequency tuning ratio desired. That's about IT.

"Taps" on a coil can be to select different inductance values for resonance with limited-range variable tuning capacitors. Note: Back in the prehistory of radio, like around the 1920s, variable capacitors were expensive and not so easy to get. A few old-time crystal sets "tuned" via lots of coil taps using a fixed parallel capacitor. I had a Philmore crystal radio kit back in 1946 that did that. Very cheap kit. It worked, so-so.

Presupposing a loop antenna that is resonated by a variable capacitor, its "gain" is going to be greatly influenced by its Q or Quality factor. The higher the Q, the greater the voltage into the headphones. However, the Q may NOT be the same over the approximate 3:1 frequency span of the AM BC band. [again, too many variables as noted in other message]

The Q of that L-C circuit is going to be "spoiled" by the impedance/resistance of the headphones. Those headphones are in parallel with the parallel-tuned L-C circuit. The higher the impedance/resistance of the headphones, the least effect it will have on the Q of the L-C resonant circuit.

Somehow my browser failed to pick up your initial message so this is a reverse-order answer. Sorry about that.

LenAnderson@ieee.org

3251. Re: QUESTION: Spectrally pure DDS Output?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 04:52:57 UTC
From: charlesh3@msn.com
Message-ID: <aZWdnf5pm7G13ErfRVn-rg@giganews.com>
Source record: 18134

I think you'll have to say what is acceptable to you and define what you mean by "spectral grass". In terms of phase noise, you'll do better with a normally designed DDS than you will with a normally defined PLL. For data on what a DDS can do rephase noise, look at various models of synthesizers on the PTS web site.

Now of course there are spurs to contend with in any DDS design, but discrete spurs are not what I would call "spectral grass". If spurs are indeed your issue, you can go to a 14 bit DDS (AD9951 or others) and get at least spurs at least 80 db down, or add filtering to the DDS output.

Chuck

3252. reverse logic

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 04:55:18 UTC
From: ALSUDANIA <ihab.hamour@gmail.com>
Message-ID: <1121403318.606011.148150@g44g2000cwa.googlegroups.com>
Source record: 18135

I would like reverse a PWM signal of 500Hz to use on an IC. I would like to use a pnp npn but I get clipping of the signal at low voltages, help please

3253. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 05:00:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11degne6dprob29@corp.supernews.com>
Source record: 18136
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

dave.harper wrote:
>
> Thanks for the response Joel. So if I understand correctly, Q is
> basically an indicator of how well the LC circuit resonates? Could you
> think of Q as the inverse of a dampening coefficient?

Just about exactly. You'll find the term "damping factor" (sometimes "damping ratio" or "damping coefficient") often used in many situations involving network analysis and control systems, usually represented by the lowercase Greek letter zeta. And it's numerically equal to 1/(2Q), so Q is exactly 1/2 the inverse of the damping factor.

When the damping factor is 1 (Q = 0.5), a second order circuit is said to be critically damped.

Roy Lewallen, W7EL

3254. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 05:42:56 UTC
From: -ex- <exray@coqui.net>
Message-ID: <3ab17$42d74ce4$4232bd6a$15556@COQUI.NET>
Source record: 18137
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

LenAnderson@ieee.org wrote:

Before I start my rant, let me excuse myself to Len (who I highly
regard) for taking some issues to point on the actually-having-done-it
level.

>
>
> "Gain" of a crystal radio depends on the bigness of the antenna.
>
> If you are talking about a loop antenna on an AM [BC band]
> radio, then it's a different story. The loop antenna on an
> AM receiver is small/tiny/micro-stuff relative to the 200+
> meters of AM BC wavelengths. The received signal VOLTAGE
> is directly dependent on the number of turns in that loop and
> the physical size of the loop.

Loop antennas do suck on a xtal set for that reason but "bigness" can
suck equally if not done right.
>

>
> A humungous-long wire is going to supply the greatest amount of
> POWER to a crystal receiver. POWER drives the headphones. But,
> the amount of power coupled in involves IMPEDANCE and that, right
> away, gets into a complicated mess of more electrical rules.

You know how you read all those old texts about using nice glass
insulators and keeping the wire away from anything? In everyday
practice you can do pretty well what you please with wire antennas and
powered radios and notice very little difference. Once you get into the
realm of truly hi-z installations those tree leaves brushing against the
wire become noticeable.
>
> Simple crystal receivers want to keep impedances very high at
> both input, middle, and output. ["crystal" or piezo-electric
> headphones are the best for that, next best is the highest
> impedance magnetic headphones (2000 Ohms or higher) you can get]

Acutally the best is a good matching xfmr and sound powered phones.
Those old 1920's 2k headsets are relatively deaf. But you did specify
"simple crystal receivers" and it that case it doesn't really matter.
>
> For the typical parallel-tuned L-C input to a crystal set, the
> inductor Q will make a difference. It must be as high as is

> practical; Qs of 200 to 300 have been done. But, the Q of the
> coil is dependent on a LOT of different factors which I noted
> in the other message.

Q in excess of 1000 is readily achievable. 200-300 is a starting point
on a decent dx set.
>
>
>
>>How come the coils on many of the CR schematics
>
>
> Mostly, that is just old-time tradition! :-) [I kid you not]
>
> The formula for resonance is: F^2 = 1 / (39.478 * L * C)

....snipping here....

> The maximum to minimum variable capacitance ratio is equal to
> the square of the maximum to minimum frequency tuning ratio
> desired. That's about IT.

Most of these old ckts relied on a 17 or 21 plate cap which was in the
400-500 pf range. They would tune the entire band at full tapping. The
tapping allowed a guy to really nitpick his tuning for two
reasons...ease of fine tuning and higher Q at the best combination.
>
> "Taps" on a coil can be to select different inductance values
> for resonance with limited-range variable tuning capacitors.
> Note: Back in the prehistory of radio, like around the 1920s,
> variable capacitors were expensive and not so easy to get. A
> few old-time crystal sets "tuned" via lots of coil taps using
> a fixed parallel capacitor. I had a Philmore crystal radio kit
> back in 1946 that did that. Very cheap kit. It worked, so-so.

I think you described the Philmore kit well. That was a toy.

My 4 cents worth.

-Bill

3255. Re: QUESTION: Spectrally pure DDS Output?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 07:24:55 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <r3led1dbegib0fpplf9nejtvfc534hrnj1@4ax.com>
Source record: 18138

On Fri, 15 Jul 2005 04:52:57 GMT, charlesh3@msn.com wrote:

>I think you'll have to say what is acceptable to you and define what you
>mean by "spectral grass". In terms of phase noise, you'll do better with a
>normally designed DDS than you will with a normally defined PLL. For data on
>what a DDS can do rephase noise, look at various models of synthesizers on
>the PTS web site.
>
>Now of course there are spurs to contend with in any DDS design, but
>discrete spurs are not what I would call "spectral grass". If spurs are
>indeed your issue, you can go to a 14 bit DDS (AD9951 or others) and get at
>least spurs at least 80 db down, or add filtering to the DDS output.

The total spur power seems to be more or less constant in the
traditional DDS. However the distribution of the spur power varies
constantly with the frequency (i.e. phase accumulator increment).

At some settings there will be a huge number of low level spurs more
or less evenly distributed along the frequency band. I assume that the
OP is calling this spectral grass.

However, at some specific phase accumulator increments, the spur power
is concentrated on just a few discrete frequencies, adding up to
easily visible spur peaks, but between these peaks the spectrum is
clean (only thermal noise).

If the discrete spurs cause problems, it would be a good idea to check
if the frequency management could be modified in such a way that the
spot frequencies that cause large discrete spurs are skipped.

OTOH, if a very clean signal is required in a narrow band, it might be
a good idea to concentrate the total spur power into a few discrete
spurs outside the band and thus have a clean band of interest.

Paul OH3LWR

3256. Re: MOV protection of 120vac circuits with high freq content

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 11:59:25 UTC
From: tjs <anon@anon.net>
Message-ID: <42d7a952_3@news1.prserv.net>
Source record: 18139
Cross-posted to: rec.radio.amateur.homebrew,sci.engr.electrical.sys-protection

Yes I think I will have to test the MOVs to really know. Or as you suggested
take a MOV out and measure resistor temperature.

"John Popelish" <jpopelish@rica.net> wrote in message
news:g7Sdnbgh8tnnIUvfRVn-tg@adelphia.com...
> tjs wrote:
> > This is close the exact component I have.
> >
http://www.maida.com/content/products/varistors/standard/fullRecord.asp?iACVolts=180&iDCVo
lts=0&iDiskSize=10&stylenum=D6121ZOV181RA04
> > It shows 320pF. Its marked 04UL is supposed to mean 40 joules, although
the
> > data sheet says 60J.
> > Tim
> >
> > I want to conclude that the MOV can short pulling over 25ma thru the
1/8th
> > watt resistor, heating it up, due to 10khz components on the voltage,
and
> > not an actual high voltage. Would this be a true statement?
>
> Without having the exact waveform, it is impossible to say exactly how
> much current the MOV capacitance allows through. I suggest you try an
> experiment of removing one of the MOVs and see how much cooler the
> resistor runs.

3257. Re: Class C amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 12:38:29 UTC
From: rkrishnan <mrkrishnan@gmail.com>
Message-ID: <1121431109.111768.68390@g49g2000cwa.googlegroups.com>
Source record: 18140

Tim Wescott wrote:
> Any coupling circuit to a class C bipolar transistor amplifier not only
> needs to match impedance, it also needs to supply DC current to the base
> of the class C stage. Inductive coupling is nice because the average
> voltage at the base is nailed at zero and the inductor will guarantee
> that enough DC current flows. If you should capacitively couple then
> you need to load the base of the final stage with a back-biased diode or
> a resistor to provide the current -- otherwise your coupling capacitor
> will just charge up until no current flows into your final's base and
> you no longer get amplification.

Thanks Tim for the info.

I am still a homebrew newbie and am slowly trying to understand the
circuits
described in SSD. Have long forgotten the circuits which I learnt, back
in
my undergrad days..

Is there any good *theory* text which explains everything?

73
Ramakrishnan, VU3RDD

3258. Re: What would cause the SWR to go up drastically when I turn my amp on?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 12:44:13 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <xcOBe.17929$C15.10225@trnddc08>
Source record: 18141
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

> Thanks for all your help guys. I think you've hit the nail on the
> head. Now it is time for me to do some more reading, and fix this
> puppy.
>
> J
>
> I have not seen much description on the solid state amp except that it has
MRF455 transistors. Because these devices were a favorite in the manufacture
of CB amplifiers, I am suspicious that the only output filtering is a HPF
set to cutoff around 30MHz.
So, running this amp on the lower HF bands would allow a lot of harmonic
energy to appear at the output.

Dale W4OP

3259. Re: What would cause the SWR to go up drastically when I turn my amp on?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 12:46:39 UTC
From: Derek Twynham <derek.photo@hotmail.com>
Message-ID: <db8b7f$e4t$1@news.al.sw.ericsson.se>
Source record: 18142
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

> RADIO----->2 TRANSISTOR AMP----->SWR METER------> ANTENNA
>
> Ok, when I check the SWR on my antenna it shows 1.1. When I turn the
> amp on it shows over 3.x SWR. The antenna is rated at 5 KW. The amp
> only puts out about 100 watts.

When I had this it was caused by arcing at the antenna. VSWR perfect with low power, but it even made an audible noise when you screwed the power up.

1 - Try this using a band-pass filter:
RADIO-->2 TRANSISTOR AMP-->SWR METER-->FILTER-->DUMMY
If amp churns out shit then the filter will reflect it. If VSWR is good, then:

2 - Eliminate your feeder (could be breaking down):
RADIO-->2 TRANSISTOR AMP-->SWR METER-->FEEDER-->DUMMY
When you do this you may even see a duff contact/joint.
If the feeder insulation is breaking down then VSWR rises again. If not then:

3 - Check out the antenna / balun / feed points for strands of wire, smoke, etc.

3260. Re: Murata Ceramic Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 12:52:45 UTC
From: Derek Twynham <derek.photo@hotmail.com>
Message-ID: <db8bitebv1@news.al.sw.ericsson.se>
Source record: 18143

> Does anyone know of a retail vendor that would sell the Murata ceramic
> filter CFJ455K5 without a $25-$5000 minimum order?

http://www.barendh.com has:

CFWM450I 4 12 455 Rather steep filter on 450kHz!
9.90
CFK455J 2.7 6 455 17x7 steil ssb
36.50
CFK455E 15 20 455 17x7 very steep
19.90
CFS455E 15 30 455 28x11 Steep filter
32.50
CFS455H 6 13 455 28x11 Steep filter
32.50
CFS455J 2.7 6 455 28x11 Steep filter
35.00
CFL455DG2 20 40 455 16x7 extremely flat group delay
36.26
CFR455G 12 22 455 7x22 Very steep
19.95
LFD15 15 25 455 28x11 Very steep
44.92
CFM455... several bandwidths stocked
CFM455H 6 15 455 ***STEEP- METAL CAN- SPEC.OFFER ***
5.67
CFM455A 35 70 455 7x22 Meteosat
31.31
CFG455F 12 25 455 7x11 Narrowband FM
26.77
CFG455I 4 9 455 7x11 Narrow AM
29.00

(prices in Euros)

3261. Re: How do you measure impedance a broadband transformer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 13:13:11 UTC
From: Derek Twynham <derek.photo@hotmail.com>
Message-ID: <db8cp7$f7n$1@news.al.sw.ericsson.se>
Source record: 18144

> How do you measure the impedance of a broadband transformer for a RF
> transistor amplifier? I'm referring to the input and output broadband
> tranformers just before and after the transistor finals.

You don't! The broadband transformer reflects the load impedance back to the driving stage. In other words, if the turns-ratio is 1:1 then the input impedance of the transformer is equal to the load impedance.

If your load is 50 Ohms and you want to match a 10-watt transmitter, with a 12v supply, then you need to calculate the impedance ratio. The transmitter output stage impedance (in Ohms) is

(Vsupply squared) / Watts

With 12 v supply, the output impedance of a 10- watt amplifier is
(12 x 12) / 10 = 144 / 10 = 14.4 Ohms.

The transformer impedance ratio is therefore:
14.4 : 50 = 1 : 3.5

The transformer turns ratio is therefore Sqrt (impedance ratio)
= 1: 1.8 (close enough to 1:2) step-up.

3262. Re: Why does a change in jumper length change amplifer outout?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 16:57:45 UTC
From: tim gorman <tgorman2@cox.net>
Message-ID: <aup8bd.an1.ln@tg6124.ab0wr.net>
Source record: 18145

Roy Lewallen wrote:

>
>
> tim gorman wrote:
>> . . .
>> Unless you are using rg174 the 7 foot of extra cable should not make this
>> much difference unless the input impedance of the amplifer is not 50ohm
>> resistive. If it is not purely resistive then changing the cable length
>> can impact the SWR seen at the transmitter end significantly. . .
>
> Changing the cable length won't change the SWR on the cable regardless
> of the kind of load impedance and, if the SWR meter is designed for the
> cable's Z0, it won't change the SWR meter reading, either. Except, of
> course, that cable loss will always lower the SWR -- but that shouldn't
> be a significant factor with such short cables.
>
> Changing the cable length *will* change the impedance looking into the
> cable, whether or not the load is purely resistive. The only exception
> to this is if the load is resistive *and equal to the line's
> characteristic impedance* in which case the impedance looking in will be
> Z0 for any length cable.
>

>
> Roy Lewallen, W7EL

I repeat, changing the cable length will change the swr *seen* at the
transmitter end significantly. As w7el says, changing the cable length
will change the impedance looking into the cable. Since most common,
inexpensive swr meters are calibrated for use with a 50ohm load, the actual
swr readings will be dependent upon the impedance presented to the swr
meter while looking into the cable. Although the actual swr may not change,
the swr that you see may very well change. A 7 foot stub represents an
eighth wavelength all the way down to 60m. This is enough to present an
impedance change.

tim ab0wr

3263. FA:'S' Mmeters for HQ-110,Sx-42 + more stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 17:25:18 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <2kSBe.423748$cg1.332150@bgtnsc04-news.ops.worldnet.att.net>
Source record: 18146
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Nice 'S' meters for HQ-110 AND SX-42 + other stuff being added; see at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking , Heytubeguy

3264. Re: What would cause the SWR to go up drastically when I turn my amp on?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 19:12:06 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <db91q6ooh1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 18147
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

To think in terms of SWR readings is a waste of time and effort.

You are all confusing yourselves. Furiously digging yourselves even
further into the mire.

Go back to square one and begin again from Ohm's Law.

Reg

3265. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 19:23:54 UTC
From: straydog <aes1492@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.62.0507151914310.6504@mx.freeshell.org>
Source record: 18148

On Thu, 14 Jul 2005, Roy Lewallen wrote:

> Date: Thu, 14 Jul 2005 19:47:23 -0700
> From: Roy Lewallen <w7el@eznec.com>
> Newsgroups: rec.radio.amateur.homebrew
> Subject: Re: QUESTION: Fun with Svetlanas or Staying alive with kV power
> supplies
>
> straydog wrote:
>>
>> Yep, I can vouch for this effect. I've seen it, too. Short the cap with
>> alligator clip-tipped wire for a few seconds if you want that voltage down
>> to microvolts. I think it is not "soak" but simple RC time constant decay.
>> Just like radioactive half-life. Residual voltage on a cap _never_ goes to
>> true zero, only according to the decay equation. However, there is a
>> so-called "electret" effect which really sounds like your "soak" effect.
>
> No, it's not a simple time constant -- the slope is much different. A
> reasonably good model of it is a series R, shunt C, series R, shunt C, etc. A
> large number of Rs and Cs with various time constants have to be used to
> imitate it reasonably well.

Well, if you want to get technical about it, yes. All those layers of foil
all, individually, add up to all of those Cs and Rs.

> I don't know about an "electret effect". An electret is a dielectric with a
> permanently trapped charge, so it produces a static electric field.

I doubt if there is very much in the universe with a real, practical
permanence. The second law of thermodynamics says that trapped charge is
going to try hard to become untrapped.

It's the
> analog of a magnet, with permanently trapped flux and producing a permanent
> magnetic field.

Most magnets that I've heard about will slowly lose their magnetism via
one of many mechanisms.

A magnet that's not moving can't produce a current (much to
> the dismay of the perpetual motion crowd), and an electret that's not moving
> can't produce a voltage.

In a laboratory, once, I made an electret out of, basically, frozen water.
The various pieces of these electrets, bathed in liquid nitrogen, behaved,
qualitatively, like little magnets. Bring one near another, and whatever
"pole" was at some point on one piece would spontaneously jump,

appropriately, to the piece I was holding.

An electret that is not moving can't produce a voltage? Semantics. There _will_ be an electric field between one pole and the other and it _will_ be measureable and calculable and the results will be in volts regardless of whether the electret is "moving". The units can be expressed in more than one way depending on reference systems, definitions, and goal of the measurement or calculation.

>>
>> D'arsonval meters, especially sensitive ones, are also best stored with a
>> shorting wire accross the terminals.
>
> That's for an entirely different reason -- to protect the meter from damage,
> rather than the user.

For many people (since, in my life, it came up many times in conversation), protecting the meter was more important.

> Roy Lewallen, W7EL
>

Art, W4PON

3266. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 19:26:00 UTC
From: straydog <aes1492@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.62.0507151925520.6504@mx.freeshell.org>
Source record: 18149

On Fri, 14 Jul 2005 LenAnderson@ieee.org wrote:

> Date: 14 Jul 2005 20:48:16 -0700
> From: LenAnderson@ieee.org
> Newsgroups: rec.radio.amateur.homebrew
> Subject: Re: QUESTION: Fun with Svetlanas or Staying alive with kV power
> supplies
>
> From: straydog on Fri 15 Jul 2005 00:48
>
>
>> That's called trial and error. Or, try, smoke, fix. Like if ready, fire,
>> aim does not work, change the order to ready, aim, fire.
>
> All electronics works on smoke. If the smoke leaks out,
> it won't work...
>

;-) Reminds me of another joke I can't quite remember: something
dealing with the proof that electricity is really smoke, or something like
that. Maybe someone has a reference to that joke. It was pretty funny,
too.

Art, W4PON

>
> LenAnderson@ieee.org
>
>

3267. ** FLEA at MIT ** Sunday July 17th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 19:39:02 UTC
From: w1gsl@mit.edu
Message-ID: <42d810d6$0$569$b45e6eb0@senator-bedfellow.mit.edu>
Source record: 18150
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

This coming Sunday....

+++ Now even more Buyers Parking !!!
Thanks to TKT we have use of their new parking lot
across Albany St from the SWAPFEST !!!

!! ** More Buyers PARKING is available ** for details see
http://web.mit.edu/w1gsl/Public/flyer

*** !!!! In our Traditional GARAGE and the adjacent lot !!!! ****
so come rain or shine or super heat the Flea is on !!!

********* $1 buyers discount with hardcopy of this notice ********

COMPUTERS - ELECTRONICS - HAM RADIO - COMPUTERS - ELECTRONICS - HAM RADIO

FLEA all SUMMER at MIT
Sunday July 17th 2005
9AM-2PM

Come to the city for a great flea - plenty of free parking.

MIT's electronics and ham radio flea will take
place on the third Sunday of each month this summer,
April thru October.

There is tailgate space for over 600 sellers and
free, off-street parking for >2000 cars!

Buyers admission is $5 (you get $1 off if
you're lucky enough to have a copy of our ad)
and sellers spaces are $20 for the first and
$15 for each additional at the gate.

The flea will be held at the corner of Albany and
Main streets in Cambridge; right in the Kendall
Square area from 9AM to 2PM, with sellers set-up
time starting at 7AM.

SEASON PASS + Advance Seller Discount

A sellers discount season pass is available which
offers a 30% discount. By prepaying you get a
discount and earlier admission. See the registration form.

*** Attention Sellers ***
Prepaid vendors.. Season Pass or monthly,

will be admitted FIRST.
Separate lines will form prior to gate opening
for prepaid and nonprepaid vendors

!! RAIN or SHINE !! Have no fear of rain, a covered
well illuminated tailgate area is available for all
sellers (6'8" clearance).

Talk-in: 145.23- (PL 88.5) W1BOS/R and
W1XM/R-449.725/444.725 (PL 114.8/2A).

Sponsors: MIT Electronics Research Society
MIT UHF Repeater Association (W1XM)
MIT Radio Society (W1MX)
Harvard Wireless Club (W1AF)

For more info / advanced reservations 617 253 3776

********** $1 buyers discount with hard copy of this notice **********

<<<<<<<<<<<<<<<<<<<<<<< cut here >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

Mail the coupon below by the 5th of the month to be a Prepaid Vendor.

FLEA at MIT 2005 Rates

SELLERS

To use your prepaid spaces the named vendor MUST be present.
Rates include one admission per space.

Advance $17 First space - includes $10 Cambridge Vendor License
$12 Additional Spaces
Must be received by the 5th of the month.

Gate Admission $20 First Space - includes $10 Cambridge Vendor License
$15 Additional Spaces
Admission is after the prepaid vendors

Early Bird Buyer -Admission after the prepaid vendor line is admitted. ~ 7:15AM
** You may not sell. **
$15 per person at the gate.

****************************** cut here ******************************

FLEA at MIT 2005 Advance Space Application

____April ____May ____June ____ July ____Aug ___Sept ____Oct
@ $17 for the first each month + $12 each additional

Name _____ Call _____ $ Included_____

Address _____ Phone _____ Make Check to
The MIT Radio Society
City _____ State _____ Zip _____ PO Box 397082
Cambridge MA 02139

E-mail _____

****
Steve Finberg W1GSL w1gsl@mit.edu
PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754
****

3268. Re: What would cause the SWR to go up drastically when I turn my amp on?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 20:27:57 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <S3VBe.7763$1Y1.3374@fe02.lga>
Source record: 18151
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:11dd9ksc9hoeab5@corp.supernews.com...
> Joeseph wrote:
> > , , ,
>> Assuming you are correct my next problem will stopping the extra
>> frequencies from getting out of the amp in the first place.
>
> No, your problem should be figuring out how to prevent them from getting
> generated in the first place. If the harmonic or spurious content is that
> high, there's something seriously wrong.

Nice answer, Roy. That was my knee-jerk, too.

Joseph, remember, the problem isn't only "stopping them from getting out of the amp...". Those other frequencies are some sort of parasitic in the amplifier. Besides being stuff you don't want going to the antenna, they are robbing your amp of the ability to amplify the frequencies you DO want amplified, and they are unnecessarily heating up your transistors and sapping their life.

So first, keep them from being generated, then stiffen up that low pass filter so anything that does get created is way, way down. Far lower than what will show up as an apparent SWR problem.

..

3269. Re: Murata Ceramic Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 22:30:17 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <ZNWBe.424884$cg1.303128@bgtnsc04-news.ops.worldnet.att.net>
Source record: 18152

Nice website you have there. The CFX455 filters have a center frequency of
455kHz, while the the CFX450 filters have a 455kHz center frequency.

Pete

"Derek Twynham" <derek.photo@hotmail.com> wrote in message
news:db8bitebv1@news.al.sw.ericsson.se...
>> Does anyone know of a retail vendor that would sell the Murata ceramic
>> filter CFJ455K5 without a $25-$5000 minimum order?
>
> http://www.barendh.com has:
>
> CFWM450I 4 12 455 Rather steep filter on 450kHz!
> 9.90
> CFK455J 2.7 6 455 17x7 steil ssb
> 36.50
> CFK455E 15 20 455 17x7 very steep
> 19.90
> CFS455E 15 30 455 28x11 Steep filter
> 32.50
> CFS455H 6 13 455 28x11 Steep filter
> 32.50
> CFS455J 2.7 6 455 28x11 Steep filter
> 35.00
> CFL455DG2 20 40 455 16x7 extremely flat group delay
> 36.26
> CFR455G 12 22 455 7x22 Very steep
> 19.95
> LFD15 15 25 455 28x11 Very steep
> 44.92
> CFM455... several bandwidths stocked
> CFM455H 6 15 455 ***STEEP- METAL CAN- SPEC.OFFER ***
> 5.67
> CFM455A 35 70 455 7x22 Meteosat
> 31.31
> CFG455F 12 25 455 7x11 Narrowband FM
> 26.77
> CFG455I 4 9 455 7x11 Narrow AM
> 29.00
>
> (prices in Euros)
>
>

3270. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 22:51:36 UTC
From: mcalhoun@ksu.edu
Message-ID: <db9elo$gcv@unix2.cc.ksu.edu>
Source record: 18153

<<All electronics works on smoke.
<<If the smoke leaks out, it won't work...

>;-) Reminds me of another joke I can't quite remember: something
>dealing with the proof that electricity is really smoke....

A local (and now retired) engineering faculty member has an after-dinner
speech in which he "proves" that "electricity is black and heavy"!

For example, in an automobile, electricity is stored in the battery.
What color is the battery? Black!
And it is quite heavy for its size.

And on and on and on!

--Myron.
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

3271. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-15 23:51:21 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11dgivlmf1fhi32@corp.supernews.com>
Source record: 18154

straydog wrote:

>
>
> On Fri, 14 Jul 2005 LenAnderson@ieee.org wrote:
>
>> Date: 14 Jul 2005 20:48:16 -0700
>> From: LenAnderson@ieee.org
>> Newsgroups: rec.radio.amateur.homebrew
>> Subject: Re: QUESTION: Fun with Svetlanas or Staying alive with kV power
>> supplies
>>
>> From: straydog on Fri 15 Jul 2005 00:48
>>
>>
>>> That's called trial and error. Or, try, smoke, fix. Like if ready, fire,
>>> aim does not work, change the order to ready, aim, fire.
>>
>>
>> All electronics works on smoke. If the smoke leaks out,
>> it won't work...
>>
>
> ;-) Reminds me of another joke I can't quite remember: something
> dealing with the proof that electricity is really smoke, or something
> like that. Maybe someone has a reference to that joke. It was pretty
> funny, too.
>
> Art, W4PON
>
But electricity _is_ really smoke. They burn coal at the generating
station and it travels through the wires to your house, where it makes
everything work. Then the used smoke goes _back_ through the wires (why
do you think they call them "return" wires, eh?) to the generating
station where it goes up the smokestack.

If something should break then some of the smoke will leak out right
there in your house right before the thing stops working.

And that's how you know that electricity is smoke.

--

Tim Wescott
Wescott Design Services

http://www.wescottdesign.com

3272. Re: Looking for 12V tube Rx project info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-16 00:30:32 UTC
From: RadioGuy <nospam@nospam.com>
Message-ID: <IyYBe.425339$cg1.326802@bgtnsc04-news.ops.worldnet.att.net>
Source record: 18156

Howdy:

I got just what you are looking for... how about the 'WWII Prison Camp Short-wave Receiver' ?

The circuit is claimed to be from, "United States Army in WWII The Technical Services, The Signal Corps: The Outcome, U.S. Government Printing Office, 1966."

Check the circuit at:
http://www.webex.net/~skywaves/SPY/spy.htm

I collected parts but never had a chance to build it---old metal canteens are hard to find.

RG

Ed <Huckleberr_REMOVE_@bigvalley.net> wrote in message news:Xns967D79AD24D7spectrumhogstarbandn@207.106.92.175...
>
> I am looking for a nice schematic, and perhaps additional info, on a 12V
> (fil. & plate) tube superhet Rx; just something fairly simple for CW/SSB
> reception without bells and whistles, and preferably for 75M/40M reception.
>
> Can anyone point me to info on this? Thanks.
>
>
>
> Ed K7AAT

3273. Finishing Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-16 00:30:33 UTC
From: RadioGuy <nospam@nospam.com>
Message-ID: <JyYBe.425340$cg1.138579@bgtnsc04-news.ops.worldnet.att.net>
Source record: 18155

Howdy:

Its been a common practice with me to finish the aluminum surface of a chassis or box with an immersion into a caustic solution followed with a coating of clear acrylic spray---I like the satin finish it produces. I normally use lye that I regularly found on the shelves of our neighborhood hardware stores. However, I've been having a harder time of finding the flaked lye that I have used over the years for that purpose. I have used 'Lewis Red Devil Lye' that I found at Ace Hardware.

A project that I am currently working on made me think of trying a substitute for lye with an item that I seem to find everywhere. Often found in the automotive stores is a product that is referred to as a 'cleaner/degreaser' or 'heavy duty industrial cleaner'. I have seen it marketed as 'Purple Stuff' yet I purchased a gallon called 'Right Stuff (Purple Stuff Concentrate)' manufactured by Sunbelt Chemicals, Palm Coast, Florida, 386.446.4595. Nevertheless, the contents of both bottles have a characteristic purple color and contains (besides sodium hydroxide) a component derived from citrus---but more importantly, the label states that the product is NOT TO BE USED ON ALUMINUM!

I finished the surface of both halves of a mini-box by immersing them into a solution, by volume, of 1 part 'Right Stuff' to 8 parts warm water (I used 1:8 for no particular reason---It just happened that way). The surface of the aluminum began to bubble rapidly, but not uncontrollably, causing a fine white froth to appear on the surface of the solution. I let the mini-box soak for 30 minutes whereupon I removed them and placed them into a bucket of water. I found that the removal of the black residue is easier to achieve if I wash the aluminum parts while they remain under water---a sponge or cloth works fine and a Q-Tip removes the residue from corners. I observed that as the reaction proceeded the purple color of the solution became clear.

Needless to say, I am entirely satisfied with the results. The dilute solution of 'Right Stuff' provided a uniform satin finish identical in appearance to a solution of lye (sodium hydroxide). If you can't find lye I suggest a solution of industrial cleaner possessing caustic properties. The next time I use 'Right Stuff' I will increase it by 1 part just to see the result. The reaction liberates hydrogen gas---use adequate ventilation.

RG

3274. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-16 00:57:56 UTC
From: straydog <aes1492@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.62.0507160057470.10800@mx.freeshell.org>
Source record: 18157

On Fri, 15 Jul 2005, Tim Wescott wrote:

> Date: Fri, 15 Jul 2005 16:51:21 -0700
> From: Tim Wescott <tim@seemywebsite.com>
> Newsgroups: rec.radio.amateur.homebrew
> Subject: Re: QUESTION: Fun with Svetlanas or Staying alive with kV power
> supplies
>
> straydog wrote:
>
>>
>>
>> On Fri, 14 Jul 2005 LenAnderson@ieee.org wrote:
>>
>>> Date: 14 Jul 2005 20:48:16 -0700
>>> From: LenAnderson@ieee.org
>>> Newsgroups: rec.radio.amateur.homebrew
>>> Subject: Re: QUESTION: Fun with Svetlanas or Staying alive with kV power
>>> supplies
>>>
>>> From: straydog on Fri 15 Jul 2005 00:48
>>>
>>>
>>>> That's called trial and error. Or, try, smoke, fix. Like if ready, fire,
>>>> aim does not work, change the order to ready, aim, fire.
>>>
>>>
>>> All electronics works on smoke. If the smoke leaks out,
>>> it won't work...
>>>
>>
>> ;-) Reminds me of another joke I can't quite remember: something
>> dealing with the proof that electricity is really smoke, or something like
>> that. Maybe someone has a reference to that joke. It was pretty funny, too.
>>
>> Art, W4PON
>>
> But electricity _is_ really smoke. They burn coal at the generating station
> and it travels through the wires to your house, where it makes everything
> work. Then the used smoke goes _back_ through the wires (why do you think
> they call them "return" wires, eh?) to the generating station where it goes
> up the smokestack.
>
> If something should break then some of the smoke will leak out right there in

> your house right before the thing stops working.
>
> And that's how you know that electricity is smoke.

That's pretty good, but I seem to recall another slightly different
version of the joke but with some really clever line about the purpose
of insulation (and a half-believable rationale [rationale does not mean
scientific, however). Anyone else remember more of the details of this joke?

Art, W4PON

> --
> --
> Tim Wescott
> Wescott Design Services
> http://www.wescottdesign.com
>

3275. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-16 03:11:31 UTC
From: "Z.Z." <nobody@nowhere.com>
Message-ID: <Xns9694CD678EFFDnobodynowhere@68.6.19.6>
Source record: 18158

Myron wrote:

>
> A local (and now retired) engineering faculty member has an after-dinner
> speech in which he "proves" that "electricity is black and heavy"!
>
> For example, in an automobile, electricity is stored in the battery.
> What color is the battery? Black!
> And it is quite heavy for its size.
>

Sounds logical to me.

My favoite is the Dark Sucker Theory (light is the absence of dark, and
light bulds suck dark). Do a google on it for lots more info, probably more
than you ever wanted to know... :-)

And thusly another thread morphs far off topic...

3276. Heater voltage for Avantek YIG?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-16 06:06:42 UTC
From: artie <artie.m@gmail.com>
Message-ID: <1507200523064274 52%artie.m@gmail.com>
Source record: 18159

Avantek Y089-4023, 8.0 - 20.0 GHz

osc supply is marked, +15, and the FM and tune coils I can figure out.

But what's the heater voltage (and approximate current)?

THanks!

3277. Re: High Voltage Techniques

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-16 07:31:49 UTC
From: Ed <none@this-time>
Message-ID: <iMqdnUUsYoRLXkXfRVn-jQ@giganews.com>
Source record: 18160

Thanks all. Tom, I've been in electronics thirty years or so, but always solid state.Now I'm going backwards to boatanchors. I know most of the old sayings such as "keep one hand in your pocket" etc., but I'm more interested in practical considerations of draining capacitors, proper wiring techniques, and so forth. I know that even unplugged tube devices can jump out and get you, and I'd like to avoid this...especially in high power RF amplifiers. I've got Bill Orr's handbook, years of old magazines from the 50's, and ARRL handbooks; great circuits but little in technique. It's like school, great on theory but troubleshooting is only taught in the doing.
73, Bob.
"K7ITM" <k7itm@aol.com> wrote in message
news:1121273199.297781.91510@g44g2000cwa.googlegroups.com...
> Try any of the older Radio Amateur's Handbooks for a start, for
> practical stuff. Are you looking for how to work safely with high
> voltages, or for practical circuits, or for theory? Are you interested
> in RF power amplifiers, or something else?
>
> Cheers,
> Tom
>

3278. Re: Finishing Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-16 13:01:44 UTC
From: Roger Conroy <rogerconroy@nospam.hotmail.com>
Message-ID: <dbb0gh$e3r$1@ctb-nnrp2.saix.net>
Source record: 18161

"RadioGuy" <nospam@nospam.com> wrote in message
news:JyYBe.425340$cg1.138579@bgtnsc04-news.ops.worldnet.att.net...
> Howdy:
>
> Its been a common practice with me to finish the aluminum surface of a
> chassis or box with an immersion into a caustic solution followed with a
> coating of clear acrylic spray---I like the satin finish it produces. I
> normally use lye that I regularly found on the shelves of our neighborhood
> hardware stores. However, I've been having a harder time of finding the
> flaked lye that I have used over the years for that purpose. I have used
> 'Lewis Red Devil Lye' that I found at Ace Hardware.
>
> A project that I am currently working on made me think of trying a
> substitute for lye with an item that I seem to find everywhere. Often
> found
> in the automotive stores is a product that is referred to as a
> 'cleaner/degreaser' or 'heavy duty industrial cleaner'. I have seen it
> marketed as 'Purple Stuff' yet I purchased a gallon called 'Right Stuff
> (Purple Stuff Concentrate)' manufactured by Sunbelt Chemicals, Palm Coast,
> Florida, 386.446.4595. Nevertheless, the contents of both bottles have a
> characteristic purple color and contains (besides sodium hydroxide) a
> component derived from citrus---but more importantly, the label states
> that
> the product is NOT TO BE USED ON ALUMINUM!
>
> I finished the surface of both halves of a mini-box by immersing them into
> a
> solution, by volume, of 1 part 'Right Stuff' to 8 parts warm water (I used
> 1:8 for no particular reason---It just happened that way). The surface of
> the aluminum began to bubble rapidly, but not uncontrollably, causing a
> fine
> white froth to appear on the surface of the solution. I let the mini-box
> soak for 30 minutes whereupon I removed them and placed them into a bucket
> of water. I found that the removal of the black residue is easier to
> achieve if I wash the aluminum parts while they remain under water---a
> sponge or cloth works fine and a Q-Tip removes the residue from corners.
> I
> observed that as the reaction proceeded the purple color of the solution
> became clear.
>
> Needless to say, I am entirely satisfied with the results. The dilute
> solution of 'Right Stuff' provided a uniform satin finish identical in
> appearance to a solution of lye (sodium hydroxide). If you can't find lye
> I

> suggest a solution of industrial cleaner possessing caustic properties.
> The
> next time I use 'Right Stuff' I will increase it by 1 part just to see the
> result. The reaction liberates hydrogen gas---use adequate ventilation.
>
> RG
>
>

Has anyone ever tried mag wheel cleaner? It's specifically intende for use
on Al/Mg Alloys.

3279. Re: Finishing Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-16 14:22:39 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <mc5id11o1ui9rn6d5ohsm6l81d4otgdrec@4ax.com>
Source record: 18065

On Sat, 16 Jul 2005 00:30:33 GMT, "RadioGuy" <nospam@nospam.com>
wrote:

>Howdy:
>
>Its been a common practice with me to finish the aluminum surface of a
>chassis or box with an immersion into a caustic solution followed with a
>coating of clear acrylic spray---I like the satin finish it produces. I
>normally use lye that I regularly found on the shelves of our neighborhood
>hardware stores. However, I've been having a harder time of finding the
>flaked lye that I have used over the years for that purpose. I have used
>'Lewis Red Devil Lye' that I found at Ace Hardware.

I still have a couple of cans of Red Devil "in stock" after my last
project. That was the rejuvenation of a 20-year-old Yagi antenna. I
built a plastic sheet lined trough outside that was long enough to
hold the longest piece of tubing and had at it.

>
>A project that I am currently working on made me think of trying a
>substitute for lye with an item that I seem to find everywhere. Often found
>in the automotive stores is a product that is referred to as a
>'cleaner/degreaser' or 'heavy duty industrial cleaner'. I have seen it
>marketed as 'Purple Stuff' yet I purchased a gallon called 'Right Stuff
>(Purple Stuff Concentrate)' manufactured by Sunbelt Chemicals, Palm Coast,
>Florida, 386.446.4595. Nevertheless, the contents of both bottles have a
>characteristic purple color and contains (besides sodium hydroxide) a
>component derived from citrus---but more importantly, the label states that
>the product is NOT TO BE USED ON ALUMINUM!
>
>I finished the surface of both halves of a mini-box by immersing them into a
>solution, by volume, of 1 part 'Right Stuff' to 8 parts warm water (I used
>1:8 for no particular reason---It just happened that way). The surface of
>the aluminum began to bubble rapidly, but not uncontrollably, causing a fine
>white froth to appear on the surface of the solution. I let the mini-box
>soak for 30 minutes whereupon I removed them and placed them into a bucket
>of water. I found that the removal of the black residue is easier to
>achieve if I wash the aluminum parts while they remain under water---a
>sponge or cloth works fine and a Q-Tip removes the residue from corners. I
>observed that as the reaction proceeded the purple color of the solution
>became clear.

Good to know. You might find that a dip in vinegar will help with the
removal of the black smut.

>
>Needless to say, I am entirely satisfied with the results. The dilute
>solution of 'Right Stuff' provided a uniform satin finish identical in
>appearance to a solution of lye (sodium hydroxide). If you can't find lye I
>suggest a solution of industrial cleaner possessing caustic properties. The
>next time I use 'Right Stuff' I will increase it by 1 part just to see the
>result. The reaction liberates hydrogen gas---use adequate ventilation.

If you want a really satiny surface, another trick I have used is to
sand the surface with an orbital sander and medium grit wet-dry paper
lubricated with light oil. It's a messy process but leaves an
interesting surface with the little "orbit" scratches and it's a good
way to recover badly scratched surfaces. Etching afterwards with lye
"softens" the effect and of coarse cleans the surface.

3280. Re: High Voltage Techniques

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-16 14:34:38 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <926id15f0f92rgq8s4li6q0c1eonesvpi0@4ax.com>
Source record: 18066

On Sat, 16 Jul 2005 02:31:49 -0500, "Ed" <none@this-time> wrote:

>Thanks all. Tom, I've been in electronics thirty years or so, but always
>solid state.Now I'm going backwards to boatanchors. I know most of the old
>sayings such as "keep one hand in your pocket" etc., but I'm more interested
>in practical considerations of draining capacitors, proper wiring
>techniques, and so forth. I know that even unplugged tube devices can jump
>out and get you, and I'd like to avoid this...especially in high power RF
>amplifiers. I've got Bill Orr's handbook, years of old magazines from the

One thing to consider is to make and use a "chicken stick". Don't
touch anything electrical until you have touched it with the chicken
stick.

This is essentially a ground wire (to a solid ground) with a well
insulated handle. To avoid component damage, add a low ohmage, high
wattage resistor in series.

A chicken stick is routinely used in commercial HV equipment, and
power company linemen have a portable equivalent.

Better to be a live chicken than flambeed.

Ref:
<http://lists.contesting.com/archives/html/Amps/2004-08/msg00245.html>
<http://www.k0gkd.com/sb220.html>

Happy trails,
Gary (net.yogi.bear)
--
At the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

3281. Re: Finishing Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-16 16:40:27 UTC
From: RadioGuy <nospam@nospam.com>
Message-ID: <%LaCe.3098$5N3.2973@bgtnsc05-news.ops.worldnet.att.net>
Source record: 18162

Wes Stewart <n7ws_@*yahoo.com> wrote in message
news:mc5id11o1ui9rn6d5ohsm6l81d4otgdrec@4ax.com...
> On Sat, 16 Jul 2005 00:30:33 GMT, "RadioGuy" <nospam@nospam.com>
> wrote:
>
> >Howdy:
> >
> >Its been a common practice with me to finish the aluminum surface of a
> >chassis or box with an immersion into a caustic solution followed with a
> >coating of clear acrylic spray---I like the satin finish it produces. I
> >normally use lye that I regularly found on the shelves of our
neighborhood
> >hardware stores. However, I've been having a harder time of finding the
> >flaked lye that I have used over the years for that purpose. I have used
> >'Lewis Red Devil Lye' that I found at Ace Hardware.
>
> I still have a couple of cans of Red Devil "in stock" after my last
> project. That was the rejuvenation of a 20-year-old Yagi antenna. I
> built a plastic sheet lined trough outside that was long enough to
> hold the longest piece of tubing and had at it.

I never thought of that for long pieces... thats a good tip.

> >A project that I am currently working on made me think of trying a
> >substitute for lye with an item that I seem to find everywhere. Often
found
> >in the automotive stores is a product that is referred to as a
> >'cleaner/degreaser' or 'heavy duty industrial cleaner'. I have seen it
> >marketed as 'Purple Stuff' yet I purchased a gallon called 'Right Stuff
> >(Purple Stuff Concentrate)' manufactured by Sunbelt Chemicals, Palm
Coast,
> >Florida, 386.446.4595. Nevertheless, the contents of both bottles have a
> >characteristic purple color and contains (besides sodium hydroxide) a
> >component derived from citrus---but more importantly, the label states
that
> >the product is NOT TO BE USED ON ALUMINUM!
> >
> >I finished the surface of both halves of a mini-box by immersing them
into a
> >solution, by volume, of 1 part 'Right Stuff' to 8 parts warm water (I
used
> >1:8 for no particular reason---It just happened that way). The surface
of
> >the aluminum began to bubble rapidly, but not uncontrollably, causing a
fine

> >white froth to appear on the surface of the solution. I let the mini-box
> >soak for 30 minutes whereupon I removed them and placed them into a
bucket
> >of water. I found that the removal of the black residue is easier to
> >achieve if I wash the aluminum parts while they remain under water---a
> >sponge or cloth works fine and a Q-Tip removes the residue from corners.
I
> >observed that as the reaction proceeded the purple color of the solution
> >became clear.
>
> Good to know. You might find that a dip in vinegar will help with the
> removal of the black smut.

Thanks... I didn't know that! I often wondered if there was an easier way
to remove the black residue.

> >Needless to say, I am entirely satisfied with the results. The dilute
> >solution of 'Right Stuff' provided a uniform satin finish identical in
> >appearance to a solution of lye (sodium hydroxide). If you can't find
lye I
> >suggest a solution of industrial cleaner possessing caustic properties.
The
> >next time I use 'Right Stuff' I will increase it by 1 part just to see
the
> >result. The reaction liberates hydrogen gas---use adequate ventilation.
>
> If you want a really satiny surface, another trick I have used is to
> sand the surface with an orbital sander and medium grit wet-dry paper
> lubricated with light oil. It's a messy process but leaves an
> interesting surface with the little "orbit" scratches and it's a good
> way to recover badly scratched surfaces. Etching afterwards with lye
> "softens" the effect and of coarse cleans the surface.

I'll give that technique a try.

Awhile back I heard that after the metal is finished in a lye bath then
boiled in a solution of color dye (RIT) a colored, metallic finish, can be
produced---one of these days I'll try it on a scrap piece.

On simple projects I print or photocopy text then affix them onto to the
aluminum surface (after a first coat of acrylic on the aluminum) with white
glue then with multiple sprays of acrylic affix them permanently to the
surface. It worked real nice with a bandpass filter project---I secured the
graph of the filter characteristics onto the minibox for reference.

RG

3282. Re: Heater voltage for Avantek YIG?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-16 17:39:28 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1d42e61cc9754af59896df@news-central.giganews.com>
Source record: 18163

In article <150720052306427452%artie.m@gmail.com>, artie.m@gmail.com says...
> Avantek Y089-4023, 8.0 - 20.0 GHz
>
> osc supply is marked, +15, and the FM and tune coils I can figure out.
>
> But what's the heater voltage (and approximate current)?
>
> THanks!
>

My 1990 Avantek book doesn't show that part number or anything close to it, but the heater voltage spec on all of the (many) YTOs it does list is 20-28V. They specify power consumption rather than current: 2.0 watts at 0 degrees C, 1.5 watts at 25C.

So I'd probably try a 24V supply, current limited at about 150 mA to start with. After the heater warms up, the current should fall to the 60 mA neighborhood. If it does, then it would be safe to assume that the 20-28V spec applies to yours.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

3283. build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-16 18:08:18 UTC
From: inagaddadavida@webtv.net
Message-ID: <6294-42D94D12-102@storefull-3255.bay.webtv.net>
Source record: 18164

i need a variable for a receiving loop antenna. does anyone know how to determine the area of plates for a given value of cap? for example i need 365 pf. two half circle plates would be handy, separated by a piece of plastic or card stock. what surface area for each plate would approximate that value? does two stator plates with one rotor between them increase the value if compared to one plate each?

3284. Homebrew clubs in Oregon or Washington?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-16 18:26:54 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrnddikbe.2oq8.ben@saturn.home.ben.com>
Source record: 18165

Can someone point me at a list of homebrew clubs (QRP especially) in
Oregon or Washington? Thanks.

--
Ben Jackson
<ben@ben.com>
http://www.ben.com/

3285. Re: Unknown Component

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-16 18:35:08 UTC
From: inagaddadavida@webtv.net
Message-ID: <6295-42D9535C-23@storefull-3255.bay.webtv.net>
Source record: 18166

i am not highly qualified as an electronics guy so maybe this is stupid,
but isnt that a cap to reduce the spark as the contacts open? an old
points ignition condenser is for that purpose and it is .02 mfd

3286. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-16 19:14:38 UTC
From: Polymath <invalid@invalid.invalid>
Message-ID: <42d95c5f$1_2@x-privat.org>
Source record: 18167

for each facing pair, (ie with two fixed and one moving in
between, you'll get two faces)

C=eA/d e=permittivity of free space, A=area, d= separation.

But you must use real scientific/engineering units, not those Yank Hillbilly
ones.

"Jim" <inagaddadavida@webtv.net> wrote in message
news:6294-42D94D12-102@storefull-3255.bay.webtv.net...
>i need a variable for a receiving loop antenna. does anyone know how to
> determine the area of plates for a given value of cap? for example i
> need 365 pf. two half circle plates would be handy, separated by a piece
> of plastic or card stock. what surface area for each plate would
> approximate that value? does two stator plates with one rotor between
> them increase the value if compared to one plate each?
>

3287. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-16 19:23:30 UTC
From: dplatt@radagast.org
Message-ID: <11dinli949oec23@corp.supernews.com>
Source record: 18168

In article <6294-42D94D12-102@storefull-3255.bay.webtv.net>,
Jim <inagaddadavida@webtv.net> wrote:

>i need a variable for a receiving loop antenna. does anyone know how to
>determine the area of plates for a given value of cap? for example i
>need 365 pf. two half circle plates would be handy, separated by a piece
>of plastic or card stock. what surface area for each plate would
>approximate that value? does two stator plates with one rotor between
>them increase the value if compared to one plate each?

For a parallel-plate capacitor, capacitance equals

0.0885 e[r] (N - 1) A / t

where A is the area of one plate (in square inches), N is the number
of plates, t is the thickness of the dielectric (separation between
plates, in an air-variable cap) measured in inches, and e[r] is the
dielectric constant of the dielectric (1.0 in the case of air).

A cap with two stator plates and one rotor plate would have twice the
capacitance of a cap with one stator and one rotor, all else being
equal and neglecting parasitic effects.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3288. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-16 19:37:20 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <4boid1huje51mv17v3lp1dc1jfb1dnnc61@4ax.com>
Source record: 18169

On Sat, 16 Jul 2005 13:08:18 -0500, inagaddadavida@webtv.net (Jim)
wrote:

>i need a variable for a receiving loop antenna. does anyone know how to
>determine the area of plates for a given value of cap? for example i
>need 365 pf. two half circle plates would be handy, separated by a piece
>of plastic or card stock. what surface area for each plate would
>approximate that value? does two stator plates with one rotor between
>them increase the value if compared to one plate each?

The spacing between the plates is an important factor as well.

You will need to construct it mechanically solid enough that the
spacing does not change much.

The dielectric material properties will have an effect as well,
although smaller.

Happy trails,
Gary (net.yogi.bear)
--
At the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

3289. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-16 19:54:06 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <3NadnfAtAehA-ETfRVnytQ@pipex.net>
Source record: 18170

"Jim" <inagaddadavida@webtv.net> wrote in message
news:6294-42D94D12-102@storefull-3255.bay.webtv.net...
>i need a variable for a receiving loop antenna. does anyone know how to
> determine the area of plates for a given value of cap? for example i
> need 365 pf. two half circle plates would be handy, separated by a piece
> of plastic or card stock. what surface area for each plate would
> approximate that value? does two stator plates with one rotor between
> them increase the value if compared to one plate each?
==========
In the May 2005 issue of 'Electron' (mag of VERON ,the IARU affiliated
society in the Netherlands) there is an article , by PE1LKT ,on a homebrew
'sliding 'capacitor made of pieces of double sided printed circuit board.
5 plates are fixed with 4 plates sliding in between.
The fixed and sliding plates fit inside grooves ,made in 2 pieces of timber
or polystyrene (alternatively inside glued strips of such material). The
sliding plates are tapered at one end and straight at the other end where
they are also bolted together with double sided PCB material spacers or
bolts and washers. At that end is also a soldered nut which suits a threaded
bar which is supported by a simple 'hose type bearing' with the end coupled
via a piece of rubber or plastic hose to a fixed in-line electric screw
driver.
The electric motor is operated remotely via a three position switch for '
right hand rotation' - 'off ' -'left hand rotation'
The fixed plates are obviously also galvanically connected at the far end
away from the moving plates .

This variable capacitor is used for a transmitting magloop and hence is
subjected to high RF voltages ,hence the plates are appropriately spaced .
Spacing could be minimised for a RX loop

The above variable cap has a capacitance of approx 400 pF ,requiring fixed
plates each with an area of 210 x 170 mm (357 cmsq equals approx 55 inch
sq). The sliding plates are slightly shorter.

For a RX loop requiring less plate spacing the plate area can be reduced.

Frank GM0CSZ / KN6WH

3290. Collins 618T tube lineup

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-16 23:25:04 UTC
From: MikeN <mnewman@clear.net.nz>
Message-ID: <bq5jd1ta3h8hd3k29guopnund89o8rgj9v@4ax.com>
Source record: 18171

Hi all

I've acquired a Collins 618T which has been partially dismantled.

Can someone let me have the tube line-up -- I may be able to use the tubes in some projects.

-- de MikeN, ZL1BNB

3291. Re: QUESTION: Cheap Accurate Shaft Position Encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-16 23:29:50 UTC
From: Timothy@tholtom.freeserve.co.uk
Message-ID: <1121556590.029730.3960@g14g2000cwa.googlegroups.com>
Source record: 18172

Roger Leone wrote:
> > Steppers have no output unless the shaft is moving. Steppers used this
> > way are really a velocity encoder and not a position encoder.
> > Regards,
> > Glenn AC7ZN
> >
>
> Glenn:
>
> I'm sure that limits stepper motors to certain uses, but I think this
> thread/post may be incorrectly titled. Unless I misunderstand the intended
> application, I don't think a "position encoder" is what he is looking for.
> Rather he wants something that, when rotated, feeds pulses to an up/down
> counter for frequency synthesis. The position of the shaft is not important
> as long as its rotation can be used to generate pulses for the counter.
>
> Roger

Roger:

Yes you're right, that's exactly what I'm looking for... any ideas as
to where I might get such a beast?

Tim

3292. Re: QUESTION: Cheap Accurate Shaft Position Encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-16 23:44:06 UTC
From: dplatt@radagast.org
Message-ID: <11dj6u6plpiab7b@corp.supernews.com>
Source record: 18173

In article <1121556590.029730.3960@g14g2000cwa.googlegroups.com>,

>> I'm sure that limits stepper motors to certain uses, but I think this
>> thread/post may be incorrectly titled. Unless I misunderstand the intended
>> application, I don't think a "position encoder" is what he is looking for.
>> Rather he wants something that, when rotated, feeds pulses to an up/down
>> counter for frequency synthesis. The position of the shaft is not important
>> as long as its rotation can be used to generate pulses for the counter.
>>
>> Roger
>
>Roger:
>
>Yes you're right, that's exactly what I'm looking for... any ideas as
>to where I might get such a beast?

Usually known as a "rotary encoder". They normally have two outputs,
in a phase-quadrature arrangment. These can be decoded to create
up/down/clock pulses using dedicated ICs (HP makes 'em), or via a small
collection of discrete TTL logic chips, or via a simple software
routine in a PIC micro or similar (which is how I'd probably do it
these days... I wrote a simple state-table routine for an 8051 some
years back which worked out quite well).

You'll probably want at least 64 counts per revolution, and probably
256, to get a nice smooth "feel" to the synthesizer tuning. Most such
use an optical code wheel and a pair of optosensors.

Digi-Key catalog lists quite a few such (all with their own shafts,
ready for panel mounting), but they aren't cheap. Mechanical rotary
encoders are less expensive, but less precise (fewer counts per
revolution) and possibly not as reliable or long-lived since they use
mechanical contacts.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3293. Re: QUESTION: Cheap Accurate Shaft Position Encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 01:29:17 UTC
From: craigm <none@domain.invalid>
Message-ID: <PviCe.1001$LC6.337@fe06.lga>
Source record: 18175

Timothy@tholtom.freeserve.co.uk wrote:
>
> Roger Leone wrote:
>
>>>Steppers have no output unless the shaft is moving. Steppers used this
>>>way are really a velocity encoder and not a position encoder.
>>>Regards,
>>>Glenn AC7ZN
>>>
>>
>>Glenn:
>>
>>I'm sure that limits stepper motors to certain uses, but I think this
>>thread/post may be incorrectly titled. Unless I misunderstand the intended
>>application, I don't think a "position encoder" is what he is looking for.
>>Rather he wants something that, when rotated, feeds pulses to an up/down
>>counter for frequency synthesis. The position of the shaft is not important
>>as long as its rotation can be used to generate pulses for the counter.
>>
>>Roger
>
>
> Roger:
>
> Yes you're right, that's exactly what I'm looking for... any ideas as
> to where I might get such a beast?
>
> Tim
>

For something inexpensive, consider the encoder in a wheel mouse. Also
most ball mice include two encoders for the ball.

craigm

3294. Re: QUESTION: Cheap Accurate Shaft Position Encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 01:54:34 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2005.07.17.01.54.33.817864@oceanfree.net>
Source record: 18174

On Thu, 14 Jul 2005 01:00:45 +0000, Roger Leone wrote:

> Tim:
>
> There used to be a website with info on using surplus stepper motors as
> precision shaft encoders. I have been doing Google searches without
> success. Perhaps someone else will be able to provide a URL. It was
> Australian, I believe.
>
> Good luck.
>
> Roger K6XQ

That was probably on Richard Hosking's (VK6BRO) web-page.
The page seems to have disappeared from the web. Hopefully
it has moved to a new URL. Are you lurking here Richard?

This page has some info:
http://www.webx.dk/oz2cpu/20m/encoder.htm

73, Ed. EI9GQ.

--
Linux 2.6.12.1
Remove 'X' to reply by e-mail.

3295. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 01:58:56 UTC
From: straydog <aes1492@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.62.0507170156210.12852@mx.freeshell.org>
Source record: 18176

On Sat, 16 Jul 2005, Jim wrote:

> Date: Sat, 16 Jul 2005 13:08:18 -0500
> From: Jim <inagaddadavida@webtv.net>
> Newsgroups: rec.radio.amateur.homebrew
> Subject: build a variable capacitor
>
> i need a variable for a receiving loop antenna. does anyone know how to
> determine the area of plates for a given value of cap? for example i
> need 365 pf. two half circle plates would be handy, separated by a piece
> of plastic or card stock. what surface area for each plate would
> approximate that value? does two stator plates with one rotor between
> them increase the value if compared to one plate each?
>
>

Do you really need to build this? I know they (365 mfd variables) are hard to find (I'd love to find a cheap source, expensive sources on the internet want $10-15 each [google on "365 mfd" to find them]), but if you go to a thrift store (Salvation Army, etc.), you may find old transistor clock radios for $1-2 each that have miniature 365 mfd variables that will do just fine if you take a few minutes to de-solder them from the circuit board.

Art, W4PON

3296. Re: QUESTION: Cheap Accurate Shaft Position Encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 02:24:24 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <qijCe.4547$wN3.2403@fe07.lga>
Source record: 18177

"Dave Platt" <dplatt@radagast.org> wrote in message
news:11dj6u6plpiab7b@corp.supernews.com...
> In article <1121556590.029730.3960@g14g2000cwa.googlegroups.com>,

> Digi-Key catalog lists quite a few such (all with their own shafts,
> ready for panel mounting), but they aren't cheap. Mechanical rotary
> encoders are less expensive, but less precise (fewer counts per
> revolution) and possibly not as reliable or long-lived since they use
> mechanical contacts.

Depending on the application, mechanical encoders are pretty good, and
getting better. As a tuning control, in most cases something on the order
of 50 pulses per rev is pretty useable and avaliable in a mechanical
encoder. Much more than that and you are getting into the optical encoders
which do get kind of pricey. They -feel- really nice, though.

Most of the mechanical encoders Digikey carries are detented, so watch out
for that. The few that aren't are pretty decent. Mechanical encoders are
typically under $5, while the opticals are more like $50. But the nice
ball-bearing feel might be worth it, depending on your project.

..

3297. Re: QUESTION: Cheap Accurate Shaft Position Encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 08:01:39 UTC
From: Ian White G/GM3SEK <g3sek@ifwtech.co.uk>
Message-ID: <PxxDykEjBh2CFAB1@ifwtech.co.uk>
Source record: 18178

Dave Platt wrote:
>
>You'll probably want at least 64 counts per revolution, and probably
>256, to get a nice smooth "feel" to the synthesizer tuning. Most such
>use an optical code wheel and a pair of optosensors.
>
For something like a receiver tuning control, even 256 steps/rev would sound 'jumpy'. However, you could gear it up mechanically so that even a small movement of the control produces several pulses from the encoder. That is exactly what happens in a mouse.

Try an old-fashioned cord drive, only in reverse.

--
73 from Ian G/GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

3298. Re: QUESTION: Fun with Svetlanas or Staying alive with kV power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 10:51:16 UTC
From: mcalhoun@ksu.edu
Message-ID: <dbdd74$mg3@unix1.cc.ksu.edu>
Source record: 18179

>But electricity _is_ really smoke. They burn coal at the generating
>station and it travels through the wires to your house, where it makes ....

Did you notice that coal is BLACK? And most smoke is BLACK, too.

Insofar as water-generated electricity is concerned, it comes from rain
which has FALLEN (it's heavy) out of BLACK clouds and flowed downward
(heavy, again) to a sort of centrifuge which spins the HEAVY electricity
out of the water and forces it into the wires....
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

3299. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 11:03:11 UTC
From: mcalhoun@ksu.edu
Message-ID: <dbddtf$mnm@unix1.cc.ksu.edu>
Source record: 18180

>>i need a variable for a receiving loop antenna....
>In the May 2005 issue of 'Electron' (mag of VERON ,the IARU affiliated
>society in the Netherlands) there is an article , by PE1LKT ,on a homebrew
>'sliding 'capacitor made of pieces of double sided printed circuit board.
>5 plates are fixed with 4 plates sliding in between.....

QST has published several homemade-capacitors articles in the last few years:
* A Home-Brew Loop Tuning Capacitor (November, 1994)
* A Homemade High-Power Tuning Capacitor (June, 1983)
* One I recall (but can't find; my QST's are paper, someone with the
QST CDs could do a search) which used concentric tubes with thin
plastic around the inner/inside the outer

Ok, so "few" is relative at my age!-)
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

3300. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 11:12:33 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <42DA3D21.4080306@bloomer.net>
Source record: 18181

Of course, you CAN build the capacitor, but unless you want to do it for fun and/or education, why re-invent the wheel? Dan's Small Parts and Kits sells several nice capacitors.

http://www.danssmallpartsandkits.net/

The capacitors aren't necessarily "dirt cheap", but a manufactured capacitor will be physically stable, insuring smooth change in capacitance as the shaft is rotated.

Scott
N0EDV

Jim wrote:
> i need a variable for a receiving loop antenna. does anyone know how to
> determine the area of plates for a given value of cap? for example i
> need 365 pf. two half circle plates would be handy, separated by a piece
> of plastic or card stock. what surface area for each plate would
> approximate that value? does two stator plates with one rotor between
> them increase the value if compared to one plate each?
>

3301. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 11:18:48 UTC
From: Polymath <invalid@invalid.invalid>
Message-ID: <42da3e51$1_2@x-privat.org>
Source record: 18182

"Manufacture" = "Make By Hand"

"Scott" <acepilot@bloomer.net> wrote in message
news:42DA3D21.4080306@bloomer.net...
> Of course, you CAN build the capacitor, but unless you want to do it for
> fun and/or education, why re-invent the wheel? Dan's Small Parts and Kits
> sells several nice capacitors.
>
> http://www.danssmallpartsandkits.net/
>
> The capacitors aren't necessarily "dirt cheap", but a manufactured
> capacitor will be physically stable, insuring smooth change in capacitance
> as the shaft is rotated.
>
> Scott
> N0EDV
>
> Jim wrote:
>> i need a variable for a receiving loop antenna. does anyone know how to
>> determine the area of plates for a given value of cap? for example i
>> need 365 pf. two half circle plates would be handy, separated by a piece
>> of plastic or card stock. what surface area for each plate would
>> approximate that value? does two stator plates with one rotor between
>> them increase the value if compared to one plate each?
>>

3302. Is there affordable software I can use to map out circuit traces for a printed circuit board?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 13:53:50 UTC
From: Cliff <kkkddddddddd@msn.net>
Message-ID: <pgokd1hgtrg8n0u40qb2aci874j52nebaa@4ax.com>
Source record: 18183

I about ready to design and build my own solid state RF amp. Is there a good and affordable piece of software out there that I can use to neatly map out the circuit traces for my printed circuit board.

3303. Re: Finishing Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 14:13:02 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <5dokd1hq1vqimmh0vm8qntl6bq1dgvoptl@4ax.com>
Source record: 18184

On Sat, 16 Jul 2005 16:40:27 GMT, "RadioGuy" <nospam@nospam.com>
wrote:

[snip]
>>
>> Good to know. You might find that a dip in vinegar will help with the
>> removal of the black smut.
>
>Thanks... I didn't know that! I often wondered if there was an easier way
>to remove the black residue.

Actually, a stronger acid works better (quicker). The "blackness"
seems to depend on the alloy and it may still take light rubbing to
get the stubborn stuff off. I'm neither a chemist or metalurgist but
in my early days in a real engineering lab environment we had a "chem
lab" where they had tanks of caustic and acid (and Alodine) for
passivating aluminum and I learned a few things there. Always
remember to fully rinse any of this stuff off with lots of water.

[snip]

>Awhile back I heard that after the metal is finished in a lye bath then
>boiled in a solution of color dye (RIT) a colored, metallic finish, can be
>produced---one of these days I'll try it on a scrap piece.

Now you're starting into anodizing. See:

http://w3.uwyo.edu/~metal/anodizing.html
>
>On simple projects I print or photocopy text then affix them onto to the
>aluminum surface (after a first coat of acrylic on the aluminum) with white
>glue then with multiple sprays of acrylic affix them permanently to the
>surface. It worked real nice with a bandpass filter project---I secured the
>graph of the filter characteristics onto the minibox for reference.

Nice idea. I use the ruboff lettering (Datak) but of course they
don't have any BPF response curves, [g]

3304. Re: Finishing Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 14:16:52 UTC
From: -ex- <exray@coqui.net>
Message-ID: <92d74$42da6856$4232bd57$23078@COQUI.NET>
Source record: 18185

Wes Stewart wrote:
> On Sat, 16 Jul 2005 16:40:27 GMT, "RadioGuy" <nospam@nospam.com>

>
>>On simple projects I print or photocopy text then affix them onto to the
>>aluminum surface (after a first coat of acrylic on the aluminum) with white
>>glue then with multiple sprays of acrylic affix them permanently to the
>>surface. It worked real nice with a bandpass filter project---I secured the
>>graph of the filter characteristics onto the minibox for reference.
>
>
> Nice idea. I use the ruboff lettering (Datak) but of course they
> don't have any BPF response curves, [g]
>

On a bare metal panel the homebrew inkjet waterslide decals work quite
well and you could do your response curve with that method.

-Bill

3305. Re: Is there affordable software I can use to map out circuit traces for a printed circuit board?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 16:38:54 UTC
From: dplatt@radagast.org
Message-ID: <11dl2cu479tle6f@corp.supernews.com>
Source record: 18186

> I about ready to design and build my own solid state RF amp. Is
>there a good and affordable piece of software out there that I can use
>to neatly map out the circuit traces for my printed circuit board.

http://www.cadsoft.de/freeware.htm might be sufficient, depending on
the size of the board you plan to make.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3306. Re: Finishing Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 16:46:44 UTC
From: dplatt@radagast.org
Message-ID: <11dl2rkm6qgvlbe@corp.supernews.com>
Source record: 18187

In article <5dokd1hq1vqimmh0vm8qntl6bq1dgvoptl@4ax.com>,
Wes Stewart <n7ws_@*yahoo.com> wrote:

>>> Good to know. You might find that a dip in vinegar will help with the
>>> removal of the black smut.
>>
>>Thanks... I didn't know that! I often wondered if there was an easier way
>>to remove the black residue.
>
>Actually, a stronger acid works better (quicker). The "blackness"
>seems to depend on the alloy and it may still take light rubbing to
>get the stubborn stuff off.

As I understand it, the black stuff is usually referred to as "smut".
It's the other metals in the alloy, left behind when the lye dissolves
the aluminum.

Anodizing shops will follow the lye-etch with a plunge into a "bright
dip" acid bath to de-smut the surface and leave it nice and shiny.
Bright dip mixtures seem to vary - one I've seen mentioned is mostly
phosphoric acid, with a few percent of nitric acid added. Kinda nasty
stuff.

>>Awhile back I heard that after the metal is finished in a lye bath then
>>boiled in a solution of color dye (RIT) a colored, metallic finish, can be
>>produced---one of these days I'll try it on a scrap piece.
>
>Now you're starting into anodizing. See:
>
>http://w3.uwyo.edu/~metal/anodizing.html

Yup. A common cycle seems to be: drill and sand, etch in lye,
bright-dip to de-smut, anodize to build up a porous layer of hard
aluminum oxide, boil in dye to color, seal.

One problem with the use of RIT color dyes is that they aren't all
that stable against UV, and can fade over time. There are
professional anodizing dyes which are more stable.

>>On simple projects I print or photocopy text then affix them onto to the
>>aluminum surface (after a first coat of acrylic on the aluminum) with white
>>glue then with multiple sprays of acrylic affix them permanently to the
>>surface. It worked real nice with a bandpass filter project---I secured the
>>graph of the filter characteristics onto the minibox for reference.
>
>Nice idea. I use the ruboff lettering (Datak) but of course they

>don't have any BPF response curves, [g]

The Brother plastic-laminated labelling tapes seem to work fairly
well, also. I usually use the standard black-text-on-white-background
and then spray with acrylic. The black-on-clear might look nice on an
aluminum case, but I haven't tries this myself yet.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3307. Resistor frequency response

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 17:15:42 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <dbe3nuejh1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 18188

FREQUENCY RESPONSE OF RESISTORS.

Program METALFLM.exe 41 Kbytes.

This program models small low-wattage wire-ended resistors including spiralled metal-film resistors. The model's equivalent circuit is a chain of T and L networks. Values of lumped inductance and stray capacitance are estimated by the program from the component's physical dimensions.

The component with it's terminating leads is treated as a lumped L and C non-uniform transmission line. The program computes input impedance from 10 KHz up to 5 GHz with the other end grounded. Fast and slow frequency sweeps are available to observe maxima and minima of Zin.

Max and min Zin are approximately related to the physical length of the component, including connecting leads, but occur at frequencies far higher than the usual and useful working frequency range.

The reflection cefficient and standing-wave-ratio are calculated with reference to Zo, Zo being the DC value of the resistor. The usefulness of the component as a dummy load or for other purposes at any frequency can then be ascertained.

The effectiveness versus frequency of solid carbon-rod resistors and multi-turn UHF chokes, which are of similar wire-end construction, can also be determined. Chokes can be wound over the bodies of high-value wire-ended resistors, the parallel resistance value perhaps having some desirable effect on the ultimate response.

Another use for resistors having a good high frequency response, or at least a known frequency response, is for ratio arms and switched resistors in impedance bridges and other measuring instruments.

Download METALFLM in a few seconds and run immediately.

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

3308. Re: Unknown Component

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 17:43:42 UTC
From: Win <w0lz@winlyn.us>
Message-ID: <g26ld1l2op9bb63k5fjhmatfafvkmnasur@4ax.com>
Source record: 18189

On Sat, 16 Jul 2005 13:35:08 -0500, inagaddadavida@webtv.net (Jim)
wrote:

>i am not highly qualified as an electronics guy so maybe this is stupid,
>but isnt that a cap to reduce the spark as the contacts open? an old
>points ignition condenser is for that purpose and it is .02 mfd

Maybe you are more qualified than youy think. Yes, it is a MilSpec
cap, probably for that exact purpose.

Win, W0LZl

3309. Re: Finishing Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 17:49:11 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <se6ld19baeigdgf02i6gp8iiu9ihhg8mls@4ax.com>
Source record: 18190

On Sun, 17 Jul 2005 16:46:44 -0000, dplatt@radagast.org (Dave Platt)
wrote:

>In article <5dokd1hq1vqimmh0vm8qntl6bq1dgvoptl@4ax.com>,
>Wes Stewart <n7ws_@*yahoo.com> wrote:
>
>>>> Good to know. You might find that a dip in vinegar will help with the
>>>> removal of the black smut.

[snip]
>
>As I understand it, the black stuff is usually referred to as "smut".

There's an echo in here [g]

3310. Re: Is there affordable software I can use to map out circuit traces for a printed circuit board?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 17:56:09 UTC
From: crusty@REMOVE_THIS_lsmo.sytes.net
Message-ID: <uk6ld1tjmlps2tvim7pi58cpv8hikv6ae9@4ax.com>
Source record: 18191

EasyTrax is a freeware program Protel released for DOS computers years ago. it will run on Windows 98 in a DOS windowm too.

Do a google search and you'll find many sites that have it for download.

One note, it doesn't have surface mount pads, so it's through-hole or kludge in the SM parts.

On Sun, 17 Jul 2005 13:53:50 GMT, Cliff <kkkddddddddd@msn.net> wrote:

>
> I about ready to design and build my own solid state RF amp. Is
>there a good and affordable piece of software out there that I can use
>to neatly map out the circuit traces for my printed circuit board.
>

3311. Silver Mica vs Mica Caps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 18:22:54 UTC
From: "Z.Z." <nobody@nowhere.com>
Message-ID: <Xns969673C8813E3nobodynowhere@68.6.19.6>
Source record: 18192

What's the difference between a silver mica cap and a plain old mica cap? Is there any? I mean with respect to size, performance, stability, voltage ratings, etc. Where would one be used instead of the other?

Thanks...

3312. Re: Silver Mica vs Mica Caps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 18:36:30 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <OyxCe.53$LF.41@newssvr27.news.prodigy.net>
Source record: 18193

Silver micas cost more and had a better spec for capacitance, temperature as
well as aging and are used in circuits where you want to minimize frequency
drift.
IIRC silver was plated somehow onto the higher grade mica whereas ordinary
micas used a lower grade o f mica and weren't plated or plated as well.

--

73
Hank WD5JFR
"Z.Z." <nobody@nowhere.com> wrote in message
news:Xns969673C8813E3nobodynowhere@68.6.19.6...
> What's the difference between a silver mica cap and a plain old mica cap?
> Is there any? I mean with respect to size, performance, stability, voltage
> ratings, etc. Where would one be used instead of the other?
>
> Thanks...

3313. TCXO Clipped Sine Wave

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 20:34:25 UTC
From: Mario Bros <rocco.calbe@tin.it>
Message-ID: <lhzCe.79508$h5.3321294@news3.tin.it>
Source record: 18194

Hi folks,
I would have to ask a clarification regard to the TCXO.
They are found with output TTL, HCMOS and CLIPPED SINE WAVE.
It is just with respect to this last type that I would want to have
elucidations on when it is convenient to employ it, which the advantages and
the disadvantages and which the extension of spectral harmonicas.
In synthesis, from the plan point of view, which are the motivations that
they make to incline towards a Clipped oscillator?

Anticipated thanks.

73's de IK6GQC Rocco

3314. Re: QUESTION: Cheap Accurate Shaft Position Encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 21:56:14 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <8uACe.17$xR1.2@fe04.lga>
Source record: 18195

"Ian White G/GM3SEK" <g3sek@ifwtech.co.uk> wrote in message
news:PxxDykEjBh2CFAB1@ifwtech.co.uk...

> For something like a receiver tuning control, even 256 steps/rev would
> sound 'jumpy'. However, you could gear it up mechanically so that even a

Actually, 256 is getting too high in most cases. The "jumpiness" comes from the size of the step, i.e., the number of Hz per step. Encoders between 50 and 100 are probably the easiest to deal with. You generally want to make the step size small, like 1 or 10 Hz, but you don't want hundreds of turns to cover the band. At very high resolutions, the pulses can come very fast, so it gets tricky to distinguish the closure from noise. Of course, higher counts can be made to work, and in principle, can be made to work better. But generally, one is dealing with low level software and finite compute resources to read the encoder, so the very high resolutions can actually become somewhat problematic.

..

3315. Re: TCXO Clipped Sine Wave

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 22:07:57 UTC
From: LenAnderson@ieee.org
Message-ID: <1121638076.992375.321200@o13g2000cwo.googlegroups.com>
Source record: 18196

From: Mario Bros on Jul 17, 4:34 pm

>Hi folks,
>I would have to ask a clarification regard to the TCXO.
>They are found with output TTL, HCMOS and CLIPPED SINE WAVE.
>It is just with respect to this last type that I would want to have
>elucidations on when it is convenient to employ it, which the advantages and
>the disadvantages and which the extension of spectral harmonicas.

The TTL and HCMOS outputs will have (generally) square waves
which are rich in odd harmonic content. Clipped sine waves
have less overall harmonics...but the harmonic content depends
on the amount of clipping (presumably off the peak of the sine).

>In synthesis, from the plan point of view, which are the motivations that
>they make to incline towards a Clipped oscillator?

Depends entirely on the designer's choice. If this is a
purchased TCXO unit then a clipped sinewave output would
probably come through a buffer stage directly from the
internal oscillator output...which resembles a clipped
sine wave. For the purchased unit, having that output is
a convenience to the customer.

TTL and HCMOS outputs would be made from internal digital
devices, again a customer convenience to allow easy interface
to external TTL or HCMOS circuitry.

bit bit
LenAnderson@ieee.org

3316. Re: TCXO Clipped Sine Wave

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 22:12:56 UTC
From: crusty@REMOVE_THIS_lsmo.sytes.net
Message-ID: <5jlld1pi35n5hpsb5o6nqfkhq69uv48opq@4ax.com>
Source record: 18197

The clipped sinewave is the simplest output for a TCXO, it's usually just a capacitor connected between the emitter of the oscillator and the output pin. You have to be careful what you connect to it, it's possible to throw the temp compensation out of tolerance. Most CMOS PLL chips have a reference frequency input that handles it well. If you're rolling your own PLL from SSI or MSI chips, you probable want to build up a buffer to make the clipped sinewave into TTL or HCMOS levels, or pay extra for a TCXO with the needed circuit built in.

On Sun, 17 Jul 2005 20:34:25 GMT, "Mario Bros" <rocco.calbe@tin.it> wrote:

>Hi folks,
>I would have to ask a clarification regard to the TCXO.
>They are found with output TTL, HCMOS and CLIPPED SINE WAVE.
>It is just with respect to this last type that I would want to have
>elucidations on when it is convenient to employ it, which the advantages and
>the disadvantages and which the extension of spectral harmonicas.
>In synthesis, from the plan point of view, which are the motivations that
>they make to incline towards a Clipped oscillator?
>
>Anticipated thanks.
>
>73's de IK6GQC Rocco
>

3317. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 22:42:06 UTC
From: "dave.harper" <dave.harper@gmail.com>
Message-ID: <1121640125.959490.41200@g47g2000cwa.googlegroups.com>
Source record: 17998
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

-ex- wrote:
> Q in excess of 1000 is readily achievable. 200-300 is a starting point
> on a decent dx set.

So what's a good inductance to DC resistance ratio for an inductor on
an xtal set? The one I wound is about 500uH, and I get a resistance of
3.2 Ohms.

Using the formula Q=2*pi*f*L/R, I get a Q for my coil of 981 (@1MHz).
But based on its performance, I KNOW it's not that good. I'm picking
up a couple stations at night, but just barely.

Dave

3318. Re: MOV protection of 120vac circuits with high freq content

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 23:03:56 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <EPWdnfWZlZ3GfUffRVn-iA@adelphia.com>
Source record: 17999
Cross-posted to: rec.radio.amateur.homebrew,sci.engr.electrical.sys-protection

tjs wrote:
> Yes I think I will have to test the MOVs to really know. Or as you suggested
> take a MOV out and measure resistor temperature.

I was suggesting that you might prove that the MOV current is the
cause of the resistor overheating, by removing an MOV and applying the
input signal. I can't guarantee the input will work, correctly, however.

3319. Re: QUESTION: Cheap Accurate Shaft Position Encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-17 23:19:32 UTC
From: LenAnderson@ieee.org
Message-ID: <1121642372.795040.42270@g43g2000cwa.googlegroups.com>
Source record: 18000

From: xpyttl on Jul 17, 5:56 pm

>"Ian White G/GM3SEK" <g...@ifwtech.co.uk> wrote in message
>news:PxxDykEjBh2CFAB1@ifwtech.co.uk...
>
>> For something like a receiver tuning control, even 256 steps/rev would
>> sound 'jumpy'. However, you could gear it up mechanically so that even a
>
>Actually, 256 is getting too high in most cases. The "jumpiness" comes from
>the size of the step, i.e., the number of Hz per step. Encoders between 50
>and 100 are probably the easiest to deal with. You generally want to make
>the step size small, like 1 or 10 Hz, but you don't want hundreds of turns
>to cover the band.

Ahem, have you guys agreed on what defines "jumpiness?" :-)

I'm into the actual receiver portion of a PLL-LO-controlled
HF SW BC receiver tuning in 1 KHz steps. The PLL and its
controlling circuitry are done and a 256-step Grayhill shaft
encoder is used with a shaft encoder decoder circuit from Dr.
Robert Dennis. That decoder circuit uses 3 HCMOS DIPs for
Up/Down counters having separate Up and Down clocks. One more
HCMOS DIP gate package is required for Up/Down counters having
a single clock input and having an Up or Down mode control pin.

> At very high resolutions, the pulses can come very fast,
>so it gets tricky to distinguish the closure from noise.

I didn't find it so. The Dennis Decoder will allow shaft
encoder rotation rates of 150 RPM with a 240-step shaft
encoder, no problem. Pressed faster, it can handle 300 RPM
or 5 revolutions per second...quite fast tuning. It is
easily comparable to the "old" tuning control on my Icom
IC-R70 which has an estimated 200 steps per revolution.

> Of course,
>higher counts can be made to work, and in principle, can be made to work
>better. But generally, one is dealing with low level software and finite
>compute resources to read the encoder, so the very high resolutions can
>actually become somewhat problematic.

While the BCD Up/Down counter ICs are getting rather scarce,
it takes only three more packages to "see" three-decimal-digit
resolution. Add another IC for four-decimal-digit resolution.
4-stage binary Up/Down counters are still being made, no problem.

Ain't no software for this critter...it's all hardware. The Up/Down counter drives the PLL divider directly (through a EPROM translator, preprogrammed, or through some more logic gates). Grayhill shaft encoder output is TTL/HCMOS level at +5 VDC into the encoder. Very fast jumps in handling the shaft encoder knob don't upset the counter chain.

If you want some nice decoder circuit schematics and a set of decoder waveforms, let me know at signature address below and I can attach the ZIP file (19 K) to e-mail.

If someone wants an Absolute position control, that could be done with an additional optical sensor and track that resets the Up/Down counter at all-zeroes. Not the same as a Gray Code multiple track and sensor encoder with a collection of Exclusive-Or gates to make it straight binary, but cheaper.

bit bit
LenAnderson@ieee.org

3320. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-18 00:10:06 UTC
From: -ex- <exray@coqui.net>
Message-ID: <50c4f$42daf364$4232bd1b$8913@COQUI.NET>
Source record: 18001
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

dave.harper wrote:

>
> -ex- wrote:
>
>>Q in excess of 1000 is readily achievable. 200-300 is a starting point
>>on a decent dx set.
>
>
> So what's a good inductance to DC resistance ratio for an inductor on
> an xtal set? The one I wound is about 500uH, and I get a resistance of
> 3.2 Ohms.
>
> Using the formula Q=2*pi*f*L/R, I get a Q for my coil of 981 (@1MHz).
> But based on its performance, I KNOW it's not that good. I'm picking
> up a couple stations at night, but just barely.
>
> Dave

For BCB work the 'standard' is in the 220-240uh range for tuning with a ~365-400 pf cap. There's an (almost) infinite number of combinations you can use if you want to split the band into segments which sometimes has an advantage. But switches and tapped coils can also be Q-killers once you get into the Q stratosphere.

In practice the coil Q is determined primarily by the form dielectric, wire size, wire spacing, diameter/length ratio/neary coupling effects, etc. R is far enough down the list that its generally not even considered. When you do a DC measurement of coil R thats not representative of the skin effects and true RF resistance, thats why the textbook formula doesn't pan out.

If you want to make a fairly nice coil without getting into the expense of litz, check out spider-web coils and rook coils. When done with say 16-18 ga wire, and diameters in the 4" range you can get a pretty nice coil. With 166-strand litz (30-35c/ft) you'll note an improvement but by that time its time to start thinking about a good hi-q ceramic capacitor and circuit loading concerns.

The Rap-n-Tap forum is where to get some good info.
http://www.midnightscience.com/rapntap/ "Best coil" is a common topic!

-Bill

3321. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-18 00:18:31 UTC
From: LenAnderson@ieee.org
Message-ID: <1121645911.200886.19170@g43g2000cwa.googlegroups.com>
Source record: 18002
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

From: dave.harper on Jul 17, 6:42 pm

>-ex- wrote:
>> Q in excess of 1000 is readily achievable. 200-300 is a starting point
>> on a decent dx set.
>
>So what's a good inductance to DC resistance ratio for an inductor on
>an xtal set? The one I wound is about 500uH, and I get a resistance of
>3.2 Ohms.
>
>Using the formula Q=2*pi*f*L/R, I get a Q for my coil of 981 (@1MHz).
>But based on its performance, I KNOW it's not that good. I'm picking
>up a couple stations at night, but just barely.

The "R" in the Q formula is an equivalent resistance at frequency,
not just the DC resistance. That equivalent resistance is made
up of many things: winding form factor, wire size, and the DC
resistance to name the major factors.

Q alone won't determine sensitivity. Sensitivity, without some
accurate numbers such as transmitter power output, distance to
transmitter, antenna gain/loss, is going to be a very subjective
item. Even with them available the numbers can turn out to be
rather off when listened to.

A couple of years ago now, I wound a loop for 60 KHz (WWVB
reception) using #14 electrical wire. It was rather cheap
at Home Depot compared to enameled "magnet" wire for a 500
foot length. Inductance came out roughly according to formula
but the low DC resistance didn't do much for the Q. At 60 KHz
the Q was only about 68. :-) Dimensions were about 2 1/2 feet
diameter, circular, with an aluminum foil electrostatic shield
over the top of 57 turns. In retrospect I should have used many
more turns of smaller wire, such as #26 AWG, since signal
strength is proportional to the number of turns for the same
size loop.

It could have been the insulation on the electrical wire that
reduced the Q. Unknown. Would have to wind a similar one in
"magnet" wire to find out. It was measured for Q and inductance
without and with the foil electrostatic shield with no discernable
changes in Q, only slight in inductance. As it is, it works well
enough, is presently in the attic above the interior workshop.
[size dictated by trap door access to that part of attic]

Years and years ago I fooled around trying to make an AM BC loop according to "expert instructions" from some magazine. Spent a lot of time cutting the "blades" of the former to allow zig-zag winding of some Litz wire someone gave me. Former was 3/32" phenolic laminate, cutting via a jig-saw. About 14 inches wide by 6 inches high. Q measured out to only about 120 at mid-band (using an old Booton Q Meter). Low enough distributed capacity but not near the Q claimed in the article, supposedly about 300. <shrug> Maybe ordinary cardboard would have worked better as the former? :-)

If you have some RF source of known frequency at the AM BC band, you can get a fair handle on the Q by using a high series resistor between RF source and the L-C parallel-tuned circuit. Observe the voltage across the L-C tank and de-tune the RF source frequency to the 71% amplitude, note the two frequencies on each side of resonance and take their difference. That's the delta-F "Q bandwidth" that, when divided into peak resonance frequency, will get you the approximate Q. The high resistance source-to-tank should be around 100 KOhms or so (higher the better) at 1 MHz to avoid introducing too much error. That resistor forms a "quasi-constant-current" stimulus...not ideal but good enough for an approximation when observing the RF voltage across the L-C tank.

"Ours is not to reason why, ours is but to cut and try..." :-)

LenAnderson@ieee.org

3322. Re: Is there affordable software I can use to map out circuit traces for a printed circuit board?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-18 03:34:30 UTC
From: pcb_dude <pcbdude@pcbguys.com>
Message-ID: <42DB2344.656CF54E@pcbguys.com>
Source record: 18003

http://www.expresspcb.com/

Cliff wrote:

> I about ready to design and build my own solid state RF amp. Is
> there a good and affordable piece of software out there that I can use
> to neatly map out the circuit traces for my printed circuit board.

3323. Re: Silver Mica vs Mica Caps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-18 04:18:42 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <vgamd1tigdtjkplk5k5rdgvfjcpaesf5qt@4ax.com>
Source record: 18004

On Sun, 17 Jul 2005 18:22:54 GMT "Z.Z." <nobody@nowhere.com> wrote:

>What's the difference between a silver mica cap and a plain old mica cap?
>Is there any? I mean with respect to size, performance, stability, voltage
>ratings, etc. Where would one be used instead of the other?

I believe these are just 2 different names for the same thing. Silver mica caps come in various cases, and those cases have varied over the decades, but they've always consisted of a mica wafer plated on each side.

I've never seen a manufacturer's catalog that made this distinction.

The little mica compression variables would be an exception, as those are not plated, but I suspect you're not asking about those.

-

Jim Adney jadney@vwtype3.org
Madison, WI 53711 USA

3324. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-18 05:03:27 UTC
From: -ex- <exray@coqui.net>
Message-ID: <1eca0$42db3823$4232be43$19553@COQUI.NET>
Source record: 18005
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

LenAnderson@ieee.org wrote:

> Q alone won't determine sensitivity.

Very true. In fact the opposite is usually the case when it comes to function. In a good hi-q xtal set one often has to sacrifice sensitivity for selectivity...and vice-versa. Tighter coupling=more sensitivity but less selectivity because of loading effects. If you want sensitivity, go outdoors and hang wire or add sound-powered headphones. If you want selectivity, tweak the ckt.

But still, by aiming for highest Q you at least have something to work with when trading off.

Crystal radios are somewhat like a house of mirrors. Changes at one end reflect at the other end of the ckt. The old razor-blade radio is an example of everything being done the worst way but it still works. As you improve on the scheme each component becomes more and more critical.

-Bill

3325. Re: Silver Mica vs Mica Caps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-18 05:15:24 UTC
From: -ex- <exray@coqui.net>
Message-ID: <23000$42db3af0$4232be43$20080@COQUI.NET>
Source record: 18006

Jim Adney wrote:

>
>>What's the difference between a silver mica cap and a plain old mica cap?
>>Is there any? I mean with respect to size, performance, stability, voltage
>>ratings, etc. Where would one be used instead of the other?
>
>
> I believe these are just 2 different names for the same thing. Silver
> mica caps come in various cases, and those cases have varied over the
> decades, but they've always consisted of a mica wafer plated on each
> side.
>
> I've never seen a manufacturer's catalog that made this distinction.

Oh, no. Not at all true. Before about say 1940, mica caps were truly a sandwich of simple alternating metal plates and mica insulators. About 1950-ish they began 'plating' the mica.
Silvering is a mixed blessing. Many of the original silvered-mica caps now exhibit migration (leakage) problems.
It doesn't go without noting that in the 50s mica caps were not at all en vogue. Precision caps went thru an era where the ceramic (silvered) dogbone style were the most common.

Nowadays, I'm not sure exactly what it is I'm buying when I buy the "dipped mica" caps. I'm confident to say they are better than the old-timers but are they silver plated onto mica or what?

-Bill

3326. Re: TCXO Clipped Sine Wave

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-18 11:26:24 UTC
From: Mario Bros <rocco.calbe@tin.it>
Message-ID: <AIMCe.173894$75.7544502@news4.tin.it>
Source record: 18007

Thanks for the answers.
I have one TCXO 40Mhz 1Vp-p 10K//15pf Clipped Sine Wave.
My idea is of:
1) to gain 40Mhz Sine Wave through buffer with resonant circuit come
to an agreement for 2nd the IF (40.455)
2) to gain 20Mhz with a divisor x2 for the 16F877
3) ..and last.. to gain before 120Mhz (40x3) and then 480Mhz with
helical filter for clock the AD9954.
Thoughts are possible? It is one bad solutions??
Thank you again.

<crusty@REMOVE_THIS_lsmo.sytes.net> ha scritto nel messaggio
news:5jlld1pi35n5hpsb5o6nqfkhq69uv48opq@4ax.com...
> The clipped sinewave is the simplest output for a TCXO, it's usually just
> a
> capacitor connected between the emitter of the oscillator and the output
> pin.
> You have to be careful what you connect to it, it's possible to throw the
> temp
> compensation out of tolerance. Most CMOS PLL chips have a reference
> frequency
> input that handles it well. If you're rolling your own PLL from SSI or MSI
> chips, you probable want to build up a buffer to make the clipped sinewave
> into
> TTL or HCMOS levels, or pay extra for a TCXO with the needed circuit built
> in.
>
>
>
>
> On Sun, 17 Jul 2005 20:34:25 GMT, "Mario Bros" <rocco.calbe@tin.it> wrote:
>
>>Hi folks,
>>I would have to ask a clarification regard to the TCXO.
>>They are found with output TTL, HCMOS and CLIPPED SINE WAVE.
>>It is just with respect to this last type that I would want to have
>>elucidations on when it is convenient to employ it, which the advantages
>>and
>>the disadvantages and which the extension of spectral harmonicas.
>>In synthesis, from the plan point of view, which are the motivations that
>>they make to incline towards a Clipped oscillator?
>>
>>Anticipated thanks.
>>

>>73's de IK6GQC Rocco
>>
>

3327. Re: Silver Mica vs Mica Caps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-18 13:39:05 UTC
From: straydog <aes1492@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.62.0507181333370.26804@mx.freeshell.org>
Source record: 18008

On Sun, 17 Jul 2005, Z.Z. wrote:

> Date: Sun, 17 Jul 2005 18:22:54 GMT
> From: Z.Z. <nobody@nowhere.com>
> Newsgroups: rec.radio.amateur.homebrew
> Subject: Silver Mica vs Mica Caps
>
> What's the difference between a silver mica cap and a plain old mica cap?
> Is there any? I mean with respect to size, performance, stability, voltage
> ratings, etc. Where would one be used instead of the other?
>
> Thanks...
>

Yes, there is a difference and catalogs should say "silver mica" and if they don't then they are not silver mica. Today's sales people may not be techie literate and so today's catalogs may be less accurate. Silver micas were a little more expensive, too.

Besides a higher price, the overall performance specs were better besides haveing lower losses and better accuracy. Most of the time, silver micas were meant for free-running VFO circuits (IIRC) because you wanted thermal stability and as little losses to lead to heat which would cause drift.

However, if you wanted to be clever, you would get a set of negative temperature coefficient capacitors and use them to balance out the (all the rest of them) positive temperature coefficient capacitors and thus arive at a very low warm-up drift free running VFO.

I'm from the old days. Today, its all phase-locked-loop VFOs and "throw away" rigs when they break (nobody fixes stuff anymore [pardon my exageration]).

Art, W4PON

3328. Re: Murata Ceramic Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-18 15:38:36 UTC
From: Heriberto <lu6dbu@tapalquenet.com.ar>
Message-ID: <42dbca7e_1@x-privat.org>
Source record: 18009
Body handling: HTML body converted to readable text

What is the diference?
Tito
LU6DBU

"Pete KE9OA" escribi&#65533; en el mensaje
news:ZNWBe.424884$cg1.303128@bgtnsc04-news.ops.worldnet.att.net...
> Nice website you have there. The CFX455 filters have a center frequency of
> 455kHz, while the the CFX450 filters have a 455kHz center frequency.
>
> Pete
>
> "Derek Twynham" wrote in message
> news:db8bitebv1@news.al.sw.ericsson.se...
> >> Does anyone know of a retail vendor that would sell the Murata ceramic
> >> filter CFJ455K5 without a $25-$5000 minimum order?
> >
> > http://www.barendh.com has:
> >
> > CFWM450I 4 12 455 Rather steep filter on 450kHz!
> > 9.90
> > CFK455J 2.7 6 455 17x7 steil ssb
> > 36.50
> > CFK455E 15 20 455 17x7 very steep
> > 19.90
> > CFS455E 15 30 455 28x11 Steep filter
> > 32.50
> > CFS455H 6 13 455 28x11 Steep filter
> > 32.50
> > CFS455J 2.7 6 455 28x11 Steep filter
> > 35.00
> > CFL455DG2 20 40 455 16x7 extremely flat group
delay
> > 36.26
> > CFR455G 12 22 455 7x22 Very steep
> > 19.95
> > LFD15 15 25 455 28x11 Very steep
> > 44.92
> > CFM455... several bandwidths stocked
> > CFM455H 6 15 455 ***STEEP- METAL CAN- SPEC.OFFER
***
> > 5.67
> > CFM455A 35 70 455 7x22 Meteosat
> > 31.31

> > CFG455F 12 25 455 7x11 Narrowband
FM
> > 26.77
> > CFG455I 4 9 455 7x11 Narrow AM
> > 29.00
> >
> > (prices in Euros)
> >
> >
>
>

3329. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-18 21:18:03 UTC
From: "dave.harper" <dave.harper@gmail.com>
Message-ID: <1121721483.202961.268810@z14g2000cwz.googlegroups.com>
Source record: 18010
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

-ex- wrote:

> I've had good success with ferrite toroids approaching Q=400, although
> ferrites are by nature very unpredictable Q-wise.

Is this the reason a lot of coils are air coils? Easy of calculations?
I assume you can get higher performance from ferrite coils than
air-core coils, right?

Thanks again!
Dave

3330. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-18 21:51:54 UTC
From: straydog <aes1492@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.62.0507182145270.4562@mx.freeshell.org>
Source record: 18011
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Mon, 18 Jul 2005, dave.harper wrote:

> Date: 18 Jul 2005 14:18:03 -0700
> From: dave.harper <dave.harper@gmail.com>
> Newsgroups: rec.radio.amateur.homebrew, rec.radio.amateur.misc
> Subject: Re: Simple questions on receivers
>
> -ex- wrote:
>
>> I've had good success with ferrite toroids approaching Q=400, although
>> ferrites are by nature very unpredictable Q-wise.
>
> Is this the reason a lot of coils are air coils?

1. Air core coils will be cheaper, lighter in weight, easier to make.

> Easy of calculations?

2. Definitely.

> I assume you can get higher performance from ferrite coils than
> air-core coils, right?

You don't need as much ampere-turns to get a given amount of inductance
and thus, ohmic resistance will be less, therefore higher Q (in theory).

caveat: the magnetizable material you use for the core (i.e. iron,
ferrite, and other stuff that I think other guys here surely know better
than I) will have a big effect on useable frequency on up to some cut-off
threshold that may be sharp or spread out. Pure solid sheet iron, for
example, might be good at audio frequencies and maybe up to x00,000 Hertz,
but you need powdered iron to go into the megacycle range. There are other
core substances that get you up higher. Anyone else care to add to this?

Don't forget that winding a torroidal coil is not so easy. Some cores are
available in halves so you can make "pies", otherwise the "bobbin"
carrying the wire has to pass through the hole of the doughnut many times.

> Thanks again!
> Dave
>
>

Art, W4PON

3331. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-18 21:58:43 UTC
From: -ex- <exray@coqui.net>
Message-ID: <8c761$42dc2623$4232bda1$1818@COQUI.NET>
Source record: 18012
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

dave.harper wrote:
> -ex- wrote:
>
>
>>I've had good success with ferrite toroids approaching Q=400, although
>>ferrites are by nature very unpredictable Q-wise.
>
>
> Is this the reason a lot of coils are air coils? Easy of calculations?
> I assume you can get higher performance from ferrite coils than
> air-core coils, right?
>
> Thanks again!
> Dave
>
Most crystal radio builders go with air core coils...partly because
thats the way it has been always done and such plans are available and
thats the way its supposed to 'look' :)
And you CAN make a better Q air coil than what is attainable with
ferrite.

When I say unpredictable about the toroids, the calculated
turns/inductance comes out the same but not the Q. I've wound the same
coil on half-dozen 'exact same' ferrite cores and gotten Q ranging from
below 200 to nearly 400. Those numbers (in my set) cover the range of
not-so-good to pretty-darn-good. I'm not sure why that is other than
its not something intended to be. You won't readily find Q charts for
ferrites like you do for iron powder cores. As a consequence of this
you don't have any guarantee that the cores you get are going to make it
to the p-d-g range.

There's some advantages and disadvantages with using ferrite cores. The
size is the most obvious advantage. Among other advantages - they are
not affected by nearby components and do not pickup signals from the air
(self-shielding). Thats why I got started with them...I have a 5kw BCB
tower about 1600 feet from my QTH! With air core coils the band is
totally swamped.

On the negative side...the ultimate Q-limitation seems to be about 400,
inability to have variable loose-coupling to traps and other stages are
most notable. They also don't have the "looks cool" factor like a big
coil :)

Now back down to earth. A random ferrite core inductor is going have a MUCH higher Q than the average coil wrapped around a toilet tissue tube. You're lucky to get 80-100 with that type of coil. It may not play out as being important in a very simple circuit that has other shortcomings but as mentioned before it also helps to have a high starting point on as many of the components as possible.

Anyhow...its something else to tinker with!

-Bill

3332. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-18 22:10:45 UTC
From: -ex- <exray@coqui.net>
Message-ID: <5a033$42dc28e9$4232bda1$6814@COQUI.NET>
Source record: 18013
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

My comments are interspersed.
-Bill

straydog wrote:

>
>
> On Mon, 18 Jul 2005, dave.harper wrote:

>>
>> Is this the reason a lot of coils are air coils?
>
>
> 1. Air core coils will be cheaper, lighter in weight, easier to make.

A typical medium-sized ferrite toroid coil for BCB use, FT-82-61 for instance, costs about US$1 and can't weigh more than an ounce and uses up about 4-5 feet of wire.

>
>> Easy of calculations?
>
>
> 2. Definitely.

Different calculation but one is as easy as the other. Just look for an online calculator :)

> iron, for example, might be good at audio frequencies and maybe up to
> x00,000 Hertz, but you need powdered iron to go into the megacycle
> range. There are other core substances that get you up higher. Anyone
> else care to add to this?

True. There are two main substances used in ferrite toroids - and I can't quote either name - and they have vastly different permeability characteristics. I think the CWS-Bytemark website goes into some of these details.

> Don't forget that winding a torroidal coil is not so easy. Some cores
> are available in halves so you can make "pies", otherwise the "bobbin"
> carrying the wire has to pass through the hole of the doughnut many times.

I've been referring to the simple doughnut cores. A BCB coil takes around 50 turns on -61 material. Even with my fat fingers it only takes about 10 minutes.

-Bill

3333. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-18 22:22:07 UTC
From: Jozef <jozef@metaphoria.org>
Message-ID: <1121725307.731291@r2d2.vermontel.net>
Source record: 18014

I have recently built a very large pi-network transmatch with two very big homemade variable capacitors. They can be seen at:
http://www.metaphoria.us/hamradio/transmatch.html

Jozef
WB2MIC

"Polymath" <invalid@invalid.invalid> wrote in message
news:42da3e51$1_2@x-privat.org...
> "Manufacture" = "Make By Hand"
>
> "Scott" <acepilot@bloomer.net> wrote in message
> news:42DA3D21.4080306@bloomer.net...
>> Of course, you CAN build the capacitor, but unless you want to do it for
>> fun and/or education, why re-invent the wheel? Dan's Small Parts and
>> Kits sells several nice capacitors.
>>
>> http://www.danssmallpartsandkits.net/
>>
>> The capacitors aren't necessarily "dirt cheap", but a manufactured
>> capacitor will be physically stable, insuring smooth change in
>> capacitance as the shaft is rotated.
>>
>> Scott
>> N0EDV
>>
>> Jim wrote:
>>> i need a variable for a receiving loop antenna. does anyone know how to
>>> determine the area of plates for a given value of cap? for example i
>>> need 365 pf. two half circle plates would be handy, separated by a piece
>>> of plastic or card stock. what surface area for each plate would
>>> approximate that value? does two stator plates with one rotor between
>>> them increase the value if compared to one plate each?
>>>
>
>

3334. Re: Finishing Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-18 23:22:29 UTC
From: Larry Gagnon <lagagnon@fakeuniserve.com>
Message-ID: <pan.2005.07.18.23.22.29.271404@fakeuniserve.com>
Source record: 18015

On Sat, 16 Jul 2005 00:30:33 +0000, RadioGuy wrote:

> Howdy:
>
> Its been a common practice with me to finish the aluminum surface of a
> chassis or box with an immersion into a caustic solution followed with a
> coating of clear acrylic spray---I like the satin finish it produces. I
> normally use lye that I regularly found on the shelves of our neighborhood
> hardware stores. However, I've been having a harder time of finding the
> flaked lye that I have used over the years for that purpose. I have used
> 'Lewis Red Devil Lye' that I found at Ace Hardware.
[snip]

Am I correct in understanding that TSP, also called Sugar Soap (the stuff used by many to wash walls before painting) is essentially mostly lye? If so that is quite a cheap source you might want to consider.

Larry VE7EA

3335. Re: Finishing Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-18 23:36:33 UTC
From: dplatt@radagast.org
Message-ID: <11dof81dvap8mcb@corp.supernews.com>
Source record: 18016

In article <pan.2005.07.18.23.22.29.271404@fakeuniserve.com>,
Larry Gagnon <lagagnon@fakeuniserve.com> wrote:

>Am I correct in understanding that TSP, also called Sugar Soap (the stuff
>used by many to wash walls before painting) is essentially mostly lye?

Nope. TSP is Tri-sodium phosphate. "TSP substitute" is apparently
often composed largely of sodium carbonate ("washing soda" or "soda ash").

I believe that both of these chemicals will attack aluminum, but that
the reactions are a lot slower than is the case with lye (sodium
hydroxide).

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3336. Re: Finishing Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-19 00:05:59 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <dbhg57$75v$1@puck.litech.org>
Source record: 18017

Larry Gagnon <lagagnon@fakeuniserve.com> wrote:
> On Sat, 16 Jul 2005 00:30:33 +0000, RadioGuy wrote:

>> Howdy:
>>
>> Its been a common practice with me to finish the aluminum surface of a
>> chassis or box with an immersion into a caustic solution followed with a
>> coating of clear acrylic spray---I like the satin finish it produces. I
>> normally use lye that I regularly found on the shelves of our neighborhood
>> hardware stores. However, I've been having a harder time of finding the
>> flaked lye that I have used over the years for that purpose. I have used
>> 'Lewis Red Devil Lye' that I found at Ace Hardware.
> [snip]

> Am I correct in understanding that TSP, also called Sugar Soap (the stuff
> used by many to wash walls before painting) is essentially mostly lye? If
> so that is quite a cheap source you might want to consider.

TSP is Tri-Sodium Phosphate; lye is Sodium Hydroxide. They're different
compounds with different properties.

Sodium Hydroxide is incredibly nasty if mishandled: the human body does not
handle strong bases well, and Sodium Hydroxide eats flesh with terrible
avidity. It's really, really easy to lose meat or an eye to a drop or three
in the wrong place. I wear long gloves, a plastic apron, a long-sleeved
shirt, goggles _and_ a face shield whenever I have to work with it.

TSP, while much less nasty, is still nothing to play with. Google for the
Material Safety Datasheets (MSDS) on both.

--
Before long, Microsoft will attempt to patent the alphabet (hoping we'll
have to pay royalties to use our keyboards and keep their stock solid).
-- Phil Paxton

3337. Re: Finishing Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-19 02:34:00 UTC
From: mcalhoun@ksu.edu
Message-ID: <dbhoqo$g32@unix1.cc.ksu.edu>
Source record: 18018

>>Am I correct in understanding that TSP, also called Sugar Soap....
>Nope. TSP is Tri-sodium phosphate...

So what is in Draino?
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

3338. Re: TCXO Clipped Sine Wave

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-19 05:10:15 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1121749815.727527.170530@o13g2000cwo.googlegroups.com>
Source record: 18019

It all sounds possible to me. It is not very different from some of the schemes we use commercially to generate internal frequencies (in spectral analysis equipment). Your idea of good filtering at 480MHz (and also, I hope, at 120MHz) is a good one, to keep out other combinations of multiplication. The one other thing I would be careful about is the phase noise of the oscillator. The AD9954 should be capable of very good phase noise performance, but you MUST feed it a clean reference to keep the output clean. I have recently tested some TCXOs which are very stable and accurate, but whose phase noise is not as good as I would really like. It is important to feed the oscillator from a very clean supply, but that alone is not a guarantee of good phase noise. See http://www.techlib.com/electronics/finesse.html for a nice idea to make a very clean supply for circuits that draw essentially constant current.

Cheers,
Tom

3339. Re: Is there affordable software I can use to map out circuit traces for a printed circuit board?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-19 05:54:03 UTC
From: Jim <kill-spam@no-spam.org>
Message-ID: <DP-dncKljuXiCEHfRVn-iA@comcast.com>
Source record: 18020

http://www.freepcb.com/

Free PCB layout

http://tinycad.sourceforge.net/

Free schematic program that can output a Netlist.

Jim
N6BIU

Cliff wrote:

> I about ready to design and build my own solid state RF amp. Is
> there a good and affordable piece of software out there that I can use
> to neatly map out the circuit traces for my printed circuit board.

3340. Want to Build HF Amp using 3-500z Tube

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-19 09:31:11 UTC
From: Kevin & Natalia <sparc_man@hotmail.com>
Message-ID: <42dcd55d$1@news.iconz.co.nz>
Source record: 18021

Hi All,

I am looking for a simple schematic to build a HF amp with a single 3-500z tube.
The reason for only one tube, as I only have one socket, however I do have a couple of used tubes.

I don't need a lot of power, but as much as I could from the single application.

If someone has a schematic around, that they would be willing to e-mail me, I'd be grateful.

Regards

Kevin, ZL1KFM.

3341. Re: TCXO Clipped Sine Wave

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-19 10:32:44 UTC
From: Mario Bros <rocco.calbe@tin.it>
Message-ID: <gF4De.84059$h5.3530621@news3.tin.it>
Source record: 18022

Hi Tom,
Thanks for the councils. An alternative could be an oscillator (480 Mhz)
with 1/4 coax resonator and IC
PLL TSA5511 I2C Bus clocked by 40Mhz/10 (4mhz)...
I must think to us...

Ciao IK6GQC Rocco

"K7ITM" <k7itm@aol.com> ha scritto nel messaggio
news:1121749815.727527.170530@o13g2000cwo.googlegroups.com...
> It all sounds possible to me. It is not very different from some of
> the schemes we use commercially to generate internal frequencies (in
> spectral analysis equipment). Your idea of good filtering at 480MHz
> (and also, I hope, at 120MHz) is a good one, to keep out other
> combinations of multiplication. The one other thing I would be careful
> about is the phase noise of the oscillator. The AD9954 should be
> capable of very good phase noise performance, but you MUST feed it a
> clean reference to keep the output clean. I have recently tested some
> TCXOs which are very stable and accurate, but whose phase noise is not
> as good as I would really like. It is important to feed the oscillator
> from a very clean supply, but that alone is not a guarantee of good
> phase noise. See http://www.techlib.com/electronics/finesse.html for a
> nice idea to make a very clean supply for circuits that draw
> essentially constant current.
>
> Cheers,
> Tom
>

3342. antialiasing filter for undersampling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-19 16:54:44 UTC
From: Hernán Sánchez <nanchez@gmail.com>
Message-ID: <1121792084.340672.150270@g47g2000cwa.googlegroups.com>
Source record: 18023

Hi.

I have a question... I want to design an antialiasing filter and later
do an A/D conversion (undersamplig).

The signal (at IF) is at 44MHz and the bandwidth is 1MHz. How can I
design the antialiasing filter for undersampling with that information
?

Thanks

Hernán Sánchez
HJ4SZY

3343. Re: TCXO Clipped Sine Wave

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-19 16:56:49 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1121792209.561835.27280@z14g2000cwz.googlegroups.com>
Source record: 18024

Hi Rocco,

I would use the multiplication. Within the loop bandwidth of the PLL, the phase noise will be determined by the crystal oscillator used as a reference PLUS the noise contributed by the PLL chip itself (the phase comparator and loop filter/amplifier), and outside the loop bandwidth, it will be determined by the VCO used in the PLL. The important thing, whether you use a PLL or multiplication, is to start with a reference which has low phase noise. In fact, your TCXO may have good phase noise...I don't know...I only know that some I've tested have not been as clean as I'd like. But I'm also setting pretty high standards for what I'm doing.

If I were in your shoes, I would build the multiplier system just as you first described, and use the TCXO you have, and if it proves to be too noisy (phase noise), then look for a better oscillator. If you can make even a crude measurement of the oscillator's phase noise before you start, that would be good, too, just to know where you are starting. My comment in my earlier posting was just to make you aware to look at phase noise, not to change the basic way you are going about it.

Cheers,
Tom

3344. Re: antialiasing filter for undersampling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-19 17:41:52 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11dqenrd8vcck97@corp.supernews.com>
Source record: 18025

"Hern&#65533;n S&#65533;nchez" <nanchez@gmail.com> wrote in message
news:1121792084.340672.150270@g47g2000cwa.googlegroups.com...
"The signal (at IF) is at 44MHz and the bandwidth is 1MHz. How can I
design the antialiasing filter for undersampling with that information?"

```
Slap a bandpass filter that's 1MHz wide at 44MHz around the signal input path.
Sample at something better than 2MHz (depending on how ideal your bandpass
filter is -- realistically you'll probably need to sample at 2.5MHz or
better... and things are simpler if you could manage to sample at 4MHz so that
44MHz ends up translated directly to DC rather than some offset).
```

3345. Re: antialiasing filter for undersampling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-19 17:49:17 UTC
From: Hernán Sánchez <nanchez@gmail.com>
Message-ID: <1121795356.943014.296270@z14g2000cwz.googlegroups.com>
Source record: 18026

Hi.

Thanks for your answer... so, the basic idea is to design a filter at the frequency of IF (44MHz in this case) with a bandwidth equal to the BW of the data (1Mhz in this case)... am I right ?

Thanks

Hernán Sánchez
HJ4SZY

3346. Re: Finishing Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-19 18:07:31 UTC
From: dplatt@radagast.org
Message-ID: <11dqgb35mbqnn9f@corp.supernews.com>
Source record: 18027

>>>Am I correct in understanding that TSP, also called Sugar Soap....
>>Nope. TSP is Tri-sodium phosphate...
>
>So what is in Draino?

The Draino brand drain-unclogger I have seen is a mixture of lye pellets, and granulated aluminum. When dumped into a drain and watered, the lye and aluminum react, generating hydrogen gas, quite a bit of heat, and often some steam. The heat helps break up the gunk clogging the drain.

"Red Devil" brand drain-unclogger is just lye, without the aluminum. If I recall correctly it even comes with instructions for making lye soap, using lye and fat.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

3347. Re: antialiasing filter for undersampling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-19 18:19:10 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11dqgtpmtkiit9c@corp.supernews.com>
Source record: 18028

"Hern&#65533;n S&#65533;nchez" <nanchez@gmail.com> wrote in message
news:1121795356.943014.296270@z14g2000cwz.googlegroups.com...
"Thanks for your answer... so, the basic idea is to design a filter at
the frequency of IF (44MHz in this case) with a bandwidth equal to the
BW of the data (1Mhz in this case)... am I right ?"

```
Yes, that's it!
```

3348. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-19 18:59:02 UTC
From: "dave.harper" <dave.harper@gmail.com>
Message-ID: <1121799542.755969.248720@o13g2000cwo.googlegroups.com>
Source record: 18029
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

-ex- wrote:

> In practice the coil Q is determined primarily by the form dielectric,
> wire size, wire spacing, diameter/length ratio/neary coupling effects,
> etc. R is far enough down the list that its generally not even
> considered.

Ah, so the voltage drop across the coil (due to the small internal resistance) and the close proximity of the wires give it some capacitance? Does this affect performance or just screw add unwanted capacitance?

Wouldn't adding space between wires cause some eddy currents and lower the L of the coil?

Does wire coating make a difference regarding the dielectric? Or is it another capacitance-altering effect?

Thanks again!
Dave

3349. Re: TCXO Clipped Sine Wave

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-19 19:13:39 UTC
From: Mario Bros <rocco.calbe@tin.it>
Message-ID: <DhcDe.181701$75.7882735@news4.tin.it>
Source record: 18030

Hi Tom,
my TCXO is GTXO-531 GOLLEDGE-UK product.

The parameters:
Clipped Sine Wave 1.0V p-p

Test Load 10k//10pF

Phase noise (@1.0Khz):
-135dbc/Hz max

To this point I have 2 possible ways:

1) TCXO+HelicalFilter480Mhz+BFR96 Buffer+HelicalFilter480Mhz

2) TCXO+Ampli-Multiplier x3(120 Mhz)+Ampli-Multiplier x4(480Mhz)+Helical
Filter480Mhz

Also here, perhaps it is the case to make some test.
But, to the first impact, what you tasks?

73's de IK6GQC Rocco

"K7ITM" <k7itm@aol.com> ha scritto nel messaggio
news:1121792209.561835.27280@z14g2000cwz.googlegroups.com...
> Hi Rocco,
>
> I would use the multiplication. Within the loop bandwidth of the PLL,
> the phase noise will be determined by the crystal oscillator used as a
> reference PLUS the noise contributed by the PLL chip itself (the phase
> comparator and loop filter/amplifier), and outside the loop bandwidth,
> it will be determined by the VCO used in the PLL. The important
> thing, whether you use a PLL or multiplication, is to start with a
> reference which has low phase noise. In fact, your TCXO may have good
> phase noise...I don't know...I only know that some I've tested have not
> been as clean as I'd like. But I'm also setting pretty high standards
> for what I'm doing.
>
> If I were in your shoes, I would build the multiplier system just as
> you first described, and use the TCXO you have, and if it proves to be
> too noisy (phase noise), then look for a better oscillator. If you can
> make even a crude measurement of the oscillator's phase noise before
> you start, that would be good, too, just to know where you are
> starting. My comment in my earlier posting was just to make you aware
> to look at phase noise, not to change the basic way you are going about
> it.
>

> Cheers,
> Tom
>

3350. Re: TCXO Clipped Sine Wave

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-19 19:56:44 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1121803004.681756.140670@g43g2000cwa.googlegroups.com>
Source record: 18031

Hi Rocco,

The specified phase noise seems respectable to me. The ones I've been looking at have some very nice characteristics that I need, but phase noise about -115dBc/Hz at 1kHz offset.

Though it might look like more work, I would use (2). If I used (1), I would have a buffer amplifier from the oscillator, driving something to generate rich harmonics...since you need an even harmonic, use an assymetrical harmonic generator. Square waves, for example, have extremely low even-order harmonics ("theoretically" zero). But with (2), you can use a square wave to get the 3rd harmonic, and not have to filter much 2nd or 4th, since there is little of either of those in your square wave. A relatively simple filter at 120MHz will suffice. Then the 480MHz helical must attenuate only signals 120MHz away, not signals 40MHz away like in (1).

At least, that is my take on it. There are tradeoffs, always, and therefore you will see different designs to accomplish the same thing, and all will work.

Cheers,
Tom

3351. Re: TCXO Clipped Sine Wave

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-19 20:05:41 UTC
From: Mario Bros <rocco.calbe@tin.it>
Message-ID: <p2dDe.181908$75.7892573@news4.tin.it>
Source record: 18032

Ok Tom, just the second solution wants more job but creed also I that I am
the better .
Thanks still for the good suggestions.

73's de IK6GQC Rocco

"K7ITM" <k7itm@aol.com> ha scritto nel messaggio
news:1121803004.681756.140670@g43g2000cwa.googlegroups.com...
> Hi Rocco,
>
> The specified phase noise seems respectable to me. The ones I've been
> looking at have some very nice characteristics that I need, but phase
> noise about -115dBc/Hz at 1kHz offset.
>
> Though it might look like more work, I would use (2). If I used (1),
> I would have a buffer amplifier from the oscillator, driving something
> to generate rich harmonics...since you need an even harmonic, use an
> assymetrical harmonic generator. Square waves, for example, have
> extremely low even-order harmonics ("theoretically" zero). But with
> (2), you can use a square wave to get the 3rd harmonic, and not have to
> filter much 2nd or 4th, since there is little of either of those in
> your square wave. A relatively simple filter at 120MHz will suffice.
> Then the 480MHz helical must attenuate only signals 120MHz away, not
> signals 40MHz away like in (1).
>
> At least, that is my take on it. There are tradeoffs, always, and
> therefore you will see different designs to accomplish the same thing,
> and all will work.
>
> Cheers,
> Tom
>

3352. Re: antialiasing filter for undersampling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-19 21:34:01 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1121808841.431482.276570@z14g2000cwz.googlegroups.com>
Source record: 18033

Oh...be a little careful here! If you have a filter centered at 44MHz and 1MHz wide, even with perfect "brick wall" attenuation below 43.5 and above 44.5, it would be very bad to sample at 4MHz, or any frequency whose harmonic landed in the passband. That is because you will not be able to distinguish (with 4MHz sampling) between a signal in your IF at 44.1MHz or 43.9MHz. Both will come out aliased by the sampling to 0.1MHz.

For a more practical example, let's say you manage to find or build a filter with acceptable flatness from 43.5 to 44.5, and acceptable attenuation below 42.5 and above 45.5. (Acceptable means that whatever signals appear there will be attenuated enough to not cause trouble if they alias into the ADC's output in the desired 1MHz passband.) Then you can, at best, use a sampling frequency whose harmonic is at 43.0MHz, and whose sampling frequency is at large enough so that the sampling freq harmonic which lies on the other side of the IF filter passband won't let signals alias into the output passband. So maybe you could use 3.071429Mhz sampling, which has a harmonic at 43MHz, alisaing 43.5-44.5 down to 0.5-1.5, and the the next harmonic at 46.07MHz is more than 1.5MHz above upper frequency where the filter gives good enough attenuation to prevent aliases. (Good luck building a filter like that with acceptable performance from practical inductors and capacitors, unless you don't need much alias protection!)

If you have trouble seeing this, draw some pictures of what goes on in the frequency domain. Remember that you get nominally the same ADC response from a signal x kHz above the effective sampling rate (harmonic of the ADC sample rate) as you do from a signal x kHz below, and remember that you get response from signals x kHz away (above or below) the 11th harmonic just the same as the 10th harmonic or the 12th harmonic, with perfect sampling. So, do NOT let in frequencies that would let you see the same response from two different inputs...be sure to filter out those freqs that would give you the same response. (That applies to noise, too...don't let multiple copies of amplifier noise alias all down to the ADC output.)

Yes, you WILL end up with your desired passband aliased to something like 0.5MHz to 1.5MHz. But you can do whatever you want to that with digital signal processing. (You can also do I and Q sampling [quadrature sampling] just like you can do I and Q mixing, but you'll have the same problems with sideband rejection degraded by imperfect quadrature phase and amplitude matching.)

Cheers,
Tom

3353. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-19 21:57:00 UTC
From: -ex- <exray@coqui.net>
Message-ID: <cd1e5$42dd7731$4232bd5a$6293@COQUI.NET>
Source record: 18034
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Comments interspersed, and staying with the BCB range scenario...

dave.harper wrote:

> -ex- wrote:
>
>
>>In practice the coil Q is determined primarily by the form dielectric,
>>wire size, wire spacing, diameter/length ratio/neary coupling effects,
>>etc. R is far enough down the list that its generally not even
>>considered.
>
>
> Ah, so the voltage drop across the coil (due to the small internal
> resistance) and the close proximity of the wires give it some
> capacitance? Does this affect performance or just screw add unwanted
> capacitance?

The internal capacitance of the turns isn't enough to radically change
the basic LC resonance. Instead it tends to result more like dielectric
leakage
>
> Wouldn't adding space between wires cause some eddy currents and lower
> the L of the coil?

Again, not significantly in the BCB example. Take for instance, a 4"
diameter coil wound with #18 wire, however many turns it takes. Lets
say 60. Winding the coil close-spaced as opposed to about
one-wire-diameter spacing will require a few less turns (maybe 10%) to
get the same L. But the close spacing WILL result in lower Q once you
re-establish the same inductance. There can be more than one reason for
this...is it the winding spacing or the length/diameter ratio or more
dielectric loss that causes this? (Its certainly not the R). Its
impossible to say because you can't have one without the other!

Smaller coils, say toilet-paper tube size, don't exhibit this effect -
or at least not to the same degree. But there's a whole different
geometry there and its not optimum.

Nobody really knows exactly what goes on here other than trial-and-error
experiments to see how they behave.

>
> Does wire coating make a difference regarding the dielectric? Or is it
> another capacitance-altering effect?

Yes it does. One of the tests on a good high Q coil is to set it up on a Q-meter then touch a piece of your coil-form material (or wire-insulation) to the coil and see how it behaves on the Q-meter. It shouldn't move. Lossy core material/insulation will cause a visible effect with this test. I'll reiterate in case someone jumps in and reads this without reading the earlier parts of the thread...you won't see this happen with a low-q coil but as you get higher in Q it becomes more and more evident. In fact, with a big solenoid coil and Q>500 you pretty much have to tie the sample material onto the end of a stick to do this test because of hand effects. Not to be confused with resonance detuning effects.

There's no good rule of thumb for insulated wire other than a test like this. There's quite a bit of insulation material in 660-strand litz and thats darn good wire. No way to make a comparison because BARE litz can't exist! I don't think I've ever heard a comparison made between say bare 16-18 wire vs enamelled. I tend to think any difference would approach the 'too difficult to evaluate' range.

-Bill

3354. Re: Finishing Aluminum

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-19 22:01:30 UTC
From: RadioGuy <nospam@nospam.com>
Message-ID: <_KeDe.449146$cg1.391010@bgtnsc04-news.ops.worldnet.att.net>
Source record: 18035

-ex- <exray@coqui.net> wrote in message
news:92d74$42da6856$4232bd57$23078@COQUI.NET...
> Wes Stewart wrote:
> > On Sat, 16 Jul 2005 16:40:27 GMT, "RadioGuy" <nospam@nospam.com>
>
> >
> >>On simple projects I print or photocopy text then affix them onto to the
> >>aluminum surface (after a first coat of acrylic on the aluminum) with
white
> >>glue then with multiple sprays of acrylic affix them permanently to the
> >>surface. It worked real nice with a bandpass filter project---I secured
the
> >>graph of the filter characteristics onto the minibox for reference.
> >
> >
> > Nice idea. I use the ruboff lettering (Datak) but of course they
> > don't have any BPF response curves, [g]
> >
>
>
> On a bare metal panel the homebrew inkjet waterslide decals work quite
> well and you could do your response curve with that method.
>
> -Bill

It took me awhile to figure out what waterslide decals were---then I
remembered! The last time I used them was many decades ago on model
airplanes.

What a great idea... the possiblities are endless. A Google search for
'waterslide decals' came up with many hits.

http://www.inkjetdecalpaper.com/inkjet.html
http://www.papilio.com/top%20pages/inkjet-water-slide-decal.htm

Thanks

RG

3355. Re: antialiasing filter for undersampling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-20 00:05:51 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1121817951.721182.86290@z14g2000cwz.googlegroups.com>
Source record: 18036

Oooops. Correction. That 3.07MHz sampling frequency will NOT work for the example filter I gave, because the harmonic at 46.07 will alias the range from 45.57 to 44.57 into the 0.5-1.5MHz output band. And 44.57 to 45.5 does not have acceptable attenuation. Better use instead a 4.3MHz sampling, so that the 10th harmonic converts the desired band to 0.5-1.5MHz, and the 11th harmonic at 47.3 converts the highest unprotected frequency, 46.5MHz, to 1.8MHz, which is above the output band of interest.

Cheers,
Tom

3356. Re: antialiasing filter for undersampling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-20 00:23:04 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1121818984.750598.73910@f14g2000cwb.googlegroups.com>
Source record: 18037

Grrr. Gremlins struck again. Should read, "...and the 11th harmonic
at 47.3 converts the highest unprotected frequency, 45.5MHz, to 1.8MHz,
which is above the output band of interest."

3357. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-20 00:45:18 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <jbqdneVMDos0A0DfRVn-iA@comcast.com>
Source record: 18038

"Jim" <inagaddadavida@webtv.net> wrote in message
news:6294-42D94D12-102@storefull-3255.bay.webtv.net...
>i need a variable for a receiving loop antenna. does anyone know how to
> determine the area of plates for a given value of cap? for example i
> need 365 pf. two half circle plates would be handy, separated by a piece
> of plastic or card stock. what surface area for each plate would
> approximate that value? does two stator plates with one rotor between
> them increase the value if compared to one plate each?
>

Here is the "How to Build an Air Variable Capacitor" article you are looking
for:
http://www.eham.net/articles/5217

w9gb

3358. Re: Want to Build HF Amp using 3-500z Tube

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-20 01:47:02 UTC
From: Roger Leone <raleoneTAKEOUT@sbcglobal.net>
Message-ID: <q2iDe.13191$NU2.1143@newssvr13.news.prodigy.com>
Source record: 18039

Kevin:

This website should give you some useful ideas:
http://ac6v.com/homebrew.htm#AMP

Roger K6XQ

3359. Re: QUESTION: Cheap Accurate Shaft Position Encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-20 06:05:21 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1121839521.025321.302900@g47g2000cwa.googlegroups.com>
Source record: 18040

Seems to me that 256 or 512 is reasonable. Then decide how many kHz/rev you want, and that tells you the step size. If you want 10kHz/rev, 512 steps would give you just under 20Hz/step, which seems reasonable to me. I wouldn't want it any coarser than that, and I'd actually prefer finer. Processors are very cheap; you can easily process the quadrature step info up to dozens of revolutions per second. If you budget ten instruction cycles to process each step, and you're using a slow processor at 1usec/instruction cycle, you can process 100,000 steps a second, if the processor has nothing else to do. You can process 10,000 steps a second, or 200kHz/second, with just ten percent of the processor's time. A nice "plus" is to accelerate the tuning when the steps come fast, so you might bump the tuning up to higher Hz/step as the steps come faster. Expect to spend some time on the algorithm to get a smooth "feel" to it, though. The accelerated tuning when the knob is turned more quickly is a feature commonly found in test instruments. I haven't ever had a problem with the HP/Agilent encoders with respect to the output looking like "noise." The outputs are very clean digital signals with no "bounce" if you're turning in one direction.

Cheers,
Tom

PS...Tim, did you find an encoder yet? Drop me an email if not...

3360. FA: 71A, 6146A, 5Y3/6087 TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-20 13:04:06 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <aZrDe.15936$5N3.5221@bgtnsc05-news.ops.worldnet.att.net>
Source record: 18041
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

See these tubes at :

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

other tubes and items coming as well. Check back often, tnx heytubeguy

3361. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-20 16:50:19 UTC
From: Polymath <invalid@invalid.invalid>
Message-ID: <42de8096_2@x-privat.org>
Source record: 18042

Without following your link.....well done that man!

"Jozef" <jozef@metaphoria.org> wrote in message
news:1121725307.731291@r2d2.vermontel.net...
>I have recently built a very large pi-network transmatch with two very big
>homemade variable capacitors. They can be seen at:
>http://www.metaphoria.us/hamradio/transmatch.html
>
> "Polymath" <invalid@invalid.invalid> wrote in message
> news:42da3e51$1_2@x-privat.org...
>> "Manufacture" = "Make By Hand"

3362. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-20 18:06:01 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1121882761.325048.274360@g44g2000cwa.googlegroups.com>
Source record: 18043

The discussions in this thread make me wonder... it seems like the tough part of making variable caps in the "classical" shape is making the plates. In my distant past, I was involved in making modest quantities of punched aluminum parts, and found a shop that was willing to make a punch/die set for the parts, even though my initial order was for only a couple hundred of them. (Eventually I ordered enough to wear out the punch/die set and they made another one...probably did 10,000 or so total.) Once you pay for the punch/die, the parts become pretty cheap, and the uniformity is vastly superior to what you could reasonably do by hand. So, the question becomes, if the plates (rotors and stators) were available in maybe two or three different basic sizes, how many frustrated hams would be interested in buying them? Might it be enough to make the punch economical? Would you be willing to pay, say, two dollars per plate for 0.0625" thick plates with 3" rotor diameter? A set of 25 such plates, using 0.1" gap (good for maybe 7kV peak?--provided the edges are properly rounded), would give you about 190pF. Do the people who would be trying to build such things already have the ability to do the rest of the parts, or would they need to be included too? Does someone already sell kits of capacitor parts?

That's obviously way beyond what the OP needs for a receiving loop, of course! For that, I'd probably use a varactor diode...or find a radio receiver to scrap one out of if I wanted to stay mechanical.

Cheers,
Tom

3363. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-20 18:14:52 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11dt54egdujan1c@corp.supernews.com>
Source record: 18044

K7ITM wrote:
> The discussions in this thread make me wonder... it seems like the
> tough part of making variable caps in the "classical" shape is making
> the plates. In my distant past, I was involved in making modest
> quantities of punched aluminum parts, and found a shop that was willing
> to make a punch/die set for the parts, even though my initial order was
> for only a couple hundred of them. (Eventually I ordered enough to
> wear out the punch/die set and they made another one...probably did
> 10,000 or so total.) Once you pay for the punch/die, the parts become
> pretty cheap, and the uniformity is vastly superior to what you could
> reasonably do by hand. So, the question becomes, if the plates (rotors
> and stators) were available in maybe two or three different basic
> sizes, how many frustrated hams would be interested in buying them?
> Might it be enough to make the punch economical? Would you be willing
> to pay, say, two dollars per plate for 0.0625" thick plates with 3"
> rotor diameter? A set of 25 such plates, using 0.1" gap (good for
> maybe 7kV peak?--provided the edges are properly rounded), would give
> you about 190pF. Do the people who would be trying to build such
> things already have the ability to do the rest of the parts, or would
> they need to be included too? Does someone already sell kits of
> capacitor parts?

For short runs today laser cutting would be better -- the programming
and setup costs are much lower than tooling. The quality will approach
that of a good die set and exceed that of a poor one. There will be a
point where things'll be cheaper to punch out with a die set, but it'd
probably be in the thousands if not tens of thousands of plates.
>
> That's obviously way beyond what the OP needs for a receiving loop, of
> course! For that, I'd probably use a varactor diode...or find a radio
> receiver to scrap one out of if I wanted to stay mechanical.
>
> Cheers,
> Tom
>
I wouldn't use a varactor to tune a recieving loop because of intermod.
Antique Radio Supply and others have various variable caps for sale.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

3364. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-20 19:55:38 UTC
From: "dave.harper" <dave.harper@gmail.com>
Message-ID: <1121889338.699737.244800@g43g2000cwa.googlegroups.com>
Source record: 18045
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

-ex- wrote:
> Comments interspersed, and staying with the BCB range scenario...
>
>
> dave.harper wrote:
>
> > -ex- wrote:
> > >
> > >
> > >>In practice the coil Q is determined primarily by the form dielectric,
> > >>wire size, wire spacing, diameter/length ratio/neary coupling effects,
> > >>etc. R is far enough down the list that its generally not even
> > >>considered.
> > >
> > >
> > > Ah, so the voltage drop across the coil (due to the small internal
> > > resistance) and the close proximity of the wires give it some
> > > capacitance? Does this affect performance or just screw add unwanted
> > > capacitance?
>
> The internal capacitance of the turns isn't enough to radically change
> the basic LC resonance. Instead it tends to result more like dielectric
> leakage
> >
> > Wouldn't adding space between wires cause some eddy currents and lower
> > the L of the coil?
>
> Again, not significantly in the BCB example. Take for instance, a 4"
> diameter coil wound with #18 wire, however many turns it takes. Lets
> say 60. Winding the coil close-spaced as opposed to about
> one-wire-diameter spacing will require a few less turns (maybe 10%) to
> get the same L. But the close spacing WILL result in lower Q once you
> re-establish the same inductance. There can be more than one reason for
> this...is it the winding spacing or the length/diameter ratio or more
> dielectric loss that causes this? (Its certainly not the R). Its
> impossible to say because you can't have one without the other!
>
> Smaller coils, say toilet-paper tube size, don't exhibit this effect -
> or at least not to the same degree. But there's a whole different
> geometry there and its not optimum.
>
> Nobody really knows exactly what goes on here other than trial-and-error
> experiments to see how they behave.

Thanks again for the reply.

>From what I've read here and elsewhere, I'm debating either making a spider coil or a tight wound 4" cylinder (about 1" length). Is there any significant advantage to either?

I can see with a powered ferrite core how the spacing would make less of a difference... but if tight winding results in a lower Q/other effects, why space the windings for air-core, crystal radio coils, period?

Thanks!
Dave

3365. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-20 20:21:08 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1121890868.502275.229060@g47g2000cwa.googlegroups.com>
Source record: 18046

Good point about other tooling methods (laser cutting not the only one available), but the question remains, how many people would actually be interested in buying plates, at what cost levels? (At the time I was making the other parts, soft tooling was cheaper for very short runs, but the shop that did the punch/die was set up to make such tools at very low cost and easily beat the soft tooling for modest runs. You just need to decide how many of your parts you want, and go shopping.)

As for using varactors on receivers loops, if you use back-to-back diodes and don't have to deal with seriously big signals, distortion should be at worst a very minor problem. For a fairly high Q tuned antenna, the signal voltage across the diodes for signals you're not tuned to is pretty small. Of course, the reason it's so hard to find small (receiving size) mechanical caps now is that their job has been taken over...by varactors.

Cheers,
Tom

3366. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-20 20:34:28 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrnddtdak.lq4.ben@saturn.home.ben.com>
Source record: 18047

On 2005-07-20, K7ITM <k7itm@aol.com> wrote:
> So, the question becomes, if the plates (rotors
> and stators) were available in maybe two or three different basic
> sizes, how many frustrated hams would be interested in buying them?

This would be a good emachineshop.com order. You can choose any of the processes that people are discussing on this thread, depending on the expected volume. When I played with their estimating software, my experience was that pretty much everything cost roughly:

$100/ea in qty 1 => $100
$11/ea qty 10 => $110
$1.20/ea qty 100 => $120
$0.13/ea qty 1000 => $130

etc. I figured the biggest risk in using them would be the temptation to get 10x more units for 10% more and then have a zillion whatevers (eg rotor plates :) around the garage. I've been trying to think of a project that needs 100 identical widgets, and a homemade air variable might be it.

--
Ben Jackson
<ben@ben.com>
http://www.ben.com/

3367. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-20 20:41:16 UTC
From: dplatt@radagast.org
Message-ID: <11dtdnc15mr3o30@corp.supernews.com>
Source record: 18048

In article <1121890868.502275.229060@g47g2000cwa.googlegroups.com>,
K7ITM <k7itm@aol.com> wrote:

>Good point about other tooling methods (laser cutting not the only one
>available), but the question remains, how many people would actually be
>interested in buying plates, at what cost levels? (At the time I was
>making the other parts, soft tooling was cheaper for very short runs,
>but the shop that did the punch/die was set up to make such tools at
>very low cost and easily beat the soft tooling for modest runs. You
>just need to decide how many of your parts you want, and go shopping.)

At the price you suggested (a couple of dollars per plate), the cost
of putting together a good-sized air variable is going to be fairly
fierce. It may be somewhat less than the cost of a new, commercially
manufactured AVC, but it's probably not competitive with the cost of
used-but-serviceable air variables at hamfest/fleamarket prices. You
might find that it was appealing only to those who needed a fairly
specific size/capacitance/standoff-voltage combination, not available
used.

You might find it attractive to specialize a bit. One not-uncommon
application for large air variable caps these days, is people who want
to make a magnetic-loop transmitting antenna. In this application,
keeping resistive losses in the cap to a minimum is very desirable
to help keep the Q and efficiency as not-terribly-low as possible.

One way to do this is to use a welded rotor/shaft assembly, and welded
stator plates, to reduce resistive losses. This is beyond the
capabilities of most homebrewers, I think. An alternative is to use a
soldered construction, which can't be done easily with aluminum but
which is relatively easy if your shaft and spacers are brass, and the
plates are either brass, or PC-board material (double-sided would work
best).

Hence, you might increase the demand for such stamped or laser-cut
plates if you were able to offer them in materials other than
aluminum. The materials cost for brass would probably be higher than
for aluminum, but you might be able to offer plates in double-sided
FR4 for prices no more than aluminum.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3368. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-20 21:01:13 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1121892299.067606.143910@z14g2000cwz.googlegroups.com>
Source record: 18049
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Huh? You wrote, "if tight winding results in a lower Q/other effects, why space the windings for air-core, crystal radio coils, period?" Do you not want a higher Q? Generally, people try for the highest unloaded Q they can get, under some set of constraints.

Close spacing lowers the Q mainly because the current in the wire is no longer radially symmetrical, if you look at a cross-section of the (round) wire. That raises the RF resistance of the wire. For decent (low-loss) form material, it's mainly the RF resistance of the wire that determines the loss and therefore the Q. Generally, highest Q for a given diameter and length is obtained by spacing the wire about two wire diameters, center to center, at least for high frequency work. If you want to use Litz wire, there's an optimum stranding...more, finer strands are not necessarily better as you get to either lower or higher frequencies. You should be able to find info on that, if you do some searching.

There is such a thing as TOO HIGH a loaded Q. Let's say you start off with a coil with unloaded Q of 500, and couple lightly to it with your circuit (antenna and detector), so the loaded Q is 250. That means the bandwidth at 3dB points, if you tune a station at 1MHz, is 4000Hz. If you've tuned to the center of the station, your demodulated bandwidth will be only 2kHz. Since the rolloff is gradual with a single-tuned circuit, voice should be OK, but you'll be missing out on a lot of the highs. (Mind you, it's not easy at all to get an unloaded Q of 500 at 1MHz!)

Using a very hack crystal radio--coil of about 3" diameter, antenna just ten feet or so of wire, and an HP zero-bias schottky detector diode--but into a low-noise audio amplifier--I've been able to listen to standard broadcast stations a thousand miles away in the evening. Biggest problem is getting rid of local stations...I'd use probably a carefully designed three-resonator filter and a much better wire antenna if I was serious about it.

Cheers,
Tom

3369. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-20 21:20:33 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1121894433.911386.84320@g44g2000cwa.googlegroups.com>
Source record: 18050

Cool, Ben. Thanks. I'm wondering what part you put in to get 13 cents each at 1000 parts. That would be very attractive, but I keep getting over a dollar a plate for 3" diameter semicircles with a tab/hole for the shaft, for rotor plates. Admittedly, the 0.063" aluminum thickness is more than needed for many applications, but dropping it to 0.024" doesn't help a lot. I don't figure that making your own cap for low power applications is going to be very attractive, so I'm figuring the larger sizes. Also, what machining technique did you pick?

Cheers,
Tom

3370. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-20 21:21:27 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11dtg28gev6c506@corp.supernews.com>
Source record: 18051

Dave Platt wrote:
> In article <1121890868.502275.229060@g47g2000cwa.googlegroups.com>,
> K7ITM <k7itm@aol.com> wrote:
>
>
>>Good point about other tooling methods (laser cutting not the only one
>>available), but the question remains, how many people would actually be
>>interested in buying plates, at what cost levels? (At the time I was
>>making the other parts, soft tooling was cheaper for very short runs,
>>but the shop that did the punch/die was set up to make such tools at
>>very low cost and easily beat the soft tooling for modest runs. You
>>just need to decide how many of your parts you want, and go shopping.)
>
>
> At the price you suggested (a couple of dollars per plate), the cost
> of putting together a good-sized air variable is going to be fairly
> fierce. It may be somewhat less than the cost of a new, commercially
> manufactured AVC, but it's probably not competitive with the cost of
> used-but-serviceable air variables at hamfest/fleamarket prices. You
> might find that it was appealing only to those who needed a fairly
> specific size/capacitance/standoff-voltage combination, not available
> used.
>
> You might find it attractive to specialize a bit. One not-uncommon
> application for large air variable caps these days, is people who want
> to make a magnetic-loop transmitting antenna. In this application,
> keeping resistive losses in the cap to a minimum is very desirable
> to help keep the Q and efficiency as not-terribly-low as possible.
>
> One way to do this is to use a welded rotor/shaft assembly, and welded
> stator plates, to reduce resistive losses. This is beyond the
> capabilities of most homebrewers, I think. An alternative is to use a
> soldered construction, which can't be done easily with aluminum but
> which is relatively easy if your shaft and spacers are brass, and the
> plates are either brass, or PC-board material (double-sided would work
> best).
>
> Hence, you might increase the demand for such stamped or laser-cut
> plates if you were able to offer them in materials other than
> aluminum. The materials cost for brass would probably be higher than
> for aluminum, but you might be able to offer plates in double-sided
> FR4 for prices no more than aluminum.
>
At two bucks a pop for plates you _ought_ to be burning up most of your

money in setup, tooling and handling, with very little going to the actual material.

Hence brass shouldn't be too much more expensive.

I might be more interested in a kit that would let me saw plates out of FR4 and assemble a precision cap -- so if you supplied frame & shaft pieces that would accept .031 or .062 FR4 that would be a cool thing.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

3371. Re: CB -->6M Conversion?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-20 21:51:42 UTC
From: "milo17@aol.com" <milo17@aol.com>
Message-ID: <1121896302.081488.222340@f14g2000cwb.googlegroups.com>
Source record: 18052

Try doing a search for ZR1EV. He had some good info posted on the net regarding CB to Six. I was able to convert an old Midland 13-892. Rig is crystal controlled and it was a pretty big job. Worked fair when it was finished, but a GREAT education ! E-mail if you ahve any more questions.

Mike N2JVT

3372. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-20 22:45:30 UTC
From: "dave.harper" <dave.harper@gmail.com>
Message-ID: <1121899530.437296.324800@f14g2000cwb.googlegroups.com>
Source record: 18053
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

K7ITM wrote:
> Huh? You wrote, "if tight winding results in a lower Q/other
> effects, why space the windings for air-core, crystal radio coils,
> period?" Do you not want a higher Q? Generally, people try for the
> highest unloaded Q they can get, under some set of constraints.

Sorry, I made a typo. Rather, why do people tight-wrap coils, period?
Just ease of construction?

> Close spacing lowers the Q mainly because the current in the wire is no
> longer radially symmetrical, if you look at a cross-section of the
> (round) wire. That raises the RF resistance of the wire. For decent
> (low-loss) form material, it's mainly the RF resistance of the wire
> that determines the loss and therefore the Q. Generally, highest Q for
> a given diameter and length is obtained by spacing the wire about two
> wire diameters, center to center, at least for high frequency work. If
> you want to use Litz wire, there's an optimum stranding...more, finer
> strands are not necessarily better as you get to either lower or higher
> frequencies. You should be able to find info on that, if you do some
> searching.
<SNIP>
> Cheers,
> Tom

Thanks for the information! Is there an advantage to wrapping cylinder
coils as opposed to spider or torroid, other than ease of construction?
I'm debating which one I'd likely get the best result with... I'll
probably make both to try it out, but I'd like to know which one would
'probably' work best.

Thanks again,
Dave

3373. Linear amplifier input mathcing circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-20 22:45:48 UTC
From: Gary Morton <gary@alma.demon.co.uk>
Message-ID: <wuADe.74296$G8.64787@text.news.blueyonder.co.uk>
Source record: 18054

I bought a heatsink/PCB containing two RF transistors (2N6080, 2N6083) at a radio rally. I'm not sure what frequency it was for but it looks like a 2m or possibly a 70cm amplifier. It appears to be from the back end of some rig. It has antenna switching relay and decoupling and RF loads on the collectors. I intend to re-use it to make a 20W linear for 4m. I have stripped off all the matching parts between the stages (trimmers, Ls and surface mount type Cs). When I tested the transistors with a multimeter I was relieved to see that the BE and BC diodes gave a good reading which suggests that the transistors are intact.

I have been reading a lot about linear amplifiers and matching circuits from the usual authors in RSGB and ARRL books. I am slowly getting an understanding of what is going on. I also have a Motorola databook which gives the datasheet for the two devices.

The databook shows that the input is capacitive below 180MHz and down to 130MHz (3.18-j4.3). Extending the line on the smith chart it appears that the input gets more capacitive at 70MHz. My understanding was that a capacitive input would be counter-acted using a series inductor, however the original amplifier clearly had a capacitor from base to ground. In PW April 96 I stumbled across a 50MHz linear amplifier based on a 2N6080 and 2N6082 combo (TA6U2 from Spectrum Communications - which may still be available today). For both stages there is 1nF of capacitance from base to ground. In a third design for which I have the schematic a 2m amplifier using a 2N6080 as the first stage also has capacitance from base to ground. I'm puzzled.

Anyway I constructed a T type input match using 200pF trimmers and a 3 turn coil rescued from the original circuit: C from i/p to common, C from common to gnd, L from common to transistor base. I read somewhere that this was called a "sloppy match". Using a MFJ259B as a signal generator I can adjust the trimmers to get a match at both 50MHz or 70MHz. Interestingly adjusting from the centre frequency the bandwidth of SWR less than 1.1 is greater at 50MHz than 70MHz. I'm guessing that this match circuit has multiple solutions for a fixed L depending upon Q, and that Q is lower at 50MHz.

I understood that the L in my match would combine with the L of the transistor input impedance which would just result in a bigger overall L in the match circuit. Certainly this circuit appears to work.

->So why in three seperate designs do I see large capacitance between the base of the transistor and ground?

Using the usual formula Zout=(Vcc*Vcc)/(2*Po)=(13*13)/(2*4)=21 I have added a 100nF and 22ohm resistor in series from the collector to ground to give what I hope is a sensible load (to test out the circuit). This will later be replaced with another match circuit, which I assume will need to match from 20ohm

instead of 50ohm (as needed for the first stage). When experimenting without the proper match circuit do you even need a load, or is my idea sensible?

regards...

--Gary (M1GRY)

3374. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-20 23:57:00 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrnddtp6c.qaj.ben@saturn.home.ben.com>
Source record: 18055

On 2005-07-20, K7ITM <k7itm@aol.com> wrote:
> Cool, Ben. Thanks. I'm wondering what part you put in to get 13 cents
> each at 1000 parts.

That was just an example. I just made a quick 3" diameter rotor with
center hole, laser cut from 6061T6 .047 and 1 is $103, 10 are $123,
100 are $264. It's not quite as steep a curve as the other parts I was
playing with. Since that's laser cutting you can group parts, so if I
throw on a stator too it only goes up to $404 for 100. If I go to slightly
thinner mild steel it's $254 for 100 pairs. Not sure how much difference
Al vs steel makes for this application.

I bet the turret punch would be cheaper, but it can't make the convex
curves.

If you make a die for the rotor it looks like the tooling is about $1k
but the per-part cost can go down to 15 cents each at quantity 10k (for
a net price of about 27 cents each). On the other hand, the lead time
is 72 days!

--
Ben Jackson
<ben@ben.com>
http://www.ben.com/

3375. coupling loop for loop antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 00:31:59 UTC
From: inagaddadavida@webtv.net
Message-ID: <3302-42DEECFF-96@storefull-3251.bay.webtv.net>
Source record: 18058

i see two different designs on the net for receiving loops. one is to wind the pickup loop with the main loop, and another is to use a 1/5 size loop off center at the bottom. what are the pros and cons for each setup? what benefit is there to a pickup winding as opposed to just inductive coupling to the internal loopstick by proximity?

3376. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 00:33:30 UTC
From: -ex- <exray@coqui.net>
Message-ID: <564e2$42deed69$4232bd15$32086@COQUI.NET>
Source record: 18056
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

dave.harper wrote:
> -ex- wrote:
>

>
>>From what I've read here and elsewhere, I'm debating either making a
> spider coil or a tight wound 4" cylinder (about 1" length). Is there
> any significant advantage to either?

They're going to be very similar in performance. If you do the solenoid (cylinder), go with one wire spacing between turns instead of tight wound. Thats been pretty well proven to give a bit better Q. And 16-18 ga wire is also in the 'best' range for both the spider-web and solenoid. Next step up would be some serious litz wire.

>
> I can see with a powered ferrite core how the spacing would make less
> of a difference... but if tight winding results in a lower Q/other
> effects, why space the windings for air-core, crystal radio coils,
> period?

I'm not 100% sure I understand the question....On a rook/basketweave/spider coil there's inherent spacing already. And a solenoid coil will also do better that way...on larger coils. The way I understand it is that there are several factors at work - primarily interwinding capacitance and overall l/d ratio. In practice, as you change one you also change the other. You can compensate one for the other somewhat with a different diameter coil, different gauge wire, etc but the general concensus is that 4"/16-18 wire/~1 wire diameter spacing is pretty close to the best you can squeeze out of that class of coil.

HTH.

-Bill

3377. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 00:45:31 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1121906731.520003.287550@o13g2000cwo.googlegroups.com>
Source record: 18057
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

I s'pose Reg, the local expert on proximity effect, etc., should pop in here and 'splain it all. Seems, though, like it's wrapped up in practicalities. For low-frequency work you typically want a lot of inductance, so you use fine wire so you can get a lot of turns in a relatively small volume. The wire diameter is small enough that, at low frequencies, the skin depth is large compared with the wire size. I believe you will then find that the proximity effect won't have as much influence on the Q as in the case where the skin depth is a small fraction of the wire diameter. So for a 50Hz/60Hz power transformer, you won't find the turns spaced apart any more than needed for insulation.

You can do a Google search for <conductor proximity effect> and find a bunch of references. The stuff at http://www.national.com/nationaledge/nov04/adc_article.html has some nice pix to show the effect in a bit different environment than we're talking about here.

The Q you actually obtain may depend on so many other things than just the shape of the windings that it's not possible to tell you the "best" geometry. But I can tell you that if you make a large coil of good design, you should be able to get to a high enough unloaded Q that doing better with a different geometry about the same size will give you only small returns on the performance in the circuit. That is, if you do manage to make a solenoid coil say 5 inches long and 5 inches diameter, maybe getting the Q up near 500 if you're careful, then operating it at a loaded Q of 100 (for a 10kHz bandwidth at 1MHz), the loss in the coil compared with an INFINITE unloaded Q is so small as to be nearly unnoticable. If my mental arithmetic is right, it would be about a 1dB difference, just barely audible. And of course, you won't get anything like that much improvement in Q with a different shape. Plus--the standard solenoid shape is easy to construct! (There ARE reasons for wanting higher unloaded Q, if you want to operate at a higher loaded Q and if you want to build a multiple-resonator tuner, but my impression is you are not there yet!)

Cheers,
Tom

3378. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 01:01:27 UTC
From: -ex- <exray@coqui.net>
Message-ID: <ba83c$42def3ee$4232bd15$5983@COQUI.NET>
Source record: 18059
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

dave.harper wrote:

>
> K7ITM wrote:
>
>>Huh? You wrote, "if tight winding results in a lower Q/other
>>effects, why space the windings for air-core, crystal radio coils,
>>period?" Do you not want a higher Q? Generally, people try for the
>>highest unloaded Q they can get, under some set of constraints.
>
>
> Sorry, I made a typo. Rather, why do people tight-wrap coils, period?
> Just ease of construction?
>
>
>>Close spacing lowers the Q mainly because the current in the wire is no
>>longer radially symmetrical, if you look at a cross-section of the
>>(round) wire. That raises the RF resistance of the wire. For decent
>>(low-loss) form material, it's mainly the RF resistance of the wire
>>that determines the loss and therefore the Q. Generally, highest Q for
>>a given diameter and length is obtained by spacing the wire about two
>>wire diameters, center to center, at least for high frequency work. If
>>you want to use Litz wire, there's an optimum stranding...more, finer
>>strands are not necessarily better as you get to either lower or higher
>>frequencies. You should be able to find info on that, if you do some
>>searching.
>
> <SNIP>
>
>>Cheers,
>>Tom
>
>
> Thanks for the information! Is there an advantage to wrapping cylinder
> coils as opposed to spider or torroid, other than ease of construction?
> I'm debating which one I'd likely get the best result with... I'll
> probably make both to try it out, but I'd like to know which one would
> 'probably' work best.
>
> Thanks again,
> Dave
>

Me again...I should have read the later threads before my earlier reply.

Tom is correct about the Q using litz. Some guys have tried 48 ga litz and said it nosedived in performance from the more-common 46 ga litz. I've seen that explained with a critique of skin depth in that the rf resistance of 48 is considerably higher at those freqs. Strand count seems to still be in the 'more-is-better' range at BCB. 660-strand is commonly used in DX sets...although I haven't graduated to that level of expenditure myself :)

As to which to try....in a single-tuned set you won't notice the difference. If you have a strong local BCB station the toroid will do a very effective job of decreasing direct pickup by the coil. You might still want a trap inline, though. Guess which type of coil makes the best trap in this scenario!

My own tests gave a slight nod to the spider web coil. Not enough to be noticeable in reception but enough for "spec-talk". The spider-web is also less prone to proximity effects and even direct pickup because it is 'directional'.

My own dx set which is admittedly tailored for my particular environment uses a toroid on the first tuned stage, a toroid inline trap, then a spiderweb on the detector stage with a loose coupled trap made with a loopstick ferrite. A little of each, huh? I can receive stations within 80-100 kc of the 5kw local that is 1/4 mile away on 1370.

My best recommendation would be to seriously consider a double-tuned set. Its a whole different world than a single-tuned one.

-Bill

3379. Re: Silver Mica vs Mica Caps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 01:06:16 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <hd3qd1l3c60o31dt40v2ds12q9mslu6av9@4ax.com>
Source record: 18061

On Mon, 18 Jul 2005 01:15:24 -0400 -ex- <exray@coqui.net> wrote:

>Nowadays, I'm not sure exactly what it is I'm buying when I buy the
>"dipped mica" caps. I'm confident to say they are better than the
>old-timers but are they silver plated onto mica or what?

They are plated, but I don't know for sure that there is any sliver in
the process. Perhaps there never was....

I share your confidence, but only time will tell for sure.

-

Jim Adney jadney@vwtype3.org
Madison, WI 53711 USA

3380. Re: coupling loop for loop antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 01:08:36 UTC
From: -ex- <exray@coqui.net>
Message-ID: <4dc69$42def598$4232bd15$9843@COQUI.NET>
Source record: 18060

Jim wrote:

> i see two different designs on the net for receiving loops. one is to
> wind the pickup loop with the main loop, and another is to use a 1/5
> size loop off center at the bottom. what are the pros and cons for each
> setup? what benefit is there to a pickup winding as opposed to just
> inductive coupling to the internal loopstick by proximity?
>
Probably more than anything else the preference would be determined by
what type of radio you're coupling to.

Fer instance...a set with a built-in antenna and no external ant
connection would HAVE TO be done by proximity...or else winding a
coupling loop onto the built-in antenna :)

A set with external antenna connections only often has no internal ant
to couple to.

There's shades of grey between those two but thats the basic pro/con.

-Bill

3381. Re: QUESTION: Cheap Accurate Shaft Position Encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 04:41:54 UTC
From: Ivan Makarov <miv@hotmail.com>
Message-ID: <oNednQtkQ6YNukLfRVn-rQ@rogers.com>
Source record: 18062

One you can find at http://ru3ga.qrz.ru/UZLY/encod.htm

Follow the links on that page for more pictures.

Sorry, the text is not in English. If anybody wants more details, let me
know.
73,
Ivan
VE3IVM

"Roger Leone" <raleoneTAKEOUT@sbcglobal.net> wrote in message
news:1PiBe.2051$_%4.856@newssvr14.news.prodigy.com...
> Tim:
>
> There used to be a website with info on using surplus stepper motors as
> precision shaft encoders. I have been doing Google searches without
> success. Perhaps someone else will be able to provide a URL. It was
> Australian, I believe.
>
> Good luck.
>
> Roger K6XQ
>
>

3382. Re: coupling loop for loop antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 08:42:24 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <dbnn5g$13f$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 18063

"Jim" <inagaddadavida@webtv.net> wrote in message
news:3302-42DEECFF-96@storefull-3251.bay.webtv.net...
> i see two different designs on the net for receiving loops. one is
to
> wind the pickup loop with the main loop, and another is to use a 1/5
> size loop off center at the bottom. what are the pros and cons for
each
> setup? what benefit is there to a pickup winding as opposed to just
> inductive coupling to the internal loopstick by proximity?

==========

The coupling and main loops behave as the primary and secondary
windings on an impedance matching transformer.

The number of turns is fixed at 1 to 1. So the impedance matching is
done by using different loop diameters.

The 1/5 diameter coupling loop matches the antenna to a 50 ohm
receiver or transmitter.

The large diameter coupling loop matches the antenna to a high
impedance receiver such as 1000 ohms.

Theoretically, the impedance matching ratio is equal to the square of
the loop diameter ratio. The receiver input impedance is usually
known. The trouble is to find the impedance of the loop antenna. But
it is not a critical matter.

Reg, G4FGQ

3383. Software tool for XTAL checks: xtalfind 2.0

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 09:52:22 UTC
From: PaoloC <ollollo@hotpop.com>
Message-ID: <42df7002$1_2@x-privat.org>
Source record: 18064

Hi,
I am glad to inform you that I have updated my 'xtalfind' program to
include tests for software defined DC receivers and DRM converters.

xtalfind is a Perl script that, given a (list of) XTAL frequency,
returns all its possible uses for HAM applications, (sub)harmonics
included. Currently xtalfind checks for the following matches:

* DC RX or TX (HAM bands)
* RX with 455kHz IF (HAM bands)
* RX with 10MHz IF (HAM bands)
* RX with 12kHz IF (HAM bands)
* RX with custom IF (HAM bands)
* SDR LO=4*F (HAM bands)
* DRM converter 455-12kHz
* DRM converter 9011-12kHz (ICOMs)
* DRM DC RX for known DRM broadcasts

You can see a sample output from a previous release at
http://spazioinwind.libero.it/ik1zyw/hardware/myxtals

You can download the software from
http://spazioinwind.libero.it/ik1zyw/software/xtalfind-2.0.tar.gz

The Perl interpreter is available for most operating systems, so
xtalfind should run almost anywhere.

Don't throw a XTAL before asking xtalfind! :-)
Never underestimate the power of weird frequency XTALs! ;-)

73,
Paolo IK1ZYW

3384. Re: Linear amplifier input mathcing circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 10:15:04 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <20sud1d1hmsrbpiripvt2gomh4u183jvm2@4ax.com>
Source record: 18067

Hi,

>The databook shows that the input is capacitive below 180MHz and down to
>130MHz (3.18-j4.3). Extending the line on the smith chart it appears that the
>input gets more capacitive at 70MHz. My understanding was that a capacitive
>input would be counter-acted using a series inductor, however the original
>amplifier clearly had a capacitor from base to ground. In PW April 96 I
>stumbled across a 50MHz linear amplifier based on a 2N6080 and 2N6082 combo
>(TA6U2 from Spectrum Communications - which may still be available today). For
>both stages there is 1nF of capacitance from base to ground. In a third design
>for which I have the schematic a 2m amplifier using a 2N6080 as the first
>stage also has capacitance from base to ground. I'm puzzled.

>->So why in three seperate designs do I see large capacitance between the base
>of the transistor and ground?

I don't think you have considered the low value of 'R' being
dealt with here. Translating 3.18-j4.3 @ 130MHz into a parallel
combo gives 8.99ohms||185pF (according to Agilent's AppCAD). Now
with pi-tank matching (possibly not the optimum method), you would
need a shunt capacitance of Xc = R/Q = 681pF using an arbitrary Q
of 5. So a capacitor of 497pF (half your 1nF) together with the
184pF of the device would do nicely.

Cheers - Joe

3385. Anderson 'Powerpole' Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 13:42:06 UTC
From: RadioGuy <nospam@nospam.com>
Message-ID: <OCNDe.459110$cg1.117269@bgtnsc04-news.ops.worldnet.att.net>
Source record: 18068

After hurricane Charley passed overhead (official track had it passing directly overhead of my house) blowing off roofs and downing powerlines---we were out of power for a week, I decided to review my emgergency equipment capabilites. After extensive Internet study I learned that the power connectors of choice, endorsed as standards by the ARRL, ARES and RACES for emergency hookups are the Anderson 'Powerpole' connectors. Using the same connector body but different internals parts provided a connector with current capability up to 45 amps. The concept of a 'genderless' connector was also mentioned. I purchased a large quantity of the 15, 30 and 45 amp connectors along with the special crimping tool and began to exchange all my old connectors with the new 'Powerpole' connectors.

When I first got the 'Powerpole' connectors about a year ago and played with them something odd about them caught my attention but I could not explain why. A couple of days ago while making connections I discovered that the 'genderless' capabilities of the connector allowed them to be connected side-to-side, in otherwords, red-to-black, or black-to-red. The possibility of making a direct short to ground---especially from an automotive battery exists (grounded chassis/negative ground)! Using the 'Powerpole' connectors makes it imperative that fuses be inserted inline, not only with the battery positive terminal as is common practice, but ideally with both sides of the power leads on the equipment side.

The connectors I used in the past and standardized on were the Amphenol two pin connectors. The ones with the wide and narrow blade. The female went to power source, and male to the equipment; furthermore, the cable clamp, that the 'Powerpole' connector do not have, kept the connecting wires from being pulled out or broken from repeated flexing. The Amphenol connectors were not only a gendered connector but could only be coupled one way---avoiding the problem of the 'Powerpole' connector.

I won't change back to the Amphenol connectors; I'll stay with the 'Powerpole' connectors, but it sure makes them an awkward solution and 'Hammy' way of doing things that require a bit of care when using them---especially under emergency conditions.

RG

3386. want to build 30m xtal lsb rcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 17:04:28 UTC
From: geoffstirling69@yahoo.ca
Message-ID: <1121964889.026445.297930@z14g2000cwz.googlegroups.com>
Source record: 18069

I'm looking to buy in kit form (or prebuilt if it's cheap enough) a receiver whose sole purpose in life would be to sit on 10.151 LSB and decode APRS packets to be relayed into APRS-IS on the internet via a computer with a sound card. I've been looking around and I've found the 30 meter half watt Rock-Mite CW tranceiver from Small Wonder Labs for $27 including shipping, $39.50 with the connectors. I'd imagine this would work just fine if I swapped the crystal in it to 10.148.5 or so, but I really don't need the transmit option, unless there was some way to modify it to take the sound card output from my computer and transmit 300 baud packet with it. It looks like since you can choose two frequencies 1khz from each other, that maybe it would be able to be modified to transmit the frequencies for mark and space and perhaps be switched by some sort of FSK mechanism controlled by a serial port. Anyways, that's more than I think I want to get into with this project and would be happy if somewhere out there was an easy crystal controlled kit that will just receive one 30 meter frequency in lower side band.

Thanks

3387. CW filter/notch filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 17:25:07 UTC
From: Samuel Hunt <shunt010@hotmail.com>
Message-ID: <dbolpj$3ij$1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 18070

I'm looking for a circuit design to a CW filter centred around 1khz that's about 200hz wide and then rolls off very rapidly.

I'm planning to build a AFC system for SSB, which has a 1khz pilot tone that will be used to lock the frequency correct.

I then need a circuit with quite a tight notch around 1khz to kill off the pilot tone once it's been locked on, so you don't have an annoying whistle on the reciever.

Can anyone possibly help with any circuit designs or where I can find some????

I've had a look at a twin tee filter, but I'm not familiar with this design. Would this be suitable, is it worth me reading more about it and learning, then using this?

Thanks all,

Sam

3388. Re: Anderson 'Powerpole' Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 18:31:00 UTC
From: dplatt@radagast.org
Message-ID: <11dvqf4eqouejcd@corp.supernews.com>
Source record: 18071

In article <OCNDe.459110$cg1.117269@bgtnsc04-news.ops.worldnet.att.net>,
RadioGuy <nospam@nospam.com> wrote:

>When I first got the 'Powerpole' connectors about a year ago and played with
>them something odd about them caught my attention but I could not explain
>why. A couple of days ago while making connections I discovered that the
>'genderless' capabilities of the connector allowed them to be connected
>side-to-side, in otherwords, red-to-black, or black-to-red.

True 'nuff. If you do this, and also have a secondary ground path
present (e.g. through the antenna system), bad things could occur.

The chances of this can be reduced by:

- Not trying to plug 'em together by touch alone.

- Pick a standard orientation (most ARES groups have standardized on
a "Red on the right, when looking into the connector, contact
tongues are on the top" orientation).

- Assemble the connectors in advance of need.

- Secure the red and black connectors together after slip-fitting them,
so that they can't come apart and be reconnected incorrectly.
Anderson provides "roll pins" for this purpose, to lock 'em
together, but I've heard some people say that these can vibrate out
of the connectors. I prefer to use a drop of Crazy Glue or acetone
to permanently bond 'em together.

> The possibility
>of making a direct short to ground---especially from an automotive battery
>exists (grounded chassis/negative ground)! Using the 'Powerpole' connectors
>makes it imperative that fuses be inserted inline, not only with the battery
>positive terminal as is common practice, but ideally with both sides of the
>power leads on the equipment side.

Good advice!

Whenever I build equipment for 12-volt plug-in use, I prefer to stick
a reverse-polarity diode across the line, right after the equipment's
main 12-volt fuse. During normal operation there's no current flow in
the diode and no voltage drop (unlike what a forward-biased diode in
series with the line would cause). If the equipment is accidentally
hooked up with polarity reversed, the diode clamps the reverse voltage
and the fuse blows instantly, almost entirely eliminating the risk of
damage to the equipment.

>I won't change back to the Amphenol connectors; I'll stay with the
>'Powerpole' connectors, but it sure makes them an awkward solution and
>'Hammy' way of doing things that require a bit of care when using
>them---especially under emergency conditions.

You raise a valid point. I have yet to hear of this actually
happening in practice, but it's certainly possible.

I'm told that the underwater-diving industry has been using PowerPole
connectors for years - a local diver who became a ham last year was
overjoyed to finally learn how and where to get "diving light"
connectors at a reasonable (non-dive-shop) price. I'll have to ask
him whether he knows of any such accidental-reverse-hookup problems in
that industry.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3389. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 18:37:33 UTC
From: RadioGuy <nospam@nospam.com>
Message-ID: <NXRDe.460360$cg1.144746@bgtnsc04-news.ops.worldnet.att.net>
Source record: 18072

Jozef <jozef@metaphoria.org> wrote in message
news:1121725307.731291@r2d2.vermontel.net...
> I have recently built a very large pi-network transmatch with two very big
> homemade variable capacitors. They can be seen at:
> http://www.metaphoria.us/hamradio/transmatch.html
>
> Jozef
> WB2MIC

Very nicely done...

I toyed with the idea of designing a couple of flat dies to punch out the stator and rotor plates and market my own series of capacitors. I agree, the high price of those capacitors are unwarranted.

There was no need for two variables in that tuner... a single DIFFERENTIAL capacitor would do nicely and eliminate the extra adjustment during tune-up. For some unknown reason Hams still need a tuner with two capacitors---it was nice to see MFJ offer the Differential-T tuner Model 986.

Many years ago (before the MFJ 986 tuner) as an experiment I built a field expedient tuner using a differential capacitor made from two telescoping cardboard tubes and aluminum foil (two plates outer and one plate inner tube) and slid the inner tube in and out to acheive an antenna match with a 28 microhenry tapped coil. It worked fine at 100 watts and many contacts were made with the end fed wire but dilectric heating of the cardboard tubes was observed.

RG

3390. Re: Anderson 'Powerpole' Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 19:04:42 UTC
From: RadioGuy <nospam@nospam.com>
Message-ID: <elSDe.460470$cg1.378918@bgtnsc04-news.ops.worldnet.att.net>
Source record: 18073

Dave Platt <dplatt@radagast.org> wrote in message
news:11dvqf4eqouejcd@corp.supernews.com...
> In article <OCNDe.459110$cg1.117269@bgtnsc04-news.ops.worldnet.att.net>,
> RadioGuy <nospam@nospam.com> wrote:
>
> >When I first got the 'Powerpole' connectors about a year ago and played
with
> >them something odd about them caught my attention but I could not explain
> >why. A couple of days ago while making connections I discovered that the
> >'genderless' capabilities of the connector allowed them to be connected
> >side-to-side, in otherwords, red-to-black, or black-to-red.
>
> True 'nuff. If you do this, and also have a secondary ground path
> present (e.g. through the antenna system), bad things could occur.
>
> The chances of this can be reduced by:
>
> - Not trying to plug 'em together by touch alone.
>
> - Pick a standard orientation (most ARES groups have standardized on
> a "Red on the right, when looking into the connector, contact
> tongues are on the top" orientation).
>
> - Assemble the connectors in advance of need.
>
> - Secure the red and black connectors together after slip-fitting them,
> so that they can't come apart and be reconnected incorrectly.
> Anderson provides "roll pins" for this purpose, to lock 'em
> together, but I've heard some people say that these can vibrate out
> of the connectors. I prefer to use a drop of Crazy Glue or acetone
> to permanently bond 'em together.
[snip]

Thanks for the reply Dave. That's precisely the point I'm trying to make.
My connectors are oriented in the preferred ARES configruation and crazy
glued together but that doesn't mean anything. You can still can mate the
assembled connectors together side-to-side, red-to-black and black-to-red.

The only options of preventing this from happening are to carefully observe
the mating of the connectors and use fused leads to protect against shorts
resulting from misalignment.

RG

3391. Re: CW filter/notch filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 20:23:59 UTC
From: Samuel Hunt <shunt010@hotmail.com>
Message-ID: <dbp08vvv1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 18074

I've found an excellent bandpass filter. It's 4 pole and is supposed to be a CW filter. When I tune it up, it works really nicely to pass about 250hz 3dB bandwidth, then has incredibly sharp edges so at 500hz BW, it's about 20dB down, and then just rolls off more. This is almost perfect for what I want.

Now the only thing is finding a tight notch filter that does similar, but the opposite, the tighter the better. Really I want to try to kill off my 1khz carrier, when it's no more than 50hz away, so it needs 100hz BW then be rolled off at about 200hz.

After I've got these circuits sorted, I might be ready to "trial" earlier than I originally thought.

Sam

"Samuel Hunt" <shunt010@hotmail.com> wrote in message
news:dbolpj$3ij$1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com...
> I'm looking for a circuit design to a CW filter centred around 1khz that's
> about 200hz wide and then rolls off very rapidly.
>
> I'm planning to build a AFC system for SSB, which has a 1khz pilot tone
> that will be used to lock the frequency correct.
>
> I then need a circuit with quite a tight notch around 1khz to kill off the
> pilot tone once it's been locked on, so you don't have an annoying whistle
> on the reciever.
>
>
> Can anyone possibly help with any circuit designs or where I can find
> some????
>
> I've had a look at a twin tee filter, but I'm not familiar with this
> design. Would this be suitable, is it worth me reading more about it and
> learning, then using this?
>
>
> Thanks all,
>
> Sam
>

3392. QUESTION: Homebrew Near Field 3Ghz Frequency Meter.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 21:51:43 UTC
From: Timothy@tholtom.freeserve.co.uk
Message-ID: <1121982703.888190.178630@g14g2000cwa.googlegroups.com>
Source record: 18075

There are plenty of homebrew frequency meters on the market, basically amp, PIC and display. Problem is I haven't seen one yet that works above about 50Mhz. Does anyone know of a circuit diagram for something capable of about 3Ghz? Something like a homebrewed version of the Optoelectonics offerings.....

Thanks,

Tim

3393. QUESTION: Logarithmic Amplifiers and their Uses

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 21:55:32 UTC
From: Timothy@tholtom.freeserve.co.uk
Message-ID: <1121982932.549061.104110@f14g2000cwb.googlegroups.com>
Source record: 18076

Anybody know of a site that explains what exactly a logarithmic amplifier is and how and where it is applied? I'm thinking in particular of the Analog Devices offerings.....

Thanks,

Tim

3394. Re: antialiasing filter for undersampling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 22:06:32 UTC
From: Hernán Sánchez <nanchez@gmail.com>
Message-ID: <1121983592.770932.78400@g47g2000cwa.googlegroups.com>
Source record: 18077

Wow... it's more complicated that I thought.. So, what you are saying is that I must do "mixing" with all the harmonic frequencies, almost to the 11th harmonic to find the right frequency that don't generate a mixing signal (with the IF signal) at the 0 - 1MHz range ?

Thanks

Hernán Sánchez

3395. Re: antialiasing filter for undersampling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 23:10:24 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1121987424.757716.151320@g49g2000cwa.googlegroups.com>
Source record: 18078

Assuming that you have a bandpass filter that allows your desired band
to pass (say 43.5 to 44.5MHz), and that has enough attenuation outside
some band (say 42.5 to 45.5MHz) to protect against aliases, then the
only harmonics of the sampling frequency that are of interest are the
first one below the passband, and the first one above the passband.
That is assuming that you don't have a harmonic of the sampling
frequency inside the passband, which I explained would be bad because
you can't distinguish between a signal xx.xxkHz above that harmonic and
a signal xx.xxkHz below that harmonic.

You can list some specific rules. Try this:

Define four frequencies for your filter:
f1 = frequency below which attenuation is great
enough that you can ignore signals there.
f2 = bottom edge of the passband, where
attenuation is small enough that signals are OK.
f3 = top edge of the passband, like f2, so signals
between f2 and f3 are all OK
f4 = frequency above which attenuation is great
enough that you can ignore signals there.
So, f1<f2<f3<f4.
(in the example above, f1=42.5MHz, f2=43.5MHz, f3=44.5MHz and
f4=45.5MHz. But the passband does not have to be symmetrical; f4 could
have been 46.5MHz for example, and the equations below will still
work.)
Define the sampling frequency = fs
Then there are two possibilities that will work:
(1) a harmonic of fs, call it n*fs, falls below (f1+f2)/2,
and (n+1)*fs-f4 > f3-n*fs. In that case, the band
from f2 to f3 will be aliased down to the band
from f2-n*fs to f3-n*fs. In fact, each frequency
f in the passband will alias (mix) to f-n*fs.
OR
(2) (kind of the mirror image of (1)) a harmonic of
fs, call it m*fs, falls above (f3+f4)/2, and
m*fs-f2 < f1-(m-1)*fs. In that case, each
frequency f in the passband will alias to m*fs-f.
In other words, the output spectrum will be
flipped compared with the input: lower freqs
in the input spectrum will be at the higher end
of the output (digitized) spectrum.

In both (1) and (2), the first requirement as I've stated them is so
that nothing on the other side of the sampling harmonic from the

passband is big enough to cause trouble in the output frequency range. The second requirement insures that nothing aliased by the harmonic on the other side of the passband from the harmonic doing the work will cause trouble in the output passband. But beware: the digitized output may very well contain frequencies which lie outside the passband, because your analog filter on the passband does not cut them off sharply enough to get rid of them. You can use DSP algorithms (FIR or IIR filters, for example) to do a good job getting rid of the remainder that you might not want in the output.

Cheers,
Tom

(Sure hope I got all those inequalities right! I trust someone will double-check them and let us know if they are wrong...)

3396. Re: coupling loop for loop antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 23:11:33 UTC
From: inagaddadavida@webtv.net
Message-ID: <20258-42E02BA5-354@storefull-3256.bay.webtv.net>
Source record: 18081

ok, now i am getting somewhere! first this, i have several cheap portable am/fm/sw radios. specifically i have sangean ats606, sangean ats505 and sangean ats818. all have built in antennas and plugs for external am/sw antennas. i am experimenting with a loop for a versatile portable antenna. i know that it wont beat an outdoor antenna, but i want something portable that beats the built in antennas. i am trying to make a loop for am(mw) and a loop for sw on the same form with a common output. i could switch the am winding or the sw winding in as needed. the high or low impedance quality of the different styles of output winding is interesting also. the high impedance would be useful on sw when the whip is the only place to connect an antenna to. thanks to all for their opinions!

3397. Re: QUESTION: Logarithmic Amplifiers and their Uses

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 23:14:37 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1121987677.126989.170600@o13g2000cwo.googlegroups.com>
Source record: 18079

Have you tried a Google search? I get LOTS of hits that look like
they'd tell you what you want. Try also the ap notes on the Analog
Devices (and TI/Burr-Brown) web sites. (I'm assuming you really do
mean log amps, and not the linear-in-dB power monitor ICs from Analog
Devices [and others].)

Cheers,
Tom

3398. Re: QUESTION: Homebrew Near Field 3Ghz Frequency Meter.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 23:23:23 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1121988203.022198.241470@g49g2000cwa.googlegroups.com>
Source record: 18080

Generally frequencies that high are done using prescalers. It's also possible to do it with a mixer, and there are some other specialized techniques. Several companies make prescalers. They tend to be expensive and not very easy to find. An alternative way to do the prescaling is to use a PLL chip. Many of them (like the National PLLatinum series and the Analog Devices parts) have one output pin that can be programmed to monitor the divide-by-n chain output, and you can program the divide-by-n to give you some useful fairly large division, to get down to a frequency that's easy to count at that output pin. The PLL chips like that tend to be inexpensive and more readily available than the prescalers. So what if you're not using about 75% of what's in the chip? You may want to use an MMIC gain block between the signal input and the PLL or other prescaler to get the sensitivity up a bit.

Cheers,
Tom

3399. Re: CW filter/notch filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-21 23:37:00 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1121989020.770510.116450@g14g2000cwa.googlegroups.com>
Source record: 18082

A switched-capacitor (commutating) filter can put a potentially very sharp notch at a frequency determined by its clock. I assume in this AFC that you'll have access to the frequency you're trying to filter out. If you use an 8-capacitor version of the filter, you just need to clock it at 8* the freq you want to remove.

You CAN also design a continuous-time band-stop filter.

(Soap-box comment: seems like this would all be a lot easier if you just digitized the signal at 8k samples/second, making detection and removal of fs/8 pretty easy... or just transmit the SSB with a suppressed carrier that you don't have to worry about removing.)

Cheers,
Tom

3400. Re: CW filter/notch filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-22 00:56:15 UTC
From: drwxr-xr-x <nobody@frontier.net>
Message-ID: <slrnde0h1f.1j57.bit-bucket@shell.config.com>
Source record: 18084

On 21 Jul 2005 16:37:00 -0700, K7ITM wrote:
> A switched-capacitor (commutating) filter can put a potentially very
> sharp notch at a frequency determined by its clock. I assume in this
> AFC that you'll have access to the frequency you're trying to filter
> out. If you use an 8-capacitor version of the filter, you just need to
> clock it at 8* the freq you want to remove.
>
> You CAN also design a continuous-time band-stop filter.
>
> (Soap-box comment: seems like this would all be a lot easier if you
> just digitized the signal at 8k samples/second, making detection and
> removal of fs/8 pretty easy... or just transmit the SSB with a
> suppressed carrier that you don't have to worry about removing.)

Soap-box comment: What are you nattering on about?
Oh, I see:
X-Trace: posting.google.com

3401. Re: QUESTION: Homebrew Near Field 3Ghz Frequency Meter.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-22 01:07:27 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2005.07.22.01.07.26.711700@oceanfree.net>
Source record: 18083

On Thu, 21 Jul 2005 14:51:43 -0700, Timothy wrote:

> There are plenty of homebrew frequency meters on the market, basically
> amp, PIC and display. Problem is I haven't seen one yet that works
> above about 50Mhz. Does anyone know of a circuit diagram for something
> capable of about 3Ghz? Something like a homebrewed version of the
> Optoelectonics offerings.....
>
> Thanks,
>
> Tim

I built one last year. I used a PIC16F628 and LCD display.
The HF input uses a 74F74 as a 1:4 prescaler and works up to
about 150MHz. The UHF input uses a Fujitsu 1:128 prescaler,
IIRC it is an MB510. The prescaler is rated for 2.7GHz. I have
used mine up to 1300MHz. The timebase is a very high quality
9MHz TCXO from Ericsson mobile phone equipment. It never
wanders more than 1Hz away from my 10MHz oven controlled
oscillator.

At HF, gate times are 400mS and 4S for 10Hz and 1Hz
resolution. At UHF the gate times are 1.28S and 12.8S
giving a resolution of 100Hz and 10Hz.

I don't have a schematic of the counter. Most of the
hardware design is stolen from my old display/stabiliser
circuit: http://www.eircom.net/~ei9gq/stab.html (from memory?).

The PIC and lower frequency circuitry is on Veroboard. The
VHF/UHF is built dead bug style on copper clad board.

73 Ed. EI9GQ.

--
Linux 2.6.12.1
Remove 'X' to reply by e-mail.

3402. Re: QUESTION: Cheap Accurate Shaft Position Encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-22 02:06:46 UTC
From: LenAnderson@ieee.org
Message-ID: <1121998006.918073.274390@z14g2000cwz.googlegroups.com>
Source record: 18085

>From: xpyttl on Jul 17, 5:56 pm
>>"Ian White G/GM3SEK" <g...@ifwtech.co.uk> wrote in message
>>news:PxxDykEjBh2CFAB1@ifwtech.co.uk...
>
>>> For something like a receiver tuning control, even 256 steps/rev would
>>> sound 'jumpy'. However, you could gear it up mechanically so that even a
>
>>Actually, 256 is getting too high in most cases. The "jumpiness" comes from
>>the size of the step, i.e., the number of Hz per step. Encoders between 50
>>and 100 are probably the easiest to deal with. You generally want to make
>>the step size small, like 1 or 10 Hz, but you don't want hundreds of turns
>>to cover the band.
>
> I'm into the actual receiver portion of a PLL-LO-controlled
> HF SW BC receiver tuning in 1 KHz steps. The PLL and its
> controlling circuitry are done and a 256-step Grayhill shaft
> encoder is used with a shaft encoder decoder circuit from Dr.
> Robert Dennis. That decoder circuit uses 3 HCMOS DIPs for
> Up/Down counters having separate Up and Down clocks. One more
> HCMOS DIP gate package is required for Up/Down counters having
> a single clock input and having an Up or Down mode control pin.
>
>> At very high resolutions, the pulses can come very fast,
>>so it gets tricky to distinguish the closure from noise.
>
> I didn't find it so. The Dennis Decoder will allow shaft
> encoder rotation rates of 150 RPM with a 240-step shaft
> encoder, no problem. Pressed faster, it can handle 300 RPM
> or 5 revolutions per second...quite fast tuning. It is

ADDENDA:

The decoder circuit I used was from:

http://www-personal.umich.edu/~bobden/quadrature_decoder.pdf

Two internal time-constants were about 10 times faster than
what I'm using for the tuning control on my receiver project.
I deliberately lengthened the two internal pulses used in
decoding to better observe them on a scope.

The Dennis Decoder is indicated as originating in 1998.

[University of Michigan, not Michigan State University. :-)]

LenAnderson@ieee.org

3403. Re: QUESTION: Logarithmic Amplifiers and their Uses

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-22 03:01:12 UTC
From: LenAnderson@ieee.org
Message-ID: <1121997897.883475.80640@g49g2000cwa.googlegroups.com>
Source record: 18086

From: Timo...@tholtom.freeserve.co.uk on Jul 21, 5:55 pm

>Anybody know of a site that explains what exactly a logarithmic
>amplifier is and how and where it is applied?

Not known by me. A logarithmic AMPLIFIER is a rare bird in
finished goods and the "successive detection" type is much
more common.

The best text I know of is "Logarithmic Video Amplifiers" by
Richard S. Hughes, then at the China Lake (CA) Naval Weapons
Center, Artech House 1971, published by Horizon House-Microwave,
Dedham, Massachusetts. "Video" in this context is up to 60
MHz plus...

Texas Instruments once made a Log Video Amplifier dual in a
dual-inline-package. Used that for some log-video R&D
circuitry in the 1970s. It went out of production, probably
due to low demand.

It's use was/is mainly in radar signal processing, considering
that the radar return varies a terrific number of db in
signal strength. One use that I had it for was to find the
3 db down point on an RF pulse which had a large peak signal
strength string. It is now used as a power output indicator
and, in Europe, has been the central part of a wide dynamic
range power meter for hams.

> I'm thinking in
>particular of the Analog Devices offerings.....

Those seem to be "successive detection log amplifiers." The
purpose there is to do a demodulation in amplitude of the
RF using successive non-linear amplifiers, each with its own
detector, the detector outputs summed. Summation of detector
outputs is a logarithmic characteristic compared to linear
input.

There IS a successive SUMMATION amplifier, or at least WAS,
and that does much the same although it sums the RF without
demodulation. Speaking from some experience, they are a
total #$%^!!!! to keep phase-stable over amplitude variations.
Others have found that. Not too many of those products were
available as ready goods.

LenAnderson@ieee.org

3404. Re: Is there affordable software I can use to map out circuit traces for a printed circuit board?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-22 03:43:15 UTC
From: betterone1@yahoo.com
Message-ID: <1122003795.064523.121980@g49g2000cwa.googlegroups.com>
Source record: 18087

have a look at TARGET3001 www.target3001.com ..richard

Cliff wrote:
> I about ready to design and build my own solid state RF amp. Is
> there a good and affordable piece of software out there that I can use
> to neatly map out the circuit traces for my printed circuit board.

3405. FA: Last few hours for Collins/Heath 6146A's(Syl)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-22 12:46:28 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <EU5Ee.22377$5N3.18030@bgtnsc05-news.ops.worldnet.att.net>
Source record: 18089
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

NOS Sylvania 6146A'S X2, for some Colling/ heath etc that need 'A' 6146,
SEE AT:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Other stuff coming along, thanks for looking: heytubeguy

3406. Re: QUESTION: Homebrew Near Field 3Ghz Frequency Meter.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-22 12:52:52 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2005.07.22.12.52.52.133005@oceanfree.net>
Source record: 18088

On Thu, 21 Jul 2005 16:23:23 -0700, K7ITM wrote:

> Several companies make prescalers. They tend to be
> expensive and not very easy to find.

Dead sat-tv receivers and some UHF tv tuners are a good
source of prescalers. I have never paid money for one.

73, Ed. EI9GQ.

--
Linux 2.6.12.1
Remove 'X' to reply by e-mail.

3407. Re: QUESTION: Cheap Accurate Shaft Position Encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-22 13:43:54 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1122039834.569313.174690@g47g2000cwa.googlegroups.com>
Source record: 18090

LenAnderson@ieee.org wrote:
> >From: xpyttl on Jul 17, 5:56 pm
> >>"Ian White G/GM3SEK" <g...@ifwtech.co.uk> wrote in message
> >>news:PxxDykEjBh2CFAB1@ifwtech.co.uk...
> >
> >>> For something like a receiver tuning control, even 256 steps/rev would
> >>> sound 'jumpy'. However, you could gear it up mechanically so that even a
> >
> >>Actually, 256 is getting too high in most cases. The "jumpiness" comes from
> >>the size of the step, i.e., the number of Hz per step. Encoders between 50
> >>and 100 are probably the easiest to deal with. You generally want to make
> >>the step size small, like 1 or 10 Hz, but you don't want hundreds of turns
> >>to cover the band.
> >
> > I'm into the actual receiver portion of a PLL-LO-controlled
> > HF SW BC receiver tuning in 1 KHz steps. The PLL and its
> > controlling circuitry are done and a 256-step Grayhill shaft
> > encoder is used with a shaft encoder decoder circuit from Dr.
> > Robert Dennis. That decoder circuit uses 3 HCMOS DIPs for
> > Up/Down counters having separate Up and Down clocks. One more
> > HCMOS DIP gate package is required for Up/Down counters having
> > a single clock input and having an Up or Down mode control pin.
> >
> >> At very high resolutions, the pulses can come very fast,
> >>so it gets tricky to distinguish the closure from noise.
> >
> > I didn't find it so. The Dennis Decoder will allow shaft
> > encoder rotation rates of 150 RPM with a 240-step shaft
> > encoder, no problem. Pressed faster, it can handle 300 RPM
> > or 5 revolutions per second...quite fast tuning. It is
>
> ADDENDA:
>
> The decoder circuit I used was from:
>
> http://www-personal.umich.edu/~bobden/quadrature_decoder.pdf
>
> Two internal time-constants were about 10 times faster than
> what I'm using for the tuning control on my receiver project.
> I deliberately lengthened the two internal pulses used in
> decoding to better observe them on a scope.
>
> The Dennis Decoder is indicated as originating in 1998.
>

> [University of Michigan, not Michigan State University. :-)]
>
> LenAnderson@ieee.org

Actually, if you want to be disgustingly cheap and easy (no machining required) then use a wheel mouse (complete) - plug it into your radio, and decode the wheel pulses for up/down = simple switch select and a few gates for tuning "rate". Worth a try - its not the space shuttle your trying to build.

73 de VK3BFA Andrew

3408. FA:VY RARE/NICE McMurdo Silver 5C+'Buy it now'

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-22 15:24:42 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <_c8Ee.22749$5N3.3598@bgtnsc05-news.ops.worldnet.att.net>
Source record: 18091
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

FA at ebay address below. Pse read description and shipping info carefully
on this very rare working unit from 1932-33 era:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx 73, heytueguy

3409. FA: NIB 6JE6C Tubes, Linear Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-22 16:42:56 UTC
From: tw@emailaccount.com
Message-ID: <1122050576.567044.229000@o13g2000cwo.googlegroups.com>
Source record: 18092
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

New-in-box pair of Sylvania 6JE6C / 6LQ6 Tubes, fully tested:

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5790299885

Worldwide shipping available.

3410. Re: antialiasing filter for undersampling

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-22 17:27:09 UTC
From: Mark <makolber@yahoo.com>
Message-ID: <1122053229.552528.156400@g47g2000cwa.googlegroups.com>
Source record: 18093

Yes, the input signal will try to "mix" with ALL the harmonics of the
sampling frequency. You must pick the sampling frequency so that the
desired signals mix down to the output you want and also no other
signals that may be present can also mix down to the output you want.
That is where the anti-aliasing BANDPASS filter helps by restricting
the possible input signals.

Mark

3411. Re: Anderson 'Powerpole' Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-22 18:21:14 UTC
From: fmmck@aol.com
Message-ID: <fmmck-2207051421140001@ac9f4bda.ipt.aol.com>
Source record: 18094

In article <11dvqf4eqouejcd@corp.supernews.com>, dplatt@radagast.org (Dave Platt) wrote:

> - Secure the red and black connectors together after slip-fitting them,
> so that they can't come apart and be reconnected incorrectly.
> Anderson provides "roll pins" for this purpose, to lock 'em
> together, but I've heard some people say that these can vibrate out
> of the connectors. I prefer to use a drop of Crazy Glue or acetone
> to permanently bond 'em together.

Dave-

Anderson may supply the roll pins if you ask, but they don't come with the connectors.

I found out about the adoption by various emergency organizations such as RACES, and converted all of my equipment. I started with a roll pin in each pair, but soon noticed that over half of the pins had fallen out. Fortunately there was no damage from pins falling into live electronic equipment.

Thinking I just had the wrong roll pins, I tried to buy some from an Anderson dealer. That is where I heard about using Crazy Glue.

I hadn't considered offsetting the connectors so black and red could connect. Yes, that would be a problem, so don't to that!

Although Anderson Power Poles seem like a good idea, I'm by myself around here. The local RACES/ARES guys insist on using Molex connectors as their standard (IC-22A compatible), ignoring that they aren't rated for the current their modern equipment uses.

73, Fred, K4DII

3412. Re: CW filter/notch filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-22 18:41:18 UTC
From: fmmck@aol.com
Message-ID: <fmmck-2207051441180001@ac9f4bda.ipt.aol.com>
Source record: 18095

In article <1121989020.770510.116450@g14g2000cwa.googlegroups.com>,
"K7ITM" <k7itm@aol.com> wrote:

>... or just transmit the SSB with a
> suppressed carrier that you don't have to worry about removing.)

Tom & Sam-

That is what I was going to suggest. It is a common practice to send a partially reduced carrier that doesn't eat up a lot of power, but allows you to synchronize to it using a synchronous detector.

When detected, the carrier translates to zero frequency relative to the modulation, so it can be eliminated by a DC-blocking capacitor.

I think such a system is in use by some foreign broadcasters. (I'm thinking one is at 21.455 MHz?) It doesn't sound quite right using an AM detector. It can be received on an SSB receiver, but you have to carefully tune it so music sounds right.

If you insist on the 1 KHz pilot tone approach, you could end up with both the pilot tone and a small vestige of the suppressed carrier. Your filter system might lock-up on either the pilot tone or the carrier!

73, Fred, K4DII

3413. Re: Anderson 'Powerpole' Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-22 18:45:30 UTC
From: dplatt@radagast.org
Message-ID: <11e2fmamjkttk99@corp.supernews.com>
Source record: 18096

In article <fmmck-2207051421140001@ac9f4bda.ipt.aol.com>,

>> - Secure the red and black connectors together after slip-fitting them,
>> so that they can't come apart and be reconnected incorrectly.
>> Anderson provides "roll pins" for this purpose, to lock 'em
>> together, but I've heard some people say that these can vibrate out
>> of the connectors. I prefer to use a drop of Crazy Glue or acetone
>> to permanently bond 'em together.
>
>Dave-
>
>Anderson may supply the roll pins if you ask, but they don't come with the
>connectors.

Seems to depend on the distributor, then. One merchant from whom I
bought PowerPoles at Pacificon a couple of years ago included them in
the bag. PowerWerx sells them separately, and I don't bother buying
them.

>I found out about the adoption by various emergency organizations such as
>RACES, and converted all of my equipment. I started with a roll pin in
>each pair, but soon noticed that over half of the pins had fallen out.
>Fortunately there was no damage from pins falling into live electronic
>equipment.

Other people seem to have had the same experience.

>Thinking I just had the wrong roll pins, I tried to buy some from an
>Anderson dealer. That is where I heard about using Crazy Glue.
>
>I hadn't considered offsetting the connectors so black and red could
>connect. Yes, that would be a problem, so don't to that!

Yup.

>Although Anderson Power Poles seem like a good idea, I'm by myself around
>here. The local RACES/ARES guys insist on using Molex connectors as their
>standard (IC-22A compatible), ignoring that they aren't rated for the
>current their modern equipment uses.

Are those the old-style stamped-metal round Molex pins, such as one
finds in a PC power supply cable, or are they using the flat-metal
"OEM T" connector used by a lot of the radio manufacturers these days?
I can't tell from the picture in the IC-22 manual I downloaded.

I really loathe the round-pin Molex - it really doesn't seem like a
design that will either stand up to repeated cyclings, or handle a lot

of current.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3414. Re: QUESTION: Cheap Accurate Shaft Position Encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-22 20:00:10 UTC
From: LenAnderson@ieee.org
Message-ID: <1122062410.359376.236440@o13g2000cwo.googlegroups.com>
Source record: 18097

Well, "disgustingly cheap" but requiring MORE steps than a mouse
wheel
can be done by a spare gear of around 40 or more teeth. I just
tried that
with an 80-tooth gear that's been in the junkbox for decades. Used
an
optical interrupter but had to Dremel open the spacing (cut the base
of the
plastic mounting).

Gear teeth are cut with precision and even rejects are good enough
for this
kind of adaptation. About the only problem is that the openings
aren't as
abrupt as the mouse wheel...but that is easily overcome by a Schmitt
trigger inverter...and perhaps some shielding from ambient light
into the
interrupters' photosensor. Used a Fairchild interrupter costing
about $2, left
over from another project.

I mentioned the Robert Dennis circuit for its simplicity in using
ALL the
transitions possible of a sensor wheel. That's twice as many as a
more
common dual-D FF decoder circuit. Takes three packages versus one
to
get all the transitions for Up/Down outputs for direction sensing.

NOT the space shuttle, yes. I've worked on the instrumentatin for
the
space shuttle main engines (at Rocketdyne) and understand the
complexity
and reliability needs for man-rated spaceflight. :-)

LenAnderson@ieee.org

3415. Re: CW filter/notch filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-22 20:31:51 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrnde2ltn.2iba.ben@saturn.home.ben.com>
Source record: 17948

On 2005-07-21, Samuel Hunt <shunt010@hotmail.com> wrote:
> I'm planning to build a AFC system for SSB, which has a 1khz pilot tone that
> will be used to lock the frequency correct.

If you are going to lock onto it so that that signal is exactly 1khz,
why not just cancel it with a 1khz signal 180 degrees out of phase?
This is essentially how an FIR filter would remove it digitally, but
you don't really need to generate the tone FROM the signal since you
know what it is already.

--
Ben Jackson
<ben@ben.com>
http://www.ben.com/

3416. A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-22 21:25:01 UTC
From: Polymath <invalid@invalid.invalid>
Message-ID: <42e163e0$1_1@x-privat.org>
Source record: 17949
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing

of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

3417. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-22 21:53:11 UTC
From: Howard <howardwj@tiscali.co.uk>
Message-ID: <42e16ac7$1_3@mk-nntp-2.news.uk.tiscali.com>
Source record: 17950
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Sounds a bit like Amateur Radio.
H.
"Polymath" <invalid@invalid.invalid> wrote in message
news:42e163e0$1_1@x-privat.org...
> What is Ham Radio?
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.
>
> Ham Radio awakens in its aficionados a whole-life
> fascination with all things technical and gives
> an all-abiding curiosity to improve one's scientific
> knowledge. It's a great swimming pool, please dive in!
>
> This excitement causes a wish to share the experience
> with ones fellow man, and shows itself in the
> gentlemanly traditions of Ham Radio.
>
> Radio Hams are qualified to design, build and then
> operate their own pieces of equipment. They do this
> with gusto, and also repair and modify their own
> equipment.
>
> The excitement that drives a Radio Ham starts with
> relatively simple technologies at first, perhaps making
> his own Wimshurst machine and primary cells. Small pieces
> of test equipment follow, possibly multimeters and signal
> generators. Then comes receivers and transmitters. It is with
> the latter that communication with like-minded technically
> motivated people takes off. The scope for technical
> development grows with the years
> and now encompasses DSP and DDS. There is also a great deal
> of excitement in the areas of computer programming to
> be learnt and applied.
>
> The technical excitement motivates Radio Hams to compete
> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.

>
> -----OOOOO----
>
> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large
> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
> repaired; they are not interested in technical discussion
> and sneer at those who are; they have no idea how
> their radios work inside and have no wish to find out;
> they are free with rather silly personal insults;
> they have not satisfied any technical qualification
> and their licences prevent the use of
> self-designed-and-built equipment.
>
> These CB types engage in the competitive activities
> with their Cheque-Book-purchased off-the-shelf radios
> in a forlorn effort to prove that they are Radio Hams.
>
> No _REAL_ Radio Hams are deceived by such people!
>
>
>
>

3418. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-22 22:35:05 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <tweEe.5974$_%4.2288@newssvr14.news.prodigy.com>
Source record: 17951
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Polymath wrote:
> What is Ham Radio?
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.
>
> Ham Radio awakens in its aficionados a whole-life
> fascination with all things technical and gives
> an all-abiding curiosity to improve one's scientific
> knowledge. It's a great swimming pool, please dive in!
>
> This excitement causes a wish to share the experience
> with ones fellow man, and shows itself in the
> gentlemanly traditions of Ham Radio.
>
> Radio Hams are qualified to design, build and then
> operate their own pieces of equipment. They do this
> with gusto, and also repair and modify their own
> equipment.
>
> The excitement that drives a Radio Ham starts with
> relatively simple technologies at first, perhaps making
> his own Wimshurst machine and primary cells. Small pieces
> of test equipment follow, possibly multimeters and signal
> generators. Then comes receivers and transmitters. It is with
> the latter that communication with like-minded technically
> motivated people takes off. The scope for technical
> development grows with the years
> and now encompasses DSP and DDS. There is also a great deal
> of excitement in the areas of computer programming to
> be learnt and applied.
>
> The technical excitement motivates Radio Hams to compete
> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.
>
> -----00000----
>

> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large
> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
> repaired; they are not interested in technical discussion
> and sneer at those who are; they have no idea how
> their radios work inside and have no wish to find out;
> they are free with rather silly personal insults;
> they have not satisfied any technical qualification
> and their licences prevent the use of
> self-designed-and-built equipment.
>
> These CB types engage in the competitive activities
> with their Cheque-Book-purchased off-the-shelf radios
> in a forlorn effort to prove that they are Radio Hams.
>
> No _REAL_ Radio Hams are deceived by such people!
>
>
>
>

Another day, another wretched, little troll from another
mediocre mind so filled with the desire to be recognized it has to
argue phantasms so people will notice. As has commonly been said,
it's more to be pitied than scorned.
73,
Tom Donaly, KA6RUH

3419. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-22 22:39:00 UTC
From: Spike <Aero.Spike@Technologies.invalid>
Message-ID: <uat2e1dnjj9adb02r13akhahttpcu2epk1@4ax.com>
Source record: 17952
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Tom Donaly wrote:

>Another day, another wretched, little troll from another
>mediocre mind so filled with the desire to be recognized it has to
>argue phantasms so people will notice. As has commonly been said,
>it's more to be pitied than scorned.

Quite. But there's no need to repost the whole bloody thing.

from
Aero Spike

3420. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-22 22:59:32 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <oTeEe.12407$vv6.7273@newsfe6-gui.ntli.net>
Source record: 17953
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Tom Donaly wrote:
> Polymath wrote:
>
>> What is Ham Radio?
>>
< crap snipped >
>>
>
> Another day, another wretched, little troll from another
> mediocre mind so filled with the desire to be recognized it has to
> argue phantasms so people will notice. As has commonly been said,
> it's more to be pitied than scorned.
> 73,
> Tom Donaly, KA6RUH
I agree, but it's fun taking the piss out of him.
--
;-)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

3421. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-22 23:52:18 UTC
From: Graham <me@privacy.net>
Message-ID: <42e18697$1_3@mk-nntp-1.news.uk.worldonline.com>
Source record: 17954
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"Polymath" <invalid@invalid.invalid> wrote in message
news:42e163e0$1_1@x-privat.org...
> What is Ham Radio?

What is Ham Radio Poly?
I have never considered myself to be a Ham
When exactly did Amateurs in this country (apart from the Tony Hancock
character) become Hams?

--
Graham.
G3ZVT

%Profound_observation%

3422. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-22 23:57:26 UTC
From: andrew <andrew0720@f2s.com>
Message-ID: <dbs157vhe2@news.freedom2surf.net>
Source record: 17955
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Graham wrote:
> "Polymath" <invalid@invalid.invalid> wrote in message
> news:42e163e0$1_1@x-privat.org...
>
>>What is Ham Radio?
>
>
> What is Ham Radio Poly?
> I have never considered myself to be a Ham
> When exactly did Amateurs in this country (apart from the Tony Hancock
> character) become Hams?
>

OED definition of 'ham'....

ham

• noun 1 an inexpert or unsubtle actor or piece of acting. 2 (also
radio ham) informal an amateur radio operator.

• verb (hammed, hamming) informal overact.

— ORIGIN perhaps from the first syllable of AMATEUR.

3423. Re: Anderson 'Powerpole' Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 00:36:50 UTC
From: RadioGuy <nospam@nospam.com>
Message-ID: <CigEe.24033$5N3.18493@bgtnsc05-news.ops.worldnet.att.net>
Source record: 17957

After trying all the permutations and combinations of connector arrangements I have concluded there is no way the 'PowerPole' connectors can be configured to prevent a short-circuit as the connectors are presently designed.

However, if the dovetails are altered (redesign of the injection mold) the connectors can be oriented 'on top of ' as opposed to the current 'side by side' orientation ---the new design will then allow the connectors halves to mate only ONE way. The connectors will no longer be 'mirrored' and as the 'PowerPole' connectors do not posess a gender a standard will be required regarding which connector half is used for the supply side and which is used for the equipment side. It is highly unlikely that Anderson will redesign the 'PowerPole' connector to meet the needs of the Ham community.

It amazes me that this connector, with the potential of short-circuit from misalignment, could be considered a standard for power connections of emergency communications equipment. In review of the literature no mention is made of the possibility of improperly mating of these connectors. This must be the first time in my experience that equipment and power source must be fused to prevent a short-circuit resulting from improper connector mating---unbelievable. I think the 'PowerPole' connector has the earmark of a classic 'Ham boondoggle'.

RG

3424. anyone know about kit modifation to CW rigs for RTTY or other digital modes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 00:42:49 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1122079369.854847.47250@g43g2000cwa.googlegroups.com>
Source record: 17958
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy

Back a long (pre 2000)while in Policy someone was tlaking about it
being easy to modify one the lowpower CW transceiver kits for some or
other digital modes

Anyone have some thoiught and info on this With Nocde HF comming I'd
love to build something that, either stand alone or laptop asisted

3425. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 00:45:19 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <zqgEe.6040$_%4.1166@newssvr14.news.prodigy.com>
Source record: 17959
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Spike wrote:
> Tom Donaly wrote:
>
>
>>Another day, another wretched, little troll from another
>>mediocre mind so filled with the desire to be recognized it has to
>>argue phantasms so people will notice. As has commonly been said,
>>it's more to be pitied than scorned.
>
>
> Quite. But there's no need to repost the whole bloody thing.
>
> from
> Aero Spike

Ah, a fine example of childish, British pique. How superior of you.
I'll tell you what, m'boy. From now on, I'll send all my posts to
you before I post them so you can rewrite them to your satisfaction.
Ha, ha! I've never read a more stereotypical post.
73,
Tom Donaly, KA6RUH

3426. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 01:11:32 UTC
From: Chris Kirby <g4fzn@yahoo.com>
Message-ID: <1663e1l4f2m27o1d9lh2qemc9k38l0qtcq@4ax.com>
Source record: 17960
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Tom Donaly wrote:
>Spike wrote:
>> Tom Donaly wrote:
>>
>>
>>>>Another day, another wretched, little troll from another
>>>>mediocre mind so filled with the desire to be recognized it has to
>>>>argue phantasms so people will notice. As has commonly been said,
>>>>it's more to be pitied than scorned.
>>
>>
>> Quite. But there's no need to repost the whole bloody thing.
>>
>> from
>> Aero Spike
>
>Ah, a fine example of childish, British pique. How superior of you.
>I'll tell you what, m'boy. From now on, I'll send all my posts to
>you before I post them so you can rewrite them to your satisfaction.

Good idea. Thanks.

--
Chris

3427. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 01:12:58 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2005.07.23.01.12.58.912925@oceanfree.net>
Source record: 17956

On Fri, 22 Jul 2005 22:25:01 +0100, Polymath wrote:

> What is Ham Radio?...........

Barely a twitch on the Troll-O-Meter.
Yawn!

Ed. EI9GQ.

--
Linux 2.6.12.1
Remove 'X' to reply by e-mail.

3428. Re: Anderson 'Powerpole' Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 04:23:49 UTC
From: dplatt@radagast.org
Message-ID: <11e3hilskrvc579@corp.supernews.com>
Source record: 17961

In article <CigEe.24033$5N3.18493@bgtnsc05-news.ops.worldnet.att.net>,
RadioGuy <nospam@nospam.com> wrote:

>However, if the dovetails are altered (redesign of the injection mold) the
>connectors can be oriented 'on top of ' as opposed to the current 'side by
>side' orientation ---the new design will then allow the connectors halves to
>mate only ONE way. The connectors will no longer be 'mirrored' and as the
>'PowerPole' connectors do not posess a gender a standard will be required
>regarding which connector half is used for the supply side and which is used
>for the equipment side.

This would eliminate the perceived (and actual) benefit of having a
genderless arrangment, which lets you plug a battery into a radio
(acting as a supply) or into a charger or power supply (acting as a
load, for recharging), or into a distribution panel alongside radio
connections (acting as a floating backup to a mains-powered supply).

> It is highly unlikely that Anderson will redesign
>the 'PowerPole' connector to meet the needs of the Ham community.

Agreed.

>It amazes me that this connector, with the potential of short-circuit from
>misalignment, could be considered a standard for power connections of
>emergency communications equipment.

The PowerPoles have been around for quite a while, and have seen a lot
of use in fields other than ham radio. I'm curious as to whether you
can cite evidence that the problem you forsee, actually occurs in
practice?

> In review of the literature no mention
>is made of the possibility of improperly mating of these connectors. This
>must be the first time in my experience that equipment and power source must
>be fused to prevent a short-circuit resulting from improper connector
>mating---unbelievable.

All power sources must be fused, in any case, in order to provide
protection against short circuits. In a mobile setting, it's canon
that both the hot and neutral should be fused, as close to the battery
as possible, in order to avoid dangerous ground-wire currents if the
alternator ground wire pops loose from the battery.

I'm not convinced that the PowerPole arrangement requires any
additional fusing, above and beyond what's normal and appropriate for
ham gear. Proper fusing on the hot side of the source ought to be
sufficient to result in an immediate fuse-blow under any PowerPole

misconnection arrangment I've been able to envision.

As I see it, if a PowerPole set is correctly wired, there are four ways to try to mate it.

One is correct, and works. One has the connectors rotated 180 degrees out of phase - doesn't mate, no problem.

One way has them rotated correctly, but offset in one direction - radio's "hot" goes to supply ground, radio's ground is unconnected (or occurs via the antenna or chassis mount). This one seems completely benign, as the radio is connected only to ground - radio doesn't power up, but there seems to be no potential for damage.

The fourth case is the only arguably problematic one, as it connects the supply hot to the radio ground. This seems very likely to blow the supply fuse, either instantly or the moment the radio chassis touches ground. I don't see the need for a separate fuse in the radio's own ground lead, as long as the supply fuse is of the proper value for the installation.

> I think the 'PowerPole' connector has the earmark
>of a classic 'Ham boondoggle'.

I concede the possibility, in principle, of mismatings of the sort you mention. I've not ever heard of any occurring in practice.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

3429. Re: anyone know about kit modifation to CW rigs for RTTY or other digital modes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 04:33:05 UTC
From: dplatt@radagast.org
Message-ID: <11e3i41qkdkcje7@corp.supernews.com>
Source record: 17962
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy

In article <1122079369.854847.47250@g43g2000cwa.googlegroups.com>,
an_old_friend <konstans@hotmail.com> wrote:

>Back a long (pre 2000)while in Policy someone was tlaking about it
>being easy to modify one the lowpower CW transceiver kits for some or
>other digital modes
>
>Anyone have some thoiught and info on this With Nocde HF comming I'd
>love to build something that, either stand alone or laptop asisted

It shouldn't be difficult to modify a VFO-tuned CW transmitter to
transmit RTTY. You could do this with a varactor diode, in parallel
with the main tuning capacitor - drive the varactor with a two-state
variable voltage, to shift the transmit frequency the necessary number
of Hz.

If you have a VFO-tuned CW transceiver, which uses a varactor to
offset the transmit and receive frequencies by the appropriate
distance to generate a receive sidetone, then this transmit-offset
circuit could probably be modified pretty easily for dual-offset RTTY
operation.

You might need to retune your receiver bandpass filter to widen the
passband a bit... this would depend on the mode and the rig.

You might be able to do something similar to this with a
crystal-controlled QRP rig, but I suspect that pulling a crystal that
far with a varactor might be somewhat difficult.

This basic approach was, I believe, the preferred one for RTTY
transmission years ago, back before sideband rigs had good carrier and
opposite-sideband suppression. It can result in a cleaner RTTY signal
than you'd get if you use AFSK modulation into a sloppy sideband
transmitter.

Doing more-sophisticated digital modulations (e.g. PSK31) would
probably require starting with a sideband rig.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3430. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 06:45:31 UTC
From: Paul <p.grace@ntlworld.com>
Message-ID: <42e1e736$0$351$cc9e4d1f@news.dial.pipex.com>
Source record: 17963
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"Polymath" <invalid@invalid.invalid> wrote in message
news:42e163e0$1_1@x-privat.org...
> What is Ham Radio?

>
Yawn

Not only is he very boring he isnt even original....This is a copy of
someone elses posts.

Ah well...he probably has issues and cant cope with real life and struggles
with cyberlife as he's hiding.
We dont even know if he's a radio ham.....I hope not

Cheers
Paul
MW0DCT

3431. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 08:07:25 UTC
From: Spike <Aero.Spike@Technologies.invalid>
Message-ID: <j9u3e1t2rkad0jbepklanne7n13b9vod7r@4ax.com>
Source record: 17964
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Tom Donaly wrote:

>Spike wrote:
>> Tom Donaly wrote:
>>
>>
>>>Another day, another wretched, little troll from another
>>>mediocre mind so filled with the desire to be recognized it has to
>>>argue phantasms so people will notice. As has commonly been said,
>>>it's more to be pitied than scorned.
>>
>>
>> Quite. But there's no need to repost the whole bloody thing.
>>
>> from
>> Aero Spike
>
>Ah, a fine example of childish, British pique. How superior of you.
>I'll tell you what, m'boy. From now on, I'll send all my posts to
>you before I post them so you can rewrite them to your satisfaction.
>Ha, ha! I've never read a more stereotypical post.
>73,
>Tom Donaly, KA6RUH

Technically speaking, your post was at best impolite. There are plenty
of people who have killfiled the OP, and your thoughtless action
resulted in their KFs being bypassed. There are also plenty of people
on dialup, who may have already downloaded the OP's rubbish, and don't
want to pay again to download yet another copy. And, by the way, I
suggest you put further posts where the sun doesn't shine.

from
Aero Spike

3432. TCXO Clipped Sine Wave (all my fault!!)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 09:36:56 UTC
From: doug dwyer <dd@ddwyer.demon.co.uk>
Message-ID: <9Prf9IB4+g4CFw0y@ddwyer.demon.co.uk>
Source record: 17965

In message <lhzCe.79508$h5.3321294@news3.tin.it>, Mario Bros
<rocco.calbe@tin.it> writes
>Hi folks,
>I would have to ask a clarification regard to the TCXO.
>They are found with output TTL, HCMOS and CLIPPED SINE WAVE.
>It is just with respect to this last type that I would want to have
>elucidations on when it is convenient to employ it, which the advantages and
>the disadvantages and which the extension of spectral harmonicas.
>In synthesis, from the plan point of view, which are the motivations that
>they make to incline towards a Clipped oscillator?
>
>Anticipated thanks.
>
>73's de IK6GQC Rocco
>
>
I designed some of the first TCXOs , simple oscillators manufactured
they used no agc control and relied on the average oscillator
maintaining circuit gain to drop to limit oscillation level. Hence
clipped sine.
I.E gain during the transition and no gain during limiting.
This output then coupled to a buffer amp for isolation was the
Lowest cost option.
When logic compatibility was required a logic buffer or open collector
provided.
Also I note that (many years ago) when the first prototypes were
required I looked through a junk box for any small case and selected
most appropriate arbitary case.
These TCXO OCXO case dimensions can now be found as standard from many
TCXO / OCXO manufacturers around the world.
--
dd

3433. Re: TCXO Clipped Sine Wave

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 09:50:18 UTC
From: doug dwyer <dd@ddwyer.demon.co.uk>
Message-ID: <9ujP1eCaLh4CFwGU@ddwyer.demon.co.uk>
Source record: 17966

In message <lhzCe.79508$h5.3321294@news3.tin.it>, Mario Bros
<rocco.calbe@tin.it> writes
>Hi folks,
>I would have to ask a clarification regard to the TCXO.
>They are found with output TTL, HCMOS and CLIPPED SINE WAVE.
>It is just with respect to this last type that I would want to have
>elucidations on when it is convenient to employ it, which the advantages and
>the disadvantages and which the extension of spectral harmonicas.
>In synthesis, from the plan point of view, which are the motivations that
>they make to incline towards a Clipped oscillator?
>
>Anticipated thanks.
>
>73's de IK6GQC Rocco
>
>
A further note the ssb noise will depend on the crystal Q the noise
level in the compensation circuit and the level of crystal oscillation.
Best with no compensation circuit ie XO or OCXO
The smallest crystals cannot be driven as hard as the bigger ones so
dont go for the smallest case!
The easiest way to indicate ssb noise may be to beat two identical
oscillators together with a few HZ offset.
Or lock one to the other using the voltage control line (exclusive or is
the easiest PLL circuit?)
The display the lock voltage on a scope.

--
dd

3434. Re: Silver Mica vs Mica Caps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 10:03:55 UTC
From: doug dwyer <dd@ddwyer.demon.co.uk>
Message-ID: <5+nOxDDLYh4CFwnK@ddwyer.demon.co.uk>
Source record: 17967

In message <hd3qd1l3c60o31dt40v2ds12q9mslu6av9@4ax.com>, Jim Adney
<jadney@vwtype3.org> writes
>On Mon, 18 Jul 2005 01:15:24 -0400 -ex- <exray@coqui.net> wrote:
>
>>Nowadays, I'm not sure exactly what it is I'm buying when I buy the
>>"dipped mica" caps. I'm confident to say they are better than the
>>old-timers but are they silver plated onto mica or what?
>
>They are plated, but I don't know for sure that there is any sliver in
>the process. Perhaps there never was....
>
>I share your confidence, but only time will tell for sure.
>
>-
>--
> Jim Adney jadney@vwtype3.org
> Madison, WI 53711 USA
>--
Mica used to be cleaved and plated then a lower costt mica reconstituted
was employed all were silver evaporated.
Dipped refers to the encapsulation.
Low values had their tc altered by the encapsulation material.
Modern npo ceramic chips are Much? Better. Also some porcelain are the
best for Q ie loss.
--
dd

3435. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 11:49:24 UTC
From: Polymath <invalid@invalid.invalid>
Message-ID: <42e22f6f_2@x-privat.org>
Source record: 17968
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In consideration of the rather immature Childish Broadcast (CB)
quoted below, any reasonable man would conjecture that
"KA6RUH" is some form of Yankland CB licence.

Ham Radio has traditions of international friendliness which
seem to be lost on you.

"Tom Donaly" <dtdonaly@sbcglobal.net> wrote in message
news:tweEe.5974$_%4.2288@newssvr14.news.prodigy.com...

> Another day, another wretched, little troll from another
> mediocre mind so filled with the desire to be recognized it has to
> argue phantasms so people will notice. As has commonly been said,
> it's more to be pitied than scorned.
> 73,
> Tom Donaly, KA6RUH

3436. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 11:50:59 UTC
From: Polymath <invalid@invalid.invalid>
Message-ID: <42e22f6f$2_2@x-privat.org>
Source record: 17969
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

The person with whom you are in discourse below, AKA "RVMJ",
AKA "Mrs.Nugatory" is well-renowned for having the pedantic
mind associated with a 13-year-old.

"Tom Donaly" <dtdonaly@sbcglobal.net> wrote in message
news:zqgEe.6040$_%4.1166@newssvr14.news.prodigy.com...
> Spike wrote:
>> Tom Donaly wrote:
>>>Another day, another wretched, little troll from another
>>>mediocre mind so filled with the desire to be recognized it has to
>>>argue phantasms so people will notice. As has commonly been said,
>>>it's more to be pitied than scorned.
>> Quite. But there's no need to repost the whole bloody thing.
>> from
>> Aero Spike
> Ah, a fine example of childish, British pique. How superior of you.
> I'll tell you what, m'boy. From now on, I'll send all my posts to
> you before I post them so you can rewrite them to your satisfaction.
> Ha, ha! I've never read a more stereotypical post.
> 73,
> Tom Donaly, KA6RUH

3437. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 12:10:58 UTC
From: Mark <nospam@nospam.com>
Message-ID: <dbtc4i$3i7$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 17970
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

FFS, killfile the twat- its only because of you idiots taking his bait I can see his posts.

Mark

3438. Re: Reposted due to thread hijacking by CBers....A Ham Radio FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 12:34:23 UTC
From: Polymath <invalid@invalid.invalid>
Message-ID: <42e23902$1_3@x-privat.org>
Source record: 17971

> What is Ham Radio?
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.
>
> Ham Radio awakens in its aficionados a whole-life
> fascination with all things technical and gives
> an all-abiding curiosity to improve one's scientific
> knowledge. It's a great swimming pool, please dive in!
>
> This excitement causes a wish to share the experience
> with ones fellow man, and shows itself in the
> gentlemanly traditions of Ham Radio.
>
> Radio Hams are qualified to design, build and then
> operate their own pieces of equipment. They do this
> with gusto, and also repair and modify their own
> equipment.
>
> The excitement that drives a Radio Ham starts with
> relatively simple technologies at first, perhaps making
> his own Wimshurst machine and primary cells. Small pieces
> of test equipment follow, possibly multimeters and signal
> generators. Then comes receivers and transmitters. It is with
> the latter that communication with like-minded technically
> motivated people takes off. The scope for technical
> development grows with the years
> and now encompasses DSP and DDS. There is also a great deal
> of excitement in the areas of computer programming to
> be learnt and applied.
>
> The technical excitement motivates Radio Hams to compete
> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.
>
> -----OOOOO----
>
> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large

> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
> repaired; they are not interested in technical discussion
> and sneer at those who are; they have no idea how
> their radios work inside and have no wish to find out;
> they are free with rather silly personal insults;
> they have not satisfied any technical qualification
> and their licences prevent the use of
> self-designed-and-built equipment.
>
> These CB types engage in the competitive activities
> with their Cheque-Book-purchased off-the-shelf radios
> in a forlorn effort to prove that they are Radio Hams.
>
> No _REAL_ Radio Hams are deceived by such people!

3439. Re: Reposted due to thread hijacking by CBers....A Ham Radio FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 12:41:03 UTC
From: "Harold E. Johnson" <w4zcb@mchsi.com>
Message-ID: <zVqEe.174933$_o.95578@attbi_s71>
Source record: 17973

"Polymath" <invalid@invalid.invalid> wrote in message
news:42e23902$1_3@x-privat.org...
>
My God, Airy Beannie has changed his name yet again! My kill list grows and
grows. Get kicked off your previous ISP Beannie ?

W4ZCB

3440. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 12:41:36 UTC
From: Polymath <invalid@invalid.invalid>
Message-ID: <42e23ab6$1_1@x-privat.org>
Source record: 17972

With good reason - because it isn't a troll.

If your mental psyche presumes it to be, is that because
"EI9GQ" is some form of Ireland CB issue?

"Eamon Skelton" <Xnospam@oceanfree.net> wrote in message
news:pan.2005.07.23.01.12.58.912925@oceanfree.net...
> On Fri, 22 Jul 2005 22:25:01 +0100, Polymath wrote:
>> What is Ham Radio?.....
> Barely a twitch on the Troll-O-Meter.
> Yawn!
> Ed. EI9GQ.

3441. Re: Reposted due to thread hijacking by CBers....A Ham Radio FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 12:43:42 UTC
From: Polymath <invalid@invalid.invalid>
Message-ID: <42e23b3e$1_3@x-privat.org>
Source record: 17974

In consideration of the rather silly Childish Broadcast (CB)
quoted below, would it be correct to assume that "W4CZB" is
some form of Yankland CB issue?

Ham Radio has traditions of international friendliness which seem
to be lost on you.

"Harold E. Johnson" <w4zcb@mchsi.com> wrote in message
news:zVqEe.174933$_o.95578@attbi_s71...
> "Polymath" <invalid@invalid.invalid> wrote in message
> news:42e23902$1_3@x-privat.org...
> My God, Airy Beannie has changed his name yet again! My kill list grows
> and grows. Get kicked off your previous ISP Beannie ?
> W4ZCB

3442. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 12:47:38 UTC
From: dkelly42@cox.net
Message-ID: <1122122858.373368.270640@o13g2000cwo.googlegroups.com>
Source record: 17975
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Can't figure why an individual needs to qualify a group as diverse as amateur radio operators in such a manner as this. Trying to describe amateurs is like trying to determine what color of blue the sky is. However, if only more ham were curious about how their gear worked or liked to experiment or had the patience (most important) to design their own gear. Sadly, many couldn't work their way through a block diagram of their simplest gear and don't have the desire to study and learn. I guess most hams have heard by now that the code requirements will be eliminated from the US licensing requirements. My hope is that there will be an influx of technically inclined/curious people who prior to the proposed change were not interested in CW and now will consider becoming amateurs. Homebrew is not the endall for being a "good" ham and is not for some any more than participating in public service should be. It is just interesting if not exciting to see what clever circuits that some guys (many non amateur) design. I consider myself a very average homebrewer, perhaps a "bit" behind the technology of today as I still build some tube gear. But over the last year the most satisfying contacts I have made have been with amateurs that had complete scratch state of the art homebrew stations. It was interesting pitting my 70's and 80's technology against their state of the art though.

Don K5UOS

3443. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 12:50:05 UTC
From: Polymath <invalid@invalid.invalid>
Message-ID: <42e23cb1$1_1@x-privat.org>
Source record: 17976
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

I am not discussing operators, I am discussing Radio Hams.

Ham Radio is a technical pursuit. It is CB Radio that is
concerned only with operating.

<dkelly42@cox.net> wrote in message
news:1122122858.373368.270640@o13g2000cwo.googlegroups.com...
> Can't figure why an individual needs to qualify a group as diverse as
> amateur radio operators in such a manner as this.

3444. Re: TCXO Clipped Sine Wave

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 12:51:24 UTC
From: Mario Bros <rocco.calbe@tin.it>
Message-ID: <g3rEe.1100$2U1.119857@news3.tin.it>
Source record: 17977

Hi Doug,
A lot interesting. Thanks for the ulterior contribution.
In these days I will make some test in order to try the better
solution.

73's de IK6GQC Rocco

"doug dwyer" <dd@ddwyer.demon.co.uk> ha scritto nel messaggio
news:9ujP1eCaLh4CFwGU@ddwyer.demon.co.uk...
> In message <lhzCe.79508$h5.3321294@news3.tin.it>, Mario Bros
> <rocco.calbe@tin.it> writes
>>Hi folks,
>>I would have to ask a clarification regard to the TCXO.
>>They are found with output TTL, HCMOS and CLIPPED SINE WAVE.
>>It is just with respect to this last type that I would want to have
>>elucidations on when it is convenient to employ it, which the advantages
>>and
>>the disadvantages and which the extension of spectral harmonicas.
>>In synthesis, from the plan point of view, which are the motivations that
>>they make to incline towards a Clipped oscillator?
>>
>>Anticipated thanks.
>>
>>73's de IK6GQC Rocco
>>
>>
> A further note the ssb noise will depend on the crystal Q the noise level
> in the compensation circuit and the level of crystal oscillation.
> Best with no compensation circuit ie XO or OCXO
> The smallest crystals cannot be driven as hard as the bigger ones so dont
> go for the smallest case!
> The easiest way to indicate ssb noise may be to beat two identical
> oscillators together with a few HZ offset.
> Or lock one to the other using the voltage control line (exclusive or is
> the easiest PLL circuit?)
> The display the lock voltage on a scope.
>
>
> --
> dd

3445. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 12:51:56 UTC
From: Spike <Aero.Spike@Technologies.invalid>
Message-ID: <m9f4e1dqgumrjht0rcjchorp9kcaoooelu@4ax.com>
Source record: 17978
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Mark wrote:

>FFS, killfile the twat- its only because of you idiots taking his bait I can
>see his posts.
>
>Mark
>

That's in effect what I said, but I got b*ll*cked by some foreigner..

from
Aero Spike

3446. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 13:04:41 UTC
From: zzzpk_pkearn_class_a@its-as-easy-as-they-say-multi_band_cb_is_here.eircom.es.it.net
Message-ID: <42e24056.3044985@news.iol.ie>
Source record: 17979
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Spike <Aero.Spike@Technologies.invalid> wrote:

: Mark wrote:
:
: >FFS, killfile the twat- its only because of you idiots taking his bait I can
: >see his posts.
: >
: >Mark
: >
:
: That's in effect what I said, but I got b*ll*cked by some foreigner..

en Francais oder auf Englisch ?

3447. FA:Heath: SQ-1, SG-7 (not SG-1),VY Nice

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 13:31:26 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <OErEe.471168$cg1.189960@bgtnsc04-news.ops.worldnet.att.net>
Source record: 17980
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Two Heathkit test instruments: tubes checked/replaced, old tubular caps/electrolytics replaced, guaranteed not DOA: NOTE: SG-7 IS MISLABELED IN TITLE AS SG-1: See at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

ALSO TAKE A LOOK AT THE McMURDO SILVER 5C!!, TNX 73 heytubeguy

3448. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 14:10:09 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <5dsEe.20546$NU2.2508@newssvr13.news.prodigy.com>
Source record: 17981
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Spike wrote:
> Tom Donaly wrote:
>
>
>>Spike wrote:
>>
>>>Tom Donaly wrote:
>>>
>>>
>>>
>>>>Another day, another wretched, little troll from another
>>>>mediocre mind so filled with the desire to be recognized it has to
>>>>argue phantasms so people will notice. As has commonly been said,
>>>>it's more to be pitied than scorned.
>>>
>>>
>>>Quite. But there's no need to repost the whole bloody thing.
>>>
>>>from
>>>Aero Spike
>>
>>Ah, a fine example of childish, British pique. How superior of you.
>>I'll tell you what, m'boy. From now on, I'll send all my posts to
>>you before I post them so you can rewrite them to your satisfaction.
>>Ha, ha! I've never read a more stereotypical post.
>>73,
>>Tom Donaly, KA6RUH
>
>
> Technically speaking, your post was at best impolite. There are plenty
> of people who have killfiled the OP, and your thoughtless action
> resulted in their KFs being bypassed. There are also plenty of people
> on dialup, who may have already downloaded the OP's rubbish, and don't
> want to pay again to download yet another copy. And, by the way, I
> suggest you put further posts where the sun doesn't shine.
>
>
> from
> Aero Spike

Struck a nerve, did I? Well, you'll recover, eventually.
73,
Tom Donaly, KA6RUH

3449. Re: Reposted due to thread hijacking by CBers....A Ham Radio FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 14:50:41 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <42e355e5.1526024@news.blueyonder.co.uk>
Source record: 17982

On Sat, 23 Jul 2005 12:41:03 GMT, "Harold E. Johnson"
<w4zcb@mchsi.com> wrote:

>
>"Polymath" <invalid@invalid.invalid> wrote in message
>news:42e23902$1_3@x-privat.org...
>>
>My God, Airy Beannie has changed his name yet again! My kill list grows and
>grows. Get kicked off your previous ISP Beannie ?
^^^

3450. Re: Reposted due to thread hijacking by CBers....A Ham Radio FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 15:25:57 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <9ktEe.6160$_%4.2014@newssvr14.news.prodigy.com>
Source record: 17983

Peter wrote:
> On Sat, 23 Jul 2005 12:41:03 GMT, "Harold E. Johnson"
> <w4zcb@mchsi.com> wrote:
>
>
>>"Polymath" <invalid@invalid.invalid> wrote in message
>>news:42e23902$1_3@x-privat.org...
>>
>>My God, Airy Beannie has changed his name yet again! My kill list grows and
>>grows. Get kicked off your previous ISP Beannie ?
>
> ^^
>
>>W4ZCB
>
>
> A number of us did complain to his ISP but only one had some success.
>
> In reality he was arrested by his local police for harassing another
> newsgroup reader over here in the UK. Apparently he resisted arrest to
> some extent and had the bruises to prove it! Full coverage appeared
> in his local newspaper. It was also understood that the police took
> away his computer(s). It seems like he got them back or had another
> stashed under the house :-)
>
> After several months he's now reappeared under another pseudonym and
> is churning out the same old stuff he did as Airey/Airy Bean. Everyone
> over here knows he is G4SDW so why he can't sign with his callsign,
> like many of us do, is a mystery to me!
>
> He is NOT a troll. Everything he posts he seriously believes in. Draw
> your own conclusions!
>
> One day I hope to meet him! I have two good photos of him, one taken
> at a UK amateur radio radio rally (= US "Hamfest") and the other
> outside his house when he was taken off to the cop shop!
>
> I expect his reply to my post will be his F6 macro key: "Grow up! You
> behave like a 5 year old" ...
>
> Polymath is killfiled from this weekend on!
>
> Peter, G3PHO

Notoriety must be habit forming. If he had any originality, he'd be interesting. He reminds me of Samuel Johnson's friend who had only one idea in his head, and that a wrong one.
73,
Tom Donaly, KA6RUH

3451. Re: Anderson 'Powerpole' Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 16:01:46 UTC
From: fmmck@aol.com
Message-ID: <fmmck-2307051201460001@aca32bf9.ipt.aol.com>
Source record: 17984

In article <11e2fmamjkttk99@corp.supernews.com>, dplatt@radagast.org (Dave Platt) wrote:

> Are those the old-style stamped-metal round Molex pins, such as one
> finds in a PC power supply cable, or are they using the flat-metal
> "OEM T" connector used by a lot of the radio manufacturers these days?
> I can't tell from the picture in the IC-22 manual I downloaded.

Dave-

They are the old-style stamped-metal round Molex pins. These may be a smaller size than the ones used for PC power supplies, so current rating would be less.

73, Fred, K4DII

3452. Re: Reposted due to thread hijacking by CBers....A Ham Radio FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 16:34:54 UTC
From: fmmck@aol.com
Message-ID: <fmmck-2307051234540001@aca32bf9.ipt.aol.com>
Source record: 17985

In article <42e23b3e$1_3@x-privat.org>, "Polymath"
<invalid@invalid.invalid> wrote:

> Ham Radio has traditions of international friendliness which seem
> to be lost on you.

Polymath-

Perhaps Harold knows something that would justify his statement. I notice that you use a nickname, don't list a Ham call and hide your address. You wouldn't be one of those trolls I've heard about, would you?

For myself, I object to your fake "FAQ". It is a statement of bigotry in disguise, and very few of us can meet your criteria. You insult any of us who care to enjoy the social and other aspects of Ham Radio, in spite of your "friendliness" reference.

Get a life.

73, Fred, K4DII

3453. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 16:36:31 UTC
From: Spike <Aero.Spike@Technologies.invalid>
Message-ID: <29s4e1p183r9hev68sl40d0qilfsik9geh@4ax.com>
Source record: 17986
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Tom Donaly wrote:

>
>Struck a nerve, did I? Well, you'll recover, eventually.
>73,
>Tom Donaly, KA6RUH

I see that your skill in the trimming of posts is currently enjoying
deferred success; and seems likely to remain so.

from
Aero Spike

3454. Re: Reposted due to thread hijacking by CBers....A Ham Radio FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 17:04:48 UTC
From: "Harold E. Johnson" <w4zcb@mchsi.com>
Message-ID: <QMuEe.176772$_o.79053@attbi_s71>
Source record: 17987

> After several months he's now reappeared under another pseudonym and
> is churning out the same old stuff he did as Airey/Airy Bean. Everyone
> over here knows he is G4SDW so why he can't sign with his callsign,
> like many of us do, is a mystery to me!
>
> He is NOT a troll. Everything he posts he seriously believes in. Draw
> your own conclusions!

Hi Peter, good to hear from you, and thanks for the update. I instantly knew who it was, same garbage, same source. I have difficulty with your last however, surely no one is stupid enough to believe ANYTHING he spouts off with. Please don't forward the picture, my stomach is upset enough already.

Regards
W4ZCB

3455. Re: Reposted due to thread hijacking by CBers....A Ham Radio FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 17:04:52 UTC
From: Polymath <invalid@invalid.invalid>
Message-ID: <42e278fa$1_1@x-privat.org>
Source record: 17988

You continue to behave like a 5-year-old, especially
in respect of the lies that you tell below.

1, The harassment was _ALLEGED_ in _TWO_ malicious and
deliberately misleading perjurous statements made by Brian Reay G8OSN
on the 7th and 21st Feb.
2. No-one had any success in their complaints to my ISP. All complaints
were discussed with me. All anonymous complaints were ignored. All
complaints
from those who had a history of childish outbursts directed at me, such as
you,
were ignored.
3. I did not resist arrest. I now have the video of the arrest to prove
this.
4. When there are a large number of dangerous paranoid loonies
such as yourself on Usenet, everybody is advised to remain anonymous,
5. You have no photograph of me at a rally. The photo you do have was not
taken
when I was arrested, but when I contacted the local paper.
6. I do not have an "F6 Macro Key", whatever that may be.
7. If you wish to killfile me that is no problem. My remarks on Usenet
are not directed to the closed mind or the brain-dead mind.

"Peter" <microwaves@blueyonder.co.uk> wrote in message
news:42e355e5.1526024@news.blueyonder.co.uk...
> On Sat, 23 Jul 2005 12:41:03 GMT, "Harold E. Johnson"
> <w4zcb@mchsi.com> wrote:
>>"Polymath" <invalid@invalid.invalid> wrote in message
>>news:42e23902$1_3@x-privat.org...
>>My God, Airy Beannie has changed his name yet again! My kill list grows
>>and
>>grows. Get kicked off your previous ISP Beannie ?
> ^^
>>W4ZCB
> A number of us did complain to his ISP but only one had some success.
> In reality he was arrested by his local police for harassing another
> newsgroup reader over here in the UK. Apparently he resisted arrest to
> some extent and had the bruises to prove it! Full coverage appeared
> in his local newspaper. It was also understood that the police took
> away his computer(s). It seems like he got them back or had another
> stashed under the house :-)
> After several months he's now reappeared under another pseudonym and
> is churning out the same old stuff he did as Airey/Airy Bean. Everyone
> over here knows he is G4SDW so why he can't sign with his callsign,
> like many of us do, is a mystery to me!

> He is NOT a troll. Everything he posts he seriously believes in. Draw
> your own conclusions!
> One day I hope to meet him! I have two good photos of him, one taken
> at a UK amateur radio radio rally (= US "Hamfest") and the other
> outside his house when he was taken off to the cop shop!
> I expect his reply to my post will be his F6 macro key: "Grow up! You
> behave like a 5 year old" ...
> Polymath is killfiled from this weekend on!

3456. Re: Reposted due to thread hijacking by CBers....A Ham Radio FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 17:07:16 UTC
From: Polymath <invalid@invalid.invalid>
Message-ID: <42e278fb_1@x-privat.org>
Source record: 17989

You have your opinion, I have mine. I do not need to
impart childish insults as you do below merely because you hold
a different opinion. That is the difference between _REAL_ Radio Hams and
others.

The FAQ is not fake. It is a question that is asked and answered frequently
by
this posting.

"Fred McKenzie" <fmmck@aol.com> wrote in message
news:fmmck-2307051234540001@aca32bf9.ipt.aol.com...
> In article <42e23b3e$1_3@x-privat.org>, "Polymath"
> <invalid@invalid.invalid> wrote:
>
>> Ham Radio has traditions of international friendliness which seem
>> to be lost on you.
>
> Polymath-
>
> Perhaps Harold knows something that would justify his statement. I notice
> that you use a nickname, don't list a Ham call and hide your address. You
> wouldn't be one of those trolls I've heard about, would you?
>
> For myself, I object to your fake "FAQ". It is a statement of bigotry in
> disguise, and very few of us can meet your criteria. You insult any of us
> who care to enjoy the social and other aspects of Ham Radio, in spite of
> your "friendliness" reference.
>
> Get a life.
>
> 73, Fred, K4DII

3457. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 17:18:02 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <eZuEe.2187$Fk4.2015@newssvr21.news.prodigy.com>
Source record: 17990
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Spike wrote:
> Tom Donaly wrote:
>
>
>>Struck a nerve, did I? Well, you'll recover, eventually.
>>73,
>>Tom Donaly, KA6RUH
>
>
> I see that your skill in the trimming of posts is currently enjoying
> deferred success; and seems likely to remain so.
>
> from
> Aero Spike

As I said, you'll recover, eventually. Who knows, you may even
get up enough courage, some day, to overcome your sick aversion
to posting your real name and call sign at the end of your posts.
After that, the sky's the limit. You could even, in the distant
future, conquer your culture-bound, xenophobic, insular proclivities
enough to have a civil conversation with someone who lives beyond
Albion's confining shores. There is always hope.
73,
Tom Donaly, KA6RUH

3458. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 17:20:52 UTC
From: "Mike, K8LH" <k8lh@arrl.net>
Message-ID: <IImdnWOwMq6y4H_fRVn-tg@wideopenwest.com>
Source record: 17991

RadioGuy wrote:
> Jozef <jozef@metaphoria.org> wrote in message
> news:1121725307.731291@r2d2.vermontel.net...
>
>>I have recently built a very large pi-network transmatch with two very big
>>homemade variable capacitors. They can be seen at:
>>http://www.metaphoria.us/hamradio/transmatch.html
>>
>>Jozef
>>WB2MIC
>
>
> Very nicely done...
>
> I toyed with the idea of designing a couple of flat dies to punch out the
> stator and rotor plates and market my own series of capacitors. I agree,
> the high price of those capacitors are unwarranted.
>
> There was no need for two variables in that tuner... a single DIFFERENTIAL
> capacitor would do nicely and eliminate the extra adjustment during tune-up.
> For some unknown reason Hams still need a tuner with two capacitors---it was
> nice to see MFJ offer the Differential-T tuner Model 986.
>
> Many years ago (before the MFJ 986 tuner) as an experiment I built a field
> expedient tuner using a differential capacitor made from two telescoping
> cardboard tubes and aluminum foil (two plates outer and one plate inner
> tube) and slid the inner tube in and out to acheive an antenna match with a
> 28 microhenry tapped coil. It worked fine at 100 watts and many contacts
> were made with the end fed wire but dilectric heating of the cardboard tubes
> was observed.
>
> RG
>
>
RG, is there an example of a differential capacitor I could look at?
I'm not sure I've ever seen one? Is there a Tuner project somewhere
using one I could look at (grin)...

Regards, Mike

3459. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 17:50:18 UTC
From: Spike <Aero.Spike@Technologies.invalid>
Message-ID: <ln05e1h1bhvc2hm2rlt89b33lf2mocmgoe@4ax.com>
Source record: 17992
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Tom Donaly wrote:

> Who knows, you may even
>get up enough courage, some day, to overcome your sick aversion
>to posting your real name and call sign at the end of your posts.
>After that, the sky's the limit. You could even, in the distant
>future, conquer your culture-bound, xenophobic, insular proclivities
>enough to have a civil conversation with someone who lives beyond
>Albion's confining shores. There is always hope.

I think you must be addressing the OP, one Poly Unsaturated Fat.

from
Aero Spike

3460. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 18:31:10 UTC
From: Polymath <invalid@invalid.invalid>
Message-ID: <42e28c9f$1_3@x-privat.org>
Source record: 17993

In a differential capacitor, as the rotor disengages from one
set of fixed plates, it engages with the other set, instead of
engaging with fresh air.

The two sets of fixed plates are adjacent to each other and
separated by a gap. (If it were not for the gap, there would
be a solid square of metal with the axle dead centre)

"Mike, K8LH" <k8lh@arrl.net> wrote in message
news:lImdnWOwMq6y4H_fRVn-tg@wideopenwest.com...
>>
> RG, is there an example of a differential capacitor I could look at? I'm
> not sure I've ever seen one? Is there a Tuner project somewhere using one
> I could look at (grin)...

3461. Re: Reposted due to thread hijacking by CBers....A Ham Radio FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 20:43:25 UTC
From: Gary Cavie <m0jjh@despammed.com>
Message-ID: <MPG.1d4cbc46f6e0a6d59896a2@news.individual.net>
Source record: 17994

In article <42e23b3e$1_3@x-privat.org>, invalid@invalid.invalid says...
> In consideration of the rather silly Childish Broadcast (CB)
> quoted below, would it be correct to assume that "W4CZB" is
> some form of Yankland CB issue?
>
> Ham Radio has traditions of international friendliness which seem
> to be lost on you.
>

You don't know Harold very well then?

3462. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 20:59:08 UTC
From: "Mike, K8LH" <k8lh@arrl.net>
Message-ID: <M4OdnfYt6-3KLX_fRVn-jQ@wideopenwest.com>
Source record: 17995

Polymath wrote:
> In a differential capacitor, as the rotor disengages from one
> set of fixed plates, it engages with the other set, instead of
> engaging with fresh air.
>
> The two sets of fixed plates are adjacent to each other and
> separated by a gap. (If it were not for the gap, there would
> be a solid square of metal with the axle dead centre)
>
> "Mike, K8LH" <k8lh@arrl.net> wrote in message
> news:lImdnWOwMq6y4H_fRVn-tg@wideopenwest.com...
>
>>RG, is there an example of a differential capacitor I could look at? I'm
>>not sure I've ever seen one? Is there a Tuner project somewhere using one
>>I could look at (grin)...
>
>
>
Thank you... I have seen variable capacitors like this...

Vy 73, Mike - K8LH

3463. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 22:29:37 UTC
From: kwacka <kwacka2@clara.co.uk>
Message-ID: <74h5e1h72c02jvjntgdvjtmell9eupec5h@4ax.com>
Source record: 17996

On Fri, 22 Jul 2005 22:35:05 GMT, "Tom Donaly"
<dtdonaly@sbcglobal.net> wrote:

>Polymath wrote:
>> What is Ham Radio?

>
>Another day, another wretched, little troll from another
>mediocre mind so filled with the desire to be recognized

I hesitate (for about 0,25 seconds) to poit out that he has been
recognised.

3464. Re: Anderson 'Powerpole' Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-23 23:04:11 UTC
From: jake <jake@jake.net>
Message-ID: <42E2CCE8.114A67FF@jake.net>
Source record: 17997

The powerpole connector system is in use worldwide !

Take a trip to any home depot, sams, costco or lumber yard.

The electric battery operated lift equipment all use the large
powerpole connectors (36volt 600ah wetcells)

They only go in one way, can't put them in backwards.

We just have to watch what we are doing,
Anderson can't do it for us.

Just like at the firing range, you can load the wrong
type of ammo in your pistol and have the round get
stuck in the barrel and if fired again the firearm can
break and hurt you and others around.

What is to stop me from connecting the radio
cables to my astron termainals backwards ?

Be safe !

3465. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-24 00:34:23 UTC
From: zzzpk_pkearn_class_a@its-as-easy-as-they-say-multi_band_cb_is_here.eircom.es.it.net
Message-ID: <42e2e1ec.44416839@news.iol.ie>
Source record: 17848
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"Tom Donaly" <dtdonaly@sbcglobal.net> wrote:

: Albion's confining shores. There is always hope.
: 73,
: Tom Donaly, KA6RUH

hmmmmmm do you have irish roots ???

just your name "sounds" irish.

3466. Re: A F.A.Q. for Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-24 01:23:26 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <i4CEe.20742$NU2.14792@newssvr13.news.prodigy.com>
Source record: 17849
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

ZZZZPK wrote:

>
>
> hmmmmmm do you have irish roots ???
>
> just your name "sounds" irish.
>

I have a nineteenth century Irish great-gandfather, I
believe. The rest is German, Welsh, Danish, etc. Typical
American mix.
73,
Tom Donaly, KA6RUH

3467. Reviving 12V Gel cells

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-24 08:25:54 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <42e35092$0$29458$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 17850

Dear all

I am sure this has been posted before, but I cant recall the response.
I have several 12V gel cells out of UPS's which are dead.
Apparently they can be revived by desulfating them - any ideas on the
way to do this?

Thanks
Richard

3468. Re: Reviving 12V Gel cells

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-24 09:46:35 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <4KudnYWJFdnr_n7fRVnytQ@pipex.net>
Source record: 17851

> I am sure this has been posted before, but I cant recall the response.
> I have several 12V gel cells out of UPS's which are dead.
> Apparently they can be revived by desulfating them - any ideas on the way
> to do this?
======================
Apply briefly a high current to break the sulfate by charging a high
capacity electrolytic capacitor (>10000microFarad) to say 40 -50 V (or even
higher) and discharge via battery.

The reason for having a 'dead' sealed battery can also be that the battery
has been overcharged resulting in lack of electrolyte.

Some people have been successful to 'revive' an electrolyte starved battery
by getting access to the rubber vent caps ,removing these temporarily and
injecting a minor amount of distilled or de-ionised water with a syringe.

A sealed battery is NOT necessarily a 'gel' type.

There is a lot of useful info on sealed batteries on the Web. Google is
the usual tool for that.
A good site is : http://www.buchmann.ca/

Frank GM0CSZ / KN6WH

3469. Re: Silver Mica vs Mica Caps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-24 16:10:11 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <a946e11vmevuvlif3rh2t1lk2aul0rnk3c@4ax.com>
Source record: 17852

On Sat, 23 Jul 2005 11:03:55 +0100 doug dwyer <dd@ddwyer.demon.co.uk>
wrote:

>then a lower costt mica reconstituted
>was employed all were silver evaporated.

Was that "Microy?"

-

Jim Adney jadney@vwtype3.org
Madison, WI 53711 USA

3470. Re: Reposted due to thread hijacking by CBers....A Ham Radio FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-24 16:58:19 UTC
From: Polymath <invalid@invalid.invalid>
Message-ID: <42e3c85f$1_2@x-privat.org>
Source record: 17853
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Normally it is the victim who resorts to the killfile, but in this
case you have clearly embarrassed yourself that you feel the need
to hide behind a killfile after your tirade of insulting infantile
comments in this and other threads.

Stupid boy.

"Peter" <microwaves@blueyonder.co.uk> wrote in message
news:42e355e5.1526024@news.blueyonder.co.uk...
> Polymath is killfiled from this weekend on!
>
> Peter, G3PHO

3471. Re: Reposted due to thread hijacking by CBers....A Ham Radio FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-24 17:26:42 UTC
From: deBaser <Not_Telling@someisp.com>
Message-ID: <1122225772.87165.0@doris.uk.clara.net>
Source record: 17854
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"Polymath" <invalid@invalid.invalid> wrote in message
news:42e3c85f$1_2@x-privat.org...
> Normally it is the victim who resorts to the killfile, but in this
> case you have clearly embarrassed yourself that you feel the need
> to hide behind a killfile after your tirade of insulting infantile
> comments in this and other threads.
>
> Stupid boy.
>
<snip>

Bean, you are just repeating yourself. I think we have all heard enough
times what you have to say and its a tad boring. I think its the killfile
for you.

deBaser

3472. Re: anyone know about kit modifation to CW rigs for RTTY or other digital modes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-24 17:47:16 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <i2c7e1lkv1r1ohavsgnt7hj6k5kum6frmk@4ax.com>
Source record: 17855

On Sat, 23 Jul 2005 04:33:05 -0000, dplatt@radagast.org (Dave Platt) wrote:

>You might be able to do something similar to this with a
>crystal-controlled QRP rig, but I suspect that pulling a crystal that
>far with a varactor might be somewhat difficult.

The RTTY offset is only 170 Hz, so the required detuning on 160 m would be about 100 ppm (parts per million), at 80 m 50 ppm, at 40 m 25 ppm and at 20 m 12 ppm. This should not be too hard for a VCXO, which usually can be pulled to several hundred ppm with only some spectral purity or stability problems. Shifts less than 100 ppm should not be too hard.

Paul OH3LWR

3473. Re: Reviving 12V Gel cells

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-25 00:04:52 UTC
From: jerry <battery_dude@outerspace.net>
Message-ID: <42E42CA2.2884F2F9@outerspace.net>
Source record: 17856

Hello Richard,

If they are 0 volts, recycle them, not worth the effort
to try to bring them back. They may have an open cell
overcharged or had a surge in the ups.

Most hamfests have used batteries available with
plenty of life left in them. We swap out our
batteries after three years normal use in our
small and large ups systems (data center).

Not all sealed lead acid batteries are gel cells.
GelCell was a trademark of Johnson Controls
and my still be so.
Any other sla type is absorbed electrolyte or
paste. There is the absorbed glass mat,
fiberglass keeps the electrolyte close to the plates.

Richard wrote:

> Dear all
>
> I am sure this has been posted before, but I cant recall the response.
> I have several 12V gel cells out of UPS's which are dead.
> Apparently they can be revived by desulfating them - any ideas on the
> way to do this?
>
> Thanks
> Richard

3474. FS: Meters, and lots of them

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-25 00:32:46 UTC
From: Eugene Rippen <soundval@foothill.net>
Message-ID: <1122251713_299@spool6-east.superfeed.net>
Source record: 17857

For sale about 640 meters.
GE, Simpson, Triplett, Marion, Westinghouse, Weston, Western Electric, AND
MANY MORE. BRANDS.
They have been tested to see if the movement works.
All I know about each meter is what is on the website.
I believe they are all reasonably priced.
They will be sold only through the website.
Please! Only VISA, MC and PayPal. No checks, MOs or cash..

See at http://www.muchstuff.com

Gene Rippen, WB6SZS

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

3475. FS: Lots of tubes. Hams, collectors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-25 02:18:00 UTC
From: Eugene Rippen <soundval@foothill.net>
Message-ID: <1122258027_385@spool6-east.superfeed.net>
Source record: 17858

There are a lot of tubes for hams and for tube and radio collectors.
Some sweep tubes too.
They have been tested. Look for comments on each tube.
If no comment, then tube tested good.
All I know about each tube is what is on the website.
I believe they are all reasonably priced.
They will be sold only through the website.
Please! Only VISA, MC and PayPal. No checks, MOs or cash..

See at http://www.muchstuff.com

Gene Rippen, WB6SZS

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

3476. Re: Reviving 12V Gel cells

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-25 13:11:26 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1d4e84da709ad471989787@localhost>
Source record: 17859

In article <42e35092$0$29458$5a62ac22@per-qv1-newsreader-
01.iinet.net.au>, richardh@iinet.net.au says...

> Dear all
>
> I am sure this has been posted before, but I cant recall the response.
> I have several 12V gel cells out of UPS's which are dead.
> Apparently they can be revived by desulfating them - any ideas on the
> way to do this?

Sealed lead-acid (not all are "gel" types) can SOMEtimes be
revived. First and foremost: If the battery measures zero volts, don't
even try. Recycle it.

If it shows 10 or so volts, it may have developed a bad cell.
Revival can be attempted, but don't expect miracles.

The best possible method to revive any weak rechargeable battery
is with an electronic battery conditioner, such as those made by Cadex
or Christie. While very expensive if purchased 'new,' used ones often
show up on Greed-Bay, or at ham swap meets. Such a device will often use
a tightly-controlled 'pulse' charge/discharge method, which helps
destroy things like sulfiting without damaging the battery in question.

Happy hunting.

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped
with surreal ports?"

3477. Re: What would cause the SWR to go up drastically when I turn my amp on?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-25 16:45:40 UTC
From: Joeseph <NOSPAM+++++@earthlink.net>
Message-ID: <bn5ae1d3hdcdenjfl69jm6gtpe93ivaqcm@4ax.com>
Source record: 17860
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Fri, 15 Jul 2005 19:12:06 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>To think in terms of SWR readings is a waste of time and effort.
>
>You are all confusing yourselves. Furiously digging yourselves even
>further into the mire.
>
>Go back to square one and begin again from Ohm's Law.
>----
>Reg
>

Actually they are correct. I ran an experiment using a Barker and
Williamson low pass filter with a 32 MHz cutoff.

With the set-up below the SWR went high when the amp was turned on.

RADIO===>AMP===>SWR METER====>ANTENNA

With the set-up below the SWR stayed at 1.1:1 with and without the amp
on.

RADIO===>AMP===>LOW PASS FILTER===>SWR METER===>ANTENNA

Also the output of the amp showed about 110 watts without the low pass
filter, but with the low pass filter the watt meter installed after
the low pass filter showed about 75 watts. That means about 30 watts
was being transmitted above 30 MHz even through the fundamental was at
28 MHz.

I doubled the value of the capacitors going form the collector to
ground, and the SWR dropped to 1.5:1 with the amp on and 1.1:1 with
the amp off. Then I add 470 pf capacitors from the trasnsitor base to
ground and the SWR with the amp dropped to 1.3:1 with the amp on.
With the TVI filter in-line the SWR is 1.1:1 with and without the amp
on.

A lack of working space inside the amp case made it difficult to
install a pi-network on the input and output side of the transistor
finals.

Thanks for everyone's help. The SWR increased was caused by harmonics
above the fundamental frequency, and they were outside the bandwidth
of the antenna.

3478. BF0 Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-25 18:10:09 UTC
From: pdrunen@aol.com
Message-ID: <1122315009.889610.131090@g14g2000cwa.googlegroups.com>
Source record: 17861

Hi Group,

I am looking at moving the old CB up to 10meter CW/SSB, One thing I have never seen is the addition of a BFO circuit to copy SSB and CW.

The radio has a first IF of 10.695 MHz and the next one is 455KHz.

I believe that 455KHz is the place to add the BFO and I think that the 455KHz IF must be mixed with another frequency, say either +/- 1KHz to get the sidetone.

I don't know if this would work for SSB reception?

How about Double-side band modulation, it would have both LSB and USB but at least it would be interesting to experiment with.

If you know of a circuit or article, please post.

I look forward to your posting.

Paul
KJ4UO
EM60

3479. Re: Unknown Component

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-25 20:00:03 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dc3gc3$hj6$1@engnntp2.cig.mot.com>
Source record: 17865

"Win" <w0lz@winlyn.us> wrote in message
news:g26ld1l2op9bb63k5fjhmatfafvkmnasur@4ax.com...
> On Sat, 16 Jul 2005 13:35:08 -0500, inagaddadavida@webtv.net (Jim)
> wrote:
>
> >i am not highly qualified as an electronics guy so maybe this is stupid,
> >but isnt that a cap to reduce the spark as the contacts open? an old
> >points ignition condenser is for that purpose and it is .02 mfd
>
> Maybe you are more qualified than youy think. Yes, it is a MilSpec
> cap, probably for that exact purpose.
>
> Win, W0LZl

drifting OT.

Actually, the Point condenser formed a resonant circuit with the coil to
produce a much larger kick and resulting spark.

73, Steve, (kDCI

3480. Variable Capacitor Software

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-25 20:00:04 UTC
From: Howie <wa2afd@gmail.com>
Message-ID: <1122321604.765075.234950@f14g2000cwb.googlegroups.com>
Source record: 17862

Hello to all.

I have followed the thread about variable capacitors recently and would like to suggest a piece of simple but effective software that will provide info about building your own home brew capacitors using a variety of spacings and dielectric material to get the capacitance you might need.

You may find this on the website of VE3SQB at www.ve3sqb.com

Scroll down the screen until you see the title "For the Experimentor."

The mechanics of building are up to you, but I have found it to be a great help in designing.

de WA2AFD

3481. Re: BF0 Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-25 20:06:09 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <RCbFe.484913$cg1.393667@bgtnsc04-news.ops.worldnet.att.net>
Source record: 17863

E-mail me directly and I will send you a schematic of an NE602 based
detector circuit in PDF form.

Pete

<pdrunen@aol.com> wrote in message
news:1122315009.889610.131090@g14g2000cwa.googlegroups.com...
> Hi Group,
>
> I am looking at moving the old CB up to 10meter CW/SSB, One thing I
> have never seen is the addition of a BFO circuit to copy SSB and CW.
>
> The radio has a first IF of 10.695 MHz and the next one is 455KHz.
>
> I believe that 455KHz is the place to add the BFO and I think that the
> 455KHz IF must be mixed with another frequency, say either +/- 1KHz to
> get the sidetone.
>
> I don't know if this would work for SSB reception?
>
> How about Double-side band modulation, it would have both LSB and USB
> but at least it would be interesting to experiment with.
>
> If you know of a circuit or article, please post.
>
> I look forward to your posting.
>
> Paul
> KJ4UO
> EM60
>

3482. Re: want to build 30m xtal lsb rcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-25 20:10:04 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <wGbFe.484931$cg1.462846@bgtnsc04-news.ops.worldnet.att.net>
Source record: 17864

That is about as cheap as you are going to find, unless you want to design it yourself.

Pete

<geoffstirling69@yahoo.ca> wrote in message news:1121964889.026445.297930@z14g2000cwz.googlegroups.com...
> I'm looking to buy in kit form (or prebuilt if it's cheap enough) a
> receiver whose sole purpose in life would be to sit on 10.151 LSB and
> decode APRS packets to be relayed into APRS-IS on the internet via a
> computer with a sound card. I've been looking around and I've found
> the 30 meter half watt Rock-Mite CW tranceiver from Small Wonder Labs
> for $27 including shipping, $39.50 with the connectors. I'd imagine
> this would work just fine if I swapped the crystal in it to 10.148.5
> or so, but I really don't need the transmit option, unless there was
> some way to modify it to take the sound card output from my computer
> and transmit 300 baud packet with it. It looks like since you can
> choose two frequencies 1khz from each other, that maybe it would be
> able to be modified to transmit the frequencies for mark and space and
> perhaps be switched by some sort of FSK mechanism controlled by a
> serial port. Anyways, that's more than I think I want to get into with
> this project and would be happy if somewhere out there was an easy
> crystal controlled kit that will just receive one 30 meter frequency in
> lower side band.
>
> Thanks
>

3483. Re: Anderson 'Powerpole' Connectors - Two SOLUTIONS...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-25 20:21:42 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dc3hkm$i2f$1@engnntp2.cig.mot.com>
Source record: 17866

Roll pin problem:
I use the smallest plastic tye-wrap instead of the roll-pin. Looking at it, I reasoned the roll pin was a bad solution because of the way it stresses the wedge side-mate structure. I use the standard Power Pole configuration (for the battery charge option and commonality with everyone) and put the "head" of the tye-wrap so it is on the "top" when viewed from the "red-on-the-right" standard view. Pull the tye-wrap through all the way, so the head is up against the Andersons, then bend the rest around, to the rear between the two wires and tighten (not too tight or it will also tend to spread the two Andersons). I crease (fold and squeeze with pliers) the tye-wrap so it is "square" at the bend points. This way the two mating tye-wrap "heads" are on opposite sides (for a blind ham in the area) to mate by feel.

Offset bad-mate problem:
One solution to the "offset connection" problem is to add an empty body on the outside on each side, then fill it with epoxy. This'll prevent mating red to black. Perhaps one of you enterprising fellas will approach Anderson with a proposal to manufacture such a blank. It doesn't need to be full size, just enough to block the offset mate. It only needs the wedge side-mat and a front end in the shape of an "L". If it has a small hole in the front, it could also be used to chassis mount the pairs.

73, Steve, K9DCI

3484. Inadvertant mixing -- what was I hearing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-25 21:16:30 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrndealle.1vpi.ben@saturn.home.ben.com>
Source record: 17867

I got a bunch of identically (but cryptically) marked crystals that I wanted a ballpark idea about so I built the oscillator part of the Pixie II (up to Q1) and put a scope on it. It was around 20MHz, so I grabbed my HT and tuned around 20MHz to see if I could find it (this, by the way, is why you should not borrow the lcd display from your frequency counter for another project...). What I discovered was several signals above 20MHz (eg 21.040) that only existed when the oscillator was on. I assumed it was picking up something else and mixing it with 20MHz so I tried to find the original signals at 1040kHz but I couldn't. The "mixed" signals were very clear and strong. It was some kind of news (shortwave?) in an Asian language.

Where else should I have looked for the base signal? ~41MHz would be in the middle of a government band.

--
Ben Jackson
<ben@ben.com>
http://www.ben.com/

3485. Re: BF0 Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-25 22:56:18 UTC
From: Heriberto <lu6dbu@tapalquenet.com.ar>
Message-ID: <42e56b85_1@x-privat.org>
Source record: 17868

Hi Paul:
For better help, I whises known your detector in actual rig.-
It is transistor o valve? The BF0 can be a oscilator within IF coil in clapp
or hartley layout.-
REgards
Heriberto

<pdrunen@aol.com> escribi&#65533; en el mensaje
news:1122315009.889610.131090@g14g2000cwa.googlegroups.com...
> Hi Group,
>
> I am looking at moving the old CB up to 10meter CW/SSB, One thing I
> have never seen is the addition of a BFO circuit to copy SSB and CW.
>
> The radio has a first IF of 10.695 MHz and the next one is 455KHz.
>
> I believe that 455KHz is the place to add the BFO and I think that the
> 455KHz IF must be mixed with another frequency, say either +/- 1KHz to
> get the sidetone.
>
> I don't know if this would work for SSB reception?
>
> How about Double-side band modulation, it would have both LSB and USB
> but at least it would be interesting to experiment with.
>
> If you know of a circuit or article, please post.
>
> I look forward to your posting.
>
> Paul
> KJ4UO
> EM60
>

3486. Re: BF0 Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-25 23:41:06 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <mMeFe.4848$6f.3934@newsread3.news.atl.earthlink.net>
Source record: 17869

<pdrunen@aol.com> wrote in message
news:1122315009.889610.131090@g14g2000cwa.googlegroups.com...
> Hi Group,
>
> I am looking at moving the old CB up to 10meter CW/SSB, One thing I
> have never seen is the addition of a BFO circuit to copy SSB and CW.
>
> The radio has a first IF of 10.695 MHz and the next one is 455KHz.
>
> I believe that 455KHz is the place to add the BFO and I think that the
> 455KHz IF must be mixed with another frequency, say either +/- 1KHz to
> get the sidetone.
>
> I don't know if this would work for SSB reception?

YOu can build a BFO for either one of three frequencies.
1. Near the input signal
2. Near 455 khz
3. near 10.695

It will almost have to be variatable as the CB rig will be crystal controled
and unless it has a fine tuning control (most of the AM units did not).

3487. Re: Reviving 12V Gel cells

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-26 02:06:47 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <aq5be198k1a08uufsjs4k8ucid90e34eta@4ax.com>
Source record: 17870

On Sun, 24 Jul 2005 10:46:35 +0100 "Highland Ham"
<abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:

>> I am sure this has been posted before, but I cant recall the response.
>> I have several 12V gel cells out of UPS's which are dead.
>> Apparently they can be revived by desulfating them - any ideas on the way
>> to do this?

>Apply briefly a high current to break the sulfate by charging a high
>capacity electrolytic capacitor (>10000microFarad) to say 40 -50 V (or even
>higher) and discharge via battery.

That's the "trick" for possibly fixing a shorted NiCad, but it won't
fix a sulfated lead acid cell. Sulfated cells can only be recharged
extremely slowly. They will exhibit a high cell voltage while doing
this, but trying to charge them faster with higher current will only
electrolyze the water in them and damage the plates.

>The reason for having a 'dead' sealed battery can also be that the battery
>has been overcharged resulting in lack of electrolyte.

Absolutely right! There's no way to charge a lead acid battery that is
dry. You can add water to some, but some are so well sealed that you
have to destroy them to get in there.

>Some people have been successful to 'revive' an electrolyte starved battery
>by getting access to the rubber vent caps ,removing these temporarily and
>injecting a minor amount of distilled or de-ionised water with a syringe.
>
>A sealed battery is NOT necessarily a 'gel' type.

Right, but you can tell a lot by the voltage across the cell while
it's trickle charging. Gel cells, starved lead acid cells, and regular
lead acid cells all share the same chemistry and will show 2-2.4 volts
per cell, NiCads and NiMH are 1.2-1.4V, and Lithium cells run about
3V. Of course none of this works if the cell is dry.

A LOT of these die just by drying out. Injecting a bit of water is a
good idea if you can get in there.

-

Jim Adney jadney@vwtype3.org
Madison, WI 53711 USA

3488. Re: Inadvertant mixing -- what was I hearing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-26 03:35:32 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <opbbe11nf5ckb3gr59q15cr9dfmbbinqn1@4ax.com>
Source record: 17871

On Mon, 25 Jul 2005 16:16:30 -0500 Ben Jackson <ben@ben.com> wrote:

>I got a bunch of identically (but cryptically) marked crystals that I
>wanted a ballpark idea about so I built the oscillator part of the Pixie
>II (up to Q1) and put a scope on it. It was around 20MHz, so I grabbed
>my HT and tuned around 20MHz to see if I could find it (this, by the
>way, is why you should not borrow the lcd display from your frequency
>counter for another project...). What I discovered was several signals
>above 20MHz (eg 21.040) that only existed when the oscillator was on.

Could your crystals just be oscillating at 21.040? A real frequency
counter can be really useful in cases like this.

I have some for sale if you, or anyone is interested.

-

Jim Adney jadney@vwtype3.org
Madison, WI 53711 USA

3489. Re: BF0 Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-26 07:57:56 UTC
From: PaoloC <ollollo@hotpop.com>
Message-ID: <42e5eca9_2@x-privat.org>
Source record: 17872

pdrunen@aol.com wrote:

Hi Paul

> I am looking at moving the old CB up to 10meter CW/SSB, One thing I
> have never seen is the addition of a BFO circuit to copy SSB and CW.

If you have an AM CB you will be able to receive DSB by the addition of a BFO. It might work for sending CW, since it is an unmodulated carrier afterall (some 10m beacons are recycled CB RTXes). You won't be able to transmit SSB, though!

> The radio has a first IF of 10.695 MHz and the next one is 455KHz.
>
> I believe that 455KHz is the place to add the BFO and I think that the
> 455KHz IF must be mixed with another frequency, say either +/- 1KHz to
> get the sidetone.

Correct. You need to inject a 455kHz into the second conversion mixer. You don't necessarily need to phisically connect it to the circuitry, over-the-air coupling should suffice.

> I don't know if this would work for SSB reception?

Sure it does! (provided your starting point has AM reception).
See my pages http://spazioinwind.libero.it/ik1zyw/hardware/osc455.html and http://spazioinwind.libero.it/ik1zyw/hardware/osc455notes.html for some operating notes. Please disregard the circuit shown since there are better solutions.

> How about Double-side band modulation, it would have both LSB and USB
> but at least it would be interesting to experiment with.

With an external BFO you'll be actually receiving DSB, so no discrimination between U and LSB. CW stations will appear twice as you tune up the band. Anyway, since 10m at this time of the solar cycle are not too crowded (from the European point of view), you should not suffer opposite sideband interference from off-frequency stations. Making the BFO frequency agile should overcome your channelized CB limitations.

I haven't been playing with this setup for a while, but it works.

73,
Paolo/Paul IK1ZYW

3490. Re: Unknown Component

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-26 17:13:03 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1122397983.212213.284780@g43g2000cwa.googlegroups.com>
Source record: 17873

The photo Win pointed to in the original posting shows the cap across the relay coil, I believe, where it may be used to keep inductive kickback under control (caused by trying to suddenly discontinue the current through the coil, when the drive turns off, presumably). Diodes are sometimes used for that, but can slow the relay down.

>From what I've read about the caps in ignition systems, I think Win is pretty close to right. I've seen pictures of points operated in a system with too large a cap and with too small a cap, and both show more contact wear (transfer of metal, actually) than with a proper-valued cap. The result the pix showed was pretty non-obvious to me at the time, and thus stuck with me. Later work in spark spectroscopy explained some of the reason. I would expect the largest voltage at the coil output with minimum capacitance (winding+stray). V=L*di/dt, and minimizing the capacitance maximizes the di/dt in the inductor. Note that when the points open, there's no energy stored in the cap, so it's just the inductor energy that goes into making the spark.

Cheers,
Tom

3491. Re: Inadvertant mixing -- what was I hearing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-26 22:21:06 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dc6d0i$c37$1@engnntp2.cig.mot.com>
Source record: 17876

If they are very strong, perhaps you can use a relatively poor antenna so it only picks up strong signals and try putting it into scan

It helps to know:
1- How did you determined the "..around 20MHz..." number.
It could actually be 1/2, 1/3, 1/4 that freq.
2- Were you able to hear the true, exact oscillator signal with the receiver.
3- the IF of the receiver used and
4- what frequencies you had the reveiver tuned to when you heard these signals.

The front end of these wide coverage handhelds are pretty broad with almost no filtering. The oscillator can easily act as an L.O.

Where F1 and F2 are the oscillator and the receiver L.O.:
The result can be F1 +/- F2 +/- the IF frequency.

Then it can be N * F1 and N * F2 that can be the culprets where N = 1, 2, 3. Chances are pretty good that the signals are not much above 20MHz.

Use a spreadsheet to do the math and it is easier to cover all these cases when you have some frequencies to enter.

73, Steve, K.9'D;C,i

"Ben Jackson" <ben@ben.com> wrote in message
news:slrndealle.1vpi.ben@saturn.home.ben.com...
> I got a bunch of identically (but cryptically) marked crystals that I
> wanted a ballpark idea about so I built the oscillator part of the Pixie
> II (up to Q1) and put a scope on it. It was around 20MHz, so I grabbed
> my HT and tuned around 20MHz to see if I could find it (this, by the
> way, is why you should not borrow the lcd display from your frequency
> counter for another project...). What I discovered was several signals
> above 20MHz (eg 21.040) that only existed when the oscillator was on.
> I assumed it was picking up something else and mixing it with 20MHz so
> I tried to find the original signals at 1040kHz but I couldn't. The
> "mixed" signals were very clear and strong. It was some kind of news
> (shortwave?) in an Asian language.
>
> Where else should I have looked for the base signal? ~41MHz would be
> in the middle of a government band.
>
> --
> Ben Jackson
> <ben@ben.com>

> http://www.ben.com/

3492. Re: BF0 Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-26 22:36:48 UTC
From: Yukio YANO <yano@shaw.ca>
Message-ID: <4WyFe.45555$5V4.41179@pd7tw3no>
Source record: 17874

pdrunen@aol.com wrote:
> Hi Group,
>
> I am looking at moving the old CB up to 10meter CW/SSB, One thing I
> have never seen is the addition of a BFO circuit to copy SSB and CW.
>
> The radio has a first IF of 10.695 MHz and the next one is 455KHz.
>
> I believe that 455KHz is the place to add the BFO and I think that the
> 455KHz IF must be mixed with another frequency, say either +/- 1KHz to
> get the sidetone.
>
> I don't know if this would work for SSB reception?
>
> How about Double-side band modulation, it would have both LSB and USB
> but at least it would be interesting to experiment with.
>
> If you know of a circuit or article, please post.
>
> I look forward to your posting.
>
> Paul
> KJ4UO
> EM60
>
Why would you want to re-invent the wheel !!!

There are millions of old 40 channel AM/SSB Cb sets available that are
easily convertable to Ten Meters with a exacto knife and a bit of solder

IS THIS A TROLL !!!

Yukio YANO

3493. Re: BF0 Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-26 22:42:47 UTC
From: dplatt@radagast.org
Message-ID: <11edf37n65dmna2@corp.supernews.com>
Source record: 17875

In article <4WyFe.45555$5V4.41179@pd7tw3no>, Yukio YANO <yano@shaw.ca> wrote:
>pdrunen@aol.com wrote:

>> I am looking at moving the old CB up to 10meter CW/SSB, One thing I
>> have never seen is the addition of a BFO circuit to copy SSB and CW.

>Why would you want to re-invent the wheel !!!
>
>There are millions of old 40 channel AM/SSB Cb sets available that are
>easily convertable to Ten Meters with a exacto knife and a bit of solder

Possibly he's interested in it precisely because of the
experimentation and learning required? Because it might increase his
own understanding and skill level, as a result of figuring out how to
do it?

That is, after all, one of the justifications for amateur radio here
in the U.S.!

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3494. Re: Inadvertant mixing -- what was I hearing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-26 23:42:54 UTC
From: Straydog <asdf@panix.com>
Message-ID: <Pine.NEB.4.63.0507261933530.8924@panix3.panix.com>
Source record: 17877

(see below)

The problem you describe is a nightmare and is not that uncommon but may be very hard to fix. I can only speculate on a few things. One is spurious parasitics (that term covers a lot of situations, including chip behavior that is not part of the specifications). Your oscillator circuit may be oscillating on frequecies (self modulation of the fundamental by the non-fundamental or harmonics and mixing, too?) other than the crystal fundamental. Yes, the mixing could be in your test apparatus other than the test oscillator. Sometimes if you get the receiver hundreds of feet away from the oscillator, then the spurious signals fade out faster.

Another way to approach this might be if you use a different receiver (different local oscilator freq, different IF) and see if you pick up the same sets of signals.

How about what do you get when you try different crystals? Similar spurious emissions? Try this if you can and tell us what you get.

Do you have a _good_ crystal that you know oscillates and know what its frequency is and put that into your test circuit. Does it behave as you expect? I also know and have had crystals that will oscillate in one oscillator circuit but will not oscillate in others. Also, some crystals will NOT oscillate on their fundamental but _will_ oscillate on one or more of their harmonics. Weird but true.

===== no change to below, included for reference and context =====

On Mon, 25 Jul 2005, Ben Jackson wrote:

> I got a bunch of identically (but cryptically) marked crystals that I
> wanted a ballpark idea about so I built the oscillator part of the Pixie
> II (up to Q1) and put a scope on it. It was around 20MHz, so I grabbed
> my HT and tuned around 20MHz to see if I could find it (this, by the
> way, is why you should not borrow the lcd display from your frequency
> counter for another project...). What I discovered was several signals
> above 20MHz (eg 21.040) that only existed when the oscillator was on.
> I assumed it was picking up something else and mixing it with 20MHz so
> I tried to find the original signals at 1040kHz but I couldn't. The
> "mixed" signals were very clear and strong. It was some kind of news
> (shortwave?) in an Asian language.
>
> Where else should I have looked for the base signal? ~41MHz would be
> in the middle of a government band.
>
> --

> Ben Jackson
> <ben@ben.com>
> http://www.ben.com/
>

3495. Re: What would cause the SWR to go up drastically when I turn my amp on?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-26 23:46:56 UTC
From: Straydog <asdf@panix.com>
Message-ID: <Pine.NEB.4.63.0507261944210.8924@panix3.panix.com>
Source record: 17878
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Thanks for sharing your results with the rest of us. That's a good experiment you described. The only "final clincher" would be if you had a receiver that covered the spectrum where you might find out what the spurious signal was that was being generated. Most power transistor circuits I've seen have all kinds of weird bypassing, ferrite beads on power-carrying lines, funny adjustable variable capacitors in funny places in the circuit. Good luck otherwise.

===== no change to below, included for reference and context =====

On Mon, 25 Jul 2005, Joeseph wrote:

> On Fri, 15 Jul 2005 19:12:06 +0000 (UTC), "Reg Edwards"
> <g4fgq.regp@ZZZbtinternet.com> wrote:
>
>> To think in terms of SWR readings is a waste of time and effort.
>>
>> You are all confusing yourselves. Furiously digging yourselves even
>> further into the mire.
>>
>> Go back to square one and begin again from Ohm's Law.
>> ----
>> Reg
>>
>
> Actually they are correct. I ran an experiment using a Barker and
> Williamson low pass filter with a 32 MHz cutoff.
>
> With the set-up below the SWR went high when the amp was turned on.
>
> RADIO===>AMP===>SWR METER====>ANTENNA
>
> With the set-up below the SWR stayed at 1.1:1 with and without the amp
> on.
>
> RADIO===>AMP===>LOW PASS FILTER===>SWR METER===>ANTENNA
>
> Also the output of the amp showed about 110 watts without the low pass
> filter, but with the low pass filter the watt meter installed after
> the low pass filter showed about 75 watts. That means about 30 watts
> was being transmitted above 30 MHz even through the fundamental was at
> 28 MHz.
>
> I doubled the value of the capacitors going form the collector to

> ground, and the SWR dropped to 1.5:1 with the amp on and 1.1:1 with
> the amp off. Then I add 470 pf capacitors from the trasnsitor base to
> ground and the SWR with the amp dropped to 1.3:1 with the amp on.
> With the TVI filter in-line the SWR is 1.1:1 with and without the amp
> on.
>
> A lack of working space inside the amp case made it difficult to
> install a pi-network on the input and output side of the transistor
> finals.
>
> Thanks for everyone's help. The SWR increased was caused by harmonics
> above the fundamental frequency, and they were outside the bandwidth
> of the antenna.
>
>

3496. Re: BF0 Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-27 03:46:46 UTC
From: pdrunen@aol.com
Message-ID: <1122436006.465883.211290@z14g2000cwz.googlegroups.com>
Source record: 17879

Hi there Paul,

I took a look, the circuit looks good, so why the better method comment?

If this 455KHz injected "over the air" signal is captured by the receiver, should the s-meter provide a constant signal level?

If the SSB signal is coming in strong (S9), and the captured BFO level is S3, will the amplitude of the BFO have to be increased?

How about AGC on the BFO so that its injection level is a function of signal level?

Thanks again for the information!

3497. TS-120

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-27 04:01:11 UTC
From: pdrunen@aol.com
Message-ID: <1122436871.721180.79260@o13g2000cwo.googlegroups.com>
Source record: 17880

Hi all,

I have a TS-120 and I think the ears are a little weak, comparing the rig with my 757, the s-meter on the 757 always reads more.

The 120 has a cal signal knob, I put the cal signal out on 14.2 MHz and get S-3, on the 21.2, it back up to S-7. The best output is at 29.2 with a little over S-9.

I don't understand why it takes a dip in the 20 meter and in the JJY band, since JJY band is for WWV at 15 MHz just above the 20 meter band then it would use some of the same circuits.

The lower bands, 80 meters is putting out the least.

I did see where a wire had been cut and this wire was touching just behind the last waper on the RF board. It emitted smoke while listening in the 20 meter band but not in the other bands.

As far as using a signal generator, I have a wavetek 3001, I could determine a signal down to about -100dbm on 20 meters and down to about -110 dbm on 15 meters.

I did not have any reference data before the event.

If you have a TS-120 and can look at 14.2 21.2 and the other bands as the band switch is moved and tell me your reading, it may tell me if I need to search for a defective part.

As far as I could tell, the unit still draws about 20 amps into the dummy load so output power did not change.

De KJ4UO

3498. Re: TS-120

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-27 04:45:24 UTC
From: -ex- <exray@coqui.net>
Message-ID: <6b55f$42e71167$4232bd8d$9704@COQUI.NET>
Source record: 17881

pdrunen@aol.com wrote:

> Hi all,
>
> I have a TS-120
>
> The 120 has a cal signal knob, I put the cal signal out on 14.2 MHz and
> get S-3, on the 21.2, it back up to S-7. The best output is at 29.2
> with a little over S-9.
>
> I don't understand why it takes a dip in the 20 meter and in the JJY
> band, since JJY band is for WWV at 15 MHz just above the 20 meter band
> then it would use some of the same circuits.

> It emitted smoke while
> listening in the 20 meter band but not in the other bands.
>
> As far as using a signal generator, I have a wavetek 3001, I could
> determine a signal down to about -100dbm on 20 meters and down to about
> -110 dbm on 15 meters.

That "smoke" part is very indicative of something wrong and should be a
good lead for troubleshooting!

-BM

3499. Re: BF0 Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-27 06:35:45 UTC
From: PaoloC <ollollo@hotpop.com>
Message-ID: <42e72ae1$1_2@x-privat.org>
Source record: 17882

pdrunen@aol.com wrote:

'morning

> I took a look, the circuit looks good, so why the better method
> comment?

Well, at that time I wanted to experiment how ceramic filters worked, so I built a very low frequency oscillator and filtered out the wanted signal near 455k. There is also a slight overhead using just 1/6th of a TTL chip!

Subsequent studies and experiments taught me that an RC oscillator can be sufficiently stable at those frequencies. I believe a 455k RC oscillator can be built right away.

> If this 455KHz injected "over the air" signal is captured by the
> receiver, should the s-meter provide a constant signal level?

I experimented the external BFO only on those cheap multiband SW radios, and they have no s-meter.

Moreover I am personally not too interested in meter reading unless I am measuring something (ie difference between two signals). I prefer to evaluate a signal by ear.

If you need/want to rely on meter readings, remember that an additional BFO will give you AM->DSB, while you'll be listening to a SSB signal. That's half power, the meter should read 3dB less than actual strength (half point?!).

> If the SSB signal is coming in strong (S9), and the captured BFO level
> is S3, will the amplitude of the BFO have to be increased?

I do not remember having to deal with BFO amplitude. In "complex" receivers there might be some implications with AGC, especially if it follows the 455k mixer (doubt so, it is probably after the 1st conversion). Assuming the AGC on the 1st IF, then the 455k IF signal level is rather constant, so BFO amplitude should not need adjustments.

> How about AGC on the BFO so that its injection level is a function of
> signal level?

That is becoming too complex for a simple solution, IMHO. :-)

Let us know how you decided to proceed and how it worked.

Greetings from the other side of the Atlantic (and a bit of Mediterranean as well),

Paolo IK1ZYW

3500. Re: TS-120

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-27 09:14:05 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1122455645.302349.82760@g44g2000cwa.googlegroups.com>
Source record: 17883

Erk - hi all,

you need to get a very basic book on radios, and read up the theory -
it will improve your fault finding no end. (probably mid 70's ARRL
handbook would be a good primer)

The sig gen is irrelevant at this stage - you have already proved that
by observation of the S meter during Cal (thats one of its functions
along with calibrating frequency)

Also, unconnected wires and/or smoke are a basic radio no no.

This is going to be hard --- to try and fix a radio by remote
control, but will give it a try if you want to persevere.

73 de VK3BFA Andrew

-ex- wrote:
> pdrunen@aol.com wrote:
>
> > Hi all,
> >
> > I have a TS-120
> >
> > The 120 has a cal signal knob, I put the cal signal out on 14.2 MHz and
> > get S-3, on the 21.2, it back up to S-7. The best output is at 29.2
> > with a little over S-9.
> >
> > I don't understand why it takes a dip in the 20 meter and in the JJY
> > band, since JJY band is for WWV at 15 MHz just above the 20 meter band
> > then it would use some of the same circuits.
>
> > It emitted smoke while
> > listening in the 20 meter band but not in the other bands.
> >
> > As far as using a signal generator, I have a wavetek 3001, I could
> > determine a signal down to about -100dbm on 20 meters and down to about
> > -110 dbm on 15 meters.
>
> That "smoke" part is very indicative of something wrong and should be a
> good lead for troubleshooting!
>
> -BM

3501. Re: TS-120

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-27 09:44:15 UTC
From: -ex- <exray@coqui.net>
Message-ID: <b0b6f$42e75772$4232bd8d$4972@COQUI.NET>
Source record: 17884

Andrew VK3BFA wrote:

> Erk - hi all,
>
> you need to get a very basic book on radios, and read up the theory -
> it will improve your fault finding no end. (probably mid 70's ARRL
> handbook would be a good primer)
>
> The sig gen is irrelevant at this stage - you have already proved that
> by observation of the S meter during Cal (thats one of its functions
> along with calibrating frequency)
>
> Also, unconnected wires and/or smoke are a basic radio no no.
>
> This is going to be hard --- to try and fix a radio by remote
> control, but will give it a try if you want to persevere.
>
> 73 de VK3BFA Andrew

I'm not so sure that any book would help with a specific model problem.
After all, the OP is a licensed ham wih a callsign and *should* be
savvy enough to look for where the smoke came from.
At this point of troubleshooting it would seem that OP would be equally
served with a book on "Olifactory Recognition" inasmuch as an
electronics book. One cannot simply read a 30 year old ARRL Handbook
and fix a complicated modern radio.

-Bill

3502. Re: BF0 Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-27 16:00:49 UTC
From: Heriberto <lu6dbu@tapalquenet.com.ar>
Message-ID: <42e7ad1c_3@x-privat.org>
Source record: 17885

Hi Paul:
When BFO is used, then AGC should be derived from audio signal,
not a If signal.-
REgards
Heriberto -
<pdrunen@aol.com> escribi&#65533; en el mensaje
news:1122436006.465883.211290@z14g2000cwz.googlegroups.com...
> Hi there Paul,
>
> I took a look, the circuit looks good, so why the better method
> comment?
>
> If this 455KHz injected "over the air" signal is captured by the
> receiver, should the s-meter provide a constant signal level?
>
> If the SSB signal is coming in strong (S9), and the captured BFO level
> is S3, will the amplitude of the BFO have to be increased?
>
> How about AGC on the BFO so that its injection level is a function of
> signal level?
>
> Thanks again for the information!
>

3503. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-27 22:32:03 UTC
From: "dave.harper" <dave.harper@gmail.com>
Message-ID: <1122503523.087785.121500@o13g2000cwo.googlegroups.com>
Source record: 17886
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

K7ITM wrote:

> There is such a thing as TOO HIGH a loaded Q. Let's say you start off
> with a coil with unloaded Q of 500, and couple lightly to it with your
> circuit (antenna and detector), so the loaded Q is 250. That means the
> bandwidth at 3dB points, if you tune a station at 1MHz, is 4000Hz. If
> you've tuned to the center of the station, your demodulated bandwidth
> will be only 2kHz. Since the rolloff is gradual with a single-tuned
> circuit, voice should be OK, but you'll be missing out on a lot of the
> highs. (Mind you, it's not easy at all to get an unloaded Q of 500 at
> 1MHz!)

Ok, I'm back with a couple more questions, since y'all are so
informative... I know it's not a true xtal set if I add an amp, but
wouldn't the best way to minimize the drop between the unloaded and
loaded Q be to add an amp? With a transistor/op amp, it seems that you
could tailor the load imposed on the tank circuit so that it's minimal,
while it seems a headphone load would be pretty significant (depending
on the headphone)...?

Also, I've seen some schematics with transistor-based and Op amp-base
amplifiers. Generally speaking, are there advantages/disadvantages to
either transistors or op-amps as the first-stage RF amplifier?

Thanks again for all the information!
Dave

3504. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-27 22:50:12 UTC
From: -ex- <exray@coqui.net>
Message-ID: <3bab2$42e80fa8$4232bdf5$9045@COQUI.NET>
Source record: 17887
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

dave.harper wrote:

> K7ITM wrote:
>
>
>>There is such a thing as TOO HIGH a loaded Q. Let's say you start off
>>with a coil with unloaded Q of 500, and couple lightly to it with your
>>circuit (antenna and detector), so the loaded Q is 250. That means the
>>bandwidth at 3dB points, if you tune a station at 1MHz, is 4000Hz. If
>>you've tuned to the center of the station, your demodulated bandwidth
>>will be only 2kHz. Since the rolloff is gradual with a single-tuned
>>circuit, voice should be OK, but you'll be missing out on a lot of the
>>highs. (Mind you, it's not easy at all to get an unloaded Q of 500 at
>>1MHz!)
>
>
> Ok, I'm back with a couple more questions, since y'all are so
> informative... I know it's not a true xtal set if I add an amp, but
> wouldn't the best way to minimize the drop between the unloaded and
> loaded Q be to add an amp? With a transistor/op amp, it seems that you
> could tailor the load imposed on the tank circuit so that it's minimal,
> while it seems a headphone load would be pretty significant (depending
> on the headphone)...?

In my set I simply use an audio matching xfmr. I'm using sound-powered phones which are in the 200 ohm impedance range, and around 50 ohms DC. A little xfmr like the Calrad 45-700 is a good choice. Some of the guys use a switchable matchbox using a tapped xfmr like the Bogen. You can see some of these at http://www.crystalradio.net/

As for an amp...mine plays great into my computer's sound card! I tried a little one chip amp but it only had about 20db of gain which isn't really enough to do a lot of good.

-Bill

3505. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-28 00:42:30 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1122511350.779105.142970@g43g2000cwa.googlegroups.com>
Source record: 17888
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Yes, by using an amplifier, you can lower the loading caused by the detector. There is an optimum load impedance for the detector output in terms of best output power for a given input signal, and for small signals it's a pretty high impedance (resistance), because the diode's dynamic impedance is quite high for very small signals. You can find info on this at the Agilent web site (at least till Agilent sells off their semiconductor business...). Look for ap notes and data sheets covering zero-bias detector diodes. It gets a bit technical. But the optimum load is, as a rule, rather high resistance. An FET-input amplifier chosen for low input voltage noise is probably ideal. HOWEVER, the crystal radio purists would probably complain that it's not a crystal radio then. As Bill says, a matching transformer can help you out a lot. I've done some work using zero-bias Schottky detector diodes driving DC amplifiers to look for small signals, and can detect signals down in the few tens of microvolts---but the output is in the vicinity of a microvolt at picoamp currents.

The other thing that lowers the loaded Q of the coil is coupling to the antenna. Remember, the antenna looks like some impedance. A resonant antenna looks like a resistance, and an antenna coupler or tuner will make a non-resonant antenna look resistive also. And that resistance, coupled to the tank coil in your crystal radio, will lower the Q. If you couple too lightly, you won't get all the signal you can, and if you couple too heavily, you will lower the Q so much that you won't get the desired selectivity. It's a balancing act. In fact, in a multiple-resonator tuner, the bandpass shape is adjusted by changing the coupling from one resonator to the next, which changes the loaded Q of each resonator. When you have but one resonator, you just change the bandwidth (and signal level) as you change the coupling and loaded Q. Coupling that's too light mostly just changes the signal level, with minimal change in bandwidth. Coupling that's too tight mostly changes the bandwidth, with minimal change in signal level.

Hope these thoughts help some...

Cheers,
Tom

3506. MSK Demodulator

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-28 05:54:05 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11egsnuhtlhtu49@corp.supernews.com>
Source record: 17889
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,comp.dsp

I've seen a number of inquiries about minimum shift keying, it's generation and demodulation. I haven't been able to find anything to recommend on the web, which is frustrating since I built a MSK receiver for my Master's thesis about 15 years ago.

So I've posted my Master's thesis. It goes into some detail about MSK, it's generation and demodulation. It also goes into some detail about maritime DGPS data link requirements which I assume no one cares about -- but it's there if you do.

Thanks go to Joel Kolstad, KE7CDV, for scanning 88 pages from a bound book and making them look good enough to post without embarrasement.

http://www.wescottdesign.com/articles/MSK/mskTop.html

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

3507. Re: MSK Demodulator

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-28 06:55:57 UTC
From: PaoloC <ollollo@hotpop.com>
Message-ID: <42e88119$1_2@x-privat.org>
Source record: 17890

Tim Wescott wrote:

> I've seen a number of inquiries about minimum shift keying, it's
[...]
> So I've posted my Master's thesis. It goes into some detail about MSK,
> it's generation and demodulation. It also goes into some detail about
> maritime DGPS data link requirements which I assume no one cares about

Thank you for sharing with the World your work, Tim! It will be a
pleasant Summer reading!

Paolo IK1ZYW

3508. Re: MSK Demodulator

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-28 07:12:02 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <6z%Fe.7987$mU3.3330@trnddc02>
Source record: 17891
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,comp.dsp

Tim Wescott wrote:
> I've seen a number of inquiries about minimum shift keying, it's
> generation and demodulation. I haven't been able to find anything to
> recommend on the web, which is frustrating since I built a MSK receiver
> for my Master's thesis about 15 years ago.
>
> So I've posted my Master's thesis. It goes into some detail about MSK,
> it's generation and demodulation. It also goes into some detail about
> maritime DGPS data link requirements which I assume no one cares about
> -- but it's there if you do.
>
> Thanks go to Joel Kolstad, KE7CDV, for scanning 88 pages from a bound
> book and making them look good enough to post without embarrasement.
>
> http://www.wescottdesign.com/articles/MSK/mskTop.html
>

Hi, Tim -

There was an article in the January 2003 issue of Circuit Cellar by Tom
Napier concerning MSK.

See http://www.circuitcellar.com/magazine/150toc.htm to purchase the article.

Other than this, I've not seen anything on the Web either.

Cheers,
John

3509. Re: MSK Demodulator

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-28 10:46:05 UTC
From: Terry Given <my_name@ieee.org>
Message-ID: <PH2Ge.4194$PL5.383355@news.xtra.co.nz>
Source record: 17892
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,comp.dsp

Tim Wescott wrote:
> I've seen a number of inquiries about minimum shift keying, it's
> generation and demodulation. I haven't been able to find anything to
> recommend on the web, which is frustrating since I built a MSK receiver
> for my Master's thesis about 15 years ago.
>
> So I've posted my Master's thesis. It goes into some detail about MSK,
> it's generation and demodulation. It also goes into some detail about
> maritime DGPS data link requirements which I assume no one cares about
> -- but it's there if you do.
>
> Thanks go to Joel Kolstad, KE7CDV, for scanning 88 pages from a bound
> book and making them look good enough to post without embarrasement.
>
> http://www.wescottdesign.com/articles/MSK/mskTop.html
>

Thanks Tim, thats a nice looking thesis, I look forward to reading it.
I'd post mine, but I never got past Ch3 :((because somebody offered me
way too much $$$:)

Three cheers for Joel, its not the first time he's done this :)

Cheers
Terry

3510. need scheme of 300Volt Fet HF linear

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-28 16:37:21 UTC
From: johan aeq <fam-j.hoekstra@zonnet.nl>
Message-ID: <1f8e$42e90ac1$52ad139c$876@news.versatel.nl>
Source record: 17893

Hello,
i would like to build a hf linear with a couple of IRF840's.
Do you have something to get me started?
Preferrably a balanced output to keep the 2'nd harmonic's down.
I would like to use it behind a qrp (ft817) transceiver.
Johan PE1AEQ

3511. Re: Simple questions on receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-28 19:45:54 UTC
From: eternalsquire@comcast.net
Message-ID: <1122579954.355641.9530@o13g2000cwo.googlegroups.com>
Source record: 17894
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

In theory, one could also use a synthetic inductance, aka 'gyrator". I took a gyrator based audio oscillator that used 741's and on LTSpice rebuilt it using 1000 Mhz GBW op-amps. Using an FFT of a transient analysis I had a nice narrow adjustable center frequency peak of about 10 Mhz, But I never did have a chance to wire it up, as I have a baby to take care of.

The Eternal Squire

3512. Re: Reviving 12V Gel cells

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-29 02:45:50 UTC
From: hexter@blazenet.net
Message-ID: <11ej62uskl4c5bc@corp.supernews.com>
Source record: 17895

In article <42e35092$0$29458$5a62ac22@per-qv1-newsreader-01.iinet.net.au>,
richardh@iinet.net.au says...
>
>Dear all
>
>I am sure this has been posted before, but I cant recall the response.
>I have several 12V gel cells out of UPS's which are dead.
>Apparently they can be revived by desulfating them - any ideas on the
>way to do this?
>
>Thanks
>Richard

Most of the gel cells from UPS type supplies are baked to death! They
have been trickle charged until the gel is now dry paste. I have seen
then so badly over charged that The cases are distorted, and the terminals
are being forced right out of the case due to plate growth.

Probably not worth your time to even attempt. New gel cells are cheap.

3513. Re: TS-120

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-29 03:18:22 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1122607102.771184.168810@g47g2000cwa.googlegroups.com>
Source record: 17896

-ex- wrote:
> Andrew VK3BFA wrote:
>
> > Erk - hi all,
> >
> > you need to get a very basic book on radios, and read up the theory -
> > it will improve your fault finding no end. (probably mid 70's ARRL
> > handbook would be a good primer)

>
> I'm not so sure that any book would help with a specific model problem.
> After all, the OP is a licensed ham wih a callsign and *should* be
> savvy enough to look for where the smoke came from.
> At this point of troubleshooting it would seem that OP would be equally
> served with a book on "Olifactory Recognition" inasmuch as an
> electronics book. One cannot simply read a 30 year old ARRL Handbook
> and fix a complicated modern radio.
>
> -Bill

Hi Bill,
no, the arrl book wont tell you how to fix a kenwood ts-120 - but it
will provide you with the basic theory of

1) how it works and
2) how to start logical fault finding.

Unless you have at least block level understanding of what is in front
of you, then you wont have ANY chance of fixing it.

Besides, by modern standards, the ts120 IS an old, simple radio, and
SHOULD be able to be serviced in the home workshop. You just need to
have enough basic radio theory to start working your way through. The
license qualification gets you on air - thats all. And most people
forget the theory unless it is subsequently applied in practice.

To me, at any rate, the 'fun' bit of AR is building and getting things
to work - I have no real interest in talking to people on air !

And RF is my field of interest - digital is a mystery, and am quite
content to ask for help and guidance if I have a problem.

73 de VK3BFA Andrew

3514. FA:NOS 572B x2 <$11!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-29 13:12:48 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <kXpGe.507734$cg1.360904@bgtnsc04-news.ops.worldnet.att.net>
Source record: 17897
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Accidentally put the wrong starting price on these tubes and they are going for less than $11 at this point: See at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

73 Tnx heytubeguy

3515. homebrew car antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-29 13:23:05 UTC
From: Kimmo Yliskoski <kimmo.yliskoski@gmail.com.invalid>
Message-ID: <42ea2dd0$0$27392$9b536df3@news.fv.fi>
Source record: 17898

Anyone have good tips to homebrew car antenna? No 1" pipe... just whip...
that stays with me when driving > 60mph. I'm going to use magnet mount on my
car roof. About 1,5m to 2m would be nice length. Any advice or site where
can find something about it?

--
poac @ Ch. 31

3516. Re: homebrew car antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-29 13:24:42 UTC
From: Kimmo Yliskoski <kimmo.yliskoski@gmail.com.invalid>
Message-ID: <42ea2e18$0$27392$9b536df3@news.fv.fi>
Source record: 17899

Kimmo Yliskoski wrote:
> Anyone have good tips to homebrew car antenna? No 1" pipe... just
> whip... that stays with me when driving > 60mph. I'm going to use
> magnet mount on my car roof. About 1,5m to 2m would be nice length.
> Any advice or site where can find something about it?

Forget to mention that it is going to be used at CB-channels. 11m band.

poac

3517. A F.A.Q - What is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-29 17:43:13 UTC
From: Polymath <invalid@invalid.invalid>
Message-ID: <42ea6a5d_3@x-privat.org>
Source record: 17900
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,

competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

3518. Re: A F.A.Q - What is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-29 17:52:29 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <x1uGe.4025$n97.2970@newsfe1-win.ntli.net>
Source record: 17901
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Poly mouth dribbled:

< crap snipped >

FOAD twat.
...(_!_)...

3519. Re: A F.A.Q - What is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-29 18:05:05 UTC
From: Roger Conroy <rogerconroy@nospam.hotmail.com>
Message-ID: <42ea6fcd$0$5353$ec3e2dad@news.usenetmonster.com>
Source record: 17902
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Well said Sir

"Frank Turner-Smith G3VKI" <g3vki@turner-smith.co.uk> wrote in message
news:x1uGe.4025$n97.2970@newsfe1-win.ntli.net...
> Poly mouth dribbled:
>
> < crap snipped >
>
> FOAD twat.
> ...(_!_)...

3520. Re: TS-120

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-29 18:32:31 UTC
From: fmmck@aol.com
Message-ID: <fmmck-2907051432310001@aca5cbd0.ipt.aol.com>
Source record: 17903

In article <1122436871.721180.79260@o13g2000cwo.googlegroups.com>,
pdrunen@aol.com wrote:

> I have a TS-120 and I think the ears are a little weak, comparing the
> rig with my 757, the s-meter on the 757 always reads more.

KJ4UO-

You shouldn't use the S-Meter to compare radios. S-Meters usually don't tell the truth to begin with, and then some companies make their radios read higher to make you think they are better.

Somewhere it is written that a meter should read S-9 with 50 microvolts RF input, and that for each S-Unit there should be a 6 dB change in RF signal. You can check this with a calibrated signal generator. However few radios will meet these specs and not everyone agrees with the values. In other words, it isn't as much a "standard" as such things as the AC voltage and frequency coming into your house.

To check the receiver's "ears", you need a calibrated signal generator to find the lowest signal level it can receive. That is its sensitivity, and that is what you should use to compare radios regardless of S-Meter reading.

73, Fred, K4DII

3521. Re: A F.A.Q - What is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-29 20:24:02 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <CfwGe.14192$YL5.13317@newsfe2-win.ntli.net>
Source record: 17904
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Nedlar <Nedlar wrote:
> On Fri, 29 Jul 2005 17:52:29 GMT, Frank Turner-Smith G3VKI
> <g3vki@turner-smith.co.uk> wrote:
>
>
>>Poly mouth dribbled:
>>
>>>< crap snipped >
>>
>>FOAD twat.
>>...(_!_)...
>
>
> Sober up Frank, then take the dog for a walk.
Done that, time for another pint.
--
;-)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

3522. VFD as an audio/RF amplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-29 22:32:51 UTC
From: N9WOS <n9wos@nobugatt.net>
Message-ID: <n8yGe.510234$cg1.402200@bgtnsc04-news.ops.worldnet.att.net>
Source record: 17905
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew,sci.electronics.design

Has anyone ever tried using a Vacuum fluorescent display as a tube type amplifier? In case anyone is interested, I have been toying around with one, trying just that. Here is my findings.

VFD was pulled out of an old VCR. Made by NEC model number FIP14KM6. I soldered all the grid leads to one wire running the length of the display. Same with the anodes. That created a tube with basically one long grid running the length of the tube, and one long anode plate under that.

All test was done with 5V on the filament.

I could easily obtain 60mA of emission current from the filament with less than 30V tied to the grid and plate. I didn't try to push it any higher because the filament started showing noticeable extra heating near the side connected to the negative of the filament supply. (ie) the filament on the left side of the tube glowed a noticeably brighter orange than the right side at the 60mA emission level.

Space charge around the grid with the grid and plate disconnected was about -2.2 to -2.4Vin reference to the most negative side of the filament.

Now to get useful output.

Hooked the plate up to a 0V to +60V supply with a current meter in line. Hooked the grid to a +15V to -15V supply with full zero crossing capability. I found that the grid in the tube is almost 100% effective. With the grid at zero volts in reference to the most negative side the filament, the plate current was only about 0.25mA. When the grid voltage dropped below -2.6V (a little bit lower than space charge) the current level dropped below readable levels. (0.01mA). The crossover from cutoff state to operating range is almost exactly 0V.

It appears that the grid pretty much acts along the lines of a space charge control grid. Efficiency in that mode of operation is about 50%. For a yield of about 1 to 1 current gain. When the control grid is positive enough to pull 2mA current, then the plate will also be subjected to about 2mA as long as it is more positive than the grid. If the plate drops below the grid voltage then plate current will start to drop and grid current will rise. As long as the plate is at a higher voltage than the grid, then plate voltage doesn't have much effect on plate current. Because of that, I was easily able to obtain a voltage gain close to 100X with a large value plate resistor.

Grid/plate curve was almost perfectly straight from 10V to 60V(cutoff) plate voltage with a 1V P-P input.

Because of it's 1 to 1 current gain, normal cap/resistor inter-stage coupling networks are useless. The driving network will basically have to be designed like a cathode driven tube circuit. Except that the output is 180 degrees out of phase with the input, instead of in phase. For audio applications, that means that all inter-stage coupling will have to be transformer based. Current gain would be performed by the transformers, and voltage gain would be performed by the VFD's

And audio amplifier was easy to build on the workbench. Hooked the plate up to 60V through an output transformer, with the transformer driving and speaker. The input was via another transformer with a positive grid bias supply hooked to it. I adjusted the positive supply to set the plate current to the middle of my desired operating range. It worked quite well.

On the frequency response side of things, it has a hefty inter-electrode capacitance. But it still provided good amplification at 2MHz. As long at a tuned plate circuit was used. Even with the large inter-electrode capacitance, self oscillation was still impossible even with a tuned plate and grid, because of it's close to 1 to 1 current gain. On a standard tuned grid, or Hartley oscillator you have to have more turns in the plate circuit, than in the grid circuit, or there won't be enough drive to drive the grid to sustain oscillation. The only working types of oscillators you can use the tube in is circuits with transformer feedback to allow current gain.

It makes it a very harmonically stable tube for RF amplifier applications. That gives me a few ideas for a full QSK QRP amplifier. Run it with zero grid voltage. It will be operating in class B. It would be good for CW or AM.

Another application, if you had two identical ones, is a push pull class B audio amp. Have the center tap of the grid input transformer fastened to ground, and the center tap of the output transformer connected to HV. Just two VFD's Two transformers, B+ , filament supply, and nothing else.

I have no idea what the maximum voltage is, that you could run on the plate. The audio amplifier I had was driven by a 60Vsupply, through a transformer output, with the lowest peak plate voltage of around 10V and the highest peak plate voltage of about 140V to 150V. It had about a quarter watt peak output, with 6mA Q current. I estimate I could push it up to about 15mA Q current with about 1W, to 1.5W peak output with 100V+ B+, and a transformer that had the right winding ratio.

Other VFD's probably have totally different specs than the one I am working with. But they should still perfectly viable for amplifier implications. If the current gain is over 1 to 1 then you may have a problem with VHF harmonic oscillation in amplifier circuits. But I don't think you will find any like that, because they would exhibit VHF oscillation characteristics even in their intended applications if they had a current gain over 1 to 1. A VFD display on an clock radio that generated a birdie on the FM broadcast band when ever the "PM" label was lit wouldn't make the FCC very happy.

Now to figure out how to make a complete tube type radio out of VFD's. Or maybe, just a single tube regenerative receiver.

Another neat thing about VFD's as amplifiers is, the display flashes in step with the music beat. :-)

Now if we could get a VFD manufacturer to produce a display with 4 or 5 totally individual sets of elements, then you could produce a totally integrated tube type AM receiver with just one VFD in it. I have seen some figures factories that give an ~$5 to $8 per unit price on custom VFD's in quantities of over 10,000.

3523. Re: A F.A.Q - What is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-29 22:44:27 UTC
From: huLLy <g4sdw@aol.com>
Message-ID: <U5OdnULySfDZLHffRVn-gw@giganews.com>
Source record: 17906
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

> On Fri, 29 Jul 2005 20:24:02 GMT, Frank Turner-Smith G3VKI
> <g3vki@turner-smith.co.uk> wrote:
>
>
>> Done that, time for another pint.
>
> After dragging that lump around with you, I see why you need one.

Hello, bully boy Super Sam.

Hows about you starting a radio related thread? No? Thought not!

3524. Pool leak detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-29 23:10:10 UTC
From: Joel <Joel@cyberbest.com>
Message-ID: <4f408$42ea9582$943f9237$32491@STARBAND.NET>
Source record: 17907

Has anyone had any experience with some sort of above ground pool leak detector? I figures if I could connect one probe to some sort of sensitive restiance (ohm) meter and put it in the water, I could maybe read the resistance between the probe and ground and then as I got closer to the leak the restiance would go down. But the restiance is WAY high.. But seems to me something like that would work. Any ideas?

Joe AG4QC

3525. The body of knowledge held by Hams?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-29 23:12:53 UTC
From: Polymath <invalid@invalid.invalid>
Message-ID: <42eab79c$1_2@x-privat.org>
Source record: 17908
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

It is technical interest that differentiates the Radio Ham from the CBer.

In a world where so much is available off-the-shelf, where is the body
of technical knowledge to be found?

I suggest that it is still within fairly elementary electrical constructs -
capacitors,
inductors, and antennae. (OK, there are some auto-antennae tuners around now
for those who are determined in their CBness)

3526. Re: Pool leak detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-29 23:14:55 UTC
From: Polymath <invalid@invalid.invalid>
Message-ID: <42eab817_3@x-privat.org>
Source record: 17909

A Grid Leak was a way in the old days of stopping a flow.

"Joel" <Joel@cyberbest.com> wrote in message
news:4f408$42ea9582$943f9237$32491@STARBAND.NET...
> Has anyone had any experience with some sort of above ground pool leak
> detector? I figures if I could connect one probe to some sort of
> sensitive restiance (ohm) meter and put it in the water, I could maybe
> read the resistance between the probe and ground and then as I got closer
> to the leak the restiance would go down. But the restiance is WAY high..
> But seems to me something like that would work. Any ideas?
>
> Joe AG4QC
>
>

3527. Re: A F.A.Q - What is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-29 23:19:10 UTC
From: Spike <Aero.Spike@Technologies.invalid>
Message-ID: <b9ele11271phdb27op6r9ofkmh2dsbolos@4ax.com>
Source record: 17910
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

huLLy wrote:

>> Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk> wrote:
>>
>>> Done that, time for another pint.
>>
>> After dragging that lump around with you, I see why you need one.
>
>Hello, bully boy Super Sam.
>
>Hows about you starting a radio related thread? No? Thought not!
>

Is he back again?

Does he know anything about radio?

Does he know anything?

from
Aero Spike

3528. Re: homebrew car antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-30 00:56:39 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <dcej87$vs2$1@puck.litech.org>
Source record: 17911

TJ <DELETEthomasj1@arczip.com> wrote:
> On Fri, 29 Jul 2005 16:24:42 +0300, "Kimmo Yliskoski" <kimmo.yliskoski
> @ gmail.com.invalid> wrote:

>>Kimmo Yliskoski wrote:
>>> Anyone have good tips to homebrew car antenna? No 1" pipe... just
>>> whip... that stays with me when driving > 60mph. I'm going to use
>>> magnet mount on my car roof. About 1,5m to 2m would be nice length.
>>> Any advice or site where can find something about it?
>>
>>Forget to mention that it is going to be used at CB-channels. 11m band.

> Why not go to RS and buy one??
> A lot easier than building one for 27Mhz.

Only if he's somewhere that has RS or equivalent, which isn't true all places. I don't find Mr. Yliskoski in the FCC or RAC databases, which leads me to believe he's not on the North American continent. The name has a Slavic feel, and anyone, anywhere in the world, can have a gmail address. It's entirely possible that there's no place near him that sells brown-n-serve antennas.

Kimmo,

An efficient 11m whip probably is going to be a bit longer than 1.5m; the rear bumper might be a better choice.

If you really want to do a roof- or trunk- (boot-) mount, there is a rather sturdy-looking magnetic mount described in the web page at <http://www.qsl.net/n2ffl/ic706kmiig.htm>. The page at <http://www.arrl.org/tis/info/Mobile-H.html> discusses mobile antenna design and construction of a bumper-mounted whip that works from 20m through 6m and will handle 100W output.

It's 99" (2.5m) long at max extension, and is retracted about 60 cm (to about 1.9m) for 10m. I think that it would need to be just about 2m long to work 11m, and that's pretty long for a roof-mounted whip. With the coil in the center, it really would be difficult to keep it in place on the roof, because of the rotational moment from the forces on the coil, and it would be a real danger to traffic if it came loose.

Boot lid would be a little safer, but not much: a magnetic mount just is not as secure as a real mechanical fastening. Please consider the bumper mount.

Good luck!

73, de

--
Mike Andrews W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

3529. Re: VFD as an audio/RF amplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-30 01:54:49 UTC
From: Andy Cuffe <baltimora@psu.edu>
Message-ID: <j5nle11be65gjbjemdukbu8ks2c1cmnc3j@4ax.com>
Source record: 17912
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew,sci.electronics.design

I actually have played with a few old VFDs. I didn't make any real measurements, but I pushed the plate to the full 400v of my power supply with no ill effects. The only limiting factor was power dissipation. When the tube got hot enough, the glass cracked. With enough negative grid bias it was happy to sit there all day with 400v on the plate. I was surprised it didn't arc with that much of an overvoltage.
Andy Cuffe

baltimora@psu.edu <-- Use this address until 12/31/2005

acuffe@gmail.com <-- Use this address after 12/31/2005

3530. Re: Pool leak detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-30 02:12:21 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrndelog5.1kdv.bit-bucket@shell.config.com>
Source record: 17913

On Fri, 29 Jul 2005 18:10:10 -0500, Joel wrote:
> Has anyone had any experience with some sort of above ground pool leak
> detector? I figures if I could connect one probe to some sort of sensitive
> restiance (ohm) meter and put it in the water, I could maybe read the
> resistance between the probe and ground and then as I got closer to the leak
> the restiance would go down. But the restiance is WAY high.. But seems to me
> something like that would work. Any ideas?
>
> Joe AG4QC

http://www.discovercircuits.com/PDF-FILES/h2oalm.pdf

Trim back the URL to find lotsa Neat Stuff.

HTH es 73
Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
Pueblo, Colorado | @ | Jonesy | OS/2 __
38.24N 104.55W | config.com | DM78rf | SK

3531. Re: VFD as an audio/RF amplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-30 03:43:44 UTC
From: N9WOS <n9wos@nobugatt.net>
Message-ID: <QHCGe.47435$5N3.20612@bgtnsc05-news.ops.worldnet.att.net>
Source record: 17914
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew,sci.electronics.design

>I actually have played with a few old VFDs. I didn't make any real
> measurements,

http://www.mif.pg.gda.pl/homepages/frank/sheets/127/1/12DL8.pdf

The first graph on the 12DL8 pdf will give you a good idea what it's
operating characteristics is like. The current scale, and voltages are off,
but it will give you the general idea.

> but I pushed the plate to the full 400v of my power
> supply with no ill effects. The only limiting factor was power
> dissipation. When the tube got hot enough, the glass cracked.

That would be easy to solve. Cover the anode side with thermal grease, and
use a clip to mount it to a big aluminum heat sink. You would have something
that would look almost like a solid state monolithic amp. :-0

3532. Re: A F.A.Q - What is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-30 10:45:21 UTC
From: CanAiry <invalid@invalid.invalid>
Message-ID: <42eb59e2$1_1@x-privat.org>
Source record: 17915
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Spike" <Aero.Spike@Technologies.invalid> wrote in message
news:b9ele11271phdb27op6r9ofkmh2dsbolos@4ax.com...
> Is he back again?
It will only be a matter of time before someone catches up with him, he
learnt nothing during his absence.

3533. Re: A F.A.Q - What is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-30 10:58:55 UTC
From: huLLy <g4sdw@aol.com>
Message-ID: <AtWdnbCoLfr6wHbfRVn-iQ@giganews.com>
Source record: 17916
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

> On Fri, 29 Jul 2005 23:44:27 +0100, "huLLy" <g4sdw@aol.com> wrote:
>
>
>>
>> Hello, bully boy Super Sam.
>>
>> Hows about you starting a radio related thread? No? Thought not!
>>
>
>
> That would be a waste of time. UKRA is now full of lazy-arsed Class
> B's and low-life dross with M3 licenses.
> I need no lessons in radio from a G7 CBr who is ashamed of his own
> call sign and has to use someone elses.

Then what, pray, are you doing here? Clearly you seem to need some form of association with the very people you mention. Either that or because school is out for the holidays you can't steal little boys pocket money?

3534. Postage-stamp sized radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-30 12:10:15 UTC
From: Polymath <invalid@invalid.invalid>
Message-ID: <42eb6dcd_1@x-privat.org>
Source record: 17917
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Having currently employment within a Japanese manufacturer of
WCDMA mobile phones and thus being exposed to the "Innards" of
such phones; following the historical challenges of making a transceiver
that would fit into a tobacco tin, is it perhaps now the time to
issue a challenge to come up with a complete transceiver design
fabricated to the size of a postage stamp?

Some of the circuits that I am engaged in testing have components
that are smaller than the smallest blob of solder I can melt!

Perhaps it is time to extend my soldering iron with a tip fashioned
from a dressmaker's pin?

3535. Re: TS-120

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-30 12:42:32 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1122727352.194993.130220@o13g2000cwo.googlegroups.com>
Source record: 17918

Fred McKenzie wrote:
> In article <1122436871.721180.79260@o13g2000cwo.googlegroups.com>,
> pdrunen@aol.com wrote:
>
> > I have a TS-120 and I think the ears are a little weak, comparing the
> > rig with my 757, the s-meter on the 757 always reads more.
>
> KJ4UO-
>
> You shouldn't use the S-Meter to compare radios. S-Meters usually don't
> tell the truth to begin with, and then some companies make their radios
> read higher to make you think they are better.
>
>
>
> 73, Fred, K4DII

Fred - its irrelevant here - you are quite correct, but its irrelevant in this context. The S meter on the ts120 shows different readings on each band on its OWN cal. oscillator. This is what the oscillator is designed to do (among other things)

Why make it more complicated than it has to be? - keep it simple. Gets things done. Too much theory confuses the issue. Most techs earn a living by doing the SIMPLE things.

And S-meter calibration standards - yes, they do exist for sure (and they are, indeed, mildly interesting. If you have an accurate, in calibration signal generator then you can check them.) - but what about fixng the radio 1st, and THEN work out if the S-meter is properly calibrated or not.

de VK3BFA Andrew

3536. Re: Postage-stamp sized radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-30 12:47:46 UTC
From: CanAiry <invalid@invalid.invalid>
Message-ID: <42eb768f$1_3@x-privat.org>
Source record: 17919
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"Polymath" <invalid@invalid.invalid> wrote in message
news:42eb6dcd_1@x-privat.org...
> Having currently employment

Ahh a rehab course

3537. Re: Postage-stamp sized radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-30 13:12:03 UTC
From: Steve H <g0lmv@yahoo.co.uk>
Message-ID: <42eb7d75$1_3@mk-nntp-2.news.uk.tiscali.com>
Source record: 17920
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

http://www.amqrp.org/kits/smk1/ latest sm components are smaller so I can't see why not, but what's the point?

Steve H
Real radios glow in the dark....
"Polymath" <invalid@invalid.invalid> wrote in message
news:42eb6dcd_1@x-privat.org...
> Having currently employment within a Japanese manufacturer of
> WCDMA mobile phones and thus being exposed to the "Innards" of
> such phones; following the historical challenges of making a transceiver
> that would fit into a tobacco tin, is it perhaps now the time to
> issue a challenge to come up with a complete transceiver design
> fabricated to the size of a postage stamp?
>
> Some of the circuits that I am engaged in testing have components
> that are smaller than the smallest blob of solder I can melt!
>
> Perhaps it is time to extend my soldering iron with a tip fashioned
> from a dressmaker's pin?
>
>

3538. Re: A F.A.Q - What is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-30 15:37:06 UTC
From: huLLy <g4sdw@aol.com>
Message-ID: <ZOGdnfPWwdE2A3bfRVn-3w@giganews.com>
Source record: 17921
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

In message: Message-ID: <tr6ne1d7pvhuc7c1f5i5lj33jjtd3hfidu@4ax.com>,
Nedlar wrote:

>
> Thank you for confirming my observations. My aim is to drive them all
> back onto 27MHz. Why don't you make a start and bugger off back there
> and leave us radio amateurs to do real radio work.

Ah, your usual bullying tactics displayed for all to see.

The 'gentlemanly' traditions of amateur radio are clearly lost on you, poor
lonely soul.

Now run along and try and fit some batteries in your wind up radio, I
suspect that's the depth of your knowledge base.

3539. Re: TS-120

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-30 15:49:50 UTC
From: fmmck@aol.com
Message-ID: <fmmck-3007051149510001@ac992f58.ipt.aol.com>
Source record: 17922

In article <1122727352.194993.130220@o13g2000cwo.googlegroups.com>,
"Andrew VK3BFA" <ablight@alphalink.com.au> wrote:

> Fred - its irrelevant here - you are quite correct, but its irrelevant
> in this context. The S meter on the ts120 shows different readings on
> each band on its OWN cal. oscillator. This is what the oscillator is
> designed to do (among other things)

Andrew-

Perhaps I was a little off base. It has been a long time since I had a
TS-120S, and I don't recall the calibration oscillator. I loaned the
service manual to someone several years ago, so I can't check it out!

Since I wasn't aware of the utility of the calibration oscillator, the
only sure evidence of a malfunction was a reference to smoke that seemed
unrelated to receiver sensitivity.

For what it is worth, there is a service bulletin about replacing an input
RF transformer that might have been damaged by static discharge. I don't
know if it applies equally to the TS-120 and TS-120S.

73, Fred, K4DII

SB-040

TS-120S Ant Input Transformer Replacement 7-12-79

Ts-120S transceivers subject to strong static fields or similar high
current atmospheric discharges may suddenly exhibit low RX sensitivity on
all bands. TX will be OK. You may suspect T1 on the RF unit X44-1260-01.

When replacing or ordering T1, L43-0696-35, also check the value of C20.
If it is 33pF, just replace and repeak the transformer.

First production transceivers will have a 15pF cap for C20. When changing
T1, also replace C20 with a 33pF capacitor, and repeak the circuit.

Old part number: L34-0696-05 Antenna Coil
New part number: L34-0696-35
Old Capacitor was 15pF, replace with
New part number: CC45RH1H330J 33pf

Please make these changes in your service manual.

JEB/yn
(c) 71279TKC

3540. Re: Postage-stamp sized radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-30 17:45:03 UTC
From: Larry <mcmlviii@comcast.net>
Message-ID: <3l1shbF10knmmU1@individual.net>
Source record: 17923
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Steve H wrote:
> http://www.amqrp.org/kits/smk1/ latest sm components are smaller so I can't
> see why not, but what's the point?

For mailing a radiogram, perhaps? Package tracking, though RFID seems
to the modus praesto.

Certainly many sinister reasons exist as well for such a small device.

3541. Re: Postage-stamp sized radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-30 19:00:09 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <Z6QGe.14722$zp1.8658@newsfe7-win.ntli.net>
Source record: 17924
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Larry wrote:
> Steve H wrote:
>
>> http://www.amqrp.org/kits/smk1/ latest sm components are smaller so I
>> can't
>> see why not, but what's the point?
>
>
> For mailing a radiogram, perhaps? Package tracking, though RFID seems
> to the modus praesto.
>
> Certainly many sinister reasons exist as well for such a small device.
It can't be smaller than Beanie's brain.
--
;-)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

3542. Re: Postage-stamp sized radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-30 21:35:37 UTC
From: brot <brot@brot.com>
Message-ID: <3l2a58F10l1o7U1@individual.net>
Source record: 17925
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"Polymath" <invalid@invalid.invalid> wrote in message
news:42eb6dcd_1@x-privat.org...
> Having currently employment within a Japanese manufacturer of
> WCDMA mobile phones and thus being exposed to the "Innards" of
> such phones; following the historical challenges of making a transceiver
> that would fit into a tobacco tin, is it perhaps now the time to
> issue a challenge to come up with a complete transceiver design
> fabricated to the size of a postage stamp?

Idiot.

3543. Re: Postage-stamp sized radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-30 23:26:38 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <7fucnWrYhZokkXHfUSdV9g@ptd.net>
Source record: 17926
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Why the attack? A postage stamp sized transceiver is certainly quite
feasible with today's technology. It won't be QRO, but an entire transceiver
can be implemented in that size ... do a web search on "Zigbee" and I'm sure
you'll find many examples

Carl - wk3c

"brot" <brot@brot.com> wrote in message
news:3l2a58F10l1o7U1@individual.net...
>
> "Polymath" <invalid@invalid.invalid> wrote in message
> news:42eb6dcd_1@x-privat.org...
>> Having currently employment within a Japanese manufacturer of
>> WCDMA mobile phones and thus being exposed to the "Innards" of
>> such phones; following the historical challenges of making a transceiver
>> that would fit into a tobacco tin, is it perhaps now the time to
>> issue a challenge to come up with a complete transceiver design
>> fabricated to the size of a postage stamp?
>
> Idiot.
>

3544. Re: CW filter/notch filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-31 01:00:52 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <bpVGe.6743$d02.1035681@news20.bellglobal.com>
Source record: 17927

"Fred McKenzie" <fmmck@aol.com> wrote in message
news:fmmck-2207051441180001@ac9f4bda.ipt.aol.com...
> In article <1121989020.770510.116450@g14g2000cwa.googlegroups.com>,
> "K7ITM" <k7itm@aol.com> wrote:
>
>>... or just transmit the SSB with a
>> suppressed carrier that you don't have to worry about removing.)
>
> Tom & Sam-
>
> That is what I was going to suggest. It is a common practice to send a
> partially reduced carrier that doesn't eat up a lot of power, but allows
> you to synchronize to it using a synchronous detector.
>
The Canadian time and frequency standard transmitters at 3330 and 7335 kHz
are USB with partially reduced carrier. I don't see the point of sending a
tone in the middle of the speech spectrum to provide a sync reference when
unsuppressing the carrier to some degree is much more economical.

Tom

3545. Re: Postage-stamp sized radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-31 04:56:04 UTC
From: Polymath <invalid@invalid.invalid>
Message-ID: <42ec5bf9_2@x-privat.org>
Source record: 17928
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Why the attack? Why the _INFANTILE_ attack? It is
an unfortunate indication of the extent to which incurable
CBers, all those who buy their rigs off-the-shelf and
send them back to be repaired, are infesting Ham Radio.

I append a short article to assist.

"Carl R. Stevenson" <wk3cqth@wk3c.com> wrote in message
news:7fucnWrYhZokkXHfUSdV9g@ptd.net...
> Why the attack? A postage stamp sized transceiver is certainly quite
> feasible with today's technology. It won't be QRO, but an entire
> transceiver can be implemented in that size ... do a web search on
> "Zigbee" and I'm sure you'll find many examples
>
> Carl - wk3c
>
> "brot" <brot@brot.com> wrote in message
> news:3l2a58F10l1o7U1@individual.net...
>>
>> "Polymath" <invalid@invalid.invalid> wrote in message
>> news:42eb6dcd_1@x-privat.org...
>>> Having currently employment within a Japanese manufacturer of
>>> WCDMA mobile phones and thus being exposed to the "Innards" of
>>> such phones; following the historical challenges of making a transceiver
>>> that would fit into a tobacco tin, is it perhaps now the time to
>>> issue a challenge to come up with a complete transceiver design
>>> fabricated to the size of a postage stamp?
>>
>> Idiot.
>>
>

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

3546. Exam Question.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-31 05:29:24 UTC
From: Polymath <invalid@invalid.invalid>
Message-ID: <42ec654d_1@x-privat.org>
Source record: 17929
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Because this NG has degenerated into a hotbed of infantile
personal remarks made by a number of contributors whose
only contribution to technical threads is to sneer, then this
NG has ceased to be a forum for Ham Radio and is merely an
annexe of the cesspit of the gangrenous degeneration from which
M3/CB Fools' Licensees originate.

Discuss (10 Marks)

3547. Re: TS-120

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-31 07:59:44 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1122796784.082680.53140@g49g2000cwa.googlegroups.com>
Source record: 17930

Hi Fred,
yep - you are correct about the input transformers - they go open
circuit, and are a real bastard to replace, as you have to pull apart
the bandswitch mechanism, which usually generates its own set of nice
little problems.

I've done up 2 of them now - a nice little radio, and not too badly
made or designed, all things considered. Synthesiser is noisy, but hey,
its the technology of the time - and not as bad as some others of that
period! But can be really fiddly around the rf front end area. Things
like bandswitch wafers have run out as spare parts, most other things
are still available.

They are getting a bit old now, so have probably been through a few
owners - and if it has been "fiddled" with, can be a bugger to get all
the faults out - but usually worth the effort in the long run.

The CAL oscillator in any radio is also used as a crude signal
generator - so it gives a "quick and dirty" indication of where the
fault is - in this case, its as deaf as a post on 20m.

The loose wires around the bandswitch are a dead giveaway as well -
probably, someone has been in there in the past stuffing around. -
would look for a damaged switch contact as that might explain the loose
wires as well - someone was trying to fault find. Its unlikely to be
the input rx rf transformer as its common to all bands. The switch
wafers can USUALLY be brought back to life with some TLC - you need
more subtle tools than a big hammer, and the patience to do it tho.

73 de VK3BFA Andrew.

ps - this vintage radio is EMMINENTLY fixable at home - no custom VLSI
ics, common parts, simple design, reasonably accessible layout, NO SMD
"things"..... - if you can get a "good" one, go for it.

Fred McKenzie wrote:
> In article <1122727352.194993.130220@o13g2000cwo.googlegroups.com>,
> "Andrew VK3BFA" <ablight@alphalink.com.au> wrote:
>
> > Fred - its irrelevant here - you are quite correct, but its irrelevant
> > in this context. The S meter on the ts120 shows different readings on
> > each band on its OWN cal. oscillator. This is what the oscillator is
> > designed to do (among other things)
>
> Andrew-
>

> Perhaps I was a little off base. It has been a long time since I had a
> TS-120S, and I don't recall the calibration oscillator. I loaned the
> service manual to someone several years ago, so I can't check it out!
>
> Since I wasn't aware of the utility of the calibration oscillator, the
> only sure evidence of a malfunction was a reference to smoke that seemed
> unrelated to receiver sensitivity.
>
> For what it is worth, there is a service bulletin about replacing an input
> RF transformer that might have been damaged by static discharge. I don't
> know if it applies equally to the TS-120 and TS-120S.
>
> 73, Fred, K4DII
>
>

3548. Re: Postage-stamp sized radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-31 08:46:05 UTC
From: Theo <theodore.twyler@ntlworld.com>
Message-ID: <hd0He.18570$bT4.14168@newsfe1-gui.ntli.net>
Source record: 17931
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"Polymath" <invalid@invalid.invalid> wrote in message
news:42eb6dcd_1@x-privat.org...

(snip)
Perhaps it is time to extend my soldering iron with a tip fashioned
from a dressmaker's pin?

Well do so - then do us all a favour and stick it up your arse!

3549. Re: Postage-stamp sized radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-31 09:11:16 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <UA0He.14506$YL5.4745@newsfe2-win.ntli.net>
Source record: 17932
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Theo wrote:
> "Polymath" <invalid@invalid.invalid> wrote in message
> news:42eb6dcd_1@x-privat.org...
>
> (snip)
> Perhaps it is time to extend my soldering iron with a tip fashioned
> from a dressmaker's pin?
>
> Well do so - then do us all a favour and stick it up your arse!
>
>
>
>
Then, and only then, switch it on.
--
;-)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

3550. Re: Exam Question.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-31 09:18:15 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <rH0He.7508$hc4.5855@newsfe6-win.ntli.net>
Source record: 17933
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Poly no maths wrote:
< crap snipped >
> Discuss (10 Marks)
>
>
T'was on the good ship Beanus,
my God, you should have seen us.
The figurehead was a sheep in bed
sucking old Airy's p***s.

Discuss (11 Marks)

3551. Re: Exam Question.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-31 10:00:20 UTC
From: Spike <Aero.Spike@Technologies.invalid>
Message-ID: <c38pe1t5aaqr3s094dfqdatl71l9d6di9u@4ax.com>
Source record: 17934
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Frank Turner-Smith G3VKI wrote:

>PolyMouthth wrote:
>
>< crap snipped >
>
>> Discuss (10 Marks)
>>
>
>T'was on the good ship Beanus,
>my God, you should have seen us.
>
>Discuss (11 Marks)

Wait a minute.

Wasn't this the chap who came on here threatening people with legal
action if they failed to preserve his anonymity?

And then went on to post a poem referring to himself, in which he was
addressed as 'Gareth', who seemed to live in Wiltshire, and seemed
know to the police?

from
Aero Spike

3552. Re: Exam Question.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-31 10:08:58 UTC
From: huLLy <g4sdw@aol.com>
Message-ID: <O-GdndCerbCtPnHfRVn-gw@giganews.com>
Source record: 17935
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Spike wrote:
> Frank Turner-Smith G3VKI wrote:
>
>> PolyMouthth wrote:
>>
>> < crap snipped >
>>
>>> Discuss (10 Marks)
>>>
>>
>> T'was on the good ship Beanus,
>> my God, you should have seen us.
>>
>> Discuss (11 Marks)
>
> Wait a minute.
>
> Wasn't this the chap who came on here threatening people with legal
> action if they failed to preserve his anonymity?
>
> And then went on to post a poem referring to himself, in which he was
> addressed as 'Gareth', who seemed to live in Wiltshire, and seemed
> know to the police?
>

Cor blimey, guv! You don't mean to say, nah I don't believe it, that Polymoth is actually Airy R Bean, Gareth Evans himself?!

My God, I am shocked!

Who would have known! Thanks for bringing it to the attention of people on the newsgroup who are parents and wish to protect their children from his nasty cyberstalking and unhealthy interest in children tendancies etc.

3553. Re: Exam Question.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-31 10:17:08 UTC
From: huLLy <g4sdw@aol.com>
Message-ID: <9_GdnfA6L6mHOHHfRVn-oQ@giganews.com>
Source record: 17936
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Bullyboy Nedlar wrote in message Message-ID:
<j19pe1pkcgv2jbua5i3as9nme41kph97bj@4ax.com

> Low-life scum.

Nedlar, you need a Taser to the testes, the shock might bring you up from
the bullyboy swamp into the human race.

3554. Re: Exam Question.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-31 11:01:22 UTC
From: MW0GUV <me@spamno.net>
Message-ID: <dcib1i$50b$1@newsg3.svr.pol.co.uk>
Source record: 17937
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"huLLy" <g4sdw@aol.com> wrote in message
news:9_GdnfA6L6mHOHHfRVn-oQ@giganews.com...
> Bullyboy Nedlar wrote in message Message-ID:
> <j19pe1pkcgv2jbua5i3as9nme41kph97bj@4ax.com
>
> > Low-life scum.
>
> Nedlar, you need a Taser to the testes, the shock might bring you up from
> the bullyboy swamp into the human race.
>
>

He's not a bully, he is just a gutless wan*er who snipes from behind his keyboard. I'd love to see what he would do face to face with any of the people he insists on having a pop at

Andy MW0GUV

3555. Re: Exam Question.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-31 12:00:27 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <v33He.10827$SO4.878@newsfe4-win.ntli.net>
Source record: 17938
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Spike wrote:
> Frank Turner-Smith G3VKI wrote:
>
>
>>PolyMouthth wrote:
>>
>>>< crap snipped >
>>
>>>Discuss (10 Marks)
>>>
>>
>>T'was on the good ship Beanus,
>>my God, you should have seen us.
>>
>>Discuss (11 Marks)
>
>
> Wait a minute.
>
> Wasn't this the chap who came on here threatening people with legal
> action if they failed to preserve his anonymity?
>
> And then went on to post a poem referring to himself, in which he was
> addressed as 'Gareth', who seemed to live in Wiltshire, and seemed
> know to the police?
>
> from
> Aero Spike

The very same, and line 2 of Polymath's posts of 10:54 and 10:58
yesterday under the title "Brian Reay's Legacy" reads:-

"Copyright ï¿½ 10th May 2005 By Gareth Alun Evans"

Is he now going to bring a case against himself? I'd love to be in Court
for the hearing!
--
;-)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

3556. Re: Exam Question.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-31 13:14:54 UTC
From: MW0GUV <me@spamno.net>
Message-ID: <dciir0$3uc$1@news5.svr.pol.co.uk>
Source record: 17939
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Nedlar >" <Nedlar <me@privacy.net> wrote in message
news:hqipe1lngiajulmtur519rvn1sn4q5tvkc@4ax.com...
> On Sun, 31 Jul 2005 12:01:22 +0100, "MW0GUV" <me@spamno.net> wrote:
>
>
> >He's not a bully, he is just a gutless wan*er who snipes from behind his
> >keyboard. I'd love to see what he would do face to face with any of the
> >people he insists on having a pop at
> >
> >Andy MW0GUV
> >
>
> You'd shit yourself , Sonny.

Easily proven

Andy MW0GUV

3557. Re: Exam Question.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-31 13:16:52 UTC
From: huLLy <g4sdw@aol.com>
Message-ID: <aoidnRDB3oimUnHfRVn-qQ@giganews.com>
Source record: 17940
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Nedlar, the playground bully, wrote in message:

Message-ID: <hqipe1lngiajulmtur519rvn1sn4q5tvkc@4ax.com>

---- Original Message ----
From: "Nedlar >" <Nedlar <me@privacy.net>
Newsgroups: uk.radio.amateur,rec.radio.amateur.homebrew
Sent: Sunday, July 31, 2005 2:00 PM
Subject: Re: Exam Question.....

>
> You'd shit yourself , Sonny.

Only 'low life scum' would respond like that. Taken time out from stealing
gob-stoppers from kids smaller than yourself to type that, have you?

3558. Re: Exam Question.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-31 14:11:39 UTC
From: Spike <Aero.Spike@Technologies.invalid>
Message-ID: <lrmpe1tuqpet0mv940s9866qqke32d1snm@4ax.com>
Source record: 17941
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

huLLy wrote:

>Nedlar, the playground bully, wrote in message:
>
>Message-ID: <hqipe1lngiajulmtur519rvn1sn4q5tvkc@4ax.com>
>
>---- Original Message ----
>From: "Nedlar >" <Nedlar <me@privacy.net>
>Newsgroups: uk.radio.amateur,rec.radio.amateur.homebrew
>Sent: Sunday, July 31, 2005 2:00 PM
>Subject: Re: Exam Question.....
>
>> You'd shit yourself , Sonny.
>
>Only 'low life scum' would respond like that. Taken time out from stealing
>gob-stoppers from kids smaller than yourself to type that, have you?
>

Is the remark quoted part of the international tradition of
gentlemanly behaviour that we are told is so much a part of 'ham
radio', whatever that is? Seems to be a hobby for strange people.

from
Aero Spike

3559. Re: Postage-stamp sized radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-31 14:34:23 UTC
From: Larry <mcmlviii@comcast.net>
Message-ID: <3l45nsF10j9k8U2@individual.net>
Source record: 17942
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Polymath wrote:
> Why the attack?

Does it matter? Killfile them and move on; they are worth no more
effort or attention and are never deserved of any response.

73
N1POP

3560. Re: Postage-stamp sized radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-31 15:43:09 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrndepscd.kog.bit-bucket@shell.config.com>
Source record: 17943

On Sun, 31 Jul 2005 07:34:23 -0700, Larry wrote:
> Polymath wrote:
>> Why the attack?
>
> Does it matter? Killfile them and move on; they are worth no more
> effort or attention and are never deserved of any response.

Well, certsinly killfile any crosspostings that include uk.radio.amateur.
That seems to be where the major sewage leaks are coming from.

Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
Pueblo, Colorado | @ | Jonesy | OS/2 __
38.24N 104.55W | config.com | DM78rf | SK

3561. Re: Postage-stamp sized radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-31 15:50:12 UTC
From: Polymath <invalid@invalid.invalid>
Message-ID: <42ecf2d3_1@x-privat.org>
Source record: 17944
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

The remark from a Yank indicates the state of play in Britland....

"Allodoxaphobia" <bit-bucket@config.com> wrote in message
news:slrndepscd.kog.bit-bucket@shell.config.com...
> On Sun, 31 Jul 2005 07:34:23 -0700, Larry wrote:
>> Polymath wrote:
>>> Why the attack?
>>
>> Does it matter? Killfile them and move on; they are worth no more
>> effort or attention and are never deserved of any response.
>
> Well, certsinly killfile any crosspostings that include uk.radio.amateur.
> That seems to be where the major sewage leaks are coming from.
>
> Jonesy
> --
> Marvin L Jones | jonz | W3DHJ | linux
> Pueblo, Colorado | @ | Jonesy | OS/2 __
> 38.24N 104.55W | config.com | DM78rf | SK

3562. Parts at Hamfests

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-31 16:53:38 UTC
From: Richard <"\"delete.this.\"rf.gillette"@ieee.org>
Message-ID: <mm7He.7882$6f.2589@newsread3.news.atl.earthlink.net>
Source record: 17945

At Midwest hamfests there is a guy that has a large collection of semiconductors. Anybody know his name or email address?

3563. Re: Exam Question.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-31 17:00:49 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <5t7He.18688$Fx3.3585@newsfe7-gui.ntli.net>
Source record: 17946
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Nedlar <Nedlar wrote:
> On Sun, 31 Jul 2005 12:01:22 +0100, "MW0GUV" <me@spamno.net> wrote:
>
>
>
>>He's not a bully, he is just a gutless wan*er who snipes from behind his
>>keyboard. I'd love to see what he would do face to face with any of the
>>people he insists on having a pop at
>>
>>Andy MW0GUV
>>
>
>
> You'd shit yourself , Sonny.
He'd more likely piss himself laughing.
--
;-)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

3564. Re: Exam Question.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-31 17:19:56 UTC
From: MW0GUV <me@spamno.net>
Message-ID: <dcj16kjns1@newsg1.svr.pol.co.uk>
Source record: 17947
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Frank Turner-Smith G3VKI" <g3vki@turner-smith.co.uk> wrote in message
news:5t7He.18688$Fx3.3585@newsfe7-gui.ntli.net...
> Nedlar <Nedlar wrote:
> > On Sun, 31 Jul 2005 12:01:22 +0100, "MW0GUV" <me@spamno.net> wrote:
> >
> >
> >
> >>He's not a bully, he is just a gutless wan*er who snipes from behind his
> >>keyboard. I'd love to see what he would do face to face with any of the
> >>people he insists on having a pop at
> >>
> >>Andy MW0GUV
> >>
> >
> >
> > You'd shit yourself , Sonny.
> He'd more likely piss himself laughing.
> --
> ;-)
> 73 de Frank Turner-Smith G3VKI - mine's a pint.
> http://turner-smith.co.uk

I can just see him now, he arrives for the square up with the ultimate
defence.....A keyboard to hide behind ;0)

Andy MW0GUV

3565. Re: Postage-stamp sized radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-07-31 18:13:19 UTC
From: EL84 <el84@nospam.aol.com>
Message-ID: <3l4im0F10s9poU1@individual.net>
Source record: 17748
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"Polymath" <invalid@invalid.invalid> wrote in message
news:42ec5bf9_2@x-privat.org...
> I append a short article to assist.
>
>
> What is Ham Radio?
(needle stuck again, repetition removed)

did you not pick up any new material from your cell wall, or were you too
busy biting your pillow?

3566. Re: TS-120

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-01 03:22:32 UTC
From: pdrunen@aol.com
Message-ID: <1122866552.216579.234800@g44g2000cwa.googlegroups.com>
Source record: 17749

Thanks all for discussing the post for my TS-120.

I had the radio open to torque down the band switch knob. For some reason there was a wire that had been cut which had something to do with the 15 MHz WWV/ JJY circuit.

The radio with the wire "cut" would draw about 15 amps in the WWV/JJY switch while transmitting but would not put out any RF power. I did not keep the key down very long, in fear that what ever was drawing the current would be destroyed.

So I reconnected the wire and very little current is taken if the key is pressed now on JJY. My thoughts is that someone was trying to get the wwv/jjy switch to transmit as I can see on the schematic that is wire disables one of the radio's RF sections. Maybe a possible mod to get up to 18 MHz.

Since no power is radiated, there must be another tuned-circuit that prevents any RF.

I was listening to the 20 meter band today, while the s-meter was not giving the same signal strenght as a reference FT-757, the TS-120 could copy every weak signal the 757 could.

Cheers, de KJ4UO

3567. Re: TS-120

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-01 10:38:50 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <NOGdnTFnt9IrZnDfRVnyhg@pipex.net>
Source record: 17750

> I was listening to the 20 meter band today, while the s-meter was not
> giving the same signal strenght as a reference FT-757, the TS-120 could
> copy every weak signal the 757 could.
==========
If you want to increase the indication of the S-meter (for example because
you wish it to be the same as on your other transceiver) ,there highly
likely is a trimpot near the meter or in the associated AGC circuit which
you can manipulate. Almost every S-meter derives its signal from the AGC.
If you have a signal generator and a good quality attenuator you can set the
S-meter indication to S9 with a receiver input of 50 microvolts @ 50 Ohms
(-73dBm).
Of course it doesn't mean that the S-meter is then correct over its entire
scale ,
1 S-point meant to be a change of 6 dB.

Frank GM0CSZ / KN6WH

3568. WTB:222 TRANSVERTER

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-01 12:24:13 UTC
From: KC0EH <cvest@cox.net>
Message-ID: <yuoHe.8501$Zt.3347@okepread05>
Source record: 17751
Cross-posted to:
alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I am looking for a 222 MHz. transverter. Working or not homebrew or commercial. Hamtronics/Microwave Modules/DEM etc. Please state price and condition. I F frequency not important. Price IS a consideration. Can't build a kit due to physical problems , but would like to try 222 SSB.

Thanks,
73,
...Charlie...KC0EH...

3569. Re: Postage-stamp sized radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-01 14:11:31 UTC
From: Harry L <oeieio@hotmail.com>
Message-ID: <dclaij$nv4$1@news.al.sw.ericsson.se>
Source record: 17752
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

> ... is it perhaps now the time to
> issue a challenge to come up with a complete
> transceiver design
> fabricated to the size of a postage stamp?

If car manufacturers had miniaturized their products in the same eay electronics has shrunk, then the modern motor car would fit ont he head of a pin. The only problem is who would drive it? The knobs and pushy-things would be too small to get hold of, or have you a solution for that, such as a big remote control?

3570. Re: Postage-stamp sized radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-01 16:20:48 UTC
From: Theo <theodore.twyler@ntlworld.com>
Message-ID: <AZrHe.12302$Aw4.2752@newsfe5-win.ntli.net>
Source record: 17753
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"EL84" <el84@nospam.aol.com> wrote in message
news:3l4im0F10s9poU1@individual.net...
>
> "Polymath" <invalid@invalid.invalid> wrote in message
> news:42ec5bf9_2@x-privat.org...
> > I append a short article to assist.
> >
> >
> > What is Ham Radio?
> (needle stuck again, repetition removed)
>
> did you not pick up any new material from your cell wall, or were you too
> busy biting your pillow?
>
Probably busy trying to squeeze out of his straitjacket
so he can chomp at the rubber padding of his cell!

3571. Re: VFD as an audio/RF amplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-01 19:54:31 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <kcvse1p3k1oh7aip0vip3057tafkef5sdk@4ax.com>
Source record: 17755
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew,sci.electronics.design

It's fun to wave a magnet around a VFD. I bet you could make a fairly sensitive magnetic-field detector from one.

John

3572. Re: SPAM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-01 20:30:26 UTC
From: Bill KB3GUN <kb3gunlessspam@swronline.com>
Message-ID: <42ee864f$0$5368$ec3e2dad@news.usenetmonster.com>
Source record: 17756

It was all from one sender. I blocked him and all his spam left my screen.

-Gun

"clfe" <postmaster@clfurent.com> wrote in message
news:IJuHe.24001$Tf5.15996@newsread1.mlpsca01.us.to.verio.net...
> Damned, what's up with all the Spam????????
>
>
>

3573. Re: SPAM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-01 21:27:22 UTC
From: -ex- <exray@coqui.net>
Message-ID: <79551$42ee93bb$4232bd9c$16599@COQUI.NET>
Source record: 17757

clfe wrote:

> Damned, what's up with all the Spam????????
>
>
>
Lou,

Its coming out of an ISP in Spain. Must have been hijacked.

-BM

3574. Re: VFD as an audio/RF amplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-02 01:19:49 UTC
From: N9WOS <n9wos@nobugatt.net>
Message-ID: <VSzHe.528973$cg1.69977@bgtnsc04-news.ops.worldnet.att.net>
Source record: 17759
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew,sci.electronics.design

>
> It's fun to wave a magnet around a VFD. I bet you could make a fairly
> sensitive magnetic-field detector from one.
>
> John
>

The best way I could think of doing that is feeding an AC signal through the filaments so that they distort in some way when in the presence of a magnetic field, then monitor the electrode current in some way to determine the amount of filament displacement that is happening. That would give you an indication of magnetic polarity, and intensity.

Second idea. Just have one grid positively biased, and monitor the current of just two anodes behind it. When the electrons move through the magnetic field, they will be shifted to one side or the other. electrode current will also shift. That would also allow you to determine polarity and intensity.

Hmm... The second idea would also work with standard vacuum tubes that have more than one anode. Or even two or more electrodes of any type that is separated from each other by a small amout, that can be used as anodes. The magnetic field would shift the electron flow from one electrode to the other. I'll have to do some experiments on that subject.

3575. Crystal Shortwave?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-02 01:23:43 UTC
From: Franklin Jennings <srogers3@bellsouth.net>
Message-ID: <1VzHe.1415$jq.1107@bignews3.bellsouth.net>
Source record: 17760

I apologise if this is not the proper group, and will greatly appreciate direction to the proper one.

I have just gotten into crystal sets after years away from the electronics feild (studied at Nuke ET "A" School and FC "A" School in the Navy in 1995-1996).

I would like to build the EconOceanic at http://antiqueradio.org/econmain.htm but the plans call for a dual vari-cap from an old superhet (using the RF section and Oscillator sections seperately to tune through the five coil pairs.) But I cannot find this vari-cap anywhere!

Here the designer shows the coverage of the various circuits in a graph. I am quite rusty (I never really worked on Comm equipment, I am a gunfire control technician by training) but if I understand this, I should be able to tune all but the lowest frequencies (.50-.75 or so) without the RF section cap (40-460pF). Again, IF I COMREHEND THIS PROPERLY, I should be able to substitute a single 365pF vari-cap for the oscillator section, ommitting the higher RF cap section, and tune all but the lowest BC frequencies.

This is fine by me since I live five miles from WSB, the local blowtorch transmitter siting at AM 750.

I just wanted to run my plans by the experts before I wind the two biggest coil pairs for this radio.

If someone wants to take the time to answer, even via email, I'll be happy to figure out how to ship a 6-pack of homemade apple cider in appreciation.

Alternatively, if someone can reccomend a different radio schematic that can tune 5810, 5850, 9955, 9975, and 13615, that too would be appreciated.

(The above freqs are for EWTN broadcasts throughout the day and night.)

Thanks

Franklin Jennings
Atlanta,GA

3576. Re: Crystal Shortwave?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-02 02:28:51 UTC
From: -ex- <exray@coqui.net>
Message-ID: <10a22$42eeda67$4232bd8a$7187@COQUI.NET>
Source record: 17761

Franklin Jennings wrote:
> I apologise if this is not the proper group, and will greatly appreciate
> direction to the proper one.
>
> I would like to build the EconOceanic at
> http://antiqueradio.org/econmain.htm but the plans call for a dual vari-cap
> from an old superhet (using the RF section and Oscillator sections
> seperately to tune through the five coil pairs.) But I cannot find this
> vari-cap anywhere!
>
>
>
> This is fine by me since I live five miles from WSB, the local blowtorch
> transmitter siting at AM 750.
>

> Alternatively, if someone can reccomend a different radio schematic that can
> tune 5810, 5850, 9955, 9975, and 13615, that too would be appreciated.
>
> (The above freqs are for EWTN broadcasts throughout the day and night.)

Hi,
I'm a crystal radio fanatic. First I'd recommend checking in with the
guys at http://www.midnightscience.com/rapntap/

I see two bigger problems than finding the cap. With WSB 5 miles away
you are going to literally be swamped with RF and may not be able to
hear much SW at all. Secondly, hearing ANY SW on a crystal set is kinda
hit and miss in the best of circumstances. The signal needs to be VERY
strong and remember that you'll have very little selectivity.

As for finding the cap...just find an old $2 plastic clock radio at a
yard sale or Goodwill store.

There's some guys on Rap-n-Tap who could probably get into more detail
about a xtal shortwave set. I built one once - with an audio amp - and
yes I heard some wispy traces of SW signals. Its anybody's guess what
frequency - or even what band - they were on.

I'd recommend building something like a 2-tube regen set - or even a one
tuber using something like a 6SN7 (dual triodes). On the same site
where you found the xtal plans I think he also has a 2-tube Doerle
receiver. Thats a good performer and if you're not into vintage tubes
thats where you can replace the two #30s with a 6SN7 or even 12AU7.
You'll find lots of these project on the web.

Good luck and see you over on R-n-T.

-Bill

3577. SPAM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-02 03:29:27 UTC
From: clfe <postmaster@clfurent.com>
Message-ID: <lJuHe.24001$Tf5.15996@newsread1.mlpsca01.us.to.verio.net>
Source record: 17754

Damned, what's up with all the Spam????????

3578. Re: Crystal Shortwave?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-02 06:07:32 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11eu3cs1fcfrmfb@corp.supernews.com>
Source record: 17762

Franklin Jennings wrote:

> I apologise if this is not the proper group, and will greatly appreciate
> direction to the proper one.
>
> I have just gotten into crystal sets after years away from the electronics
> feild (studied at Nuke ET "A" School and FC "A" School in the Navy in
> 1995-1996).
>
> I would like to build the EconOceanic at
> http://antiqueradio.org/econmain.htm but the plans call for a dual vari-cap
> from an old superhet (using the RF section and Oscillator sections
> seperately to tune through the five coil pairs.) But I cannot find this
> vari-cap anywhere!
>
> Here the designer shows the coverage of the various circuits in a graph. I
> am quite rusty (I never really worked on Comm equipment, I am a gunfire
> control technician by training) but if I understand this, I should be able
> to tune all but the lowest frequencies (.50-.75 or so) without the RF
> section cap (40-460pF). Again, IF I COMREHEND THIS PROPERLY, I should be
> able to substitute a single 365pF vari-cap for the oscillator section,
> ommitting the higher RF cap section, and tune all but the lowest BC
> frequencies.
>
> This is fine by me since I live five miles from WSB, the local blowtorch
> transmitter siting at AM 750.
>
> I just wanted to run my plans by the experts before I wind the two biggest
> coil pairs for this radio.
>
> If someone wants to take the time to answer, even via email, I'll be happy
> to figure out how to ship a 6-pack of homemade apple cider in appreciation.
>
> Alternatively, if someone can reccomend a different radio schematic that can
> tune 5810, 5850, 9955, 9975, and 13615, that too would be appreciated.
>
> (The above freqs are for EWTN broadcasts throughout the day and night.)
>
> Thanks
>
> Franklin Jennings
> Atlanta,GA
>
>

http://www.tubesandmore.com

There are plenty others if you dig a bit.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

3579. Re: SPAM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-02 06:15:03 UTC
From: clfe <postmaster@clfurent.com>
Message-ID: <Y8xHe.24026$Tf5.9716@newsread1.mlpsca01.us.to.verio.net>
Source record: 17758

"-ex-" <exray@coqui.net> wrote in message
news:79551$42ee93bb$4232bd9c$16599@COQUI.NET...
> clfe wrote:
>
>> Damned, what's up with all the Spam????????
>>
>>
> Lou,
>
> Its coming out of an ISP in Spain. Must have been hijacked.
>
> -BM

WOW..... man that is as bad as I think I've ever seen it for "one"
newsgroup. At least the only one I seen it in. I too blocked the sender.

clf

3580. HOW TO MAKE $1,000 PER DAY

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-02 09:02:59 UTC
From: "HOW TO MAKE $1,000 PER DAY" <isabella13630@hotmail.com>
Message-ID: <TEGHe.62992$dr.13492@news.ono.com>
Source record: 17763

[No readable article body recovered]

3581. Re: VFD as an audio/RF amplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-02 09:48:50 UTC
From: N9WOS <n9wos@nobugatt.net>
Message-ID: <6kHHe.531094$cg1.236987@bgtnsc04-news.ops.worldnet.att.net>
Source record: 17764
Cross-posted to: rec.audio.tubes,rec.radio.amateur.homebrew,sci.electronics.design

> Hmm... The second idea would also work with standard vacuum tubes that
> have more than one anode. Or even two or more electrodes of any type that
> is separated from each other by a small amout, that can be used as anodes.
> The magnetic field would shift the electron flow from one electrode to the
> other. I'll have to do some experiments on that subject.

I have looked at over a 100 different tube types that I have on had. Ranging from the 4 pin 01A to a bunch of different compactatrons. I haven't found one with the correct electrode structure to do a good job at detecting polarity and intensity. The only two that I found, that would possibly make a good intensity detector is the 6AV6, and the 6JH8.

You would have to have a tube with two anodes about the same distance from the cathode, with both anodes on the same side of the cathode.

(ie) the electrons leave the cathode in one direction, headed for the group of two electrodes. The amount of current arriving at each electrode will be a function of the magnetic field along the path. The magnetic field will curve the path to one electrode, or the other, depending on magnetic polarity. And the current distribution between the two electrodes would indicate intensity.

The only thing that draws even close to that is a cathode ray tube with deflection plates. Operate it with the focus out of adjustment enough that the deflection plates are pulling a measurable current. Then the current distribution between the plates will depend on how the magnetic field is shifting the electron beam.

3582. Re: homebrew car antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-02 09:56:59 UTC
From: Kimmo Yliskoski <kimmo.yliskoski@gmail.com.invalid>
Message-ID: <42ef4369$0$12789$9b536df3@news.fv.fi>
Source record: 17765

Mike Andrews wrote:
> TJ <DELETEthomasj1@arczip.com> wrote:
>> On Fri, 29 Jul 2005 16:24:42 +0300, "Kimmo Yliskoski"
>> <kimmo.yliskoski @ gmail.com.invalid> wrote:
>
>>> Kimmo Yliskoski wrote:
>>>> Anyone have good tips to homebrew car antenna? No 1" pipe... just
>>>> whip... that stays with me when driving > 60mph. I'm going to use
>>>> magnet mount on my car roof. About 1,5m to 2m would be nice length.
>>>> Any advice or site where can find something about it?
>>>
>>> Forget to mention that it is going to be used at CB-channels. 11m
>>> band.
>
>> Why not go to RS and buy one??
>> A lot easier than building one for 27Mhz.
>
> Only if he's somewhere that has RS or equivalent, which isn't true all
> places. I don't find Mr. Yliskoski in the FCC or RAC databases, which
> leads me to believe he's not on the North American continent. The name
> has a Slavic feel, and anyone, anywhere in the world, can have a gmail
> address. It's entirely possible that there's no place near him that
> sells brown-n-serve antennas.
>
> Kimmo,
>
> An efficient 11m whip probably is going to be a bit longer than 1.5m;
> the rear bumper might be a better choice.
>
> If you really want to do a roof- or trunk- (boot-) mount, there is a
> rather sturdy-looking magnetic mount described in the web page at
> <http://www.qsl.net/n2ffl/ic706kmiig.htm>. The page at
> <http://www.arrl.org/tis/info/Mobile-H.html> discusses mobile antenna
> design and construction of a bumper-mounted whip that works from 20m
> through 6m and will handle 100W output.
>
> It's 99" (2.5m) long at max extension, and is retracted about 60 cm
> (to about 1.9m) for 10m. I think that it would need to be just about
> 2m long to work 11m, and that's pretty long for a roof-mounted whip.
> With the coil in the center, it really would be difficult to keep it
> in place on the roof, because of the rotational moment from the
> forces on the coil, and it would be a real danger to traffic if it
> came loose.
>

> Boot lid would be a little safer, but not much: a magnetic mount just
> is not as secure as a real mechanical fastening. Please consider the
> bumper mount.
>
> Good luck!
>
> 73, de

Yes

I'm not north american. I'm Finnish and comp. science student. Everything that i make myself gives extra pleasure to me. :) Now car antenna is next goal. Because i have made simple dipole antenna to my home use. I also found one that is made from fishing rod.
http://home.att.net/~wizardoz/cbmw/antenna_fabri.html#fish going to try that one.

73's to all from Finland
--
Kimmo Yliskoski

3583. Re: Pool leak detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-02 20:41:11 UTC
From: Wim Ton <wimton@blueyonder.co.uk>
Message-ID: <HTQHe.70317$dN6.35281@fe1.news.blueyonder.co.uk>
Source record: 17766

> Has anyone had any experience with some sort of above ground pool leak
> detector? I figures if I could connect one probe to some sort of
sensitive
> restiance (ohm) meter and put it in the water, I could maybe read the
> resistance between the probe and ground and then as I got closer to the
leak
> the restiance would go down. But the restiance is WAY high.. But seems to
me
> something like that would work. Any ideas?

Maybe look only outside the pool for the wettest area. The keywords to look for are in the direction of geophysics. These electrical methods are also used to find subsurface water (e.g. where to drill wells)

Wim

3584. PSpice help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-03 05:17:47 UTC
From: meara.london@virgin.net
Message-ID: <1123046267.850747.50510@z14g2000cwz.googlegroups.com>
Source record: 17767
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.basics

I've started using PSpice as part homebrewing and design efforts. It is very interesting, and a great way to check out ideas before committing them to actual PC boards.

Some questions:

The version I downloaded has some limitations in the parts libraries. For example, I can't find many of the common parts used by ham homebrewers: MPf102 JFETS, NE602 mixers, etc. Where can I find the PSpice models of these parts? Has anyone developed a library of ham homebrew .MOD files for the parts we use?

I've (sort of) figured out how to put an impedance matching transformer into the circuits. I select what they call a "non-linear" transformer (bad name I think) and this allows me to set the coupling coefficient and the turns on the primary and the secondary. But what about the core material, toroid vice no-toried, bifilar windings, etc. Is there a way of plugging in the kinds of toroids we use?

Also, I'd be interested in hearing from other amateur homebrewers who are using Pspice in their solder-melting activities.

Thanks and 73

Bill N2CQR M0HBR CU2JL
http://www.qsl.net/n2cqr

3585. Re: TS-120

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-03 07:14:12 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1123053252.001578.188030@o13g2000cwo.googlegroups.com>
Source record: 17768

pdrunen@aol.com wrote:
> Thanks all for discussing the post for my TS-120.
>
> I had the radio open to torque down the band switch knob. For some
> reason there was a wire that had been cut which had something to do
> with the 15 MHz WWV/ JJY circuit.
>
>
>
> I was listening to the 20 meter band today, while the s-meter was not
> giving the same signal strenght as a reference FT-757, the TS-120 could
> copy every weak signal the 757 could.
>
> Cheers, de KJ4UO

Well, this is getting a bit too much to comprehend - from your original post, the TS120 had a MDS (Minimum Discernable Signal) of -100dbm, ie 2.25uv - which is pretty poor. If your FT757 is getting the same results, then its sick too - and it SHOULD be better considering the high synthesiser noise in the TS120.

Why not read the specifications for your radios - and then post some meaningful test figures.

73 de VK3BFA Andrew

3586. Re: PSpice help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-03 16:16:12 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <6bmdnWUPPuRVcG3fRVn-iA@adelphia.com>
Source record: 17769
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.basics

meara.london@virgin.net wrote:
> I've started using PSpice as part homebrewing and design efforts. It
> is very interesting, and a great way to check out ideas before
> committing them to actual PC boards.
>
> Some questions:
>
> The version I downloaded has some limitations in the parts libraries.
> For example, I can't find many of the common parts used by ham
> homebrewers: MPf102 JFETS, NE602 mixers, etc. Where can I find the
> PSpice models of these parts? Has anyone developed a library of ham
> homebrew .MOD files for the parts we use?
>
> I've (sort of) figured out how to put an impedance matching transformer
> into the circuits. I select what they call a "non-linear" transformer
> (bad name I think) and this allows me to set the coupling coefficient
> and the turns on the primary and the secondary. But what about the
> core material, toroid vice no-toried, bifilar windings, etc. Is there
> a way of plugging in the kinds of toroids we use?
>
> Also, I'd be interested in hearing from other amateur homebrewers who
> are using Pspice in their solder-melting activities.
>
> Thanks and 73
>
> Bill N2CQR M0HBR CU2JL
> http://www.qsl.net/n2cqr
>
There is a very active Spice group (though focused on LTspice, free
from Linear Technology) in Yahoo Groups, but they have a few thousand
subscribers, many well versed on all aspects of Spice. You might
consider joining that group to get answers to your Spice questions.
http://groups.yahoo.com/group/LTspice/

3587. Re: PSpice help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-03 21:39:08 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <6Qale.2247$qv2.991@fe07.lga>
Source record: 17770
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.basics

Chuck Adams has a lot of spice models for typical homebrew components available on his web site, www.k7qo.net. He has a nice tutorial in the QRP Homebrewer, I think you can still get issue number 5. Also, the QRP-L archives CD has a lot of models (they may be mostly the same as Chuck though). The CD is available through QRP-ARCI.

Most manufacturers provide models of their parts, so often googling the part number will land you on a spice model.

..

<meara.london@virgin.net> wrote in message
news:1123046267.850747.50510@z14g2000cwz.googlegroups.com...
> I've started using PSpice as part homebrewing and design efforts. It
> is very interesting, and a great way to check out ideas before
> committing them to actual PC boards.
>
> Some questions:
>
> The version I downloaded has some limitations in the parts libraries.
> For example, I can't find many of the common parts used by ham
> homebrewers: MPf102 JFETS, NE602 mixers, etc. Where can I find the
> PSpice models of these parts? Has anyone developed a library of ham
> homebrew .MOD files for the parts we use?
>
> I've (sort of) figured out how to put an impedance matching transformer
> into the circuits. I select what they call a "non-linear" transformer
> (bad name I think) and this allows me to set the coupling coefficient
> and the turns on the primary and the secondary. But what about the
> core material, toroid vice no-toried, bifilar windings, etc. Is there
> a way of plugging in the kinds of toroids we use?
>
> Also, I'd be interested in hearing from other amateur homebrewers who
> are using Pspice in their solder-melting activities.
>
> Thanks and 73
>
> Bill N2CQR M0HBR CU2JL
> http://www.qsl.net/n2cqr
>

3588. Re: PSpice help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-03 22:24:31 UTC
From: Johnson <jdwalton@comt.net>
Message-ID: <iLydnemAcOPB32zfRVn-3w@comcast.com>
Source record: 17771
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.basics

<meara.london@virgin.net> wrote in message
news:1123046267.850747.50510@z14g2000cwz.googlegroups.com...
> I've started using PSpice as part homebrewing and design efforts. It
> is very interesting, and a great way to check out ideas before
> committing them to actual PC boards.
>
> Some questions:
>
> The version I downloaded has some limitations in the parts libraries.
> For example, I can't find many of the common parts used by ham
> homebrewers: MPf102 JFETS, NE602 mixers, etc. Where can I find the
> PSpice models of these parts? Has anyone developed a library of ham
> homebrew .MOD files for the parts we use?
>
> I've (sort of) figured out how to put an impedance matching transformer
> into the circuits. I select what they call a "non-linear" transformer

check out the banter at the sci.electronics.cad newsgroup --
you can also google spice models

oh, for transformers -- use a current dependent voltage source -- then you
can add coupling capacitance, primary and secondary leakage inductance
etc -- unfortunately it works down to D.C.

3589. Old Miller IF Transformer Data Search... Anyone with an old catalog?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-04 00:42:04 UTC
From: Jim Flanagan <jflan@tampabay.rr.com>
Message-ID: <wvdle.34683$iG6.3423@tornado.tampabay.rr.com>
Source record: 17772

Hello...
Does anyone have an old Miller data book with the data sheet for
the #612-W4 1.6MHz IF transformer. I am planning on replicating this
part in a homebrew receiver. Of course if anyone already has one of
these xfmrs in the junk box maybe we can deal!!

Any spec info would be VERY helpful, however...

Thanks.
-Jim
WB5KYE

3590. Re: Pool leak detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-04 07:29:35 UTC
From: Joel <Joel@cyberbest.com>
Message-ID: <f1fef$42f1a1f1$943f9237$13958@STARBAND.NET>
Source record: 17773

The problem is it could be on the bottom or sides and I need something better then my eyes to find it. It certainly is leaking as I have standing water all around the pool. The pool is 27 foot round, so a hole in the bottom could show most anyplace on any or all sides. I am hoping to measure 'something' resistance seems to make senses.. But something to lead me to the leaking location. The resistance is high between the water and the ground but measurable. I'm not sure I can see the resistance change to direct me in the right direction. I'm hoping to build or even buy something that would be maybe a bridge that would zero out or null on the restiance and then show minor changes. Something like that makes sense to me. But I can't believe someone hasn't already built something like this.

Joe

"Wim Ton" <wimton@blueyonder.co.uk> wrote in message
news:HTQHe.70317$dN6.35281@fe1.news.blueyonder.co.uk...
>> Has anyone had any experience with some sort of above ground pool leak
>> detector? I figures if I could connect one probe to some sort of
> sensitive
>> restiance (ohm) meter and put it in the water, I could maybe read the
>> resistance between the probe and ground and then as I got closer to the
> leak
>> the restiance would go down. But the restiance is WAY high.. But seems to
> me
>> something like that would work. Any ideas?
>
> Maybe look only outside the pool for the wettest area. The keywords to
> look
> for are in the direction of geophysics. These electrical methods are also
> used to find subsurface water (e.g. where to drill wells)
>
> Wim
>
>

3591. Re: Pool leak detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-04 08:01:33 UTC
From: -ex- <exray@coqui.net>
Message-ID: <97e36$42f1cb60$4232bd45$19084@COQUI.NET>
Source record: 17774

Joel wrote:

> The problem is it could be on the bottom or sides and I need something
> better then my eyes to find it. It certainly is leaking as I have standing
> water all around the pool. The pool is 27 foot round, so a hole in the
> bottom could show most anyplace on any or all sides. I am hoping to measure
> 'something' resistance seems to make senses.. But something to lead me to
> the leaking location. The resistance is high between the water and the
> ground but measurable. I'm not sure I can see the resistance change to
> direct me in the right direction. I'm hoping to build or even buy something
> that would be maybe a bridge that would zero out or null on the restiance
> and then show minor changes. Something like that makes sense to me. But I
> can't believe someone hasn't already built something like this.
>
> Joe

This is a crazy idea...I had one of those moisture indicators like you use with watering indoor house plants. Cost about 10 bux. Pretty sensitive but i don't know if it would help in pinpointing anything in your case.

But...if you've got standing water all around the pool it would seem to me that you need to call a pool guy. They have experience in locating these problems and you'll likely need them to come fix the problem anyway. They won't be very impressed by having to slosh thru water to view the results of your homebrew leak detector.

-Bill

3592. My Homebrew gear

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-04 14:32:29 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <1Gple.236642$xm3.51767@attbi_s21>
Source record: 17775

A picture and brief discussion of my homebrew HF receiver and transmitter are on QRZ.COM.

Bill W0IYH

3593. Re: My Homebrew gear

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-04 14:40:13 UTC
From: "Harold E. Johnson" <w4zcb@mchsi.com>
Message-ID: <hNpIe.220263$_o.151253@attbi_s71>
Source record: 17776

"William E. Sabin" <w.sabin@mchsi.com> wrote in message
news:1GpIe.236642$xm3.51767@attbi_s21...
>A picture and brief discussion of my homebrew HF receiver and transmitter
>are on QRZ.COM.
>
> Bill W0IYH

Very handsome Bill. Is that 40+ volt supply internal to the transmitter cabinet? Any blowers involved?

Regards
W4ZCB

3594. Re: My Homebrew gear

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-04 17:01:25 UTC
From: "Harold E. Johnson" <w4zcb@mchsi.com>
Message-ID: <FRrIe.219369$x96.13159@attbi_s72>
Source record: 17777

"Harold E. Johnson" <w4zcb@mchsi.com> wrote in message
news:hNpIe.220263$_o.151253@attbi_s71...
>
> "William E. Sabin" <w.sabin@mchsi.com> wrote in message
> news:1GpIe.236642$xm3.51767@attbi_s21...
>>A picture and brief discussion of my homebrew HF receiver and transmitter
>>are on QRZ.COM.
>>
>> Bill W0IYH
>
> Very handsome Bill. Is that 40+ volt supply internal to the transmitter
> cabinet? Any blowers involved?

Belay the last, just remembered the blower on the MRF-150's!
>
> Regards
> W4ZCB
>

3595. Re: My Homebrew gear

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-04 17:02:58 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <6TrIe.237307$xm3.27399@attbi_s21>
Source record: 17778

Yes, the 47 V 8A series regulator supply is in the big cabinet. It also has all of the protections for the MRF150 transistors. Also a fan for the 100W amplifier module. The transmitter is completely self-contained.

There is no attempt at miniaturization. I don't have the time or patience for that level of effort. Each radio is a "test bed" and not a finished product. Just this morning I made two circuit improvements in the receiver. I recently rebuilt the 3.395 MHz IF amp module and the AGC processor module to get rid of a rat's nest of "fixups" and haywire. It looks pretty good now.

I do admire the tremendous effort that goes into the compact transceivers, but I don't want to duplicate it. It is the basic radio communications functionality that I care about.

Bill W0IYH

"Harold E. Johnson" <w4zcb@mchsi.com> wrote in message
news:hNpIe.220263$_o.151253@attbi_s71...
>
> "William E. Sabin" <w.sabin@mchsi.com> wrote in message
> news:1GpIe.236642$xm3.51767@attbi_s21...
>>A picture and brief discussion of my homebrew HF receiver and transmitter
>>are on QRZ.COM.
>>
>> Bill W0IYH
>
> Very handsome Bill. Is that 40+ volt supply internal to the transmitter
> cabinet? Any blowers involved?
>
> Regards
> W4ZCB
>

3596. Re: Pool leak detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-04 18:37:32 UTC
From: fmmck@aol.com
Message-ID: <fmmck-0408051437330001@aca32f66.ipt.aol.com>
Source record: 17779

In article <f1fef$42f1a1f1$943f9237$13958@STARBAND.NET>, "Joel"
<Joel@cyberbest.com> wrote:

> The problem is it could be on the bottom or sides and I need something
> better then my eyes to find it. It certainly is leaking as I have standing
> water all around the pool.

Joe-

I've never had a pool, but it seems to me that standing water could only
be the result of a gross leak. You should be able to see it with the
naked eye.

Isn't it more likely that a leak would be in the external plumbing
associated with the pool? How else could the pool have a water level
lower than the surrounding standing water, unless it is located in a
swamp?

73, Fred, K4DII

3597. Re: Crystal Shortwave?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-04 22:14:45 UTC
From: mcalhoun@ksu.edu
Message-ID: <dcu40l$rbo@unix1.cc.ksu.edu>
Source record: 17780

>Franklin Jennings wrote:
>> ... I would like to build the EconOceanic at....

-ex- <exray@coqui.net> writes:
>.... Secondly, hearing ANY SW on a crystal set is kinda
>hit and miss in the best of circumstances. The signal needs to be VERY
>strong and remember that you'll have very little selectivity.
>....[snip]....

Unless something has really changed, you shouldn't be so negative about
hearing SW on a crystal set.

About 1958, on a simple xtal set (antenna, coil, capacitor, diode, phones)
although I don't remember the exact stations (Quito and Radio Moscow?), I
do remember hearing LOUD shortwave signals. At the time, my antenna was
the top strand of a barbed-wire fence on wooden posts (length UNknown,
but probably less that a couple-hundred feet) and the ground was the guy-
wire to our house's power pole.
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

3598. Re: Crystal Shortwave?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-05 00:15:11 UTC
From: amdxjunk <nojunk@knology>
Message-ID: <cee71$42f2afa2$18d6b479$24643@KNOLOGY.NET>
Source record: 17781

> I see two bigger problems than finding the >cap. With WSB 5 miles away
> you are going to literally be swamped with >RF and may not be able to
> hear much SW at all. Secondly, hearing >ANY SW on a crystal set is kinda
> hit and miss in the best of circumstances. >The signal needs to be VERY
> strong and remember that you'll have very >little selectivity.store.

Build a tuned circuit for WSB and use the voltage generated as the power
supply for a transistor amplifier for your SW listening.
You will find info on the web.
Mike

3599. Re: Crystal Shortwave?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-05 01:26:24 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns96A8BBB32AD5spectrumhogstarbandn@207.106.93.175>
Source record: 17782

>
> Build a tuned circuit for WSB and use the voltage generated as the
> power
> supply for a transistor amplifier for your SW listening.
> You will find info on the web.
> Mike
>
>

That's a great concept.... I'd like more specific info on WEB sites.
Can't quite figure what to type in the Google search box for this.

Ed

3600. Re: Pool leak detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-05 03:35:38 UTC
From: Joel <Joel@cyberbest.com>
Message-ID: <b1ad3$42f2bc95$943f9237$25842@STARBAND.NET>
Source record: 17783

This is a above ground pool with a vinyl liner.. about 27 feet in diameter, we had a special liner installed in it so we have the ground dug out so the deep end is about 6 and half feet deep. The bottom is cement as it's the only way to keep the sand from migrating along the bottom to the deep end. So a leak is a bugger to find as the liner leaks and the cement bottom send the water in all directions. I had another leak a year or so ago and I ended up draining the pool and finely found it and repaired it. In this case I can't drain the pool again, as the line probably won't take another streaching. And -ex- your probably right, I need to get a expert out here.. I live about 200 miles from Nashville and 150 from Memphis, and that's where these 'experts' probably would have to come. So if I could find this thing it would be great. I know they make some sort of electronic gismos for finding leaks, I just have no idea how they work.

Joe AG4QC
"Fred McKenzie" <fmmck@aol.com> wrote in message
news:fmmck-0408051437330001@aca32f66.ipt.aol.com...
> In article <f1fef$42f1a1f1$943f9237$13958@STARBAND.NET>, "Joel"
> <Joel@cyberbest.com> wrote:
>
>> The problem is it could be on the bottom or sides and I need something
>> better then my eyes to find it. It certainly is leaking as I have
>> standing
>> water all around the pool.
>
> Joe-
>
> I've never had a pool, but it seems to me that standing water could only
> be the result of a gross leak. You should be able to see it with the
> naked eye.
>
> Isn't it more likely that a leak would be in the external plumbing
> associated with the pool? How else could the pool have a water level
> lower than the surrounding standing water, unless it is located in a
> swamp?
>
> 73, Fred, K4DII

3601. Re: My Homebrew gear

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-05 03:48:57 UTC
From: meara.london@virgin.net
Message-ID: <1123213736.998245.249570@g43g2000cwa.googlegroups.com>
Source record: 17784

Bill: Very nice! It was a pleasure to look at the pictures and read
about your work. Very FB! 73
Bill
M0HBR N2CQR CU2JL
http://planeta.clix.pt/n2cqr

3602. Re: My Homebrew gear

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-05 03:49:02 UTC
From: meara.london@virgin.net
Message-ID: <1123213742.561970.34440@g43g2000cwa.googlegroups.com>
Source record: 17785

Bill: Very nice! It was a pleasure to look at the pictures and read
about your work. Very FB! 73
Bill
M0HBR N2CQR CU2JL
http://planeta.clix.pt/n2cqr

3603. Re: My Homebrew gear

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-05 03:49:07 UTC
From: meara.london@virgin.net
Message-ID: <1123213747.165657.68340@g49g2000cwa.googlegroups.com>
Source record: 17786

Bill: Very nice! It was a pleasure to look at the pictures and read
about your work. Very FB! 73
Bill
M0HBR N2CQR CU2JL
http://planeta.clix.pt/n2cqr

3604. Re: Crystal Shortwave?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-05 05:34:34 UTC
From: biascomms <biascomms@blueyonder.co.uk>
Message-ID: <KTCIe.82972$G8.7665@text.news.blueyonder.co.uk>
Source record: 17787

mcalhoun@ksu.edu wrote:

> Unless something has really changed, you shouldn't be so negative about
> hearing SW on a crystal set.
>
> About 1958, on a simple xtal set (antenna, coil, capacitor, diode, phones)
> although I don't remember the exact stations (Quito and Radio Moscow?), I
> do remember hearing LOUD shortwave signals. At the time, my antenna was
> the top strand of a barbed-wire fence on wooden posts (length UNknown,
> but probably less that a couple-hundred feet) and the ground was the guy-
> wire to our house's power pole.

Unfortunately, things /really/ have changed in the intervening years. The shortwave bands have become /much/ more crowded, and the general noise levels have increased radically - almost /every/ piece of domestic or commercial electronics radiates RF noise these days.

Bob

--
Everything gets easier with practice, except getting up in the morning!

3605. 6m or 10m CW RX Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-05 06:43:34 UTC
From: Andy Ball <null@not.valid>
Message-ID: <qUDIe.1510$RS.167@newsread3.news.pas.earthlink.net>
Source record: 17788

Is anyone here able to point me in the direction of a 10m or
6m CW receiver kit? I would like something that's fairly
simple to build (I don't have a lot of test equipment) but
would perform well enough to let me monitor a few beacons
and perhaps some fairly local CW activity (if there is any).

Thanks,
- Andy, KB9YLW

3606. Re: My Homebrew gear

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-05 08:29:38 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <SrFIe.238887$nG6.847@attbi_s22>
Source record: 17789

Thanks Bill and 73

Bill W0IYH

<meara.london@virgin.net> wrote in message
news:1123213736.998245.249570@g43g2000cwa.googlegroups.com...
> Bill: Very nice! It was a pleasure to look at the pictures and read
> about your work. Very FB! 73
> Bill
> M0HBR N2CQR CU2JL
> http://planeta.clix.pt/n2cqr
>

3607. Rules-of-thumb for RF variable cap plate spacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-05 13:42:50 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1123249370.681543.216960@f14g2000cwb.googlegroups.com>
Source record: 17790

Are there any generic rules-of-thumb for what variable cap (tune and load) spacing is necessary for RF amps in a certain power class?

For example, "if you're building a 80W amp with a single 6146B the plate spacing should be x inches".

Wasn't there a table in the ARRL handbook along these lines?

I'm guessing it depends on both the DC plate voltage and the power level and maybe how mismatched the antenna is.

Of course, I could just buy bigger and bigger spacing surplus variable caps until they don't arc over when I key up! Sort of how like they put the weight limit on a bridge by building the bridge, driving bigger and bigger trucks over it until it collapses, and then rebuild it with the weight of the last truck that made it over :-).

Tim.

3608. FA: Original Manuals:TWE 500+1000, HRO-50-1, 1 day

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-05 14:14:47 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <rvkIe.550618$cg1.310293@bgtnsc04-news.ops.worldnet.att.net>
Source record: 17791
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

See these original manuals at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking heytubeguy

3609. Re: Rules-of-thumb for RF variable cap plate spacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-05 14:22:31 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <HCKIe.1182$RZ2.185@newsread3.news.atl.earthlink.net>
Source record: 17792

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
news:1123249370.681543.216960@f14g2000cwb.googlegroups.com...
> Are there any generic rules-of-thumb for what variable cap (tune and
> load) spacing is necessary for RF amps in a certain power class?
>
> For example, "if you're building a 80W amp with a single 6146B the
> plate spacing should be x inches".
>
> Wasn't there a table in the ARRL handbook along these lines?
>
> I'm guessing it depends on both the DC plate voltage and the power
> level and maybe how mismatched the antenna is.
>
> Of course, I could just buy bigger and bigger spacing surplus variable
> caps until they don't arc over when I key up! Sort of how like they
> put the weight limit on a bridge by building the bridge, driving bigger
> and bigger trucks over it until it collapses, and then rebuild it with
> the weight of the last truck that made it over :-).
>
The handbook lists peak voltages for the plate capacitor spacings.

1000 volts .015 inch spacing
2000 .05
3000 .07
4500 .125
6000 .15
9000 .25
13000 .5

Also it states that is for peak RF volts, if the DC plate voltage is across the capacitor it must be added. Plate modulated finals take about 4 times the plate voltage.

3610. Re: Rules-of-thumb for RF variable cap plate spacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-05 16:01:10 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <dd02g6$4di$2@puck.litech.org>
Source record: 17793

Ralph Mowery <rmowery28146@earthlink.net> wrote:

> The handbook lists peak voltages for the plate capacitor spacings.

> 1000 volts .015 inch spacing
> 2000 .05
> 3000 .07
> 4500 .125
> 6000 .15
> 9000 .25
> 13000 .5

> Also it states that is for peak RF volts, if the DC plate voltage is across
> the capacitor it must be added. Plate modulated finals take about 4 times
> the plate voltage.

The rule of thumb I learned for HV conductor spacing is 30 KV per inch
in dry air with smooth surfaces. Rough surfaces, points, sharp edges,
etc. all reduce the arc-over voltage, as does increasing humidity.

I'd go with the handbook's table above, as it allows a safety factor
and probably will prevent embarrassing events involving smoke.

--
I, for one, do not like to damage my precious equipment, especially
when it involves repeatedly hitting it with a computer.

-- Peter Corlett, about his hammer

3611. Re: Rules-of-thumb for RF variable cap plate spacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-05 21:17:00 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1123276620.770459.104560@z14g2000cwz.googlegroups.com>
Source record: 17794

Also to consider is air pressure. The breakdown voltage decreases with decreasing air pressure, and to a slight extent with increasing temperature.

"Reference Data for Radio Engineers" has a graph of breakdown for a needle gap and for smooth surfaces. For the needle gap (pretty much a worst case) at sea level (760mm Hg), it's a bit over 25kV peak at 1 inch spacing, and just over 3kV at 0.1 inches. For comparison, a couple smooth 10" diameter balls spaced with a 1" gap between them will exhibit a breakdown greater than 80kV. Plates for an air-variable high voltage cap should have smooth, rounded edges. Looks like the handbook's table assumes sharp corners, and/or gets its safety factor from an assumption of rounded edges. It's usually not much of a problem, but the higher dielectric constant (rel. to air) of the ceramic or other insulation in a capacitor can create locally higher fields that cause trouble.

Cheers,
Tom

(Great quote about hammers, Mike!)

3612. Re: Crystal Shortwave?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-06 00:48:16 UTC
From: amdxjunk <nojunk@knology>
Message-ID: <7f6fb$42f408e1$18d6b479$19518@KNOLOGY.NET>
Source record: 17795

"Ed" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
news:Xns96A8BBB32AD5spectrumhogstarbandn@207.106.93.175...
> >
> > Build a tuned circuit for WSB and use the voltage generated as the
> > power
> > supply for a transistor amplifier for your SW listening.
> > You will find info on the web.
> > Mike

> That's a great concept.... I'd like more specific info on WEB sites.
> Can't quite figure what to type in the Google search box for this.
> Ed

I looked for a while and found many dead sites. I did find this one, this
guy has done some serious research on crystal radios.
You might recognize the name.
http://www.bentongue.com/
Look at #25

3613. Re: Crystal Shortwave?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-06 05:57:56 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns96A9E9BF75CBCspectrumhogstarbandn@207.106.93.175>
Source record: 17796

> I looked for a while and found many dead sites. I did find this one,
> this
> guy has done some serious research on crystal radios.
> You might recognize the name.
> http://www.bentongue.com/
> Look at #25
>

Great! That site I had missed in my searching. Probably my best
reference, now. Thanks.

Ed

3614. Re: 6m or 10m CW RX Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-06 13:30:59 UTC
From: To Lose Lautrec <nobody@nowhere.com>
Message-ID: <l5e9f1hcl4biccq93k6kjtd1uumohpbtvu@4ax.com>
Source record: 17797

RAMSEY and TENTEC might be two sources...

On Fri, 05 Aug 2005 06:43:34 GMT, Andy Ball <null@not.valid> wrote:

>
>Is anyone here able to point me in the direction of a 10m or
>6m CW receiver kit? I would like something that's fairly
>simple to build (I don't have a lot of test equipment) but
>would perform well enough to let me monitor a few beacons
>and perhaps some fairly local CW activity (if there is any).
>
>Thanks,
> - Andy, KB9YLW

3615. Re: 6m or 10m CW RX Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-06 23:44:03 UTC
From: Andy Ball <null@not.valid>
Message-ID: <7XbJe.2220$Wi6.1453@newsread2.news.pas.earthlink.net>
Source record: 17798

> RAMSEY and TENTEC might be two sources...

Thanks. Ramsey have 10m and 6m RX kits, but they're FM and the beacons that I was hoping to hear transmit CW. I have a TenTec kit, but it's more complex than I had hoped and I'm told that it will work better on 80m or 40m than 10m, so I will probably build it for 40m when I eventually pluck up the courage (and source a nice vernier for the tuning).

Thanks,
- Andy, KB9YLW

3616. Re: 6m or 10m CW RX Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-07 11:14:35 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <2K-dnQfYyI0ecWjfRVn-tg@bright.net>
Source record: 17799

Try http://www.hamtronics.com and scroll down the menu bar on the left side to Receiving & Xmtg Converters and then select VHF & UHF Receiving Converters. These will listen to any mode (AM,FM,SSB,CW,PSK31,etc.) that your I.F. rig can copy. I've built many Hamtronics kits over the years and they are simple and tune up with a voltmeter. A frequency counter might be nice to get the oscillator exactly on frequency, but it probably isn't absolutely necessary.

Scott
N0EDV

Andy Ball wrote:
>
> > RAMSEY and TENTEC might be two sources...
>
> Thanks. Ramsey have 10m and 6m RX kits, but they're FM and
> the beacons that I was hoping to hear transmit CW. I have a
> TenTec kit, but it's more complex than I had hoped and I'm
> told that it will work better on 80m or 40m than 10m, so I
> will probably build it for 40m when I eventually pluck up
> the courage (and source a nice vernier for the tuning).
>
> Thanks,
> - Andy, KB9YLW

3617. Re: 6m or 10m CW RX Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-07 11:24:14 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <2-idnUSOwM5Yc2jfRVn-gQ@bright.net>
Source record: 17800

Oops. I see the Hamtronics 6M to 10M receive converters are only sold as assembled units, so you don't have to worry about getting the crystal on frequency! The have obviously redesigned the converters since they now use surface mount technology. Still wish they offered them in kit form as I'm not scared of surface mounting anymore...building a 10 GHz transverter right now and it hasn't been that tough. However, I need to keep up the allergy medication so I don't sneeze! ;)

Scott
N0EDV

Scott wrote:

> Try http://www.hamtronics.com and scroll down the menu bar on the left
> side to Receiving & Xmtg Converters and then select VHF & UHF Receiving
> Converters. These will listen to any mode (AM,FM,SSB,CW,PSK31,etc.)
> that your I.F. rig can copy. I've built many Hamtronics kits over the
> years and they are simple and tune up with a voltmeter. A frequency
> counter might be nice to get the oscillator exactly on frequency, but it
> probably isn't absolutely necessary.
>
> Scott
> N0EDV
>
> Andy Ball wrote:
>
>>
>> > RAMSEY and TENTEC might be two sources...
>>
>> Thanks. Ramsey have 10m and 6m RX kits, but they're FM and
>> the beacons that I was hoping to hear transmit CW. I have a
>> TenTec kit, but it's more complex than I had hoped and I'm
>> told that it will work better on 80m or 40m than 10m, so I
>> will probably build it for 40m when I eventually pluck up
>> the courage (and source a nice vernier for the tuning).
>>
>> Thanks,
>> - Andy, KB9YLW

3618. Re: Rules-of-thumb for RF variable cap plate spacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-07 14:04:08 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1123423448.010799.116100@z14g2000cwz.googlegroups.com>
Source record: 17801

K7ITM wrote:
> Also to consider is air pressure. The breakdown voltage decreases with
> decreasing air pressure, and to a slight extent with increasing
> temperature.
>
> "Reference Data for Radio Engineers" has a graph of breakdown for a
> needle gap and for smooth surfaces. For the needle gap (pretty much a
> worst case) at sea level (760mm Hg), it's a bit over 25kV peak at 1
> inch spacing, and just over 3kV at 0.1 inches. For comparison, a
> couple smooth 10" diameter balls spaced with a 1" gap between them will
> exhibit a breakdown greater than 80kV. Plates for an air-variable high
> voltage cap should have smooth, rounded edges. Looks like the
> handbook's table assumes sharp corners, and/or gets its safety factor
> from an assumption of rounded edges. It's usually not much of a
> problem, but the higher dielectric constant (rel. to air) of the
> ceramic or other insulation in a capacitor can create locally higher
> fields that cause trouble.
>
> Cheers,
> Tom
>
> (Great quote about hammers, Mike!)

Yep - the hammer quote was great! (finally, a sensible use for
computers hi hi)

But lets look at this a bit laterally - I cant argue the figures given,
just a lowly tech. BUT consider this - you should approach it from the
viewpoint of what variable capacitors you can get hold of!

What power you are running, and thus voltage etc, is the deciding
factor - in the case of 1 (or 2 even) 6146's, its wont need all that
huge a capacitor - most surplus transmitting caps would do it no
trubble. And the traditional amateur method is, after all:-

Do the calculations, and then build it with what you can lay your hands
on !

73 de VK3BFA Andrew

3619. Re: Rules-of-thumb for RF variable cap plate spacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-07 14:07:26 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1123423646.831014.47660@o13g2000cwo.googlegroups.com>
Source record: 17802

and I forgot - the loading capacitor can be a 3 gang (typical) brodcast band one - old valve radio ones are fine. Its low impedance, so you dont need to worry too much about rf volts.

3620. Re: Rules-of-thumb for RF variable cap plate spacing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-07 14:51:12 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <d_SdnVsSjMTOv2vfRVnyvw@pipex.net>
Source record: 17803

"Andrew VK3BFA" <ablight@alphalink.com.au> wrote in message
news:1123423646.831014.47660@o13g2000cwo.googlegroups.com...
> and I forgot - the loading capacitor can be a 3 gang (typical) broadcast
> band one - old valve radio ones are fine. Its low impedance, so you
> dont need to worry too much about rf volts.
==========
When transmitter ouput is 100 W then @ 50 Ohms the V(peak) equals 100V
when output is 400 W then @ 50 Ohms the V(peak) equals 200 V
when output is 1500 W then @ 50 Ohms the V(peak) equals 386 V

So for 400 W output or perhaps a bit higher a good quality air spaced BC
variable capacitor should be OK

Frank GM0CSZ / KN6WH

3621. mc145170 pic programe

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-07 15:38:45 UTC
From: zinda <zen@lineisp.co.uk>
Message-ID: <1123429125.101208.202680@g44g2000cwa.googlegroups.com>
Source record: 17804

hi
looking to make simple 6,4 and 2m single frequency transmitters using mc145170 pll controlled by a pic..does anyone have hex codes (or program) to load up pic chip to allow me to do this?? dont care what pic chip i use, and will only be single frequency use!

thanks..

3622. Re: build a variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-07 16:30:07 UTC
From: zzzpk_pkearn_class_a@its-as-easy-as-they-say-multi_band_cb_is_here.eircom.es.it.net
Message-ID: <42f636f6.1969766@news.iol.ie>
Source record: 17805

"Jozef" <jozef@metaphoria.org> wrote:

: http://www.metaphoria.us/hamradio/transmatch.html

excellent demonstration for others to learn from.

3623. Re: 6m or 10m CW RX Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-07 16:59:30 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1123433970.809315.219130@g14g2000cwa.googlegroups.com>
Source record: 17806

Andy Ball wrote:
> Is anyone here able to point me in the direction of a 10m or
> 6m CW receiver kit? I would like something that's fairly
> simple to build (I don't have a lot of test equipment) but
> would perform well enough to let me monitor a few beacons
> and perhaps some fairly local CW activity (if there is any).

don't know about 10M being a tech, but only time I hear 6M cw is FD
>
> Thanks,
> - Andy, KB9YLW

3624. Re: 6m or 10m CW RX Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-07 21:24:03 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <yNFJe.9490$_41.129@fe02.lga>
Source record: 17811

"an_old_friend" <konstans@hotmail.com> wrote in message
news:1123433970.809315.219130@g14g2000cwa.googlegroups.com...

> don't know about 10M being a tech, but only time I hear 6M cw is FD

10M CW is fairly active when the band is open, which at this point in the
sunspot cycle is infrequent. 10m catches a little of the Es that you get on
6, but in addition, it gets real F openings which are really amazing. But
with the flux hanging under 100, that doesn't happen very often.

..

3625. Re: mc145170 pic programe

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-08 03:31:03 UTC
From: Joel <Joel@cyberbest.com>
Message-ID: <419a1$42f6afed$943f9237$23159@STARBAND.NET>
Source record: 17807

I think you might need a bit more then a pic chip.. and whats 4 meters?

Joe AG4QC
"zinda" <zen@lineisp.co.uk> wrote in message
news:1123429125.101208.202680@g44g2000cwa.googlegroups.com...
> hi
> looking to make simple 6,4 and 2m single frequency transmitters using
> mc145170 pll controlled by a pic..does anyone have hex codes (or
> program) to load up pic chip to allow me to do this?? dont care what
> pic chip i use, and will only be single frequency use!
>
> thanks..
>

3626. Re: 6m or 10m CW RX Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-08 04:28:34 UTC
From: Andy Ball <null@not.valid>
Message-ID: <SbBJe.2620$Wi6.723@newsread2.news.pas.earthlink.net>
Source record: 17808

Hello Scott,

Thanks for the reference. The transvertors aren't quite
what I'm after, but they may come in useful at some point so
it's good to know about them.

73,
- Andy, KB9YLW

3627. Re: mc145170 pic programe

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-08 05:22:31 UTC
From: LenAnderson@ieee.org
Message-ID: <1123478551.062073.267770@o13g2000cwo.googlegroups.com>
Source record: 17809

From: zinda on Aug 7, 8:38 am

>hi
>looking to make simple 6,4 and 2m single frequency transmitters using
>mc145170 pll controlled by a pic..does anyone have hex codes (or
>program) to load up pic chip to allow me to do this?? dont care what
>pic chip i use, and will only be single frequency use!

I would suggest you investigate DC Kits in Scottsdale, AZ, for
a kit that contains both the MC145170 and the controlling
microprocessor. Basic kit is US$35. www.dckits.com

If all you wanted was a single frequency, there is no need to
use any microprocessor. The Motorola/Freescale MC145151 can
be hard-wired at one frequency. It is available at Jameco
for US$6.00. Good up to 30 MHz. www.jameco.com

LenAnderson@ieee.org

3628. SSB voice keyer from MP3 player?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-08 08:43:39 UTC
From: ollollo@hotpop.com
Message-ID: <1123490619.027009.320210@g47g2000cwa.googlegroups.com>
Source record: 17810

Hi,
I tried some googling but nothing useful came up.

I would like to build a lightweight SSB voice keyer for battery
operated portable operations (VHF contests and the like).

MP3 players are getting cheaper every day, they're *small* and
lightweight and their batteries last long enough for a typical
contest.

Has anyone seen a design of an interface between MP3 players and HAM
transceivers? Modern RTX could easily use the VOX facility, but older
gear (like my Yaesu FT-290R) would need external PTT keying.

Any idea? Would a "standard" VOX circuit do the trick?

Thanks,
Paolo IK1ZYW

3629. Re: 6m or 10m CW RX Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-08 11:04:10 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <rYCdneWdx7ISpmrfRVn-sQ@bright.net>
Source record: 17812

Hi Andy,

Well, the reference I sent originally was for a receive only converter.
Technically, a transverter does both transmit and receive.
Personally, I would build a transverter at the start. If you hear
someone, you will invariably want to talk to them as well...

Scott
N0EDV

Andy Ball wrote:
>
> Hello Scott,
>
> Thanks for the reference. The transvertors aren't quite
> what I'm after, but they may come in useful at some point so
> it's good to know about them.
>
> 73,
> - Andy, KB9YLW

3630. RACAL filter impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-08 14:35:45 UTC
From: Mario Bros <rocco.calbe@tin.it>
Message-ID: <55KJe.56479$fm.3703261@news4.tin.it>
Source record: 17813

Hallo folks
Someone of you can say to me which is the 455 Khz filters impedance I/O
installed on RACAL 1792 and 6790 ?

Many thanks

73's de IK6GQC

3631. 4 meters (was: Re: mc145170 pic programe)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-08 15:17:51 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <dd7t2v$l6s$8@puck.litech.org>
Source record: 17814

Joel <Joel@cyberbest.com> wrote:
> I think you might need a bit more then a pic chip.. and whats 4 meters?

> Joe AG4QC
> "zinda" <zen@lineisp.co.uk> wrote in message
> news:1123429125.101208.202680@g44g2000cwa.googlegroups.com...
>> hi
>> looking to make simple 6,4 and 2m single frequency transmitters using
>> mc145170 pll controlled by a pic..does anyone have hex codes (or
>> program) to load up pic chip to allow me to do this?? dont care what
>> pic chip i use, and will only be single frequency use!
>>
>> thanks..

Other countries, other bands.

It appears that the UK, and possibly other countries, have allocated
some portion of 4 meters to amateur operations.

--
"bing-bong. Brimish Rull regret that mumble maz bem dermumble a mir
mumble mumble bimble late. Passengers mizzing to mumble rimble mumble
are advised to momble mar at murmble. Thank you mor mumble mimbling
Brimble mum. bing-bong." -- Gary "Wolf" Barnes, the Monastery

3632. Re: 4 meters (was: Re: mc145170 pic programe)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-08 16:34:30 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <dd81im$n1p$1@theodyn.ncf.ca>
Source record: 17815

"Mike Andrews" (mikea@mikea.ath.cx) writes:
> Joel <Joel@cyberbest.com> wrote:
>> I think you might need a bit more then a pic chip.. and whats 4 meters?
>
>> Joe AG4QC
>> "zinda" <zen@lineisp.co.uk> wrote in message
>> news:1123429125.101208.202680@g44g2000cwa.googlegroups.com...
>>> hi
>>> looking to make simple 6,4 and 2m single frequency transmitters using
>>> mc145170 pll controlled by a pic..does anyone have hex codes (or
>>> program) to load up pic chip to allow me to do this?? dont care what
>>> pic chip i use, and will only be single frequency use!
>>>
>>> thanks..
>
> Other countries, other bands.
>
> It appears that the UK, and possibly other countries, have allocated
> some portion of 4 meters to amateur operations.
>
And in the UK, they didn't have 6meters until relatively recently.

Michael VE2BVW

3633. Re: 6m or 10m CW RX Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-08 16:42:08 UTC
From: Andy Ball <null@not.valid>
Message-ID: <AXLJe.2772$Wi6.806@newsread2.news.pas.earthlink.net>
Source record: 17816

Hello Scott,

SAL> Technically, a transverter does both transmit and
> receive. Personally, I would build a transverter at
> the start. If you hear someone, you will invariably
> want to talk to them as well...

I don't want to talk to beacons, but I imagine I'll hear
some hams too and eventually once I upgrade my license it
would make sense to have invested in a transvertor rather
than just a receive converter. I no longer have a radio that
that can receive CW on any band though, so a transverter
doesn't help unless I buy a receiver too...

73,
- Andy, KB9YLW

3634. Re: SSB voice keyer from MP3 player?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-08 17:34:07 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1123522447.054712.241470@z14g2000cwz.googlegroups.com>
Source record: 17817

A part of a solution: since pretty much any commercial mp3 player will handle stereo, assuming sufficient channel separation, put your desired voice on one channel and a tone on the other channel. Then use a simple circuit to sense the tone and key a relay (or maybe even just turn on a FET) to turn on the transmitter. Use a fairly high frequency for the tone, and the response could be very quick. In simplest form, the tone detector might not need any frequency filtering at all--just detect presence vs absence of a signal. Difficulty is that you need a way to put the tone on with the voice--easy enough if you can pre-record all you need, but a bit more difficult if you want to change the messages real-time. An advantage over simple VOX is better control of the time the xmt line is activated.

I'm not sure if it would be any value, but you could also use different tones to key different things; standard DTMF would be one way to do it, but even just properly chosen single frequencies could work. And if the player can reproduce high audio frequencies OK and you only need voice bandwidth for your audio out, you could even put both the tones and the voice on one channel, and filter the tones (or let the xcvr's audio path-if filters do it).

Cheers,
Tom

3635. Re: 4 meters (was: Re: mc145170 pic programe)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-08 20:31:08 UTC
From: zinda <zen@lineisp.co.uk>
Message-ID: <1123533068.225603.310910@z14g2000cwz.googlegroups.com>
Source record: 17818

we have 6m for ages..and yes 4m for ever..but really want to use
mc145170, cos its a real nice chip and small(sm) and works up to
185mhz..so i can make this really tiny..(so 145151 is no good..)

so..still looking pls..
Michael Black wrote:
> "Mike Andrews" (mikea@mikea.ath.cx) writes:
> > Joel <Joel@cyberbest.com> wrote:
> >> I think you might need a bit more then a pic chip.. and whats 4 meters?
> >
> >> Joe AG4QC
> >> "zinda" <zen@lineisp.co.uk> wrote in message
> >> news:1123429125.101208.202680@g44g2000cwa.googlegroups.com...
> >>> hi
> >>> looking to make simple 6,4 and 2m single frequency transmitters using
> >>> mc145170 pll controlled by a pic..does anyone have hex codes (or
> >>> program) to load up pic chip to allow me to do this?? dont care what
> >>> pic chip i use, and will only be single frequency use!
> >>>
> >>> thanks..
> >
> > Other countries, other bands.
> >
> > It appears that the UK, and possibly other countries, have allocated
> > some portion of 4 meters to amateur operations.
> >
> And in the UK, they didn't have 6meters until relatively recently.
>
> Michael VE2BVW

3636. Re: New Sync AM Special Interest Group

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-09 02:56:15 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <mXUJe.6603$6d4.715954@news20.bellglobal.com>
Source record: 17819
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

"Tom Holden" <holden_family@sympatico.ca> wrote in message
news:_hXze.10052$is5.1036100@news20.bellglobal.com...
> Information on and discussion of synchronous AM demodulators is scattered
> widely. There are sporadic discussions on a couple of Usenet news groups
> but they are restricted to text messages and it's hard to find the wheat
> in the chaff. This new group can accommodate schematics and pictures and
> provides a filtered view focussed on this one subject. In time, I hope
> that its collected files and discussions will make a strong starting or
> reference point for all with an interest in Sync AM.
>
> Please join if you have ever designed or experimented with sync AM
> demodulators or intend to start. Visit the web site at
> http://groups.yahoo.com/group/Synch_AM/ to subscribe and then check out
> the Links section for some answers to What, Why and How. Your designs,
> experiences and participation in the on-topic discussions to ensue will be
> welcomed.
>
In just one month, this group has grown to 73 members with a pretty lively forum - the archive of 160 on-topic messages is publicly visible. Several members are actively experimenting with a variety of homebrew sync AM detectors. The member-only links, files and photos sections have grown to have a respectable body of reference material.

Check it out - your old receiver might get a new lease on life with an add-on sync AM detector for better audio quality and sensitivity and you'll have some fun doing it! Seasoned sync AM users/designers/experimenters - your expertise and experience couldn't go into a better group.

Tom

3637. Re: New Sync AM Special Interest Group

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-09 03:14:56 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <dd973g$d71$1@theodyn.ncf.ca>
Source record: 17820
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

"Tom Holden" (holden_family@sympatico.ca) writes:
> "Tom Holden" <holden_family@sympatico.ca> wrote in message
> news:_hXze.10052$is5.1036100@news20.bellglobal.com...
>> Information on and discussion of synchronous AM demodulators is scattered
>> widely. There are sporadic discussions on a couple of Usenet news groups
>> but they are restricted to text messages and it's hard to find the wheat
>> in the chaff. This new group can accommodate schematics and pictures and
>> provides a filtered view focussed on this one subject. In time, I hope
>> that its collected files and discussions will make a strong starting or
>> reference point for all with an interest in Sync AM.
>>
>> Please join if you have ever designed or experimented with sync AM
>> demodulators or intend to start. Visit the web site at
>> http://groups.yahoo.com/group/Synch_AM/ to subscribe and then check out
>> the Links section for some answers to What, Why and How. Your designs,
>> experiences and participation in the on-topic discussions to ensue will be
>> welcomed.
>>
> In just one month, this group has grown to 73 members with a pretty lively
> forum - the archive of 160 on-topic messages is publicly visible. Several
> members are actively experimenting with a variety of homebrew sync AM
> detectors. The member-only links, files and photos sections have grown to
> have a respectable body of reference material.
>
> Check it out - your old receiver might get a new lease on life with an
> add-on sync AM detector for better audio quality and sensitivity and you'll
> have some fun doing it! Seasoned sync AM users/designers/experimenters -
> your expertise and experience couldn't go into a better group.
>
> Tom
>
>
Well no. I've posted things in both of these newsgroups about the topic,
and I'd say you're missing whole areas of the bibliography. I sure
have no interest in joining some "club".

And if you were so interested in moving the topic ahead, you'd
stay away from those "members only links and files".

By isolating yourselves, you lose out.

Micahel VE2BVW

3638. Re: New Sync AM Special Interest Group

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-09 03:37:41 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <byVJe.6660$6d4.736762@news20.bellglobal.com>
Source record: 17822
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

"Michael Black" <et472@FreeNet.Carleton.CA> wrote in message
news:dd973g$d71$1@theodyn.ncf.ca...
>
> "Tom Holden" (holden_family@sympatico.ca) writes:
>> "Tom Holden" <holden_family@sympatico.ca> wrote in message
>> news:_hXze.10052$is5.1036100@news20.bellglobal.com...
>>> Information on and discussion of synchronous AM demodulators is
>>> scattered
>>> widely. There are sporadic discussions on a couple of Usenet news groups
>>> but they are restricted to text messages and it's hard to find the wheat
>>> in the chaff. This new group can accommodate schematics and pictures and
>>> provides a filtered view focussed on this one subject. In time, I hope
>>> that its collected files and discussions will make a strong starting or
>>> reference point for all with an interest in Sync AM.
>>>
>>> Please join if you have ever designed or experimented with sync AM
>>> demodulators or intend to start. Visit the web site at
>>> http://groups.yahoo.com/group/Synch_AM/ to subscribe and then check out
>>> the Links section for some answers to What, Why and How. Your designs,
>>> experiences and participation in the on-topic discussions to ensue will
>>> be
>>> welcomed.
>>>
>> In just one month, this group has grown to 73 members with a pretty
>> lively
>> forum - the archive of 160 on-topic messages is publicly visible. Several
>> members are actively experimenting with a variety of homebrew sync AM
>> detectors. The member-only links, files and photos sections have grown to
>> have a respectable body of reference material.
>>
>> Check it out - your old receiver might get a new lease on life with an
>> add-on sync AM detector for better audio quality and sensitivity and
>> you'll
>> have some fun doing it! Seasoned sync AM users/designers/experimenters -
>> your expertise and experience couldn't go into a better group.
>>
>> Tom
>>
>>
> Well no. I've posted things in both of these newsgroups about the topic,
> and I'd say you're missing whole areas of the bibliography.

Undoubtedly. We've made a start on a bibliography.

> I sure
> have no interest in joining some "club".

I suppose it is, in this respect: members can be readily ejected for bad behaviour, unlike Usenet..

> And if you were so interested in moving the topic ahead, you'd
> stay away from those "members only links and files".

That's a Yahoo 'feature' over which we have no control. (Actually, on checking, the Links can be made public but many of them point to the member-only files and photos)

>
> By isolating yourselves, you lose out.

The invitation is open to all with a genuine interest in the subject. I've seen some of your informative postings and would be delighted if you could overcome your reservation about the "clubbiness".

> Micahel VE2BVW

73, Tom

3639. WTB or FS for parts Kenwood TM-701a vhf/uhf tranceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-09 03:39:36 UTC
From: Ron <ron@nowisconsin.com>
Message-ID: <kq8gf1dejsfn083o7k8e93psik9os5ma4q@4ax.com>
Source record: 17821
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

I have a Kenwood TM 701 that has good rf decks, audio etc. The
previous owner botched the button cell battery replacement job.
Radio does not program properly. Can only change freqs with the mic
up/down buttons.

I would like to find one that has toasted rf decks (most of them) but
has good logic Or just the front encoder board.
Willing to sell for parts as a last result if I get no answers for
k-ball unit.
Please e-mail to ron@onwisconsin.com

Thank you.

3640. Gain of 2N3866 at Lower Voltages

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-09 06:07:14 UTC
From: dumpjunkmailhere@yahoo.com
Message-ID: <1123567634.140114.136110@o13g2000cwo.googlegroups.com>
Source record: 17823

Hi All,

Does anyone know what's the power gain of a 2N3866 at 9, 12 and 14
volts? I know that the 2N3866 has a gain of 10dB at 28 volts.

C.W.

3641. Re: SSB voice keyer from MP3 player?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-09 07:17:40 UTC
From: ollollo@hotpop.com
Message-ID: <1123571860.142820.84430@g47g2000cwa.googlegroups.com>
Source record: 17824

K7ITM wrote:

Hi Tom

> A part of a solution: since pretty much any commercial mp3 player will
> handle stereo, assuming sufficient channel separation, put your desired
> voice on one channel and a tone on the other channel. Then use a

I did think of that too, and should be pretty easy to build with a .wav editor on any PC. My only concern is about channel separation in the pocket player, and whether MP3 compression would throw away the tone or not.

Because of MP3 compression I think the tone should not be chosen either too high or too low.

> I'm not sure if it would be any value, but you could also use different
> tones to key different things; standard DTMF would be one way to do it,

Well, walking uphill with antenna, RTX and battery (one each) is tiring enough - that's about 3kg -, having even more radios is not for me. :-)

Thanks for your suggestion,
Paolo IK1ZYW

3642. Re: 6m or 10m CW RX Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-09 11:25:09 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <6d-dnYSc-v9kDGXfRVn-hw@bright.net>
Source record: 17825

Ah, OK, you want to listen for beacons and you don't have a receiver. I misread what you were looking for. I thought you had some sort of receiver and wanted to listen to 10M and/or 6M. Sorry about that!!

Being a Tech class, you can transmit legally on both 10M (28.1-28.5) and all bands above 6M, so you really don't have to upgrade if you don't want to.

Here are a couple websites that may give you places to start...

http://www.af4k.com/mega/megakits.htm
http://radio.tentec.com/kits/Receiver

Good luck and have fun!!

Scott
N0EDV

Andy Ball wrote:

>
> Hello Scott,
>
> SAL> Technically, a transverter does both transmit and
> > receive. Personally, I would build a transverter at
> > the start. If you hear someone, you will invariably
> > want to talk to them as well...
>
> I don't want to talk to beacons, but I imagine I'll hear
> some hams too and eventually once I upgrade my license it
> would make sense to have invested in a transvertor rather
> than just a receive converter. I no longer have a radio that
> that can receive CW on any band though, so a transverter
> doesn't help unless I buy a receiver too...
>
> 73,
> - Andy, KB9YLW

3643. Re: SSB voice keyer from MP3 player?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-09 12:06:00 UTC
From: gsm@mendelson.com
Message-ID: <slrndfh6q8.d4j.gsm@cable.mendelson.com>
Source record: 17826

> I did think of that too, and should be pretty easy to build with a .wav
> editor on any PC. My only concern is about channel separation in the
> pocket player, and whether MP3 compression would throw away the tone or
> not.

It depends upon the compressor and the type of compression chosen. There
are three options in most compressors: Mono, Joint Stereo and Stereo.

Keep in mind that MP3 files are really MPG movie streams with no video.

Mono is obvious.

Stereo is two seperate mono channels. This is best for programs with
multi language sound tracks.

Joint stereo is the same system used in FM stereo. FM uses a SUM track
(mono) and a DIFFERNCE track. I think MP3's use one track and a difference
track. Since it is decoded by a computer, this saves processor time
over the sum and difference which requires two tracks to be calculated
after decompression instead of one.

> Because of MP3 compression I think the tone should not be chosen either
> too high or too low.

Anything in the higher audible range, say 300 Hz on up, but 2600Hz is
sort of a standard in the telephone industry and 1000Hz in the audio visual,
so your choice may be influenced by what you can find easily.

Analog phone cells identified themselves with tones in the 5kHz range.
They were used to determine which cell your phone was actually receiving.
Obvioulsy the phone filtered out the tone.

A simple set of capacitor audio filters such as the ones used in SCAF
units would do the trick and you could use a mono signal. You just make
a 3kHz low pass filter for the audio and a 4khz high pass filter
for the control signals.

>> I'm not sure if it would be any value, but you could also use different
>> tones to key different things; standard DTMF would be one way to do it,

DTMF would be simple to use, encoder and decoder hardware is very easy
to get and well documented. The tones are audible so you would need
to use two channels, or introduce a delay to prevent them from being
transmitted.

The old motorola pagers used reeds at very specific filters. Subaudible
for signal identification and audible tones to unlock the recevier.
You may be able to find lots of them in junk bins.

> Well, walking uphill with antenna, RTX and battery (one each) is tiring
> enough - that's about 3kg -, having even more radios is not for me. :-)

You could just get a bunch of audible greeting cards (or the chips from
inside them) or use a pocket pc or late model Palm.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (077)-424-1667 IL Fax: 972-2-648-1443 U.S. Voice: 1-215-821-1838
Support the growing boycott of Google by radio users and hobbyists.
It's starting to work, Yahoo has suprassed Google.

3644. Re: Gain of 2N3866 at Lower Voltages

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-09 14:28:21 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <e5ehf1th8qpra0646jjkotsdp3g0aq8c0s@4ax.com>
Source record: 17827

On 8 Aug 2005 23:07:14 -0700, dumpjunkmailhere@yahoo.com wrote:

>Hi All,
>
>Does anyone know what's the power gain of a 2N3866 at 9, 12 and 14
>volts? I know that the 2N3866 has a gain of 10dB at 28 volts.
>
>C.W.

That must be 1watt out Class C at 400mhz value.

The spec (motorola 1978) Ft is 500mhz @15V and collector current of
50ma. Later manufacture devices have Ft in the range of 800mhz.

The gain is really a function of many parameters and often the given
numbers have to be "qualified" for a given set of test conditions.
The 2n3866 is a high gain device that is useful to in excess of 400mhz
and when used at lower frequencies exhibits the usual Ft/Fop gain
curve(gain at frequency is Ft [where gain is 1] divided by opertaing
frequency and never exceeds the DC or low frequency HFE value).
So at say 40mhz the gain will be around 50 or ~17db.

The gain of that device is tied to frequency and operating current
and circuit impedences more so than voltage. As imagined they are
interrelated. However at 13.6V the class C power gain is around 10db
at 175mhz but at 28V it will be around 13db. In class A or B circuits
the gain numbers have to be derived from the Ft and HFE as well a
circuit topology used. Typically the small signal Class A gain will
be much higher.

Allison
Kb1GMX

3645. Re: Gain of 2N3866 at Lower Voltages

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-09 16:29:51 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1123604991.239071.192690@g44g2000cwa.googlegroups.com>
Source record: 17828

As Allison wrote, the gain depends on the operating conditions other than just collector supply voltage. However, a reasonable rule of thumb if you don't change the operating class or circuit topology, but do adjust the output matching network as appropriate, is that the gain would change by 3dB per doubling of supply voltage (or -3dB for halving it). Think of it this way: you get the same current, and you're only changing the voltage. Power equals voltage times current. Of course, you're limited by the transistor's breakdown voltage, and too much gain can lead to instabilities. And at very low voltages, you need to consider the transistor's saturation voltage.

Cheers,
Tom

3646. Re: 6m or 10m CW RX Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-09 16:52:09 UTC
From: fmmck@aol.com
Message-ID: <fmmck-0908051252090001@ac955e05.ipt.aol.com>
Source record: 17829

In article <qUDIe.1510$RS.167@newsread3.news.pas.earthlink.net>, Andy Ball <null@not.valid> wrote:

> Is anyone here able to point me in the direction of a 10m or
> 6m CW receiver kit? I would like something that's fairly
> simple to build (I don't have a lot of test equipment) but
> would perform well enough to let me monitor a few beacons
> and perhaps some fairly local CW activity (if there is any).

Andy-

Check out http://www.elecraft.com/ for some quite good kits. They may not have exactly what you are looking for, but the equipment has a first class reputation.

I understand you can buy a simpler kit and add to it with upgrades later. I don't know if they have a receive-only kit or not.

73, Fred, K4DII

3647. 600 plus METERS for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-09 19:05:43 UTC
From: Eugene Rippen <soundval@foothill.net>
Message-ID: <1123614489_6223@spool6-east.superfeed.net>
Source record: 17830

NEW and USED METERS
Each tested.
Each priced

Burlington DeJur GE Hammarlund
Hickok Honeywell Jewell Marion
Phaostron Readrite Roller Smith Shurite
Simpson Triplett Western Electric
Weston

http://www.muchstuff.com

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

3648. Re: Gain of 2N3866 at Lower Voltages

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-09 20:10:53 UTC
From: dumpjunkmailhere@yahoo.com
Message-ID: <1123618253.039514.7790@g44g2000cwa.googlegroups.com>
Source record: 17831

K7ITM wrote:
> As Allison wrote, the gain depends on the operating conditions other
> than just collector supply voltage. However, a reasonable rule of
> thumb if you don't change the operating class or circuit topology, but
> do adjust the output matching network as appropriate, is that the gain
> would change by 3dB per doubling of supply voltage (or -3dB for halving
> it). Think of it this way: you get the same current, and you're only
> changing the voltage. Power equals voltage times current. Of course,
> you're limited by the transistor's breakdown voltage, and too much gain
> can lead to instabilities. And at very low voltages, you need to
> consider the transistor's saturation voltage.
>
> Cheers,
> Tom

Tom and Allison,

Thanks for your replies. The reason I'm asking is that I built two class A small signal VHF stages using 2N3866's, powered by 14 volts, and I'm getting only 2 to 3 dB gain per stage. Then, I was told to change the transistors to 2N4427, which are 12 volt devices. Would the gain improve by changing to 2N4427's? Please explain saturation voltage. Thanks,

C.W.

3649. Re: Gain of 2N3866 at Lower Voltages

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-09 21:08:51 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <mb6if1ha55tcn8emau40keucjdn0grp8an@4ax.com>
Source record: 17832

On 9 Aug 2005 13:10:53 -0700, dumpjunkmailhere@yahoo.com wrote:

>Tom and Allison,
>
>Thanks for your replies. The reason I'm asking is that I built two
>class A small signal VHF stages using 2N3866's, powered by 14 volts,
>and I'm getting only 2 to 3 dB gain per stage. Then, I was told to
>change the transistors to 2N4427, which are 12 volt devices. Would the
>gain improve by changing to 2N4427's? Please explain saturation
>voltage. Thanks,
>
>C.W.

Thats horrid performance. I've used 2N3866 at 144mhz and seen far
better gains than that at 12V.

What you don't specify is the (ther than VHF) is the frequency in
use. A transistor with an Ft of 500mhz at 250mhz is going to exhibit
poor gain.

A better choice would be a 2n5179, characterized for lower voltages
and has a hight Ft. I've also used 2n5109 at 440mhz/12V with good
gain, thats what 1200mhz Ft buys you.

FYI: saturation voltage is the votages measured from collector to
ground(usually same potential as emitter) at some specified current
with the device turned on hard (over driven). Applies to switching
circuits usually.

Allison

3650. Re: Gain of 2N3866 at Lower Voltages

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-09 21:50:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11fi9a0i819c667@corp.supernews.com>
Source record: 17833

Many factors influence a stage's power gain other than the intrinsic gain of the transistor itself. Changes in circuit components and/or topology are more likely to modify the gain than changing the transistor type.

Roy Lewallen, W7EL

3651. FA:VIDEO SWITCHER,IG-42+ TUBES...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-10 01:53:17 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <h6dKe.82936$5N3.65250@bgtnsc05-news.ops.worldnet.att.net>
Source record: 17834
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

See these and a few other items at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Check back often, heytubeguy

3652. Re: 6m or 10m CW RX Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-10 11:05:06 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <XaWdnQBjistVQ2TfRVn-oA@bright.net>
Source record: 17835

Oops, it has been pointed out to me that TECH class does not have access
to HF. I forgot about the "new" Tech license, being no-code and thus
not having HF priviledges. I keep thinking back to the days when I was
a TECH class (early 1980s) when the TECH class had to pass the 5 WPM
code test. It's just too hard to keep all the TECH class (Old TECH,
TECH Plus, New TECH) priviledges straight! Sorry about the confusion!!

Scott
N0EDV

Scott wrote:
> Ah, OK, you want to listen for beacons and you don't have a receiver. I
> misread what you were looking for. I thought you had some sort of
> receiver and wanted to listen to 10M and/or 6M. Sorry about that!!
>
> Being a Tech class, you can transmit legally on both 10M (28.1-28.5) and
> all bands above 6M, so you really don't have to upgrade if you don't
> want to.
>
> Here are a couple websites that may give you places to start...
>
> http://www.af4k.com/mega/megakits.htm
> http://radio.tentec.com/kits/Receiver
>
> Good luck and have fun!!
>
> Scott
> N0EDV
>
> Andy Ball wrote:
>
>>
>> Hello Scott,
>>
>> SAL> Technically, a transverter does both transmit and
>> > receive. Personally, I would build a transverter at
>> > the start. If you hear someone, you will invariably
>> > want to talk to them as well...
>>
>> I don't want to talk to beacons, but I imagine I'll hear
>> some hams too and eventually once I upgrade my license it
>> would make sense to have invested in a transvertor rather
>> than just a receive converter. I no longer have a radio that
>> that can receive CW on any band though, so a transverter
>> doesn't help unless I buy a receiver too...

>>
>> 73,
>> - Andy, KB9YLW

3653. FA:Tubes:6JB6,6V6Y,6V6GT,Catalogs+....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-10 15:49:13 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <ZlpKe.581452$cg1.119094@bgtnsc04-news.ops.worldnet.att.net>
Source record: 17836
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

See these at address below. More parts also coming as well:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking, check often, heytubeguy

3654. Re: Crystal Shortwave?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-10 20:30:10 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <mttKe.13776$7d.7145@trnddc08>
Source record: 17837

Ed wrote:
>> Build a tuned circuit for WSB and use the voltage generated as the
>> power
>>supply for a transistor amplifier for your SW listening.
>>You will find info on the web.
>> Mike
>>
>>
>
>
>
> That's a great concept.... I'd like more specific info on WEB sites.
> Can't quite figure what to type in the Google search box for this.
>
>
> Ed

Here's a couple...

http://www.scitoys.com/scitoys/scitoys/radio/homemade_radio.html

http://www.midnightscience.com/

Have fun!

John

3655. FA: El-Key Paddle - Very Rare Morse Code Key

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-10 20:57:11 UTC
From: Dave <dave@somehere.net>
Message-ID: <ffqkf1hknjbh6v7q2frjls7t4571m1j7u4@4ax.com>
Source record: 17838

I have this for auction on eBay:

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5796993832&rd=1&sspagename=STRK%3AMESE%3AIT&rd=1

Thanks for looking

3656. FA: Heathkit Station Monitor SB-614 Oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-10 21:05:26 UTC
From: Dave <dave@somehere.net>
Message-ID: <3tqkf19o2fltji05mus0qomglb6fe485gg@4ax.com>
Source record: 17839

I have this for sale on eBay:

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5797026388&rd=1&sspagename=STRK%3AMESE%3AIT&rd=1

Thanks for Looking

3657. FA: Yaesu Landliner SP101PB Speaker Phone Patch for FT-101

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-10 21:19:36 UTC
From: Dave <dave@somehere.net>
Message-ID: <1nrkf1dem93tvqeaiavv2evmobrvpb6cfb@4ax.com>
Source record: 17840
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap

I have this for sale on eBay:

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5797070032&rd=1&sspagename=STRK%3AMESE%3AIT&rd=1

Thanks for looking.

3658. FA: Yaesu YH-55 Headphones - As New in Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-10 21:23:05 UTC
From: Dave <dave@somehere.net>
Message-ID: <80skf1lkutq3jrc4lhogth32a13d4fptg7@4ax.com>
Source record: 17841
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap

I have this for sale on eBay:

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5796984738&rd=1&sspagename=STRK%3AMESE%3AIT&rd=1

Thanks for looking.

3659. Re: FA: Yaesu YH-55 Headphones - As New in Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-10 23:24:21 UTC
From: Mike Coslo <mremovethiscoslo@adelphia.net>
Message-ID: <SMidnQlwxa07EWffRVn-1A@adelphia.com>
Source record: 17842
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap

Dave wrote:
> I have this for sale on eBay:
>
> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5796984738&rd=1&sspagename=STRK%3AMESE%3AIT&rd=1
>
> Thanks for looking.

Dave, you are spamming several newsgroups with this stuff.
FA: posts have no place in rec.radio.amateur antenna, boatanchors, misc,
or equipment. It belongs in swap only.

Thanks.

- Mike KB3EIA -

3660. FA: Motorola Police Speaker Microphone - Very Nice

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-10 23:32:59 UTC
From: Dave <dave@somehere.net>
Message-ID: <rh3lf1h4tgac08g2k1ubpgrm36loej77oo@4ax.com>
Source record: 17843
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap

I have this for sale on eBay:

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5797305343&rd=1&sspagename=STRK%3AMESE%3AIT&rd=1

Thanks for looking.

3661. Qst Jan 1990 article

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-11 03:54:21 UTC
From: Nobody <rock_sci@hotmail.com>
Message-ID: <1123732461.397640.159420@g14g2000cwa.googlegroups.com>
Source record: 17844

Does anyone have a copy of article in QST January 1990 titled

CRYSTAL TESTER FOR F, Q, AND R BY W1FB?

If so, could you scan it and email me a copy?

Thanks,

Tim AA6DQ
aa6dq@arrl.net

3662. Re: Qst Jan 1990 article

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-11 12:26:32 UTC
From: Richard Heindel <rheindel@neo.rr.com>
Message-ID: <YtHKe.55331$B52.13577@tornado.ohiordc.rr.com>
Source record: 17845

Dan Richardson wrote:
> On 10 Aug 2005 20:54:21 -0700, "Nobody" <rock_sci@hotmail.com> wrote:
>
>
>>Does anyone have a copy of article in QST January 1990 titled
>>
>>CRYSTAL TESTER FOR F, Q, AND R BY W1FB?
>>
>>If so, could you scan it and email me a copy?
>>
>
>
> You got it. Check your mail.
>
> 73,
> Danny, K6MHE
>
>
>
It's also in W1FB's Design Notebook on page 192.

73
Richard WB8KRN

3663. Re: Pool leak detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-11 16:47:04 UTC
From: jwphillips <jwphillips.1tmc09@news.radiobanter.com>
Message-ID: <jwphillips.1tmc09@news.radiobanter.com>
Source record: 17847

Try turning your filter off, and dumping a pack of red Kool Aid (don't
stir) into the pool. The red coloring will indicate the leak.

Polymath Wrote:
> A Grid Leak was a way in the old days of stopping a flow.
>
> "Joel" Joel@cyberbest.com wrote in message
> news:4f408$42ea9582$943f9237$32491@STARBAND.NET...-
> Has anyone had any experience with some sort of above ground pool
> leak
> detector? I figures if I could connect one probe to some sort of
> sensitive restiance (ohm) meter and put it in the water, I could
> maybe
> read the resistance between the probe and ground and then as I got
> closer
> to the leak the restiance would go down. But the restiance is WAY
> high..
> But seems to me something like that would work. Any ideas?
>
> Joe AG4QC
>
> -

--
jwphillips

3664. Re: Qst Jan 1990 article

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-11 17:04:14 UTC
From: Nobody <rock_sci@hotmail.com>
Message-ID: <1123779854.267571.230580@o13g2000cwo.googlegroups.com>
Source record: 17846

Hello Richard,

Yes, I know that the article was printed in the appendix. However, I have not been able to find a copy of W1FB's Design Notebook from a reliable reseller at an affordable price -- it appears to be out of print.

So, I am still looking for someone who can scan the article for me.

Tim AA6DQ

3665. Re: Qst Jan 1990 article

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-11 23:28:04 UTC
From: Dino Papas <kl0s@cox.net>
Message-ID: <kl0s-3AE99D.19280411082005@news.east.cox.net>
Source record: 17698

There are a couple of corrections that were made in the version printed
in the Design Notebook. Here are two that I found:

The value of R24 in Figure 1 was omitted in the original; it's listed as
a 56 ohm resistor in the notebook.

Also, a note that appeared as "Feedback" in the March 1990 QST added a
220 ohm resistor from the output of voltage regulator U2 (LM317) back to
the the "Adjust" pin and top of R1 (voltage adjust) in the power supply
circuit (Figure 3).

Tim -- if all else fails and you can't find the updated article I'll
mail you a copy via snail mail.

BTW, you can get the PC board from FAR Circuits....I've got the board
populated but the project is down in the queue to get finished...so many
projects, so little time!

Dino KL0S/4

In article <3gbnf1t6qf59ivjbbm9g8dg9aqb3t470g6@4ax.com>,
Dan Richardson <> wrote:

> On 11 Aug 2005 10:04:14 -0700, "Nobody" <rock_sci@hotmail.com> wrote:
>
> >So, I am still looking for someone who can scan the article for me.
> >
> >Tim AA6DQ
>
> Did you not get the email I sent you?
>
> Danny, k6mhe

3666. FS: Lots of homebrew amplifier parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 00:06:31 UTC
From: ae4en@bellsouth.net
Message-ID: <1123805191.503802.267580@g14g2000cwa.googlegroups.com>
Source record: 17699

For sale, lots of of homebrew amplifier parts. Here's a short list:

Jennings CVDD-1000-7.5S 7.5 kv 25-1000 pf vacuum variable capacitor. Looks like it is in it's original packing but cannot promise that it is new- $150.

Jennings CVDD-500-7.5S 7.5 kv 20-500pf vacuum variable capacitor, $120.

Jennings UCSL-1000 3 kv 1000 pf vacuum variable $80

New K6SVC full wave diode assembly using 28 1N5408 diodes, 28 470K 1/4 watt resistors and 28 .01 1 KV disc ceramic caps. Nicely done on a 8 1/2 x 5 1/2 circuit board $40

Mallory 800 mfd @450 volt electrolytic capacitors, quant. 2, $10 each

Mallory 1500 mfd 450 volt electrolytic capacitors. Quant 19, appear to be new $10 each.

ETO Alpha 86 chassis, band switch, tanks, both variable caps, blower, tube sockets and mount, HV choke, loading caps, 2 relays, low voltage power supply, some wiring, other small parts and low voltage electrolytic cap. $300

ETO Alpha 86 new electrolytic capacitors. Mallory 350 mfd 450 volt electrolytics. Set of 7 for $70 or $12 each.

ETO Alpha (unsure of the model)tube socket circuit board for 2 3CX800A7's. Board #ABX-X181 Rev. A, used unknown condition. $120.00.

Lots and lots more...ceramic stand offs, jacks, switches and insulators, some small to medimum sized air variables, high voltage jacks, some more ETO Alpha 86 stuff, tanks, transmitting caps, high voltage disc ceramic. I can send pics. If you think the price is too high, don't grumble...send an offer, I may just take you up on it.

3667. Can 6146B tubes be used in GG (grounded grid)?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 02:20:47 UTC
From: Trying to be a real ham! <Wanna.Be.A.Real.Ham33333@hotmail.com>
Message-ID: <vm1of1hukri4snum9um6seo72a3uoadg86@4ax.com>
Source record: 17700

I've seen many tubes used in grounded grid, but 6146Bs are usually shown in class AB2. Can 6146B tubes be used in grounded grid with good results?

3668. Re: Pool leak detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 02:56:37 UTC
From: Mr Fed UP <mrfedup@bellsouth.net>
Message-ID: <6cUKe.5341$XL3.5143@bignews3.bellsouth.net>
Source record: 17701

Have you considered a divining rod and holding it backwards?

Sorry couldn't resist the humor... but on the serious side,, I got
114,000 hits for a Yahoo search for "pool leak detector"
Might be something in that pile to help.
Good luck Gary

"Joel" <Joel@cyberbest.com> wrote in message
news:b1ad3$42f2bc95$943f9237$25842@STARBAND.NET...
> This is a above ground pool with a vinyl liner.. about 27 feet in
> diameter, we had a special liner installed in it so we have the ground dug
> out so the deep end is about 6 and half feet deep. The bottom is cement as
> it's the only way to keep the sand from migrating along the bottom to the
> deep end. So a leak is a bugger to find as the liner leaks and the cement
> bottom send the water in all directions. I had another leak a year or so
> ago and I ended up draining the pool and finely found it and repaired it.
> In this case I can't drain the pool again, as the line probably won't take
> another streaching. And -ex- your probably right, I need to get a expert
> out here.. I live about 200 miles from Nashville and 150 from Memphis, and
> that's where these 'experts' probably would have to come. So if I could
> find this thing it would be great. I know they make some sort of
> electronic gismos for finding leaks, I just have no idea how they work.
>
> Joe AG4QC
> "Fred McKenzie" <fmmck@aol.com> wrote in message
> news:fmmck-0408051437330001@aca32f66.ipt.aol.com...
>> In article <f1fef$42f1a1f1$943f9237$13958@STARBAND.NET>, "Joel"
>> <Joel@cyberbest.com> wrote:
>>
>>> The problem is it could be on the bottom or sides and I need something
>>> better then my eyes to find it. It certainly is leaking as I have
>>> standing
>>> water all around the pool.
>>
>> Joe-
>>
>> I've never had a pool, but it seems to me that standing water could only
>> be the result of a gross leak. You should be able to see it with the
>> naked eye.
>>
>> Isn't it more likely that a leak would be in the external plumbing
>> associated with the pool? How else could the pool have a water level
>> lower than the surrounding standing water, unless it is located in a
>> swamp?
>>

>> 73, Fred, K4DII
>
>

3669. Re: How to build an amplifier chassis????

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 09:00:44 UTC
From: Paul Hinman <paul.hinman@shaw.ca>
Message-ID: <0zZKe.197562$s54.56494@pd7tw2no>
Source record: 17702

Mike Andrews wrote:

>Tim Shoppa <shoppa@trailing-edge.com> wrote:
>
>
>>In the traditional world, the chassis and enclosure are related but
>>separate items. The common technique is:
>>
>>
>
>
>
>>1. Electronics built on aluminum chassis box. Available
>>pre-fabricated from Hammond etc. Or make your own from sheet metal.
>>
>>
>
>
>
>>2. Front panel bolted to the chassis box. Knobs and switches and
>>meters go on the front panel. And are either wired to the stuff inside
>>the chassis or control variable caps etc. on the chassis via long
>>shafts. Front panel for a big project is often 19" wide rack-mount
>>panel (again a standard size available from Hammond et al.)
>>
>>
>
>
>
>>3. Enclosure is a sheet metal box that slides on from behind. Made
>>using sheet metal tools.
>>
>>
>
>
>
>>At the high end, "sheet metal tools" are a big shear for cutting and a
>>brake for bending. At the low end you make you own brake out of 2x4's
>>and hinges, and cut with hacksaw/table saw/aircraft snips (depending on
>>type of cut, thickness, and material.)
>>
>>
>
>

>
>>For the really classy look all the holes you need can be cut with
>>punches. More likely for a hobbyist is drills and hacksaws and files
>>and the most valuable tool of all: the nibbler.
>>
>>
>
>And if there's a good sheet metal shop in your area (there is in mine), you
>may be able to get the owner to custom-make stuff for you for prices that
>merely make you want to scream. But that way you'll get what you want, or
>at least what you told the owner you wanted.
>
>My preference, when I get to indulge it, is for rackmount panels with one
>or more chassis boxes bolted to it, and subchassis inside those as seems
>appropriate.
>
>
>
I hope that when you build your amplifier you use tubes with glass
envelopes and a window in the front panel of the Amp to show the glow .
The window would probably have to be heat proof glass with a copper
screen behind it for shielding. I would just love to have an amp that
showed off the finals and maybe even the rectifiers is you decided to
use tubes in the power supply as well.

Paul

3670. Marconi RC782 TX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 12:40:03 UTC
From: Samuel Hunt <shunt010@hotmail.com>
Message-ID: <ddi5b3$3r$1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 17703

I'm after a service manual / circuit diagram for a Marconi RC782 TX.

I've got one here that's a PA and I want to get it running on 2m. I've got it doing about 45W on 2m, but there's a lot of second harmonic coming out (10W), and me playing about isn't doing much to kill it off, so I need to look at a circuit to try to work it all out.

Can anyone help?

Sam

3671. Re: Marconi RC782 TX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 12:53:44 UTC
From: "Harold E. Johnson" <w4zcb@mchsi.com>
Message-ID: <sZ0Le.20051$084.18119@attbi_s22>
Source record: 17704

> I've got one here that's a PA and I want to get it running on 2m. I've got
> it doing about 45W on 2m, but there's a lot of second harmonic coming out
> (10W), and me playing about isn't doing much to kill it off, so I need to
> look at a circuit to try to work it all out.
>
>
> Can anyone help?
>
> Sam

If it's a push pull stage, you have one transistor not doing it's job.
Should have 30-40 dB of second harmonic suppression just due to symmetry.

W4ZCB

3672. Desperately Seeking ...user\service manual for Farnell LS-30

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 13:02:33 UTC
From: Zen Navigator <dahall.aefb0@orange.net>
Message-ID: <1123851753.105812.132930@o13g2000cwo.googlegroups.com>
Source record: 17705

Hi,

My first post, and I'm already make demands ;)

Have got my a Farnell LS-30 which is variable psu 0 - 30v. It is in a state of despair, and I would like to get it up and working.

Anybody got a user or service manual for this or know of a website where you can download it...preferably for free :)

Dave

3673. Lattice-wound RF choke replacement, 50 years later

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 13:30:47 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1123853447.833965.298810@g43g2000cwa.googlegroups.com>
Source record: 17706
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.components

I'm fixing up some older ham transmitters. 811 or 6146 finals, etc. in the 50-200 watt class.

Invariably these have sat on the shelf for so long because the RF choke for the final died a horrible death (sometimes charred beyond recognition) in their final use. I myself have fried/burnt several RF chokes and other final components in Heathkits etc. but that was many years ago when I could order exact spare parts. Sometimes a capacitor or two is burnt up too, but these I already have in the junkbox or can buy off-the-shelf.

The chokes that burned up seem to be between 1mH and 2.5mH or so, and were lattice-wound on what seems to be a ceramic form. Maybe it's a ferrite, but I don't think so.

6146/811/sweep tube handbook construction articles from the 50's show similar RF chokes in their circuits and part numbers like "National R-100" and "Ohmite Z-214".

I look in modern catalogs and I see molded (almost certainly ferrite core) RF chokes in the right inductance (low mH) and current (100mA to a few hundred mA) range but they look nothing like the old lattice-wound choke. Are these suitable substitutes for the originals? Something in the back of my head says that ferrite core losses with all that RF across the choke will make the thing burn up at transmitter RF power levels even if I'm below the DC current limit for these parts.

AES lists some pi-wound 1mH and 2.5mH RF chokes (ferrite core) that look more like the original. Better idea for these?

If I wanted to learn to rewind the original chokes (very often they double as ceramic supports for the anti-parasitic RL network and plate caps) are there any web resources that would tell me how to wind my own lattice-wound RF chokes? I've wound my share of simple solenoidal coils in repair/homebrew endeavors, but the slices in these RF chokes seem very ornately wound. I think there's a Lindsay or similar book about coil winding, is that on my "gotta own" list?

Oh well, back to replacing those smoking electrolytics in the power supply, I know how to do that!

Tim.

3674. Sony kitchen radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 14:05:15 UTC
From: jeplett <jeplett.1tnq09@news.radiobanter.com>
Message-ID: <jeplett.1tnq09@news.radiobanter.com>
Source record: 17707

I posted this in the Antenna forum but got no replies, so I thought I'd try posting it over here in Homebrew and see if anyone can help me.

I have one of those white under-cabinet Sony kitchen radio / cd players. The radio uses a digital tuner. They have notoriously poor radio reception, and the internet is full of posts by people ranting about how Sony could sell such a poor radio.

I thought I'd ask you experts if there's anything that can be done to improve the reception. I understand the power cord is used as the antenna. I've tried stringing-up an extension cord to the power cord, with no improved reception. Could I open it up and attach an external antenna? If so, how would I do this? Any ideas, or experience with this particular problem?

Regards,

--
jeplett

3675. Re: Qst Jan 1990 article

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 15:43:55 UTC
From: Nobody <rock_sci@hotmail.com>
Message-ID: <1123861435.479814.265580@g49g2000cwa.googlegroups.com>
Source record: 17708

Dino,
Thanks for the updates to the article. This all started because I was cleaning out a stack of stuff and came across the board that I had purchased years ago along with a box of crystals and a pcb for a crystal ladder filter. The only thing missing was the article. Thanks to Richard, I have a copy of the article.
Tim

3676. Re: Sony kitchen radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 16:18:00 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11fpitlnandlu75@corp.supernews.com>
Source record: 17709

jeplett wrote:
> I posted this in the Antenna forum but got no replies, so I thought I'd
> try posting it over here in Homebrew and see if anyone can help me.
>
> I have one of those white under-cabinet Sony kitchen radio / cd
> players. The radio uses a digital tuner. They have notoriously poor
> radio reception, and the internet is full of posts by people ranting
> about how Sony could sell such a poor radio.
>
> I thought I'd ask you experts if there's anything that can be done to
> improve the reception. I understand the power cord is used as the
> antenna. I've tried stringing-up an extension cord to the power cord,
> with no improved reception. Could I open it up and attach an external
> antenna? If so, how would I do this? Any ideas, or experience with this
> particular problem?
>
> Regards,
>
>
In theory you should be able to do so -- you'd have to be able to
identify the RF section of the thing and find the capacitors (or
whatever) that are being used to couple to the power cord.

In practice it may not be the antenna that's the limiting factor -- a
crappy receiver is a crappy receiver, no matter what you do with the
antenna. You might be able to go as far as putting in an external
antenna with a preamp, but you may still not improve the receiver
performance, and at that point you may have done enough work to have
installed a _good_ receiver into a similar sized cabinet.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

3677. Re: Lattice-wound RF choke replacement, 50 years later

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 17:09:31 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <jljpf1hq07f0mlca3aam2s7ij0rn4scv9s@4ax.com>
Source record: 17710
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.components

On 12 Aug 2005 06:30:47 -0700, "Tim Shoppa" <shoppa@trailing-edge.com>
wrote:

>I'm fixing up some older ham transmitters. 811 or 6146 finals, etc. in
>the 50-200 watt class.
>
>Invariably these have sat on the shelf for so long because the RF choke
>for the final died a horrible death (sometimes charred beyond
>recognition) in their final use. I myself have fried/burnt several RF
>chokes and other final components in Heathkits etc. but that was many
>years ago when I could order exact spare parts. Sometimes a capacitor
>or two is burnt up too, but these I already have in the junkbox or can
>buy off-the-shelf.
>
>The chokes that burned up seem to be between 1mH and 2.5mH or so, and
>were lattice-wound on what seems to be a ceramic form. Maybe it's a
>ferrite, but I don't think so.
>
>6146/811/sweep tube handbook construction articles from the 50's show
>similar RF chokes in their circuits and part numbers like "National
>R-100" and "Ohmite Z-214".
>
>I look in modern catalogs and I see molded (almost certainly ferrite
>core) RF chokes in the right inductance (low mH) and current (100mA to
>a few hundred mA) range but they look nothing like the old
>lattice-wound choke. Are these suitable substitutes for the originals?
> Something in the back of my head says that ferrite core losses with
>all that RF across the choke will make the thing burn up at transmitter
>RF power levels even if I'm below the DC current limit for these parts.
>
>AES lists some pi-wound 1mH and 2.5mH RF chokes (ferrite core) that
>look more like the original. Better idea for these?
>
>If I wanted to learn to rewind the original chokes (very often they
>double as ceramic supports for the anti-parasitic RL network and plate
>caps) are there any web resources that would tell me how to wind my own
>lattice-wound RF chokes? I've wound my share of simple solenoidal
>coils in repair/homebrew endeavors, but the slices in these RF chokes
>seem very ornately wound. I think there's a Lindsay or similar book
>about coil winding, is that on my "gotta own" list?
>
>Oh well, back to replacing those smoking electrolytics in the power
>supply, I know how to do that!

>
>Tim.

Tim,

The idea behind the multiple section windings on these chokes is the prevention of unwanted resonances.

The choke must present a much higher impedance than the plate impedance over a wide frequency range. A single solenoid that has enough inductance at the low frequency end is going to have a lot of self-capacitance and will wind up (no pun intended) with unwanted resonances at some other frequency(ies) in the operating range. Above any parallel resonance the reactance will go capacitive with disastrous results.

In an attempt to control this, the chokes are effectively broken up into several smaller and dissimilar chokes connected in series.

Here is an example of a solenoid wound choke that uses different winding lengths and diameters to place resonances outside the range of operation:

http://www.qsl.net/n7ws/RF_Choke.jpg

I see no theoretical reason why ferrite loaded chokes cannot be used as long as all of the design caveats are observed.

3678. Re: Sony kitchen radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 18:50:34 UTC
From: dplatt@radagast.org
Message-ID: <11fprrql83bgr63@corp.supernews.com>
Source record: 17711

>I thought I'd ask you experts if there's anything that can be done to
>improve the reception. I understand the power cord is used as the
>antenna. I've tried stringing-up an extension cord to the power cord,
>with no improved reception. Could I open it up and attach an external
>antenna? If so, how would I do this? Any ideas, or experience with this
>particular problem?

In radios of this sort that I've seen, the tuner input circuit is usually coupled to the AC powerline in one of two ways. Sometimes, there's a small-value (picofarads or nanofarads) high-voltage capacitor between the tuner input and one side of the power line. In other cases, a wire from the tuner input is wrapped around one of the power-line wires several times (I suspect it's serving as a gimmick capacitor of a few pF).

If you can identify the way in which this coupling occurs, you can probably disconnect the tuner input from the line, and bring it out to a separate jack (pin or banana) of some sort. Then, try hooking a few feet of wire to this jack, and see if you can get a stronger signal.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3679. Re: FA: Yaesu YH-55 Headphones - As New in Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 19:33:48 UTC
From: JOE <JOE@hotmail.com>
Message-ID: <1123875230.3223785fea96174b8d975eecd4caebb4@meganetnews2>
Source record: 17712
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap

"Mike Coslo" <mremovethiscoslo@adelphia.net> wrote in message
news:SMidnQlwxa07EWffRVn-1A@adelphia.com...
> Dave wrote:
>> I have this for sale on eBay:
>>
>> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5796984738&rd=1&sspagename=STRK%3AMESE%3AIT&rd=1
>>
>> Thanks for looking.
>
>
> Dave, you are spamming several newsgroups with this stuff.
> FA: posts have no place in rec.radio.amateur antenna, boatanchors, misc,
> or equipment. It belongs in swap only.
>
> Thanks.
>
> - Mike KB3EIA -

Mike - did you just wake up from a 9 year coma or something??

YOU are spamming your hatred of Ebay just as much as he's spamming
his ad! If you're so offended, learn to use kill files and you'll never
even
see the evil awful horrid Ebay ads. Add my name to and you'll never hear
from me again either

JOE

3680. What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 19:34:33 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1123875273.411151.190000@o13g2000cwo.googlegroups.com>
Source record: 17713
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

What is Ham Radio?

(Nothing whatsoever to do with Mrs.Nugatory and
her infantile obsessive habits, that's for sure!)

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

3681. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 19:40:07 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.12.19.40.06.528943@gmail.com>
Source record: 17714
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

PM:

Most of that is fictional... lots of "could have", "should have", "would have" which it suggests though...

Computer related hardware/software is where all of the engineers are coming from today.

John

On Fri, 12 Aug 2005 12:34:33 -0700, Polymath wrote:

> What is Ham Radio?
>
> (Nothing whatsoever to do with Mrs.Nugatory and
> her infantile obsessive habits, that's for sure!)
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.
>
> Ham Radio awakens in its aficionados a whole-life
> fascination with all things technical and gives
> an all-abiding curiosity to improve one's scientific
> knowledge. It's a great swimming pool, please dive in!
>
> This excitement causes a wish to share the experience
> with ones fellow man, and shows itself in the
> gentlemanly traditions of Ham Radio.
>
> Radio Hams are in a unique privileged position in that
> they can construct and operate their own equipment! No-one
> else has this privilege. Users, such as broadcasters,
> the po lice and armed farces, CBers and mobile phone
> users have to purchase ready-made gear. Manufacturers
> are not licensed to operate their gear. Radio Hams
> are qualified to design, build and then
> operate their own pieces of equipment. They do this
> with gusto, and also repair and modify their own
> equipment. This is a privilege well worth the effort
> to gain, and one to be jealously guarded.
>

> The excitement that drives a Radio Ham starts with
> relatively simple technologies at first, perhaps making
> his own Wimshurst machine and primary cells. Small pieces
> of test equipment follow, possibly multimeters and signal
> generators. Then comes receivers and transmitters. It is with
> the latter that communication with like-minded technically
> motivated people takes off. The scope for technical
> development grows with the years
> and now encompasses DSP and DDS. There is also a great deal
> of excitement in the areas of computer programming to
> be learnt and applied.
>
> The technical excitement motivates Radio Hams to compete
> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.
>
> -----OOOOO----
>
> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large
> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
> repaired; they are not interested in technical discussion
> and sneer at those who are; they have no idea how
> their radios work inside and have no wish to find out;
> they are free with rather silly personal insults;
> they have not satisfied any technical qualification
> and their licences prevent the use of
> self-designed-and-built equipment.
>
> These CB types engage in the competitive activities
> with their Cheque-Book-purchased off-the-shelf radios
> in a forlorn effort to prove that they are Radio Hams.
>
> No _REAL_ Radio Hams are deceived by such people!

3682. Re: *ORIGINAL* NORCAL NC-20 5-WATT QRP TRANSCEIVER (BUILT)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 20:03:49 UTC
From: John Harper AE5X <john@ae5x.com>
Message-ID: <Fg7Le.3748$Gx1.2488@fe11.lga>
Source record: 17715

I have a review of this rig on my website:
http://www.ae5x.com/kits.html

It was $100 brand new.

--

John Harper AE5X
Portable QRP: http://www.ae5x.com

3683. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 20:08:30 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1123877310.237542.294580@g47g2000cwa.googlegroups.com>
Source record: 17716
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

If you feel that it is fictional, then it is almost
certain that you are one of the latter-day recruits
whose style is that of CB Radio, the very type that
I warn against.

Perhaps the horse has already bolted?

John Smith wrote:
> PM:
>
> Most of that is fictional... lots of "could have", "should have", "would
> have" which it suggests though...
>
> Computer related hardware/software is where all of the engineers are
> coming from today.
>
> John
>
> On Fri, 12 Aug 2005 12:34:33 -0700, Polymath wrote:
>
> > What is Ham Radio?
> >
> > (Nothing whatsoever to do with Mrs.Nugatory and
> > her infantile obsessive habits, that's for sure!)
> >
> > Ham Radio is a technical pursuit for those who
> > are interested in the science of radio wave
> > propagation and who are also interested in the
> > way that their radios function. It has a long-standing
> > tradition of providing a source of engineers who
> > are born naturals.
> >
> > Ham Radio awakens in its aficionados a whole-life
> > fascination with all things technical and gives
> > an all-abiding curiosity to improve one's scientific
> > knowledge. It's a great swimming pool, please dive in!
> >
> > This excitement causes a wish to share the experience
> > with ones fellow man, and shows itself in the
> > gentlemanly traditions of Ham Radio.
> >
> > Radio Hams are in a unique privileged position in that
> > they can construct and operate their own equipment! No-one
> > else has this privilege. Users, such as broadcasters,

> > the po lice and armed farces, CBers and mobile phone
> > users have to purchase ready-made gear. Manufacturers
> > are not licensed to operate their gear. Radio Hams
> > are qualified to design, build and then
> > operate their own pieces of equipment. They do this
> > with gusto, and also repair and modify their own
> > equipment. This is a privilege well worth the effort
> > to gain, and one to be jealously guarded.
> >
> > The excitement that drives a Radio Ham starts with
> > relatively simple technologies at first, perhaps making
> > his own Wimshurst machine and primary cells. Small pieces
> > of test equipment follow, possibly multimeters and signal
> > generators. Then comes receivers and transmitters. It is with
> > the latter that communication with like-minded technically
> > motivated people takes off. The scope for technical
> > development grows with the years
> > and now encompasses DSP and DDS. There is also a great deal
> > of excitement in the areas of computer programming to
> > be learnt and applied.
> >
> > The technical excitement motivates Radio Hams to compete
> > with each other to determine who has designed and manufactured
> > the best-quality station. This competitiveness is found in DXing,
> > competitions and fox-hunts.
> >
> > -----OOOOO----
> >
> > However, beware! A Ham Radio licence is such a
> > desirable thing to have that there are large
> > numbers of people who wish to be thought of
> > as Radio Hams when, in fact, they are nothing
> > of the kind! Usually such people are a
> > variation of the CB Radio hobbyist; they buy their
> > radios off the shelf and send them back to be
> > repaired; they are not interested in technical discussion
> > and sneer at those who are; they have no idea how
> > their radios work inside and have no wish to find out;
> > they are free with rather silly personal insults;
> > they have not satisfied any technical qualification
> > and their licences prevent the use of
> > self-designed-and-built equipment.
> >
> > These CB types engage in the competitive activities
> > with their Cheque-Book-purchased off-the-shelf radios
> > in a forlorn effort to prove that they are Radio Hams.
> >
> > No _REAL_ Radio Hams are deceived by such people!

3684. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 20:17:34 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1123877854.406419.43270@f14g2000cwb.googlegroups.com>
Source record: 17717
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Polymath wrote:
> If you feel that it is fictional, then it is almost
> certain that you are one of the latter-day recruits
> whose style is that of CB Radio, the very type that
> I warn against.

It is fictional as is your charge

>
> Perhaps the horse has already bolted?
>

3685. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 20:27:42 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1123878462.933154.271100@g14g2000cwa.googlegroups.com>
Source record: 17718
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Perhaps even "KB9RQZ" is a CB call sign?

an_old_friend wrote:
> Polymath wrote:
> > If you feel that it is fictional, then it is almost
> > certain that you are one of the latter-day recruits
> > whose style is that of CB Radio, the very type that
> > I warn against.
>
> It is fictional as is your charge
>
>
> >
> > Perhaps the horse has already bolted?
> >

3686. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 20:36:54 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1123879014.595584.171910@g47g2000cwa.googlegroups.com>
Source record: 17719
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Polymath wrote:
> Perhaps even "KB9RQZ" is a CB call sign?

nope no call signs in CB, at least not in the US

you are just writing bafflegab to use an expression of one of MY fav
Birtish chacters, the Doctor, of course

>
> an_old_friend wrote:
> > Polymath wrote:
> > > If you feel that it is fictional, then it is almost
> > > certain that you are one of the latter-day recruits
> > > whose style is that of CB Radio, the very type that
> > > I warn against.
> >
> > It is fictional as is your charge
> >
> >
> > >
> > > Perhaps the horse has already bolted?
> > >

3687. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 20:43:35 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.12.20.43.34.514057@gmail.com>
Source record: 17725
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

PM:

No, new technology came, amateur radio was too slow to adapt, it began the
way of the dodo and has progressed along that course beginning in the late
60's leading right up to today, and continuing...

John

On Fri, 12 Aug 2005 13:08:30 -0700, Polymath wrote:

> If you feel that it is fictional, then it is almost
> certain that you are one of the latter-day recruits
> whose style is that of CB Radio, the very type that
> I warn against.
>
> Perhaps the horse has already bolted?
>
> John Smith wrote:
>> PM:
>>
>> Most of that is fictional... lots of "could have", "should have", "would
>> have" which it suggests though...
>>
>> Computer related hardware/software is where all of the engineers are
>> coming from today.
>>
>> John
>>
>> On Fri, 12 Aug 2005 12:34:33 -0700, Polymath wrote:
>>
>> > What is Ham Radio?
>> >
>> > (Nothing whatsoever to do with Mrs.Nugatory and
>> > her infantile obsessive habits, that's for sure!)
>> >
>> > Ham Radio is a technical pursuit for those who
>> > are interested in the science of radio wave
>> > propagation and who are also interested in the
>> > way that their radios function. It has a long-standing
>> > tradition of providing a source of engineers who
>> > are born naturals.
>> >
>> > Ham Radio awakens in its aficionados a whole-life
>> > fascination with all things technical and gives

>> > an all-abiding curiosity to improve one's scientific
>> > knowledge. It's a great swimming pool, please dive in!
>> >
>> > This excitement causes a wish to share the experience
>> > with ones fellow man, and shows itself in the
>> > gentlemanly traditions of Ham Radio.
>> >
>> > Radio Hams are in a unique privileged position in that
>> > they can construct and operate their own equipment! No-one
>> > else has this privilege. Users, such as broadcasters,
>> > the po lice and armed farces, CBers and mobile phone
>> > users have to purchase ready-made gear. Manufacturers
>> > are not licensed to operate their gear. Radio Hams
>> > are qualified to design, build and then
>> > operate their own pieces of equipment. They do this
>> > with gusto, and also repair and modify their own
>> > equipment. This is a privilege well worth the effort
>> > to gain, and one to be jealously guarded.
>> >
>> > The excitement that drives a Radio Ham starts with
>> > relatively simple technologies at first, perhaps making
>> > his own Wimshurst machine and primary cells. Small pieces
>> > of test equipment follow, possibly multimeters and signal
>> > generators. Then comes receivers and transmitters. It is with
>> > the latter that communication with like-minded technically
>> > motivated people takes off. The scope for technical
>> > development grows with the years
>> > and now encompasses DSP and DDS. There is also a great deal
>> > of excitement in the areas of computer programming to
>> > be learnt and applied.
>> >
>> > The technical excitement motivates Radio Hams to compete
>> > with each other to determine who has designed and manufactured
>> > the best-quality station. This competitiveness is found in DXing,
>> > competitions and fox-hunts.
>> >
>> > -----OOOOO----
>> >
>> > However, beware! A Ham Radio licence is such a
>> > desirable thing to have that there are large
>> > numbers of people who wish to be thought of
>> > as Radio Hams when, in fact, they are nothing
>> > of the kind! Usually such people are a
>> > variation of the CB Radio hobbyist; they buy their
>> > radios off the shelf and send them back to be
>> > repaired; they are not interested in technical discussion
>> > and sneer at those who are; they have no idea how
>> > their radios work inside and have no wish to find out;
>> > they are free with rather silly personal insults;
>> > they have not satisfied any technical qualification

>> > and their licences prevent the use of
>> > self-designed-and-built equipment.
>> >
>> > These CB types engage in the competitive activities
>> > with their Cheque-Book-purchased off-the-shelf radios
>> > in a forlorn effort to prove that they are Radio Hams.
>> >
>> > No _REAL_ Radio Hams are deceived by such people!

3688. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 20:45:24 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.12.20.45.23.533485@gmail.com>
Source record: 17723
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

AOF:

Who? Doctor Who? :|

John

On Fri, 12 Aug 2005 13:36:54 -0700, an_old_friend wrote:

>
> Polymath wrote:
>> Perhaps even "KB9RQZ" is a CB call sign?
>
> nope no call signs in CB, at least not in the US
>
> you are just writing bafflegab to use an expression of one of MY fav
> Birtish chacters, the Doctor, of course
>
>
>>
>> an_old_friend wrote:
>> > Polymath wrote:
>> > > If you feel that it is fictional, then it is almost
>> > > certain that you are one of the latter-day recruits
>> > > whose style is that of CB Radio, the very type that
>> > > I warn against.
>> >
>> > It is fictional as is your charge
>> >
>> >
>> > >
>> > > Perhaps the horse has already bolted?
>> > >

3689. Re: FA: Yaesu YH-55 Headphones - As New in Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 20:52:10 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <1123880086_11361@spool6-east.superfeed.net>
Source record: 17720
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap

JOE wrote:
> YOU are spamming your hatred of Ebay just as much as he's spamming
> his ad!

But hatred of Ebay is not against the usenet posting rules. :-)
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

3690. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 21:14:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.12.21.14.50.207296@gmail.com>
Source record: 17724
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

PM:

Let me give a summary of the "real world."

If you were a child today, you would grow up with the computer.

In elementary school your first "pen pal" would be in a foreign country
and you would communicate with them via the internet. You would learn to
IM, IRC, EMAIL, MSN CHAT, YAHOO, WEB CAM, etc....

By high school you would be picking up a computer script and/or language
and at least have a basic knowledge of programming. Your first hardware
project would most likely be computer related.

Somewhere along this line, you bump into a ham or a few. You look at them
using their equipment, it is apparent the internet is superior. They lack
the ability to exchange pics, apps, music, videos, documents, etc. by
transmissions taking seconds or minutes. Then, they show you a CW key and
you are dumb struck, and leave. You return to the internet and current
technology, never to stray again... you begin a web site and consider
what position you would like in the computer field, when you grow up...

John

On Fri, 12 Aug 2005 13:27:42 -0700, Polymath wrote:

> Perhaps even "KB9RQZ" is a CB call sign?
>
> an_old_friend wrote:
>> Polymath wrote:
>> > If you feel that it is fictional, then it is almost
>> > certain that you are one of the latter-day recruits
>> > whose style is that of CB Radio, the very type that
>> > I warn against.
>>
>> It is fictional as is your charge
>>
>>
>> >
>> > Perhaps the horse has already bolted?
>> >

3691. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 21:22:02 UTC
From: Chuck Olson <chuckolson01@REMOVETHIScomcast.net>
Message-ID: <FZWdnSZ-9Lsnj2DfRVn-tQ@comcast.com>
Source record: 17721
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"John Smith" <assemblywizard@gmail.com> wrote in message
news:pan.2005.08.12.19.40.06.528943@gmail.com...
> PM:
>
> Most of that is fictional... lots of "could have", "should have", "would
> have" which it suggests though...
>
> Computer related hardware/software is where all of the engineers are
> coming from today.
>
> John

I guess you never put together a crystal set or a 1-tube radio, or designed your own VFO-controlled transmitter. I did, and from those days in 7th grade, I knew what I was going to do the rest of my life. By sophomore year in high school I learned to send and receive Morse Code at 15 WPM so I could be sure to meet the 13WPM requirement for my Ham license. At 21, my Engineering education was interrupted by the draft, and I joined the Navy to become an Electronics Technician and service radar and communications equipment for 4 years. Resuming my education, I became an Electrical Engineer and worked in industry for the next 38 years, continuously learning new things as they became current technology. I was never laid off or a victim of "reduction in force" through that entire career - - because I was a "natural" and kept my skills up to meet the needs of my employer. Ham radio is an excellent start for anyone who has a curiosity and fascination about electronics, be it represented by radio communications or computers or industrial control technology.

I was inspired by Polymath's description of the good effects of ham radio on its devotees. He should be congratulated on his explanation - - a very readable and true to life presentation.

73, Chuck W6PKP

3692. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 21:43:45 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.12.21.43.43.454273@gmail.com>
Source record: 17722
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Chuck:

Your text reminds me of some of the "motivational speakers" on TV.

I don't dispute it may well be true, for a past age, just not accurate
under todays technology and the state amateur radio now exists in...

... yesterday just doesn't matter, today is only useful for being able to
plan tomorrow, tomorrow is where it is at!

John

On Fri, 12 Aug 2005 14:22:02 -0700, Chuck Olson wrote:

>
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:pan.2005.08.12.19.40.06.528943@gmail.com...
>> PM:
>>
>> Most of that is fictional... lots of "could have", "should have", "would
>> have" which it suggests though...
>>
>> Computer related hardware/software is where all of the engineers are
>> coming from today.
>>
>> John
>
> I guess you never put together a crystal set or a 1-tube radio, or designed
> your own VFO-controlled transmitter. I did, and from those days in 7th
> grade, I knew what I was going to do the rest of my life. By sophomore year
> in high school I learned to send and receive Morse Code at 15 WPM so I could
> be sure to meet the 13WPM requirement for my Ham license. At 21, my
> Engineering education was interrupted by the draft, and I joined the Navy to
> become an Electronics Technician and service radar and communications
> equipment for 4 years. Resuming my education, I became an Electrical
> Engineer and worked in industry for the next 38 years, continuously learning
> new things as they became current technology. I was never laid off or a
> victim of "reduction in force" through that entire career - - because I was
> a "natural" and kept my skills up to meet the needs of my employer. Ham
> radio is an excellent start for anyone who has a curiosity and fascination
> about electronics, be it represented by radio communications or computers or
> industrial control technology.
>
> I was inspired by Polymath's description of the good effects of ham radio on
> its devotees. He should be congratulated on his explanation - - a very

> readable and true to life presentation.
>
> 73, Chuck W6PKP

3693. Re: Lattice-wound RF choke replacement, 50 years later

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 22:06:34 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <I8GdnceSOe_2gGDfRVnyrQ@pipex.net>
Source record: 17726
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.components

> The choke must present a much higher impedance than the plate
> impedance over a wide frequency range. A single solenoid that has
> enough inductance at the low frequency end is going to have a lot of
> self-capacitance and will wind up (no pun intended) with unwanted
> resonances at some other frequency(ies) in the operating range. Above
> any parallel resonance the reactance will go capacitive with
> disastrous results.
==========
Suitability of any choke for this application can be readily checked (in
circuit)with a grid dipper ,which should NOT indicate resonance within any
of the used bands.

Frank GM0CSZ / KN6WH

3694. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 22:06:35 UTC
From: huLLy <g4sdw@aol.com>
Message-ID: <q-KdnYx7OLX8gGDfRVn-iA@giganews.com>
Source record: 17727
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

John Smith wrote:
>
> Somewhere along this line, you bump into a ham or a few. You look at
> them using their equipment, it is apparent the internet is superior.
> They lack the ability to exchange pics, apps, music, videos,
> documents, etc. by transmissions taking seconds or minutes. Then,
> they show you a CW key and you are dumb struck, and leave. You
> return to the internet and current technology, never to stray
> again... you begin a web site and consider what position you would
> like in the computer field, when you grow up...
>

Fabulously put.
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

3695. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 22:12:14 UTC
From: K&#65533;HB <groupk0hb@earthlink.net>
Message-ID: <299Le.5388$RS.711@newsread3.news.pas.earthlink.net>
Source record: 17728
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Polymath" <aiyr.r.bean@lycos.co.uk> wrote

> What is Ham Radio?

This message is a VERY brief attempt to explain the hobby and give some pointers on where to get more information. Almost certainly I won't answer all your questions, so feel free to ask for help. Hams are famous for their eagerness to help newcomers. I should also point out that this explanation assumes you live in the USA. Almost every country has hams (amateur radio operators), but each has their own name for the various classes of license, and the test requirements vary from country to country.

(First I have to explain something you might not have realized. In doing so, I'm going to paraphrase something written by Steve Ford, WB8IMY, in his introduction to a book entitled "The ARRL Operating Manual".)

In case you didn't know, belief in magic is a necessary requirement for all Amateur Radio operators. Of course, you won't see a question concerning magic or metaphysics on the test you take to obtain your license, but in your heart you will come to believe in that powerful, intangible force.

All of us in the hobby have felt its influence at one time or another. Some night when the band is dead as a doornail you'll be tuning aimlessly, not expecting to hear a single signal because NOTHING could be coming through at that hour. But then, rising out of the noise like a ghost, there will be a faint call from another stalwart explorer thousands of miles distant. You pounce, establish contact and both of you marvel at the fact that the conversation is taking place at all. A few minutes later, however, the signal vanishes as quickly as it came. Your rational mind will shrug it off as a quirk of propagation, but that little tingle in your gut will tell you otherwise.

If you could travel back in time to, say, 1305 AD, you'd probably be burned at the nearest stake for even suggesting that two human beings could communicate with each other over great distances without a physical connection. No doubt they would accuse you of dabbling in magic -- and they'd be right!

As Amateur Radio operators, we work feats of magic every day. Many of us have become jaded about our powers and we tend to dismiss them as commonplace. We hardly think twice when we use our equipment to sommon the elemental forces of the universe. But every so often we need to

pause and remind ourselves of what we are really doing. We need to remember the essence of what drew us to our unusual avocation in the first place: the wonderful magic of wireless communications.

So how can YOU become a magician?

First, you need to prepare to obtain a Magicians License. The Federal Communications Commission calls them Amateur Radio Operator Licenses, and they come in 3 "classes".

The Technician class license, is currently the most popular class, providing the "first taste of magic" to most new licensees. There is no Morse code examination for this license, and the written examination is not considered difficult by most applicants. The frequency bands for this license are largely "local" in nature. (You can gain access to some "long distance" bands if you pass a slow (5 words per minute) Morse examination, but this option may soon be history if a recent FCC is adopted.)

The other two classes of license are General and Extra.
These two classes have access to portions of all amateur bands, with progressively more difficult exams, and a requirement requirement to pass a 5 word per minute Morse code exam.

To prepare for the exams you will need some study material and more information about classes, examination points (the exams are given by volunteer Hams in your community), and clubs in your area. A number of organizations will be more than willing to help. One such organization is the American Radio Relay League. They are on the Web at http://www.arrl.org.

Or you can write them at:

ARRL 225 Main Street Newington, CT 06111

or call them at 1-800-32NEWHAM

Ask for their "Prospective Ham Package". It will include more detailed information, a list of classes and clubs in your area, and a list of scheduled examinations in your area. Include your ZIP code in your query so they can send you info tailored for your location.

If you are near a Radio Shack store, go there and ask for a book entitled "Now You're Talking". This book is also available from the ARRL. It contains all the information you need, including study material and sample questions for the examination for the Technician license.

Good luck, and welcome to the "magical" hobby.

Regards,

Hans, K0HB

3696. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 22:17:47 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1123885066.949621.237820@z14g2000cwz.googlegroups.com>
Source record: 17729
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

a much better peice of writing

KØHB wrote:
> "Polymath" <aiyr.r.bean@lycos.co.uk> wrote
>
> > What is Ham Radio?
>
> This message is a VERY brief attempt to explain the hobby and give
> some pointers on where to get more information. Almost certainly I won't
> answer all your questions, so feel free to ask for help. Hams are famous
> for their eagerness to help newcomers. I should also point out that
> this explanation assumes you live in the USA. Almost every country
> has hams (amateur radio operators), but each has their own name
> for the various classes of license, and the test requirements vary from
> country to country.
>
> (First I have to explain something you might not have realized. In
> doing so, I'm going to paraphrase something written by Steve Ford,
> WB8IMY, in his introduction to a book entitled "The ARRL Operating
> Manual".)
>
> In case you didn't know, belief in magic is a necessary requirement
> for all Amateur Radio operators. Of course, you won't see a question
> concerning magic or metaphysics on the test you take to obtain your
> license, but in your heart you will come to believe in that powerful,
> intangible force.
>
> All of us in the hobby have felt its influence at one time or
> another. Some night when the band is dead as a doornail you'll be
> tuning aimlessly, not expecting to hear a single signal because NOTHING
> could be coming through at that hour. But then, rising out of the noise
> like a ghost, there will be a faint call from another stalwart explorer
> thousands of miles distant. You pounce, establish contact and both of
> you marvel at the fact that the conversation is taking place at all. A
> few minutes later, however, the signal vanishes as quickly as it came.
> Your rational mind will shrug it off as a quirk of propagation, but
> that little tingle in your gut will tell you otherwise.
>
> If you could travel back in time to, say, 1305 AD, you'd probably
> be burned at the nearest stake for even suggesting that two human
> beings could communicate with each other over great distances without a
> physical connection. No doubt they would accuse you of dabbling in
> magic -- and they'd be right!

>
> As Amateur Radio operators, we work feats of magic every day. Many
> of us have become jaded about our powers and we tend to dismiss them as
> commonplace. We hardly think twice when we use our equipment to sommon
> the elemental forces of the universe. But every so often we need to
> pause and remind ourselves of what we are really doing. We need to
> remember the essence of what drew us to our unusual avocation in the
> first place: the wonderful magic of wireless communications.
>
> So how can YOU become a magician?
>
> First, you need to prepare to obtain a Magicians License. The Federal
> Communications Commission calls them Amateur Radio Operator Licenses,
> and they come in 3 "classes".
>
> The Technician class license, is currently the most popular class,
> providing the "first taste of magic" to most new licensees. There
> is no Morse code examination for this license, and the written
> examination is not considered difficult by most applicants. The
> frequency bands for this license are largely "local" in nature. (You
> can gain access to some "long distance" bands if you pass a slow
> (5 words per minute) Morse examination, but this option may soon
> be history if a recent FCC is adopted.)
>
> The other two classes of license are General and Extra.
> These two classes have access to portions of all amateur bands, with
> progressively more difficult exams, and a requirement requirement
> to pass a 5 word per minute Morse code exam.
>
> To prepare for the exams you will need some study material and more
> information about classes, examination points (the exams are given by
> volunteer Hams in your community), and clubs in your area. A number of
> organizations will be more than willing to help. One such organization
> is the American Radio Relay League. They are on the Web at
> http://www.arrl.org.
>
> Or you can write them at:
>
> ARRL 225 Main Street Newington, CT 06111
>
> or call them at 1-800-32NEWHAM
>
> Ask for their "Prospective Ham Package". It will include more
> detailed information, a list of classes and clubs in your area, and a
> list of scheduled examinations in your area. Include your ZIP
> code in your query so they can send you info tailored for your
> location.
>
> If you are near a Radio Shack store, go there and ask for a book
> entitled "Now You're Talking". This book is also available from the

> ARRL. It contains all the information you need, including study
> material and sample questions for the examination for the Technician
> license.
>
> Good luck, and welcome to the "magical" hobby.
>
> Regards,
>
> Hans, K0HB

3697. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 22:18:30 UTC
From: Trying to be a real ham! <Wanna.Be.A.Real.Ham33333@hotmail.com>
Message-ID: <tv7qf1pdcm38ejb74kl0q4iscv5b55ojmo@4ax.com>
Source record: 17730
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On 12 Aug 2005 12:34:33 -0700, "Polymath" <aiyr.r.bean@lycos.co.uk>
wrote:

they are nothing
>of the kind! Usually such people are a
>variation of the CB Radio hobbyist...

Actually it was CB band competition between a friend and I combined with my desire to understand radio that turned me in to a ham. When I was back in school my friend and I started trying to see who could put out the strongest signal. His father bought him an amplifier to get over me. I was not going to ask my parents for an amplifier, and I did not have any money to buy one since I was a full time student. I had heard the phrase "Knowledge is power", so I decided if I could not buy a bigger amp to get over my friend I would have to out smart him with brain power.
I went to the school library and started reading radio handbooks like Bill Orr's handbook. When a radio repair tech at the local ham store realized I truly wanted to learn the science of radio he gave me a copy of the 1983 ARRL handbook for free (it was 1984 at the time). I read that book until it fell apart. Then I bought another ARRL radio book, and then another radio book, and then another radio book. I'm still doing that all these years later. The radios I talk on (a Tempo 2020, Drake 4 B line twins, Yaesu FT-101ee, and a Midland 79-892 40 channel sideband CB) were all someone else's broken door stop. None of them worked when I bought them. I repaired them all, and I made most of my antennas. When I talk on those old radios part of me smiles, because I know the only reason those radios are still working is because I put them back on the air.
Anyway after deciding to ignore all the CB radio folklore I had heard on the CB back in the 1970s and early 1980s, I learned the truth about radio from reading the ARRL handbooks. I quickly became the strongest CB station on the airways, and much of that was with self taught radio know how.
A local ham noticed I was emerging from the CB pack as a potential ham, and he started talking to me about ham radio. I aced the 5 wpm Morse code test three weeks after listening to my first ARRL code tape, and I don't even like Morse code. I aced all my exams, my 13 WPM code test, and now I am an Advanced class ham. When I passed my Advanced written test a bunch old timers circled around the VE examiners desk looking for a mistake on my test, but there was none to be found. I made a perfect score, and out of all my test I only missed one question.
One of the reasons I have not taken the Extra test is because the

old timers spit on the new no code Extra. I'm proud of my Advanced class license, and I would not take kindly to an old timer spitting on me if I had the new no code Extra.
In the past I used older equipment because I could not afford anything else. Now I can afford the best, but I find myself poking around in the old tube types and tube hybrids, because I don't know if I can service the new surface mount technology stuff. If all I could do was talk on the radio that would take all the fun out of it for me. I think the best compliment I ever received on the ham bands was when an old timer listened to all the things I was building and doing and he said; "You are a true ham". That phrase from an old timer meant more to me than any signal report or any DX contact. I am a true ham, and I started on the CB band back in the 1970s just like most other hams my age. I am not ashamed of my CB heritage. The truth is I had a blast on the CB band back then.

Michael Rawls
KS4HY

3698. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-12 23:31:21 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.12.23.31.18.69106@gmail.com>
Source record: 17731
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Michael:

Thanks for your post. (A real "BLAST-FROM-THE-PAST!")

Back in the 70's, on CB, some of the best radio years of my whole life where there... I miss them... (there was a "rubber duck" under every rock--we still got "mud ducks" though :)

Amateur radio has changed too, the bands are not as interesting... the personalities stagnant and without humor, without fun, without excitement, without youngsters, without harmless pranks, without mystery. Bunch of old guys attempting to play "James Bond", "secret agent" and attempting more structure to communication than the NSA uses! :(

I hope-against-hope the good old days of radio will return, but, I would like it to do so on new technology... some of us which remember the old CB days (days when even, good, hams had cb rigs!--or, we made do with 10 meter equip. <grin>) are on ch. 38-39 LSB (27.385, 27.395) in the central valley of calif, we are a stagnant number, be nice to have the company. Lot of mobiles so they escape the harassment of hams still waging the "old war." If you mention your call, be prepared to take some kidding...

If you ever get an opportunity--come join us! Real CB still lives in isolated pockets!

John

On Fri, 12 Aug 2005 22:18:30 +0000, Trying to be a real ham! wrote:

> On 12 Aug 2005 12:34:33 -0700, "Polymath" <aiyr.r.bean@lycos.co.uk>
> wrote:
>
> they are nothing
>>of the kind! Usually such people are a
>>variation of the CB Radio hobbyist...
>
> Actually it was CB band competition between a friend and I combined
> with my desire to understand radio that turned me in to a ham. When I
> was back in school my friend and I started trying to see who could put
> out the strongest signal. His father bought him an amplifier to get
> over me. I was not going to ask my parents for an amplifier, and I
> did not have any money to buy one since I was a full time student. I
> had heard the phrase "Knowledge is power", so I decided if I could not
> buy a bigger amp to get over my friend I would have to out smart him
> with brain power.
> I went to the school library and started reading radio handbooks

> like Bill Orr's handbook. When a radio repair tech at the local ham
> store realized I truly wanted to learn the science of radio he gave me
> a copy of the 1983 ARRL handbook for free (it was 1984 at the time).
> I read that book until it fell apart. Then I bought another ARRL
> radio book, and then another radio book, and then another radio book.
> I'm still doing that all these years later. The radios I talk on (a
> Tempo 2020, Drake 4 B line twins, Yaesu FT-101ee, and a Midland 79-892
> 40 channel sideband CB) were all someone else's broken door stop. None
> of them worked when I bought them. I repaired them all, and I made
> most of my antennas. When I talk on those old radios part of me
> smiles, because I know the only reason those radios are still working
> is because I put them back on the air.
> Anyway after deciding to ignore all the CB radio folklore I had
> heard on the CB back in the 1970s and early 1980s, I learned the truth
> about radio from reading the ARRL handbooks. I quickly became the
> strongest CB station on the airways, and much of that was with self
> taught radio know how.
> A local ham noticed I was emerging from the CB pack as a potential
> ham, and he started talking to me about ham radio. I aced the 5 wpm
> Morse code test three weeks after listening to my first ARRL code
> tape, and I don't even like Morse code. I aced all my exams, my 13
> WPM code test, and now I am an Advanced class ham. When I passed my
> Advanced written test a bunch old timers circled around the VE
> examiners desk looking for a mistake on my test, but there was none to
> be found. I made a perfect score, and out of all my test I only missed
> one question.
> One of the reasons I have not taken the Extra test is because the
> old timers spit on the new no code Extra. I'm proud of my Advanced
> class license, and I would not take kindly to an old timer spitting on
> me if I had the new no code Extra.
> In the past I used older equipment because I could not afford
> anything else. Now I can afford the best, but I find myself poking
> around in the old tube types and tube hybrids, because I don't know if
> I can service the new surface mount technology stuff. If all I could
> do was talk on the radio that would take all the fun out of it for me.
> I think the best compliment I ever received on the ham bands was
> when an old timer listened to all the things I was building and doing
> and he said; "You are a true ham". That phrase from an old timer
> meant more to me than any signal report or any DX contact. I am a
> true ham, and I started on the CB band back in the 1970s just like
> most other hams my age. I am not ashamed of my CB heritage. The
> truth is I had a blast on the CB band back then.
>
> Michael Rawls
> KS4HY

3699. Re: Lattice-wound RF choke replacement, 50 years later

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-13 01:02:05 UTC
From: LenAnderson@ieee.org
Message-ID: <1123894798.840511.96790@g14g2000cwa.googlegroups.com>
Source record: 17732
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.components

From: Wes Stewart on Fri 12 Aug 2005 10:09

>On 12 Aug 2005 06:30:47 -0700, "Tim Shoppa" <shoppa@trailing-edge.com>
>wrote:
>
>>I'm fixing up some older ham transmitters. 811 or 6146 finals, etc. in
>>the 50-200 watt class.

>The idea behind the multiple section windings on these chokes is the
>prevention of unwanted resonances.

Absolutely. A self-parallel-resonant inductor above its
resonant frequency will appear as a CAPACITOR.

>Here is an example of a solenoid wound choke that uses different
>winding lengths and diameters to place resonances outside the range of
>operation:
>
>http://www.qsl.net/n7ws/RF_Choke.jpg

Excellent photo quality there, Wes. Also, it amused me to see
so MANY sections on that RFC assembly! :-) I've seen quite a
few and "dipped the plate, peaked the grid" on many an HF
transmitter of olden times using such RF chokes.

>I see no theoretical reason why ferrite loaded chokes cannot be used
>as long as all of the design caveats are observed.

I can only add that the Micrometals *free* toroid calculator
incorporates approximate self-resonant frequencies in their
program's calculations. Excellent program for toroidal inductor
design...can't beat the price! :-) www.micrometals.com

Problem is, if this is a restoration kind of project similar to
old automobile restoration, toroidal forms won't do...just
weren't many in the old transmitters of the 1950s and before.
Anything of the same construction type is going to be an
expensive special-order thing now. :-(

LenAnderson@ieee.org

3700. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-13 01:04:16 UTC
From: Dee Flint <deeflint01@comcast.net>
Message-ID: <zPSdnVm_GIeJ2mDfRVn-pw@comcast.com>
Source record: 17733
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"John Smith" <assemblywizard@gmail.com> wrote in message
news:pan.2005.08.12.21.14.50.207296@gmail.com...
> PM:
>
> Let me give a summary of the "real world."
>
> If you were a child today, you would grow up with the computer.
>
> In elementary school your first "pen pal" would be in a foreign country
> and you would communicate with them via the internet. You would learn to
> IM, IRC, EMAIL, MSN CHAT, YAHOO, WEB CAM, etc....
>
> By high school you would be picking up a computer script and/or language
> and at least have a basic knowledge of programming. Your first hardware
> project would most likely be computer related.
>
> Somewhere along this line, you bump into a ham or a few. You look at them
> using their equipment, it is apparent the internet is superior. They lack
> the ability to exchange pics, apps, music, videos, documents, etc. by
> transmissions taking seconds or minutes. Then, they show you a CW key and
> you are dumb struck, and leave. You return to the internet and current
> technology, never to stray again... you begin a web site and consider
> what position you would like in the computer field, when you grow up...
>
> John
>

The days of kids being computer gurus have already come and gone. Now they just play video games and chat. Very few get interested in programming. Very few do a hardware project. They take their computers to the shop for upgrades. They only people that I have observed doing their own hardware upgrades, rebuilding computers, etc are the middle aged and the "old farts" that you seem to despise so.

I spend countless hours teaching our interns how to use email, spreadsheets, etc.

Dee D. Flint, N8UZE

3701. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-13 01:58:12 UTC
From: Frank <ve6cb@nospam.telus.net>
Message-ID: <UscLe.171792$HI.115367@edtnps84>
Source record: 17734
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

> I hope-against-hope the good old days of radio will return, but, I would
> like it to do so on new technology... some of us which remember the old
> CB days (days when even, good, hams had cb rigs!--or, we made do with 10
> meter equip. <grin>) are on ch. 38-39 LSB (27.385, 27.395) in the central
> valley of calif, we are a stagnant number, be nice to have the company.
> Lot of mobiles so they escape the harassment of hams still waging the
> "old war." If you mention your call, be prepared to take some kidding...
>
> If you ever get an opportunity--come join us! Real CB still lives in
> isolated pockets!
>
> John

You ever get on 40 m John? Often on Sunday evenings around 7168 +/-.

73,

Frank

PS I thought this was a Brit N.G.

3702. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-13 02:19:51 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.13.02.19.49.261774@gmail.com>
Source record: 17736
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Dee:

You know you have won a soft-spot in my heart now, and I always wanna "take-the-gloves-off" when replying to your posts, and I would, except you would take it as an insult and never forgive me...

Yes, there are people like that in the world. Indeed, the top of the bell-curve are those with an IQ of 100-110 (barely intelligent enough not to drool on their work.) If your company/corp is interning them, you really should look for a position elsewhere, but you knew that...

John

On Fri, 12 Aug 2005 21:04:16 -0400, Dee Flint wrote:

>
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:pan.2005.08.12.21.14.50.207296@gmail.com...
>> PM:
>>
>> Let me give a summary of the "real world."
>>
>> If you were a child today, you would grow up with the computer.
>>
>> In elementary school your first "pen pal" would be in a foreign country
>> and you would communicate with them via the internet. You would learn to
>> IM, IRC, EMAIL, MSN CHAT, YAHOO, WEB CAM, etc....
>>
>> By high school you would be picking up a computer script and/or language
>> and at least have a basic knowledge of programming. Your first hardware
>> project would most likely be computer related.
>>
>> Somewhere along this line, you bump into a ham or a few. You look at them
>> using their equipment, it is apparent the internet is superior. They lack
>> the ability to exchange pics, apps, music, videos, documents, etc. by
>> transmissions taking seconds or minutes. Then, they show you a CW key and
>> you are dumb struck, and leave. You return to the internet and current
>> technology, never to stray again... you begin a web site and consider
>> what position you would like in the computer field, when you grow up...
>>
>> John
>>
>
> The days of kids being computer gurus have already come and gone. Now they
> just play video games and chat. Very few get interested in programming.

> Very few do a hardware project. They take their computers to the shop for
> upgrades. They only people that I have observed doing their own hardware
> upgrades, rebuilding computers, etc are the middle aged and the "old farts"
> that you seem to despise so.
>
> I spend countless hours teaching our interns how to use email, spreadsheets,
> etc.
>
> Dee D. Flint, N8UZE

3703. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-13 02:31:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.13.02.31.37.689809@gmail.com>
Source record: 17737
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Sneaky Frank:

I often listen to "Bell's Bunch" on 3.840, once in a great while--bore them with comment or two of mine (I make fun of AB and Wayne Greene--but kinda like 'em both. <grin>) I just punched ~7168 into memory of the rig and will take a peek...

I think you can tell, I am an easy mark, if the conversation is provocative, interesting and civilized... maybe... that is hard to find today, yanno, good conversation...

Thank you for the invitation, I am honored to be asked...

John

On Sat, 13 Aug 2005 01:58:12 +0000, Frank wrote:

>> I hope-against-hope the good old days of radio will return, but, I would
>> like it to do so on new technology... some of us which remember the old
>> CB days (days when even, good, hams had cb rigs!--or, we made do with 10
>> meter equip. <grin>) are on ch. 38-39 LSB (27.385, 27.395) in the central
>> valley of calif, we are a stagnant number, be nice to have the company.
>> Lot of mobiles so they escape the harassment of hams still waging the
>> "old war." If you mention your call, be prepared to take some kidding...
>>
>> If you ever get an opportunity--come join us! Real CB still lives in
>> isolated pockets!
>>
>> John
>
> You ever get on 40 m John? Often on Sunday evenings around 7168 +/-.
>
> 73,
>
> Frank
>
> PS I thought this was a Brit N.G.

3704. FS: 500 Watt solidstate HF linear amplifier....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-13 03:17:16 UTC
From: MICHAEL LINGER <oldrover@verizon.net>
Message-ID: <0DdLe.1076$H_4.388@trnddc07>
Source record: 17735

FS: Solid state Skywalker 500 linear amp with 200amp metered power supply. Puts out over 700 watts on 75M. Amp it 9+ in appearance and 100% in operational quality. Substantially less than 80 watts drives it full power. Also has bandpass filters for all HF bands. It's very quiet and very efficient. $850.

3705. Re: Lattice-wound RF choke replacement, 50 years later

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-13 06:32:58 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11fr50rgi66oc52@corp.supernews.com>
Source record: 17738
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.components

LenAnderson@ieee.org wrote:
> From: Wes Stewart on Fri 12 Aug 2005 10:09
>
>>I see no theoretical reason why ferrite loaded chokes cannot be used
>>as long as all of the design caveats are observed.
>
>
> I can only add that the Micrometals *free* toroid calculator
> incorporates approximate self-resonant frequencies in their
> program's calculations. Excellent program for toroidal inductor
> design...can't beat the price! :-) www.micrometals.com
> . . .

Micrometals manufactures powdered iron, not ferrite, cores. The two materials are quite different. Among the larger manufacturers of ferrites are Fair-Rite, Magnetics, Indiana General, Siemens, and Ferroxcube.

When making an RFC using a core of any magnetic material, you need to insure that the core won't saturate from the flux generated by the DC current. This is done by including flux density in the calculations, and comparing it with the flux density which the material will support before saturating. Powdered iron cores will tolerate a much greater flux density than ferrites without saturating -- but the permeability is much lower, also, which necessitates more turns and therefore higher flux density for a given inductance and DC current. The presence of an air gap in the magnetic path reduces the flux density for a given inductance, so saturation isn't nearly as much of a problem with a solenoidal inductor than with a toroid. However, once again, there's a trade -- the air gap reduces the effective core permeability.

If you don't want to calculate the flux density, you can evaluate an inductor by measuring the inductance or RF impedance while the normal amount of DC current is flowing through it. The current has to come from a source with considerably higher impedance than the inductor's, say from a high voltage source with series resistor, or a transistor connected as a current source. The measurement device is connected through capacitors. Some saturation isn't a problem as long as the impedance remains high enough for the purpose at hand -- as the saturation level increases the impedance will drop.

Low frequency ferrite -- with an air gap -- can be a good choice for an RFC because at HF the impedance is resistive or, at worst, looks like an extremely low Q inductance. This results in an impedance that stays relatively constant for a very wide bandwidth (typically decades), and

is just about completely free of resonance effects. But again, flux density has to be considered whenever it has to pass DC current.

Roy Lewallen, W7EL

3706. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-13 10:45:46 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <IMedncwqge_FUmDfRVnytg@pipex.net>
Source record: 17739
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

> The days of kids being computer gurus have already come and gone. Now
> they just play video games and chat. Very few get interested in
> programming. Very few do a hardware project. They take their computers to
> the shop for upgrades. They only people that I have observed doing their
> own hardware upgrades, rebuilding computers, etc are the middle aged and
> the "old farts" that you seem to despise so.
==========
From the above comments it is clear that the writer has no idea what's going on in the Linux World ; with its many volunteer developers /testers , many being from the younger generation . Ever been to a Linux or Robotics or Hackers Fest ?

Frank GM0CSZ / KN6WH

3707. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-13 11:32:00 UTC
From: Jock <real_classs_a2004@yahooo.fr>
Message-ID: <9fmrf1d6mnnp7dpcb45kmgppggd350n77p@4ax.com>
Source record: 17740
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Fri, 12 Aug 2005 14:14:52 -0700, John Smith <assemblywizard@gmail.com> wrote:

>By high school you would be picking up a computer script and/or language
>and at least have a basic knowledge of programming. Your first hardware
>project would most likely be computer related.
>
>Somewhere along this line, you bump into a ham or a few.

You don't need the internet for that; practically any
butcher's shop will do. (Jewish and Muslim ones excepted).

73 de Jock.
--

If the Yank religious nuts believe in
intelligent creation, why George W. Bush?

3708. Re: Lattice-wound RF choke replacement, 50 years later

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-13 11:50:05 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1123933805.020654.120380@g14g2000cwa.googlegroups.com>
Source record: 17741
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.components

LenAnderson@ieee.org wrote:
>> [[Toroidal chokes]]
> Problem is, if this is a restoration kind of project similar to
> old automobile restoration, toroidal forms won't do...just
> weren't many in the old transmitters of the 1950s and before.
> Anything of the same construction type is going to be an
> expensive special-order thing now. :-(

In fact, this isn't quite a "restoration to original build" type thing, it's more of a "fix some old stuff that's been sitting on the shelf for years and put it to use" type thing. Most of these units are in pretty good shape, and I'm guessing that after the RF chokesdied they were swapped around at hamfests for a few years with each owner realizing they didn't have that choke and passing it on to the next guy... eventually ending up with me.

In fact, Pi-w
ound chokes are still listed in the Hammond catalog and
a couple of them are stocked by AES. I ordered a 2.5mH one which ought to be able to handle the 100mA or so that a single 6146 will need and I'll grid-dip it and try it out.

I would still like to find a good reference on lattice-wound and Pi-wound coil winding in a do-it-yourselfer's workshop. I think I remember seeing a book that shows how to build a little coil winding machine that'll do some of the ornate pi winding, and now I kick myself for not buying it at the time.

Even though the choke fires took out some stuff, the ceramic core seems to be intact in most cases and I think I could rewind something useful and authentic-looking on them. (OK, I'd use enameled wire and not that funky real skinny cloth kind!). Again the intention is to put these rigs back on the air after fixing whatever is necessary. Having
powered them up, most of them are fine right up to the final stage (OK, they generally need new electrolytics in the PS) where everything stops because of plate current. I probably will replace the tubes in mostcases and I'm guessing that after I get plate current flowing again and
replacing the miscellaneous capacitors blown up in the final compartment they'll
need to be reneutralized.

Tim.

3709. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-13 11:58:51 UTC
From: Frank <ve6cb@nospam.telus.net>
Message-ID: <%flLe.133849$wr.67700@clgrps12>
Source record: 17742
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Ok John, most of my ham friends are in Southern CA, and some are mobile, so it is a heck of a struggle to copy them at times on 40 m. It would be nice to receive a good signal up here in Calgary. My antenna is just a low dipole, with 1.5kW, and they all seem to hear me just fine. Guess you mean Art Bell. Have not heard him (or Wayne Green -- is he in CA?) on 75, but have heard his splatter on 40m.

Our sked is kind of tentative, and sometimes nobody shows up. I am usually around from about 7PM Pacific time.

73,

Frank

"John Smith" <assemblywizard@gmail.com> wrote in message
news:pan.2005.08.13.02.31.37.689809@gmail.com...
> Sneaky Frank:
>
> I often listen to "Bell's Bunch" on 3.840, once in a great while--bore
> them with comment or two of mine (I make fun of AB and Wayne Greene--but
> kinda like 'em both. <grin>) I just punched ~7168 into memory of the rig
> and will take a peek...
>
> I think you can tell, I am an easy mark, if the conversation is
> provocative, interesting and civilized... maybe... that is hard to find
> today, yanno, good conversation...
>
> Thank you for the invitation, I am honored to be asked...
>
> John
>
> On Sat, 13 Aug 2005 01:58:12 +0000, Frank wrote:
>
>>> I hope-against-hope the good old days of radio will return, but, I would
>>> like it to do so on new technology... some of us which remember the old
>>> CB days (days when even, good, hams had cb rigs!--or, we made do with 10
>>> meter equip. <grin>) are on ch. 38-39 LSB (27.385, 27.395) in the
>>> central
>>> valley of calif, we are a stagnant number, be nice to have the company.
>>> Lot of mobiles so they escape the harassment of hams still waging the
>>> "old war." If you mention your call, be prepared to take some
>>> kidding...
>>>
>>> If you ever get an opportunity--come join us! Real CB still lives in

>>> isolated pockets!
>>>
>>> John
>>
>> You ever get on 40 m John? Often on Sunday evenings around 7168 +/-.
>>
>> 73,
>>
>> Frank
>>
>> PS I thought this was a Brit N.G.
>

3710. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-13 12:57:08 UTC
From: Dee Flint <deeflint01@comcast.net>
Message-ID: <rfGdnZGtvOG0c2DfRVn-hw@comcast.com>
Source record: 17743
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:lMedncwqge_FUmDfRVnytg@pipex.net...
>> The days of kids being computer gurus have already come and gone. Now
>> they just play video games and chat. Very few get interested in
>> programming. Very few do a hardware project. They take their computers
>> to the shop for upgrades. They only people that I have observed doing
>> their own hardware upgrades, rebuilding computers, etc are the middle
>> aged and the "old farts" that you seem to despise so.
> ==========
> From the above comments it is clear that the writer has no idea what's
> going on in the Linux World ; with its many volunteer developers /testers
> , many being from the younger generation . Ever been to a Linux or
> Robotics or Hackers Fest ?
>
> Frank GM0CSZ / KN6WH
>

A. They don't have those fests here

B. Didn't say no one is doing these things just that their heyday has come
and gone.

Dee D. Flint, N8UZE

3711. Re: Can 6146B tubes be used in GG (grounded grid)?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-13 17:20:31 UTC
From: Roger Leone <raleoneTAKEOUT@sbcglobal.net>
Message-ID: <zZpLe.6649$O07.1247@newssvr23.news.prodigy.net>
Source record: 17744

There are several considerations when choosing a tube for grounded grid (GG) operation. One of the most important is whether all of the grid connections are available on the base of the tube. In the case of the 6146 (including the A, B, etc variations), some are not. The control and screen grids come out to pins on the base of the tube, so they could be connected to ground. But the beam forming structure (identified as grid #3 on most diagrams) is internally connected to the cathode. You cannot ground it without grounding the cathode (and vice versa). In GG configuration, the cathode gets the RF drive so it cannot also be gounded. Because of this internal connection, the 6146 is not a good candidate for GG operation.

This factor also explains why you may see GG amplifiers using certain sweep tubes like the 6JB6, 6KD6, and 6LF6. They have all their grid connections available at the tube base and none are internally connected to the cathode. Other sweep tubes like the 6HF5, which have internal connections to the cathode, are not suitable for GG operations.

Having said this, I should also point out that not all tubes with access to their grids at the base are good candidates for GG operation. Among other factors are the necessity for biasing. The tubes usually chosen for grounded grid operation require little or no DC bias voltage to limit plate current and set the class of operation. An example of a tube not usually seen in grounded grid configuration is the 4CX250 series. None of its grids is internally connected to the cathode, but in order to run it in grounded grid configuration, you must still supply bias and screen voltages. Which means it is no easier to make into a GG amp than a grid driven (grounded cathode) amp. One big advantage of GG amplifiers is they usually avoid the need for bias and screen supplies.

Also, the class of operation, such as AB2 which you mentioned, is not limited to grounded cathode operation. You can have a GG amp running class AB2. The class of operation is determined by the portion of the RF cycle that causes the plate current of the amplifier tube to vary. For example, in a class A amplifier, plate current is always flowing; even during the most negative voltage peak of the RF cycle. The tube is conducting for the full 360 degrees of the RF cycle and is varying in accordance with the drive signal. In class C operation (used mostly for FM, CW and plate modulated AM modes), plate current flows during only the most positive peaks of the RF drive signal and is cut off during most of the RF cycle. The output of the tube is a series of pulses which are not a representation of the drive signal, so Class C is not a "linear" mode of operation.

There is more to this, obviously. You should read though the "Transmitting" chapters of any copy of the Radio Amateurs Handbook.

Good luck,

Roger K6XQ

3712. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-13 23:25:46 UTC
From: hhc314@yahoo.com
Message-ID: <1123975546.034763.16870@g44g2000cwa.googlegroups.com>
Source record: 17745
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Bravo Chuck. Right on!

Harry C.

3713. Buy and Sell your Tube Gear!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-13 23:34:45 UTC
From: Jeff James <cbstv@optonline.net>
Message-ID: <qsvLe.3888$Gx1.1249@fe11.lga>
Source record: 17746

You never know what you'll find..
http://www.dealamerica.com/deal/cgi-bin/ads/bcads.cgi
FREE ads Dedicated to Vintage Amateur Radio...

3714. Re: Can 6146B tubes be used in GG (grounded grid)?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 00:45:08 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <VswLe.8549$Rm3.3102@bignews4.bellsouth.net>
Source record: 17747

Roger Leone wrote:
> There are several considerations when choosing a tube for grounded grid
> (GG) operation. One of the most important is whether all of the grid
> connections are available on the base of the tube. In the case of the 6146
> (including the A, B, etc variations), some are not. The control and screen
> grids come out to pins on the base of the tube, so they could be connected
> to ground. But the beam forming structure (identified as grid #3 on most
> diagrams) is internally connected to the cathode. You cannot ground it
> without grounding the cathode (and vice versa). In GG configuration, the
> cathode gets the RF drive so it cannot also be gounded. Because of this
> internal connection, the 6146 is not a good candidate for GG operation.
>
> This factor also explains why you may see GG amplifiers using certain sweep
> tubes like the 6JB6, 6KD6, and 6LF6. They have all their grid connections
> available at the tube base and none are internally connected to the cathode.
> Other sweep tubes like the 6HF5, which have internal connections to the
> cathode, are not suitable for GG operations.
>
> Having said this, I should also point out that not all tubes with access to
> their grids at the base are good candidates for GG operation. Among other
> factors are the necessity for biasing. The tubes usually chosen for
> grounded grid operation require little or no DC bias voltage to limit plate
> current and set the class of operation. An example of a tube not usually
> seen in grounded grid configuration is the 4CX250 series. None of its grids
> is internally connected to the cathode, but in order to run it in grounded
> grid configuration, you must still supply bias and screen voltages. Which
> means it is no easier to make into a GG amp than a grid driven (grounded
> cathode) amp. One big advantage of GG amplifiers is they usually avoid the
> need for bias and screen supplies.
>
> Also, the class of operation, such as AB2 which you mentioned, is not
> limited to grounded cathode operation. You can have a GG amp running class
> AB2. The class of operation is determined by the portion of the RF cycle
> that causes the plate current of the amplifier tube to vary. For example,
> in a class A amplifier, plate current is always flowing; even during the
> most negative voltage peak of the RF cycle. The tube is conducting for the
> full 360 degrees of the RF cycle and is varying in accordance with the drive
> signal. In class C operation (used mostly for FM, CW and plate modulated
> AM modes), plate current flows during only the most positive peaks of the RF
> drive signal and is cut off during most of the RF cycle. The output of the
> tube is a series of pulses which are not a representation of the drive
> signal, so Class C is not a "linear" mode of operation.
>
> There is more to this, obviously. You should read though the "Transmitting"

> chapters of any copy of the Radio Amateurs Handbook.
>
> Good luck,
>
> Roger K6XQ
>
>
One advantage of "cathode driven tetrode" (where normal grid bias and screen voltage are applied) is that you get higher power gain and usually don't need to neutralize the amplifier (technically it is IMPOSSIBLE to neutralize a ground grid amplifier anyway).

Some brands of 807 and 1625 tubes had the beam deflection plates brought out via a separate wire through the glass which was connected to the cathode outside the bulb. It was possible to remove the base and then connect this lead to it's own pin (on the 1625, or on the 807 by changing the base to one with more pins), or connect it to the screen or control grid so the tube would work in GG. Thus modified the 807 / 1625 made a good gg tube. It's also possible this was true with some brands of 6L6 tubes as well.

The 814 and 813 transmitting tubes also can be used in GG operation, they have the beam deflection plates brought out to it's own pin on the base.

4CX150 and 250 series tubes work VERY well in "cathode drive tetrode" operation. Too bad the price of these tubes is now so high, even in surplus.

3715. Re: Qst Jan 1990 article

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 00:52:38 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <XzwLe.8550$Rm3.1035@bignews4.bellsouth.net>
Source record: 17498

Nobody wrote:
> Does anyone have a copy of article in QST January 1990 titled
>
> CRYSTAL TESTER FOR F, Q, AND R BY W1FB?
>
> If so, could you scan it and email me a copy?
>
> Thanks,
>
> Tim AA6DQ
> aa6dq@arrl.net
>
The article is available in both the QST view cd set for 1990-1994,
and in the arrl periodicals cd for that year. In the former it's
a bunch of .TIFF files, in the latter it's in a .pdf file. If anyone
has either of these cd sets they could email it to you, you might want
to buy one of those cd's if there is anything else in the collections
you'd like to have.

BTW I can convert the .tiff files to a .pdf file, (using open office,
MS word can probably do it also) but I only own the
1914-1929 and 1930-1939 QST views at the moment. One of these days
I'm going to have to get some later ones (I bought the early ones
to do some radio history research).

3716. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 02:28:02 UTC
From: Kim <mail@nomail.com>
Message-ID: <S_xLe.1553$SR5.284@newssvr22.news.prodigy.net>
Source record: 17499
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

<hhc314@yahoo.com> wrote in message
news:1123975546.034763.16870@g44g2000cwa.googlegroups.com...
> Bravo Chuck. Right on!
>
> Harry C.
>

Oh...now *that* has my curiosity up... ;)

Kim W5TIT

3717. Radio problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 02:42:52 UTC
From: Newbie Ham <none@INOSPAM.com>
Message-ID: <mcyLe.23170$6d4.1600151@news20.bellglobal.com>
Source record: 17500
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

Hi Everybody

I hope this isn't the wrong place to ask. if it is, please let me know where I should post.

I have a Kenwood TS50 installed on a boat with a SGC autotuner. The tuner is grounded to a dynaplate.

I also have a 2000watt inverter/charger built into the boat for ac power creation from 12v batteries.

Something strange is going on and I jusr don't know where to start trouble shooting.

When I transmit on frequencies like 14300MHZ usb, no problem.

If I transmit on 7628 LSB 100watts the FET's in my inverter blow up! As soon as I key the mike I hear a loud pop and there goes another fet.

I've changed them twice now and since the inverter is bolted into an awkward spot and weighs 70 pounds (it's all transformer), removing the inverter and changing them ain't fun.

Tonight I went so far as to disconnect (as in unplug) the AC supply to the inverter and switch it completely off. As in no LEDS lit, everything off.

Yet as soon as I keyed the mic, POOF. The fets just blew apart.

Any thoughts as to what might be happening?

FWIW, the coax from radio to tuner runs within about 2 feet of the inverter, the radio and tuner are powered from the batteries which power the inverter. So the inverter and radio share Pos. and Neg.

I can only think of a few ways this might be happening:

1) Radiated signal from the coax leaking into the inverter.
2) Radiated signal passing into the inverter via the shared positive or negative feeds.
3) Some weird ground loop issue.

I have no ideas as to how to diagnose this and trouble shoot it without having to replace fets everytime. And that's a big job.

Any thoughts would be greatly appreciated.

3718. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 03:05:05 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.14.03.05.03.434921@gmail.com>
Source record: 17504
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Chuck:

You ask me if I ever put ham gear together from old radios, tv's and army surplus equip., Yes, gobs... my uncle had a chain of army surplus stores. Most of that equip you just took to the air...

But, born right around 1950, I got in on the tail end of tubes. In the late 60's we were already attempting to run transistors with multi-parallel-push-pull circuits to get higher outputs on low HF. The 70's provided some decent high power transistors, in the 70's seen a lot of hybrid equip (tube/transistor), in the 80's-90's mainly transistors, even multi-KW linears designed around transistors.

Now I awaiting the next generation equip., you see it in commercial and industrial use, but very rarely in amateur shacks.

Now I play with single chip wide band oscillators... buffers, amps and finals in personal experiments, all transistor. The tube, except for greater than 2KW linears/transmitters is pretty much dead... most new homebrew amps I see are using the russian tubes, cheap if you get the right source... but the filament draw on those big amps can heat a shack!

Just look at the number of hams still running the old tube equip. henry 2KW linears, drakes, heathkits, hallicrafters, gonset, johnson, etc.... although a lot of it is still in use, it isn't built anymore... some hams just haven't adapted to building with transistors... don't ask me why...

What does spark-gap transmitters, crystal radios, regenerative, TRF, etc have to do with today? Collectors items? Junk sold at hamfests?

Most high power stuff is custom made mosfet, or commercial adapted to amateur use--if you are into homebrew...

John

On Fri, 12 Aug 2005 14:22:02 -0700, Chuck Olson wrote:

>
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:pan.2005.08.12.19.40.06.528943@gmail.com...
>> PM:
>>
>> Most of that is fictional... lots of "could have", "should have", "would
>> have" which it suggests though...
>>
>> Computer related hardware/software is where all of the engineers are

>> coming from today.
>>
>> John
>
> I guess you never put together a crystal set or a 1-tube radio, or designed
> your own VFO-controlled transmitter. I did, and from those days in 7th
> grade, I knew what I was going to do the rest of my life. By sophomore year
> in high school I learned to send and receive Morse Code at 15 WPM so I could
> be sure to meet the 13WPM requirement for my Ham license. At 21, my
> Engineering education was interrupted by the draft, and I joined the Navy to
> become an Electronics Technician and service radar and communications
> equipment for 4 years. Resuming my education, I became an Electrical
> Engineer and worked in industry for the next 38 years, continuously learning
> new things as they became current technology. I was never laid off or a
> victim of "reduction in force" through that entire career - - because I was
> a "natural" and kept my skills up to meet the needs of my employer. Ham
> radio is an excellent start for anyone who has a curiosity and fascination
> about electronics, be it represented by radio communications or computers or
> industrial control technology.
>
> I was inspired by Polymath's description of the good effects of ham radio on
> its devotees. He should be congratulated on his explanation - - a very
> readable and true to life presentation.
>
> 73, Chuck W6PKP

3719. Re: Radio problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 03:12:17 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns96B1CDB968A05spectrumhogstarbandn@207.106.93.175>
Source record: 17501
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

I can't offer much help, but I would think that you ought to try this with a dummy load instead of the antenna; Dummy load hooked directly to the radio.

If nothing else, it would tell you whether you have a DC voltage/grounding problem, or an RF problem.

Ed K7AAT

3720. Re: Radio problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 03:26:14 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11fteeo89s870de@corp.supernews.com>
Source record: 17502
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

Here's what I think is happening.

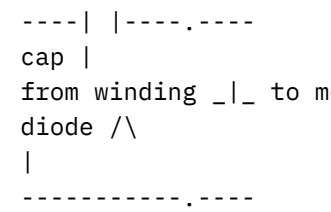
On 40 meters, the path from the tuner back along the outside of the coax to the rig is about as attractive to RF as the dynaplate, so a good fraction of the RF current being fed to the antenna goes that way. On 20 meters, the dynaplate is relatively more attractive due to a combination of the dynaplate impedance, antenna input impedance, and coax length, so more goes to the dynaplate and less along the coax.

The RF current goes along the outside of the feedline to the rig, over the outside of the rig, and into your inverter via the power leads. There are a couple of ways you can reduce the problem:

1. Put one or more good current baluns (common mode chokes) in the coax feedline. If you just put one in, I'd put it at the rig, to force the current there to be minimal.
2. Put a common mode choke in the power cable to the rig. Because the wires are pretty large, it's probably not practical to wrap multiple turns around a single ferrite core. So get some large clamp-on cores you can clamp over both conductors at the same time. It's likely to take a dozen or so, or more depending on the type of ferrite. I recommend type 43, or 70-series if you can find it in clamp-on cores.
3. Apply the same kind of choke to the inverter power leads from the battery.

What you're doing here is to create a high impedance to common mode current along the path from the tuner to the inverter.

If you'd like a quantitative measure of how bad a problem you've got and how effective any solution is (or if this is really the problem), get a clamp-on ferrite core you can clamp over the coax line or the power leads to the rig. Wind about 10 turns to make a transformer secondary winding -- the primary will be the wire passing through the clamped core. Connect the winding through a series capacitor of around 0.001 to 0.01 uF to a shunt diode (any small signal type will do), and then to a voltmeter:



Sorry, I'm not very good with ASCII art. . .

Clamp this onto the coax or over both power leads. The meter reading
will be approximately proportional to the amount of RF current. The
object is to minimize it.

Roy Lewallen, W7EL

Newbie Ham wrote:
> Hi Everybody
>
> I hope this isn't the wrong place to ask. if it is, please let me know
> where I should post.
>
> I have a Kenwood TS50 installed on a boat with a SGC autotuner. The
> tuner is grounded to a dynaplate.
>
> I also have a 2000watt inverter/charger built into the boat for ac power
> creation from 12v batteries.
>
> Something strange is going on and I jusr don't know where to start
> trouble shooting.
>
> When I transmit on frequencies like 14300MHZ usb, no problem.
>
> If I transmit on 7628 LSB 100watts the FET's in my inverter blow up! As
> soon as I key the mike I hear a loud pop and there goes another fet.
>
> I've changed them twice now and since the inverter is bolted into an
> awkward spot and weighs 70 pounds (it's all transformer), removing the
> inverter and changing them ain't fun.
>
> Tonight I went so far as to disconnect (as in unplug) the AC supply to
> the inverter and switch it completely off. As in no LEDS lit, everything
> off.
>
> Yet as soon as I keyed the mic, POOF. The fets just blew apart.
>
> Any thoughts as to what might be happening?
>
> FWIW, the coax from radio to tuner runs within about 2 feet of the
> inverter, the radio and tuner are powered from the batteries which power
> the inverter. So the inverter and radio share Pos. and Neg.
>
> I can only think of a few ways this might be happening:
>
> 1) Radiated signal from the coax leaking into the inverter.
> 2) Radiated signal passing into the inverter via the shared positive or
> negative feeds.
> 3) Some weird ground loop issue.
>
> I have no ideas as to how to diagnose this and trouble shoot it without
> having to replace fets everytime. And that's a big job.
>

> Any thoughts would be greatly appreciated.

3721. Re: Radio problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 03:57:54 UTC
From: dplatt@radagast.org
Message-ID: <11ftga2330im66c@corp.supernews.com>
Source record: 17503
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

In article <mcyLe.23170$6d4.1600151@news20.bellglobal.com>,
Newbie Ham <none@lNOSPAM.com> wrote:

>1) Radiated signal from the coax leaking into the inverter.
>2) Radiated signal passing into the inverter via the shared positive or
>negative feeds.
>3) Some weird ground loop issue.
>
>I have no ideas as to how to diagnose this and trouble shoot it without
>having to replace fets everytime. And that's a big job.
>
>Any thoughts would be greatly appreciated.

Could be any of the three paths, or more than one at once... conducted
vs. radiated is an interesting question, but perhaps a bit academic.
All of your equipment is going to be in the near field of the
antenna/ground system, I think, and so you're going to be ending up
with RF pretty much everywhere.

If I had to guess, I'd guess that your inverter may have some sort of
half-bridge / push-pull switching circuitry. The RF getting into the
system is switching both sides of the push-pull drive into conduction
at the same time (a few volts of RF on the gates of the FETs could do
it) and shorting the supply through the FETs.

The fact that the RF was able to blow the FETs with the inverter
switched off suggests to me that it may be a fairly direct, local
pickup of RF onto the gates which did the damage. With the inverter
switched off, its controller wouldn't have been driving the FET(s) at
all.

As to how to prevent it from happening again... my guess is that your
best bet is going to be to add heavy-duty RF filtering to both the DC
inputs, and the AC load, and make the invert case as RF-tight as
possible.

I'm not sure whether it'd be possible to add snubbers, ferrites, etc.
on the FET gate leads themselves to keep the RF from triggering
them... the inverter design may require driving the FETs quite fast to
achieve proper control of the voltage. Figuring this out would
require a schematic and some study of the design.

It might be worth sniffing around inside the inverter with a grid dip
meter, with the power completely disconnected and everything
unplugged. You might get lucky and find a portion of the circuitry

that's actually resonant at around the frequency at which you're
having trouble. If so, spoiling the Q of this resonance might reduce
or eliminate the problem.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3722. Re: Foxhole Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 04:19:00 UTC
From: -ex- <exray@coqui.net>
Message-ID: <f122c$42fec637$4232bd1b$8859@COQUI.NET>
Source record: 17505

Sgt. Schultz wrote:

> How do you build a foxhole radio? I saw a few plans on the internet,
> but I don't understand them. I have read that you can use a telephone
> receiver instead of crystal earphones. Is this true? Also, is it
> possible to make a version without the razor blade? Sorry if I sound
> stupid here. I am not an expert with radio. Thanks in advance.
>

The intent of a "foxhole" radio was a real-world example of how to build a functional receiver under the worst of conditions and limitations. That implies using components that will "get by" in a pinch.

Basically you're referring to a plain old crystal detector set. Yes, a 1N34A diode will work much better than a razor blade and hi-z phones will work better than a telephone headset. But they didn't have hi-z phones and 1N34A diodes available in the foxholes and prison camps of WW2 and thats the legacy of the "foxhole radio".

Building one is an interesting exercise and may provide some learning experience as well as a baseline comparison for *any* other type of radio receiver. The more interesting part of such a radio is your imagination if you can imagine yourself under the same conditions totally isolated from the outside world of news and how important such a thing could be.

The downside is that the old-timey razor blades are no more. Read up on the techniques to modify newer blades...heat, corrosion, etc.

GL,
Bill

3723. Re: Qst Jan 1990 article

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 07:34:10 UTC
From: Alt Beer <null@null.com>
Message-ID: <StCLe.6972$QU4.6735@newsfe5-win.ntli.net>
Source record: 17506

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
news:XzwLe.8550$Rm3.1035@bignews4.bellsouth.net...
> Nobody wrote:
> > Does anyone have a copy of article in QST January 1990 titled
> >
> > CRYSTAL TESTER FOR F, Q, AND R BY W1FB?
> >
> > If so, could you scan it and email me a copy?
> >
> > Thanks,
> >
> > Tim AA6DQ
> > aa6dq@arrl.net

The W1FB article is included as a help file in AADE's free filter design
software.
http://www.aade.com

3724. Re: Lattice-wound RF choke replacement, 50 years later

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 08:25:38 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1124007938.184147.255450@g14g2000cwa.googlegroups.com>
Source record: 17507
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.components

Tim Shoppa wrote:
> LenAnderson@ieee.org wrote:
> >> [[Toroidal chokes]]
> > > Problem is, if this is a restoration kind of project similar to
> > > old automobile restoration, toroidal forms won't do...just
> > > weren't many in the old transmitters of the 1950s and before.
> > > Anything of the same construction type is going to be an
> > > expensive special-order thing now. :-(
>
> In fact, this isn't quite a "restoration to original build" type
> thing, it's more of a "fix some old stuff that's been sitting on the
> shelf for years and put it to use" type thing. Most of these units
> are in pretty good shape, and I'm guessing that after the RF chokesdied
> they were swapped around at hamfests for a few years with each
> owner realizing they didn't have that choke and passing it on to the
> next guy... eventually ending up with me.
>
> In fact, Pi-w
> ound chokes are still listed in the Hammond catalog and
> a couple of them are stocked by AES. I ordered a 2.5mH one which ought
> to be able to handle the 100mA or so that a single 6146 will need and
> I'll grid-dip it and try it out.
>
> I would still like to find a good reference on lattice-wound and
> Pi-wound coil winding in a do-it-yourselfer's workshop. I think
> I remember seeing a book that shows how to build a little coil
> winding machine that'll do some of the ornate pi winding, and now
> I kick myself for not buying it at the time.
>
> >
> Tim.

hi Tim,
yes, a reference to how to do pie-wound chokes would be good - jumble
wound would be fine, but its probably like cable lacing - you just want
to know how to do it for the sheer satisfaction of it hi hi !

the picture link that Wes posted looks pretty good aesthetically (and
evey toher way as well) - how was it done, how as the former made up -
looks like plastic, hopefully a follow-up post from The Man? - these
things also provide a useful way of getting B+ to the anodes of the
tubes......

I too have a "accidental" collection of old valve type amateur HF radios - (too many, in fact) that need to be got on air as a first step - will worry about the "authenticity" of the process later.

Andrew VK3BFA

3725. New Program. L-match Networks.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 09:05:37 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ddn1h1$nq3$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 17508

Occasionally it may be useful to deduce the value of the terminating impedance of an L-match network when only the values of the coil (uH) and capacitor (pF) and the frequency are known.

Program L_NETWK does exactly that.

The terminating impedance is often the input impedance of the transmission line leading to an antenna when an impedance measuring device is not available. Whereas it is possible to estimate the values of the coil and capacitor settings from a visual examination. The L and C components having been set by using the SWR meter or TLI.

The program also assists with assessing the range of terminating impedances which can be accomodated by a given L-tuner. Without such assistance a considerable strain is placed on an ordinary person's imagination.

Download in a few seconds program L_NETWK from the website below and run immediately. No unzipping inconvenience.

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

3726. Re: Radio problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 10:18:51 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <PsydnRZNk8oUh2LfRVnyhQ@pipex.net>
Source record: 17509
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

>> I have a Kenwood TS50 installed on a boat with a SGC autotuner. The tuner
>> is grounded to a dynaplate.
>>
>> I also have a 2000watt inverter/charger built into the boat for ac power
>> creation from 12v batteries.
>>
>> Something strange is going on and I jusr don't know where to start
>> trouble shooting.
>>
>> When I transmit on frequencies like 14300MHZ usb, no problem.
>>
>> If I transmit on 7628 LSB 100watts the FET's in my inverter blow up! As
>> soon as I key the mike I hear a loud pop and there goes another fet.
==========
Firstly , Thank you Roy for your expert advice ; I have stored your message
for future reference.

Secondly , (Silly me) What is a 'Dynaplate' ? I am not a
boating type of person.

Frank GM&#65533;CSZ / KN6WH

3727. Re: Radio problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 11:25:56 UTC
From: Newbie Ham <none@INOSPAM.com>
Message-ID: <42FF2A44.7010907@INOSPAM.com>
Source record: 17510
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

Since my boat, like many is made of fiberglass, obtaining a
ground/counterpoise is a tad tricky. Steel boats don't have a problem
but glass boats do.

So what is commonly done is a dynaplate is added to the boat. It's
basically a highly conductive copper plate that is through bolted to the
hull and is in contact with the sea water under the boat. There's a stud
on the dynaplate to which you attach a copper foil coming from the tuner
ground stud.

Highland Ham wrote:
>>>I have a Kenwood TS50 installed on a boat with a SGC autotuner. The tuner
>>>is grounded to a dynaplate.
>>>
>>>I also have a 2000watt inverter/charger built into the boat for ac power
>>>creation from 12v batteries.
>>>
>>>Something strange is going on and I jusr don't know where to start
>>>trouble shooting.
>>>
>>>When I transmit on frequencies like 14300MHZ usb, no problem.
>>>
>>>If I transmit on 7628 LSB 100watts the FET's in my inverter blow up! As
>>>soon as I key the mike I hear a loud pop and there goes another fet.
>
> ==========
> Firstly , Thank you Roy for your expert advice ; I have stored your message
> for future reference.
>
> Secondly , (Silly me) What is a 'Dynaplate' ? I am not a
> boating type of person.
>
> Frank GMï¿½CSZ / KN6WH
>
>

3728. Re: Radio problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 12:12:50 UTC
From: Murray <me@erewhon.net>
Message-ID: <42ff3531$0$4569$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 17511
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Roy Lewallen wrote:
SNIP>>
2. Put a common mode choke in the power cable to the rig.

Because the wires are pretty large, it's probably not

practical to wrap multiple turns around a single ferrite

core. So get some large clamp-on cores you can clamp over

both conductors at the same time. It's likely to take a

dozen or so, or more depending on the type of ferrite.

I recommend type 43, or 70-series if you can find it in clamp-on cores.

3. Apply the same kind of choke to the inverter power leads from the
battery.

A source of supply of 'big'! toroids for this kind of
suppression is the deflection coil toroid from old
TV sets. Some of them are enormous! And cheap. (read - free)

I use them round the shack liberally. There is enough
ferrite in there to equal 10 small toroids. (by weight)

Cheers.
Murray vk4aok

3729. K9YA Telegraph - September 2005 Issue (FREE)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 14:53:20 UTC
From: K9YA Telegraph <no_spam@yahoo.com>
Message-ID: <AVILe.82$Z%6.14@newssvr17.news.prodigy.com>
Source record: 17512

K9YA Telegraph - September 2005 Issue

Check out the K9YA Telegraph e-Zine-a FREE monthly ham radio magazine. Each issue contains new-never before published articles, pictures and cartoons. Visit our Web site to download samples or subscribe. http://www.k9ya.org

September 2005 Issue:

FISTS By Philip Cala-Lazar, K9PL

If I Had a Time Machine By Daniel Meloch, W1DPM

My Name is Nate! By Nate Youngs, N1IDX

A Real Cheesy Rig By Dick Sylvan, W9CBT

Book Review By Herb Scarpelli, WK9O

Mr. Murphy's Days of Glory By Rod Newkirk, VA3ZBB/W9BRD

How Many Differences Can You Find? By Dick Sylvan, W9CBT

3730. Make your own transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 17:19:26 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1124039966.650652.57280@f14g2000cwb.googlegroups.com>
Source record: 17513
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

About 40 years ago, I recall as a teenager borrowing
a book from the local library that described how to
make your own transistor radio, including the manufacture
of the transistors themselves by point-contact
techniques. ISTR that it was published in Yankland.

Does anyone here remember this book?

3731. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 17:20:06 UTC
From: Dave Holford <holford@sympatico.ca>
Message-ID: <42FF7D46.ED7E2C8B@sympatico.ca>
Source record: 17516
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Dee Flint wrote:

> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:pan.2005.08.12.21.14.50.207296@gmail.com...
> > PM:
> >
> > Let me give a summary of the "real world."
> >
> > If you were a child today, you would grow up with the computer.
> >
> > In elementary school your first "pen pal" would be in a foreign country
> > and you would communicate with them via the internet. You would learn to
> > IM, IRC, EMAIL, MSN CHAT, YAHOO, WEB CAM, etc....
> >
> > By high school you would be picking up a computer script and/or language
> > and at least have a basic knowledge of programming. Your first hardware
> > project would most likely be computer related.
> >
> > Somewhere along this line, you bump into a ham or a few. You look at them
> > using their equipment, it is apparent the internet is superior. They lack
> > the ability to exchange pics, apps, music, videos, documents, etc. by
> > transmissions taking seconds or minutes. Then, they show you a CW key and
> > you are dumb struck, and leave. You return to the internet and current
> > technology, never to stray again... you begin a web site and consider
> > what position you would like in the computer field, when you grow up...
> >
> > John
> >
>
> The days of kids being computer gurus have already come and gone. Now they
> just play video games and chat. Very few get interested in programming.
> Very few do a hardware project. They take their computers to the shop for
> upgrades. They only people that I have observed doing their own hardware
> upgrades, rebuilding computers, etc are the middle aged and the "old farts"
> that you seem to despise so.
>
> I spend countless hours teaching our interns how to use email, spreadsheets,
> etc.
>
> Dee D. Flint, N8UZE

Absolutely. 25 or 30 years ago it was true. Then I could ask an exam question
which required writing an ISR in assembly, or even object.

Now, forget it! Such questions would never be allowed because the students wouldn't understand the question.

My grandkids live for the computer. the blackberry, cellphone and their gadgets, but have no idea what goes on behind the screen, despite the fact that their mother is a specialist in advanced secure systems. The kid who used to cut my grass thinks he is a programmer because he can copy a script from the internet - but say things like "object", "hex", "bus" and this teenage expert looks at me llike I have one eye in the middle of my forehead.

If I want to talk to people who build hardware, write efficient imaginative software, and can actually do hex math I go to the QCWA breakfast; where someone always has a new piece of homebrew microwave hardware or some neat little Unix trick to show off.

The last QCWA convention I attended had fascinating discussions on cell phone hacking, unix programming, software defined radio along with the old standards of antennas, propagation, etc.

Yes, I'm an old fart who can hand key 25wpm (but doesn't anymmore because e-mail is easier, not faster), use the net, write assembly programs and even use a soldering iron. I even have some idea how the telephone system works and made phone calls from my HT before the cell phone was invented. And I certainly do not rank myself anywhere near the experimenters and explorers in Ham Radio; I'm not that talented.

Dave
VE3HLU

3732. Re: Make your own transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 17:22:31 UTC
From: huLLy <g4sdw@aol.com>
Message-ID: <Iq-dnVF0F9BK4GLfRVn-2g@giganews.com>
Source record: 17514
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

```
Polymath wrote:
> About 40 years ago, I recall as a teenager borrowing
> a book from the local library that described how to
> make your own transistor radio, including the manufacture
> of the transistors themselves by point-contact
> techniques. ISTR that it was published in Yankland.
>
> Does anyone here remember this book?
```

How can you remember that and not the £350 law book you bought less than 5 years ago?
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

3733. Spectrum Analyser from Cell Phones?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 17:25:07 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1124040307.170942.41970@z14g2000cwz.googlegroups.com>
Source record: 17515
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

I wonder if anyone has successfully converted a
thrown-away cell-phone into a spectrum analyser?

We would seem to have all the necessary components
in there for free - keyboard, graphical display,
post-demodulation DSP, Frequency Synthesizer,
RF good up to 1 GHz (2G5Hz if an ex-WCDMA unit)

Here would seem to be an opportunity to equip
all Radio Hams with a reasonably state-of-the-art
piece of test gear, that when coupled with an
IF generator would give us all a network analyser
into the bargain!

3734. Re: Spectrum Analyser from Cell Phones?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 17:30:51 UTC
From: Dave Holford <holford@sympatico.ca>
Message-ID: <42FF7FCB.8D940FA2@sympatico.ca>
Source record: 17517
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Polymath wrote:

> I wonder if anyone has successfully converted a
> thrown-away cell-phone into a spectrum analyser?
>
> We would seem to have all the necessary components
> in there for free - keyboard, graphical display,
> post-demodulation DSP, Frequency Synthesizer,
> RF good up to 1 GHz (2G5Hz if an ex-WCDMA unit)
>
> Here would seem to be an opportunity to equip
> all Radio Hams with a reasonably state-of-the-art
> piece of test gear, that when coupled with an
> IF generator would give us all a network analyser
> into the bargain!

Many years ago it was done with junked Video Tape Recorders and, from what I saw and read, very successfully too.

Dave

3735. Re: Make your own transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 17:31:33 UTC
From: Dave Holford <holford@sympatico.ca>
Message-ID: <42FF7FF5.6D86262F@sympatico.ca>
Source record: 17518
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Polymath wrote:

> About 40 years ago, I recall as a teenager borrowing
> a book from the local library that described how to
> make your own transistor radio, including the manufacture
> of the transistors themselves by point-contact
> techniques. ISTR that it was published in Yankland.
>
> Does anyone here remember this book?

Don't remember the book but I do remember several good magazine
arcticles on the subject.

Dave

3736. Re: Spectrum Analyser from Cell Phones?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 18:17:46 UTC
From: Spike <Aero.Spike@Technologies.invalid>
Message-ID: <0f2vf1lr45ferfk2vhsvc7c8h6uandrlft@4ax.com>
Source record: 17519
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Dave Holford wrote:
>Polymouth wrote:
>
>> I wonder if anyone has successfully converted a
>> thrown-away cell-phone into a spectrum analyser?
>>
>> We would seem to have all the necessary components
>> in there for free - keyboard, graphical display,
>> post-demodulation DSP, Frequency Synthesizer,
>> RF good up to 1 GHz (2G5Hz if an ex-WCDMA unit)
>>
>> Here would seem to be an opportunity to equip
>> all Radio Hams with a reasonably state-of-the-art
>> piece of test gear, that when coupled with an
>> IF generator would give us all a network analyser
>> into the bargain!
>
>Many years ago it was done with junked Video Tape Recorders and, from
>what I saw and read, very successfully too.

Don't hold your breath, as there seems to be a raft of projects ahead
of this one: his own XRC machine, an ATU made from discarded CDs, a
DSP project using an FT-707, and of course, the mathematical basis for
the Big-K approach to DSP to be proved, peer-reviewed, and then
published.

from
Aero Spike

3737. Re: Lattice-wound RF choke replacement, 50 years later

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 18:24:55 UTC
From: msix@nmia.com
Message-ID: <1052a$42ff8c77$402a802f$5626@nmia.allthenewsgroups.com>
Source record: 17520
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.components

Simple way. Wind a single layer 175uH choke on a ceramic form
with 24-26 wire. Good for 600ma and 160-10M.
I use these on all my HB from 30W to 1KW.
73 W7ZFB

3738. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 18:28:26 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.14.18.28.24.496422@gmail.com>
Source record: 17521
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Dave:

No one is denying you the right to your religion of "amateur worship", we all need some high power to look up to. But, you must realize you are in a church which has a very small following (mostly other hams, and NOT all of them!)

Fact is, the computer is a TV with a tv card inserted--a stereo system with a high quality audio card, tuner card inserted--a cd music player with cd and proper software--a dvd player with a dvd-cd and proper software--a home security system with the proper card and related software and backup-power supply--and soon to be an amateur rig with proper receiver card and xmitter card (some are already there!)

Fact is, the computer IS amateurs future--like it or not... only reason the future is not here right now, old amateurs can't adapt and die first... and serve as a hindrance to the new minds bringing the future with them...

John

On Sun, 14 Aug 2005 13:20:06 -0400, Dave Holford wrote:

>
>
> Dee Flint wrote:
>
>> "John Smith" <assemblywizard@gmail.com> wrote in message
>> news:pan.2005.08.12.21.14.50.207296@gmail.com...
>> > PM:
>> >
>> > Let me give a summary of the "real world."
>> >
>> > If you were a child today, you would grow up with the computer.
>> >
>> > In elementary school your first "pen pal" would be in a foreign country
>> > and you would communicate with them via the internet. You would learn to
>> > IM, IRC, EMAIL, MSN CHAT, YAHOO, WEB CAM, etc....
>> >
>> > By high school you would be picking up a computer script and/or language
>> > and at least have a basic knowledge of programming. Your first hardware
>> > project would most likely be computer related.
>> >
>> > Somewhere along this line, you bump into a ham or a few. You look at them
>> > using their equipment, it is apparent the internet is superior. They lack

>> > the ability to exchange pics, apps, music, videos, documents, etc. by
>> > transmissions taking seconds or minutes. Then, they show you a CW key and
>> > you are dumb struck, and leave. You return to the internet and current
>> > technology, never to stray again... you begin a web site and consider
>> > what position you would like in the computer field, when you grow up...
>> >
>> > John
>> >
>>
>> The days of kids being computer gurus have already come and gone. Now they
>> just play video games and chat. Very few get interested in programming.
>> Very few do a hardware project. They take their computers to the shop for
>> upgrades. They only people that I have observed doing their own hardware
>> upgrades, rebuilding computers, etc are the middle aged and the "old farts"
>> that you seem to despise so.
>>
>> I spend countless hours teaching our interns how to use email, spreadsheets,
>> etc.
>>
>> Dee D. Flint, N8UZE
>
> Absolutely. 25 or 30 years ago it was true. Then I could ask an exam question
> which required writing an ISR in assembly, or even object.
>
> Now, forget it! Such questions would never be allowed because the students
> wouldn't understand the question.
>
> My grandkids live for the computer. the blackberry, cellphone and their gadgets,
> but have no idea what goes on behind the screen, despite the fact that their
> mother is a specialist in advanced secure systems. The kid who used to cut my
> grass thinks he is a programmer because he can copy a script from the internet -
> but say things like "object", "hex", "bus" and this teenage expert looks at me
> llike I have one eye in the middle of my forehead.
>
> If I want to talk to people who build hardware, write efficient imaginative
> software, and can actually do hex math I go to the QCWA breakfast; where someone
> always has a new piece of homebrew microwave hardware or some neat little Unix
> trick to show off.
>
> The last QCWA convention I attended had fascinating discussions on cell phone
> hacking, unix programming, software defined radio along with the old standards
> of antennas, propagation, etc.
>
> Yes, I'm an old fart who can hand key 25wpm (but doesn't anymmore because e-mail
> is easier, not faster), use the net, write assembly programs and even use a
> soldering iron. I even have some idea how the telephone system works and made
> phone calls from my HT before the cell phone was invented. And I certainly do
> not rank myself anywhere near the experimenters and explorers in Ham Radio; I'm
> not that talented.
>

> Dave
> VE3HLU

3739. Re: Make your own transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 19:13:49 UTC
From: Bob Liesenfeld <wb0poq@visi.com>
Message-ID: <42FF97ED.F562BB9@visi.com>
Source record: 17522
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Polymath wrote:

> About 40 years ago, I recall as a teenager borrowing
> a book from the local library that described how to
> make your own transistor radio, including the manufacture
> of the transistors themselves by point-contact
> techniques. ISTR that it was published in Yankland.
>
> Does anyone here remember this book?

I don't know if it is the same book, but one currently available is
"Instruments of Amplification" by H.P. Friedricchs, ISBN 0-9671905-1-7.
It is available from the ARRL.

3740. Re: Foxhole Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 19:39:25 UTC
From: Tom <nospam@nospam.com>
Message-ID: <N5NLe.606838$cg1.473419@bgtnsc04-news.ops.worldnet.att.net>
Source record: 17523

Sgt. Schultz <notredame_26000@yahoo.com> wrote in message
news:1123990723.074219.104240@f14g2000cwb.googlegroups.com...
> How do you build a foxhole radio? I saw a few plans on the internet,
> but I don't understand them. I have read that you can use a telephone
> receiver instead of crystal earphones. Is this true? Also, is it
> possible to make a version without the razor blade? Sorry if I sound
> stupid here. I am not an expert with radio. Thanks in advance.

See the websites:
http://www.bizarrelabs.com/foxhole.htm (Extensive detail on the Fox-hole
radio; theory, construction and how-to)

http://www.bizarrelabs.com/rtfox1.htm (I kept cutting my finger on the blade
when I built this set back in the 60's)

Tom

3741. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 20:16:22 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ddo8ql$2lo$1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 17524
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

```
> some hams
> just haven't adapted to building with transistors... don't ask me
why...
>
============================

For one thing, with advancing years, eyesight deteriorates.
---
Reg.
```

3742. Re: Radio problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 20:21:47 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <jO-dnd5-5K9IOmLfRVnyrA@pipex.net>
Source record: 17525
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

> So what is commonly done is a dynaplate is added to the boat. It's
> basically a highly conductive copper plate that is through bolted to the
> hull and is in contact with the sea water under the boat. There's a stud
> on the dynaplate to which you attach a copper foil coming from the tuner
> ground stud.
==========
Thank you for the above info. Now understanding the situation better , it would perhaps be beneficial to have a 'tunable counterpoise' between the transceiver ground connection and the dynaplate.
It is in fact an adjustable series tuned circuit comprising a air-spaced capacitor and a roller coaster or switch-tapped type of variable inductor which is tuned for minimum impedance with the aid of an integral RF current meter (as described by Roy ,W7EL) Tuning is done for each band by maximising the current in the counterpoise at low power.
For the latter it is best to use a sensitive microamp meter ,its sensitivity adjustable with a potmeter
Such a tunable counterpoise can also be used very well in a high rise apartment where there is no good RF earth .
The end of the counterpoise is then not connected ,but since the RF voltage can be considerable ,the free end should be well insulated.
Such a device can be home brewed ,but a version with a switch allowing for several inductor taps is (or at least was) available from MFJ it's their model MFJ-931 ; Artificial RF Ground.
It was (in the early 1990s ?) described in QST , by Doug DeMaw , W1FB (sadly now SK)

I have home brewed the above type of artificial ground made with a roller coaster inductor.
For the HF bands the inductor is to be adjustable between approx 0.9 to 43 microHenry ,with the variable capacitor being 200 -250 pF max.

Frank GM0CSZ / KN6WH

3743. Re: Foxhole Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 20:36:50 UTC
From: Jim <kill-spam@no-spam.org>
Message-ID: <BIidnUpKDpT1NmLfRVn-2Q@comcast.com>
Source record: 17526

Sgt. Schultz <notredame_26000@yahoo.com> wrote in message
news:1123990723.074219.104240@f14g2000cwb.googlegroups.com...
> How do you build a foxhole radio? I saw a few plans on the internet,
> but I don't understand them. I have read that you can use a telephone
> receiver instead of crystal earphones. Is this true? Also, is it
> possible to make a version without the razor blade? Sorry if I sound
> stupid here. I am not an expert with radio. Thanks in advance.
>

The 'Foxhole Radio' is a type of crystal radio that can be built out of scraps that could be found almost anywhere and so it was sometimes built as a radio for soldiers to use.

There are many forms of crystal radios, most of the recent ones use a diode that can be purchased at radio shack, or any electronics parts store. This diode replaces the razer blade that was originally used as a detector diode.

Here is a website that shows how to build one.

http://www.midnightscience.com/project.html

This website has more technical information, although it shows a slightly different assembly for a crystal radio.

http://www.electronics-tutorials.com/receivers/crystal-radio-set.htm

Jim Pennell
N6BIU

3744. Re: Lattice-wound RF choke replacement, 50 years later

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 20:43:55 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ddoaea$5qk$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 17527
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.components

> Simple way. Wind a single layer 175uH choke on a ceramic form
> with 24-26 wire. Good for 600ma and 160-10M.
> I use these on all my HB from 30W to 1KW.
> 73 W7ZFB
==========
I'm interested.
What is the approx diameter and length of the form and approx number
of turns?

Reg.

3745. Re: Make your own transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 21:19:52 UTC
From: sdeyoreo@hotmail.com
Message-ID: <badvf1h92ibppnb3nms3rlc2p5f8281jhk@4ax.com>
Source record: 17528
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

On 14 Aug 2005 10:19:26 -0700, "Polymath" <aiyr.r.bean@lycos.co.uk>
wrote:

>About 40 years ago, I recall as a teenager borrowing
>a book from the local library that described how to
>make your own transistor radio, including the manufacture
>of the transistors themselves by point-contact
>techniques. ISTR that it was published in Yankland.
>
>Does anyone here remember this book?

We used to make crystal for radio by dropping sulpher in molten
solder. LeadSulphide?

3746. Re: Foxhole Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 21:24:53 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ddocr5$bv9$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 17529

These radios were secretly constructed and used by prisoners in Japanese prison-of-war camps during WW2 in circumstances where you can't pay a visit to Radio Shack and purchase the bits and pieces. The antenna also had to be hidden.

But, for things to work, there had to be a friendly news-broadcasting station not too far away. Which did not occur very often. Long distance short-wave stations do not lay down particularly strong signals.

However, there has been a report of prisoners in the Far East receiving news of the end of the war in Europe thus giving encouragement and hope to people who had survived for several years under the most extreme and terrible conditions.

Reg.

3747. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 21:32:28 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.14.21.32.26.670450@gmail.com>
Source record: 17539
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Reg:

LOL!!!

Good to see you... well, that is how it looks from here... but, I imagine
it might differ even in other states...

You sure it isn't the same across the pond?

John

On Sun, 14 Aug 2005 20:16:22 +0000, Reg Edwards wrote:

>> some hams
>> just haven't adapted to building with transistors... don't ask me
> why...
>>
> ============================
>
> For one thing, with advancing years, eyesight deteriorates.
> ---
> Reg.

3748. Re: 6m or 10m CW RX Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 21:32:52 UTC
From: Andy Ball <null@not.valid>
Message-ID: <8MOLe.6174$WD.2844@newsread1.news.pas.earthlink.net>
Source record: 17530

Hello Steve,

SAL> Oops, it has been pointed out to me that TECH class
> does not have access to HF. I forgot about the "new"
> Tech license, being no-code and thus not having HF
> priviledges.

If a "new Tech" passes the code test, does he or she get
Tech Plus priviliges, or are those solely for people who
earned that license when it was current?

- Andy, KB9YLW

3749. Re: Lattice-wound RF choke replacement, 50 years later

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 22:05:59 UTC
From: msix@nmia.com
Message-ID: <9b0ae$42ffc047$402a802f$7893@nmia.allthenewsgroups.com>
Source record: 17531
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.components

In rec.radio.amateur.homebrew Reg wrote:

>> Simple way. Wind a single layer 175uH choke on a ceramic form
>> with 24-26 wire. Good for 600ma and 160-10M.
>> I use these on all my HB from 30W to 1KW.
>> 73 W7ZFB
>==========
>I'm interested.
>What is the approx diameter and length of the form and approx number
>of turns?
>----
>Reg.

No turns depends on dia of form but the size of the form don't matter.
I use forms from fried chokes, 3/8 inch to 1 inch.
With 26 wire and 3/8 dia, expect 3 inches of winding or so then use
analyzer to get about 170uH and check for zeros around 23MHz and a
second around 33MHz. Tweak the 170uH to get the zero at 23MHz in
situ but with the PINET unhooked...
GL 73 W7ZFB

3750. Re: 6m or 10m CW RX Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 23:08:27 UTC
From: dplatt@radagast.org
Message-ID: <11fvjnb9efu9ue8@corp.supernews.com>
Source record: 17532

In article <8MOLe.6174$WD.2844@newsread1.news.pas.earthlink.net>,
Andy Ball <null@not.valid> wrote:

>If a "new Tech" passes the code test, does he or she get
>Tech Plus priviliges, or are those solely for people who
>earned that license when it was current?

The former, as I read the book.

Those who passed the Technician license prior to 3/21/1987, and thus passed the Element 1A (5 WPM) code test, have Novice-equivalent HF privileges as part of their Technician license.

Newer Technicians, who pass the Element 1 95 WPM) code test and are given a CSCE as proof of passing, but who have not passed Element 3 (General written exam), have Novice-equivalent HF privileges indefinitely. They should retain the CSCE as proof of this since the FCC doesn't keep track of which Techs have code credit. The CSCE is valid as credit towards the General license for only one year.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3751. Re: Lattice-wound RF choke replacement, 50 years later

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 23:09:19 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ddoiuvrlk1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 17533
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.components

Thanks for info.

==========

<msix@nmia.com> wrote in message
news:9b0ae$42ffc047$402a802f$7893@nmia.allthenewsgroups.com...
> In rec.radio.amateur.homebrew Reg wrote:
>
> >> Simple way. Wind a single layer 175uH choke on a ceramic form
> >> with 24-26 wire. Good for 600ma and 160-10M.
> >> I use these on all my HB from 30W to 1KW.
> >> 73 W7ZFB
> >==========
> >I'm interested.
> >What is the approx diameter and length of the form and approx
number
> >of turns?
> >----
> >Reg.
> ----------
> No turns depends on dia of form but the size of the form don't
matter.
> I use forms from fried chokes, 3/8 inch to 1 inch.
> With 26 wire and 3/8 dia, expect 3 inches of winding or so then use
> analyzer to get about 170uH and check for zeros around 23MHz and a
> second around 33MHz. Tweak the 170uH to get the zero at 23MHz in
> situ but with the PINET unhooked...
> GL 73 W7ZFB
>
>

3752. Re: Make your own transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 23:21:26 UTC
From: Wankel Rotary <no@no.yes.no.yes.no.org>
Message-ID: <WlQLe.6398$9b6.5756@newsfe3-gui.ntli.net>
Source record: 17534
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Polymath wrote:

> About 40 years ago, I recall as a teenager borrowing
> a book from the local library that described how to
> make your own transistor radio, including the manufacture
> of the transistors themselves by point-contact
> techniques. ISTR that it was published in Yankland.
>
> Does anyone here remember this book?

No - but we do remember the one written here in the UK and published by Ladybird books written by Rev. George 'read the quote' Dobbs G3RJV.

Maybe you should purchase or search for a copy from ebay or amazon - the wooden baseboard is roughly at your level of engineering (or should that be fettling) from what we read in other newsgroups!

3753. Re: Spectrum Analyser from Cell Phones?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 23:24:02 UTC
From: Wankel Rotary <no@no.yes.no.yes.no.org>
Message-ID: <moQLe.6399$9b6.4569@newsfe3-gui.ntli.net>
Source record: 17535
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Spike wrote:

> Don't hold your breath, as there seems to be a raft of projects ahead
> of this one: his own XRC machine, an ATU made from discarded CDs, a
> DSP project using an FT-707, and of course, the mathematical basis for
> the Big-K approach to DSP to be proved, peer-reviewed, and then
> published.

You also forget the gauntlet he laid down in the newsgroups to design a transceiver that was roughly based upon re-inventing the wheel.

When people took his suggestion somewhat seriously, he backed away, and, as it the case with all Bean-powered projects, let the subject die.

3754. Re: Make your own transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 23:29:26 UTC
From: Bill Janssen <billj9@ieee.org>
Message-ID: <qtQLe.4152$cg.2071@news02.roc.ny>
Source record: 17536
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Polymath wrote:

>About 40 years ago, I recall as a teenager borrowing
>a book from the local library that described how to
>make your own transistor radio, including the manufacture
>of the transistors themselves by point-contact
>techniques. ISTR that it was published in Yankland.
>
>Does anyone here remember this book?
>
>
>
Don't remember the book but I do remember instructions for taking a 1N23
or two
(many available as surplus) and opening one and adding another point
contact.
The extra point contact could be obtained from the second 1N23. At that time
the 1N23 was filled with wax so opening one up was doable.

Good luck
Bill K7NOM.

3755. Re: Spectrum Analyser from Cell Phones?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 23:40:11 UTC
From: Wankel Rotary <no@no.yes.no.yes.no.org>
Message-ID: <vDQLe.12737$U36.1128@newsfe6-gui.ntli.net>
Source record: 17537
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Polymath wrote:

> I wonder if anyone has successfully converted a
> thrown-away cell-phone into a spectrum analyser?
>
> We would seem to have all the necessary components
> in there for free - keyboard, graphical display,
> post-demodulation DSP, Frequency Synthesizer,
> RF good up to 1 GHz (2G5Hz if an ex-WCDMA unit)
>
> Here would seem to be an opportunity to equip
> all Radio Hams with a reasonably state-of-the-art
> piece of test gear, that when coupled with an
> IF generator would give us all a network analyser
> into the bargain!

Bargain - of course - that's after the Radio Amateur has equipped his shack with a very expensive SMD rework station....

Would it not be wiser to suggest the building of an interface so the shack PC could be used to do such a task as spectrum analysis?

Beanie/Polymath - Once a dumbass, always a dumbass.

3756. Re: 6m or 10m CW RX Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-14 23:44:11 UTC
From: fmmck@aol.com
Message-ID: <fmmck-1408051944110001@ac895f5f.ipt.aol.com>
Source record: 17538

In article <8MOLe.6174$WD.2844@newsread1.news.pas.earthlink.net>, Andy Ball <null@not.valid> wrote:

> If a "new Tech" passes the code test, does he or she get
> Tech Plus priviliges, or are those solely for people who
> earned that license when it was current?

Andy-

It doesn't work that way now. However you can probably pass the General Class test with only a little more effort than for the Technician test. Many years ago they were the same test except for code speed. Check out the practice tests at http://www.qrz.com.

You may be interested to know that the FCC has issued a proposal to eliminate code from all Ham tests. It will take a while before all the comments have been submitted and resolved. If you want the HF license now without waiting, you'll need to pass the code test.

73, Fred, K4DII

3757. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 00:16:46 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <T9RLe.689$uO2.334@fed1read07>
Source record: 17540
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Seems to me FCC Rules and Regs Part 97 defines it quite well

--
CL -- I doubt, therefore I might be !

3758. Re: Make your own transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 00:28:40 UTC
From: Samuel Hunt <shunt010@hotmail.com>
Message-ID: <ddonjoahk1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 17541
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

I don't remember THAT book.

I do remember the book though "How to kill beans in 3 easy steps" by "Moth Flutterus".

Very good book, well worth the read, goes into much detail.

Apparently the HQ is in Chippenham, so if any of you are out that way, stop by. I believe the road is Hardens Road or Close or something like that.

I must say though, that a good old roasted coffee bean is just the thing.

Tara a bit all

3759. Tuned MFJ-1024 Active Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 00:41:05 UTC
From: gagnonrchrd@netscape.net
Message-ID: <1124066465.660710.297540@g47g2000cwa.googlegroups.com>
Source record: 17542

Hello Group

I have been wondering if it might be an advantage to remotely tune this active antenna using a varactor? The remote unit uses a 40673 dual gate mosfet followed by a 2N5109 npn vhf/uhf transistor which feeds a 30 turn bifilar wound 4:1 balun. Then rg58 to the control unit. The whip is 58"/1473mm in length. Any thoughts on this? Thank you.

Richard

3760. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 00:52:07 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.15.00.52.06.385780@gmail.com>
Source record: 17543
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

... define what? And, how in relation to what we are discussing?

John

On Sun, 14 Aug 2005 17:16:46 -0700, Caveat Lector wrote:

> Seems to me FCC Rules and Regs Part 97 defines it quite well

3761. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 00:55:15 UTC
From: Dave Holford <holford@sympatico.ca>
Message-ID: <42FFE7F3.CF21EB0C@sympatico.ca>
Source record: 17544
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

(Apologies to the top posting hater community, but I decided to follow John's lead).

Got the wrong guy John.

I've been using most of that stuff for quite a while, and I could point you to a dozen or so hams well over the age of 70 who not only use it; they understand how it works and some even tinker with the hardware and software.

I'm not quite that old yet, but it ain't always that easy to keep up with some of them when they discuss their latest project.

About a quarter of a century ago, I was teaching a system using a synthesized HF sideband transceiver, on a single PCB about 2 or 3 inches square, running from about 7 to 10MHz and digitally controlled either locally or remotely (up to 100 transceivers controlled from a DEC minicomputer) - would love to have slipped one in my shirt pocket, taken it home and added a linear! Funnily enough most of the guys I was working with have decided to become hams within the last 10 or 15 years.

The HF receiver card in one of my PCs gets far more use than my stand-alone transceivers with the DSP etc. the card is much more versatile - more modes, bandwidths etc. etc.. Software defined is the way to go.

But, and it is a fair sized but, I find I can have much more detailed and interesting discussions of this technology with older rather than younger folks. I find (just my experience and maybe the folks I choose to hang out with) that the younger generation tend to be users who know no more about how it works than my granny knew about how her telephone worked. But boy can they use it!

My generation understood it down to the electron level.
My kids understood it down to the IC level.
My grand kids (teenagers - with a few exceptions) know how to use it but don't understand, or really care, how it works.

Can't blame them, it's progress. The systems have become so complex that one pretty much has to specialize and folks with a general knowledge of hardware and software, theory and practice of entire systems are becoming a vanishing breed. That is true of much more than communications technology - the guy at the corner gas station probably can't fix your anti-skid braking system any more than the local pharmacy can sell you the part to fix your TV any more.

Dave
Sitting at his computer listening to an HF net on his software defined radio running on the same processor.

John Smith wrote:

> Dave:
>
> No one is denying you the right to your religion of "amateur worship", we
> all need some high power to look up to. But, you must realize you are in
> a church which has a very small following (mostly other hams, and NOT all
> of them!)
>
> Fact is, the computer is a TV with a tv card inserted--a stereo system
> with a high quality audio card, tuner card inserted--a cd music player
> with cd and proper software--a dvd player with a dvd-cd and proper
> software--a home security system with the proper card and related software
> and backup-power supply--and soon to be an amateur rig with proper
> receiver card and xmitter card (some are already there!)
>
> Fact is, the computer IS amateurs future--like it or not... only reason
> the future is not here right now, old amateurs can't adapt and die
> first... and serve as a hindrance to the new minds bringing the future
> with them...
>
> John
>
> On Sun, 14 Aug 2005 13:20:06 -0400, Dave Holford wrote:
>
> >
> >
> > Dee Flint wrote:
> >
> >> "John Smith" <assemblywizard@gmail.com> wrote in message
> >> news:pan.2005.08.12.21.14.50.207296@gmail.com...
> >> > PM:
> >> >
> >> > Let me give a summary of the "real world."
> >> >
> >> > If you were a child today, you would grow up with the computer.
> >> >
> >> > In elementary school your first "pen pal" would be in a foreign country
> >> > and you would communicate with them via the internet. You would learn to
> >> > IM, IRC, EMAIL, MSN CHAT, YAHOO, WEB CAM, etc....
> >> >
> >> > By high school you would be picking up a computer script and/or language
> >> > and at least have a basic knowledge of programming. Your first hardware
> >> > project would most likely be computer related.
> >> >
> >> > Somewhere along this line, you bump into a ham or a few. You look at them
> >> > using their equipment, it is apparent the internet is superior. They lack
> >> > the ability to exchange pics, apps, music, videos, documents, etc. by
> >> > transmissions taking seconds or minutes. Then, they show you a CW key and
> >> > you are dumb struck, and leave. You return to the internet and current
> >> > technology, never to stray again... you begin a web site and consider
> >> > what position you would like in the computer field, when you grow up...
> >> >

> >> > John
> >> >
> >>
> >> The days of kids being computer gurus have already come and gone. Now they
> >> just play video games and chat. Very few get interested in programming.
> >> Very few do a hardware project. They take their computers to the shop for
> >> upgrades. They only people that I have observed doing their own hardware
> >> upgrades, rebuilding computers, etc are the middle aged and the "old farts"
> >> that you seem to despise so.
> >>
> >> I spend countless hours teaching our interns how to use email, spreadsheets,
> >> etc.
> >>
> >> Dee D. Flint, N8UZE
> >
> > Absolutely. 25 or 30 years ago it was true. Then I could ask an exam question
> > which required writing an ISR in assembly, or even object.
> >
> > Now, forget it! Such questions would never be allowed because the students
> > wouldn't understand the question.
> >
> > My grandkids live for the computer. the blackberry, cellphone and their gadgets,
> > but have no idea what goes on behind the screen, despite the fact that their
> > mother is a specialist in advanced secure systems. The kid who used to cut my
> > grass thinks he is a programmer because he can copy a script from the internet -
> > but say things like "object", "hex", "bus" and this teenage expert looks at me
> > llike I have one eye in the middle of my forehead.
> >
> > If I want to talk to people who build hardware, write efficient imaginative
> > software, and can actually do hex math I go to the QCWA breakfast; where someone
> > always has a new piece of homebrew microwave hardware or some neat little Unix
> > trick to show off.
> >
> > The last QCWA convention I attended had fascinating discussions on cell phone
> > hacking, unix programming, software defined radio along with the old standards
> > of antennas, propagation, etc.
> >
> > Yes, I'm an old fart who can hand key 25wpm (but doesn't anymmore because e-mail
> > is easier, not faster), use the net, write assembly programs and even use a
> > soldering iron. I even have some idea how the telephone system works and made
> > phone calls from my HT before the cell phone was invented. And I certainly do
> > not rank myself anywhere near the experimenters and explorers in Ham Radio; I'm
> > not that talented.
> >
> > Dave
> > VE3HLU

3762. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 01:34:20 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.15.01.34.17.915085@gmail.com>
Source record: 17545
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Dave:

Interesting, when I have exchanged station pics, I have never seen the new equip, other than my own...

When I exchange equip descriptions, everyone is mentioning drake, henry, heathkit, etc... frankly, last months maybe a year--I gave up paying close attention... in fact, my xmitter pci card is a proto-type which an engineer made a gift of to me when I worked on some software to support it (they will actually market a USB model.) Last time I chatted with him, it was still sitting on his companies "back shelf" waiting for the market to develop... they strongly support dropping CW and expect an influx of new hams which they feel will accept the equipment and make profitable the sales. In the meantime they market to police, fire, hospitals, gov't...

John

On Sun, 14 Aug 2005 20:55:15 -0400, Dave Holford wrote:

> (Apologies to the top posting hater community, but I decided to follow John's lead).
>
> Got the wrong guy John.
>
> I've been using most of that stuff for quite a while, and I could point you to a dozen
> or so hams well over the age of 70 who not only use it; they understand how it works
> and some even tinker with the hardware and software.
>
> I'm not quite that old yet, but it ain't always that easy to keep up with some of them
> when they discuss their latest project.
>
> About a quarter of a century ago, I was teaching a system using a synthesized HF
> sideband transceiver, on a single PCB about 2 or 3 inches square, running from about 7
> to 10MHz and digitally controlled either locally or remotely (up to 100 transceivers
> controlled from a DEC minicomputer) - would love to have slipped one in my shirt
> pocket, taken it home and added a linear! Funnily enough most of the guys I was
> working with have decided to become hams within the last 10 or 15 years.
>
> The HF receiver card in one of my PCs gets far more use than my stand-alone
> transceivers with the DSP etc. the card is much more versatile - more modes,
> bandwidths etc. etc.. Software defined is the way to go.
>
> But, and it is a fair sized but, I find I can have much more detailed and interesting
> discussions of this technology with older rather than younger folks. I find (just my
> experience and maybe the folks I choose to hang out with) that the younger generation
> tend to be users who know no more about how it works than my granny knew about how her

> telephone worked. But boy can they use it!
>
> My generation understood it down to the electron level.
> My kids understood it down to the IC level.
> My grand kids (teenagers - with a few exceptions) know how to use it but don't
> understand, or really care, how it works.
>
> Can't blame them, it's progress. The systems have become so complex that one pretty
> much has to specialize and folks with a general knowledge of hardware and software,
> theory and practice of entire systems are becoming a vanishing breed. That is true of
> much more than communications technology - the guy at the corner gas station probably
> can't fix your anti-skid braking system any more than the local pharmacy can sell you
> the part to fix your TV any more.
>
> Dave
> Sitting at his computer listening to an HF net on his software defined radio running
> on the same processor.
>
>
> John Smith wrote:
>
>> Dave:
>>
>> No one is denying you the right to your religion of "amateur worship", we
>> all need some high power to look up to. But, you must realize you are in
>> a church which has a very small following (mostly other hams, and NOT all
>> of them!)
>>
>> Fact is, the computer is a TV with a tv card inserted--a stereo system
>> with a high quality audio card, tuner card inserted--a cd music player
>> with cd and proper software--a dvd player with a dvd-cd and proper
>> software--a home security system with the proper card and related software
>> and backup-power supply--and soon to be an amateur rig with proper
>> receiver card and xmitter card (some are already there!)
>>
>> Fact is, the computer IS amateurs future--like it or not... only reason
>> the future is not here right now, old amateurs can't adapt and die
>> first... and serve as a hindrance to the new minds bringing the future
>> with them...
>>
>> John
>>
>> On Sun, 14 Aug 2005 13:20:06 -0400, Dave Holford wrote:
>>
>> >
>> >
>> > Dee Flint wrote:
>> >
>> >> "John Smith" <assemblywizard@gmail.com> wrote in message
>> >> news:pan.2005.08.12.21.14.50.207296@gmail.com...

>> >> > PM:
>> >> >
>> >> > Let me give a summary of the "real world."
>> >> >
>> >> > If you were a child today, you would grow up with the computer.
>> >> >
>> >> > In elementary school your first "pen pal" would be in a foreign country
>> >> > and you would communicate with them via the internet. You would learn to
>> >> > IM, IRC, EMAIL, MSN CHAT, YAHOO, WEB CAM, etc....
>> >> >
>> >> > By high school you would be picking up a computer script and/or language
>> >> > and at least have a basic knowledge of programming. Your first hardware
>> >> > project would most likely be computer related.
>> >> >
>> >> > Somewhere along this line, you bump into a ham or a few. You look at them
>> >> > using their equipment, it is apparent the internet is superior. They lack
>> >> > the ability to exchange pics, apps, music, videos, documents, etc. by
>> >> > transmissions taking seconds or minutes. Then, they show you a CW key and
>> >> > you are dumb struck, and leave. You return to the internet and current
>> >> > technology, never to stray again... you begin a web site and consider
>> >> > what position you would like in the computer field, when you grow up...
>> >> >
>> >> > John
>> >> >
>> >>
>> >> The days of kids being computer gurus have already come and gone. Now they
>> >> just play video games and chat. Very few get interested in programming.
>> >> Very few do a hardware project. They take their computers to the shop for
>> >> upgrades. They only people that I have observed doing their own hardware
>> >> upgrades, rebuilding computers, etc are the middle aged and the "old farts"
>> >> that you seem to despise so.
>> >>
>> >> I spend countless hours teaching our interns how to use email, spreadsheets,
>> >> etc.
>> >>
>> >> Dee D. Flint, N8UZE
>> >
>> > Absolutely. 25 or 30 years ago it was true. Then I could ask an exam question
>> > which required writing an ISR in assembly, or even object.
>> >
>> > Now, forget it! Such questions would never be allowed because the students
>> > wouldn't understand the question.
>> >
>> > My grandkids live for the computer. the blackberry, cellphone and their gadgets,
>> > but have no idea what goes on behind the screen, despite the fact that their
>> > mother is a specialist in advanced secure systems. The kid who used to cut my
>> > grass thinks he is a programmer because he can copy a script from the internet -
>> > but say things like "object", "hex", "bus" and this teenage expert looks at me
>> > llike I have one eye in the middle of my forehead.
>> >

>> > If I want to talk to people who build hardware, write efficient imaginative
>> > software, and can actually do hex math I go to the QCWA breakfast; where someone
>> > always has a new piece of homebrew microwave hardware or some neat little Unix
>> > trick to show off.
>> >
>> > The last QCWA convention I attended had fascinating discussions on cell phone
>> > hacking, unix programming, software defined radio along with the old standards
>> > of antennas, propagation, etc.
>> >
>> > Yes, I'm an old fart who can hand key 25wpm (but doesn't anymmore because e-mail
>> > is easier, not faster), use the net, write assembly programs and even use a
>> > soldering iron. I even have some idea how the telephone system works and made
>> > phone calls from my HT before the cell phone was invented. And I certainly do
>> > not rank myself anywhere near the experimenters and explorers in Ham Radio; I'm
>> > not that talented.
>> >
>> > Dave
>> > VE3HLU

3763. Re: Can 6146B tubes be used in GG (grounded grid)?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 02:03:08 UTC
From: Roger Leone <raleoneTAKEOUT@sbcglobal.net>
Message-ID: <wJSLe.1068$r54.744@newssvr19.news.prodigy.com>
Source record: 17546

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote > >

> One advantage of "cathode driven tetrode" (where normal grid bias and
> screen voltage are applied) is that you get higher power gain and
> usually don't need to neutralize the amplifier (technically it is
> IMPOSSIBLE to neutralize a ground grid amplifier anyway).
>

Ken:

I think you meant to say that cathode driven tubes have LOWER power gain. Grid driven amps can have as much as 10 dB or more gain than cathode driven (GG) amps, all other factors being equal. My Johnson Thunderbolt running a pair of grid driven 4-400's can be driven to full output with about 20 watts of RF drive (representating close to 20 dB of power gain). The same tubes in GG configuration would need close to 80 watts to drive them to full output.

A grid driven 4CX250 can produce over 200 watts of output with 2 watts of drive (per the RCA manual). Because the tube isn't commonly used in GG configuration, that manual doesn't provide power gain figures for cathode driven service. My guess is you would need more like 8 to 10 watts of cathode drive to get the same 200+ watts out.

The widespread use of transceivers in the 100 watt class has made GG amps popular since there is no need to attenuate the transceiver's output. With my grid driven Thunderbolt, I use a 6 dB attenuator at the amp's input to keep from overdriving it.

With the right choice of tube, a GG amp can have a much simpler power supply. And since there is no need for neutralization, homebrewing a GG amp is quite appealing.

Roger K6XQ

3764. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 02:19:18 UTC
From: Dave Holford <holford@sympatico.ca>
Message-ID: <42FFFBA6.83229570@sympatico.ca>
Source record: 17547
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Fascinating, I don't know who you talk to but I can only think of a couple of people I know using Drake stuff, and then only as collectors items or though nostalgia. Can't remember the
last time I heard someone mention Henry, except in an inductor value, and one of the few pictures of Heathkit equipment I have seen in a long time was in a magazine on antique equipment a (younger) friend showed me a couple of weeks ago.

I have a real hard time believing that the long overdue dropping of CW will result in much of an influx to HF. If they were interested in HF they would already be here.

I've had a two hour HF swap shop running in the background and I don't think I heard anything that old being offered for sale or looked for except for a couple of antique RCA, Hammarlund and National receivers, but they were in the antiques listing. Plenty of DSP rigs
and digital stuff, a few people looking for specialized digital ICs. It is quite common to hear current generation equipment being sold by very elderly hams due to deteriorating health and/or moving into nursing homes or apartments where they must give up the hobby.

I'm having coffee with an 81 year old tomorrow and he has a DSP HF rig; and a software defined receiver running on his backup PC, which he also uses to watch TV and movies. He usually has at least one PC in pieces as he reconfigures it and has been inside his ICOM and
Kenwood HF rigs with a soldering iron more than once, although as his age creeps up he is reducing those activities somewhat. He will probably want to discuss optimizing the data base for his SDR receiver.

Not every ham over 40 is using a hand key to a crystal controlled 6L6.

Dave

John Smith wrote:

> Dave:
>
> Interesting, when I have exchanged station pics, I have never seen the new
> equip, other than my own...
>
> When I exchange equip descriptions, everyone is mentioning drake, henry,
> heathkit, etc... frankly, last months maybe a year--I gave up paying close
> attention... in fact, my xmitter pci card is a proto-type which an
> engineer made a gift of to me when I worked on some software to support
> it (they will actually market a USB model.) Last time I chatted with him,
> it was still sitting on his companies "back shelf" waiting for the market
> to develop... they strongly support dropping CW and expect an influx of
> new hams which they feel will accept the equipment and make profitable the

> sales. In the meantime they market to police, fire, hospitals, gov't...
>
> John
>
> On Sun, 14 Aug 2005 20:55:15 -0400, Dave Holford wrote:
>
> > (Apologies to the top posting hater community, but I decided to follow John's lead).
> >
> > Got the wrong guy John.
> >
> > I've been using most of that stuff for quite a while, and I could point you to a dozen
> > or so hams well over the age of 70 who not only use it; they understand how it works
> > and some even tinker with the hardware and software.
> >
> > I'm not quite that old yet, but it ain't always that easy to keep up with some of them
> > when they discuss their latest project.
> >
> > About a quarter of a century ago, I was teaching a system using a synthesized HF
> > sideband transceiver, on a single PCB about 2 or 3 inches square, running from about 7
> > to 10MHz and digitally controlled either locally or remotely (up to 100 transceivers
> > controlled from a DEC minicomputer) - would love to have slipped one in my shirt
> > pocket, taken it home and added a linear! Funnily enough most of the guys I was
> > working with have decided to become hams within the last 10 or 15 years.
> >
> > The HF receiver card in one of my PCs gets far more use than my stand-alone
> > transceivers with the DSP etc. the card is much more versatile - more modes,
> > bandwidths etc. etc.. Software defined is the way to go.
> >
> > But, and it is a fair sized but, I find I can have much more detailed and interesting
> > discussions of this technology with older rather than younger folks. I find (just my
> > experience and maybe the folks I choose to hang out with) that the younger generation
> > tend to be users who know no more about how it works than my granny knew about how her
> > telephone worked. But boy can they use it!
> >
> > My generation understood it down to the electron level.
> > My kids understood it down to the IC level.
> > My grand kids (teenagers - with a few exceptions) know how to use it but don't
> > understand, or really care, how it works.
> >
> > Can't blame them, it's progress. The systems have become so complex that one pretty
> > much has to specialize and folks with a general knowledge of hardware and software,
> > theory and practice of entire systems are becoming a vanishing breed. That is true of
> > much more than communications technology - the guy at the corner gas station probably
> > can't fix your anti-skid braking system any more than the local pharmacy can sell you
> > the part to fix your TV any more.
> >
> > Dave
> > Sitting at his computer listening to an HF net on his software defined radio running
> > on the same processor.
> >

> >
> > John Smith wrote:
> >
> >> Dave:
> >>
> >> No one is denying you the right to your religion of "amateur worship", we
> >> all need some high power to look up to. But, you must realize you are in
> >> a church which has a very small following (mostly other hams, and NOT all
> >> of them!)
> >>
> >> Fact is, the computer is a TV with a tv card inserted--a stereo system
> >> with a high quality audio card, tuner card inserted--a cd music player
> >> with cd and proper software--a dvd player with a dvd-cd and proper
> >> software--a home security system with the proper card and related software
> >> and backup-power supply--and soon to be an amateur rig with proper
> >> receiver card and xmitter card (some are already there!)
> >>
> >> Fact is, the computer IS amateurs future--like it or not... only reason
> >> the future is not here right now, old amateurs can't adapt and die
> >> first... and serve as a hindrance to the new minds bringing the future
> >> with them...
> >>
> >> John
> >>
> >> On Sun, 14 Aug 2005 13:20:06 -0400, Dave Holford wrote:
> >>
> >> >
> >> >
> >> > Dee Flint wrote:
> >> >
> >> >> "John Smith" <assemblywizard@gmail.com> wrote in message
> >> >> news:pan.2005.08.12.21.14.50.207296@gmail.com...
> >> >> > PM:
> >> >> >
> >> >> > Let me give a summary of the "real world."
> >> >> >
> >> >> > If you were a child today, you would grow up with the computer.
> >> >> >
> >> >> > In elementary school your first "pen pal" would be in a foreign country
> >> >> > and you would communicate with them via the internet. You would learn to
> >> >> > IM, IRC, EMAIL, MSN CHAT, YAHOO, WEB CAM, etc....
> >> >> >
> >> >> > By high school you would be picking up a computer script and/or language
> >> >> > and at least have a basic knowledge of programming. Your first hardware
> >> >> > project would most likely be computer related.
> >> >> >
> >> >> > Somewhere along this line, you bump into a ham or a few. You look at them
> >> >> > using their equipment, it is apparent the internet is superior. They lack
> >> >> > the ability to exchange pics, apps, music, videos, documents, etc. by
> >> >> > transmissions taking seconds or minutes. Then, they show you a CW key and

> >> >> > you are dumb struck, and leave. You return to the internet and current
> >> >> > technology, never to stray again... you begin a web site and consider
> >> >> > what position you would like in the computer field, when you grow up...
> >> >> >
> >> >> > John
> >> >> >
> >> >>
> >> >> The days of kids being computer gurus have already come and gone. Now they
> >> >> just play video games and chat. Very few get interested in programming.
> >> >> Very few do a hardware project. They take their computers to the shop for
> >> >> upgrades. They only people that I have observed doing their own hardware
> >> >> upgrades, rebuilding computers, etc are the middle aged and the "old farts"
> >> >> that you seem to despise so.
> >> >>
> >> >> I spend countless hours teaching our interns how to use email, spreadsheets,
> >> >> etc.
> >> >>
> >> >> Dee D. Flint, N8UZE
> >> >
> >> > Absolutely. 25 or 30 years ago it was true. Then I could ask an exam question
> >> > which required writing an ISR in assembly, or even object.
> >> >
> >> > Now, forget it! Such questions would never be allowed because the students
> >> > wouldn't understand the question.
> >> >
> >> > My grandkids live for the computer. the blackberry, cellphone and their gadgets,
> >> > but have no idea what goes on behind the screen, despite the fact that their
> >> > mother is a specialist in advanced secure systems. The kid who used to cut my
> >> > grass thinks he is a programmer because he can copy a script from the internet -
> >> > but say things like "object", "hex", "bus" and this teenage expert looks at me
> >> > llike I have one eye in the middle of my forehead.
> >> >
> >> > If I want to talk to people who build hardware, write efficient imaginative
> >> > software, and can actually do hex math I go to the QCWA breakfast; where someone
> >> > always has a new piece of homebrew microwave hardware or some neat little Unix
> >> > trick to show off.
> >> >
> >> > The last QCWA convention I attended had fascinating discussions on cell phone
> >> > hacking, unix programming, software defined radio along with the old standards
> >> > of antennas, propagation, etc.
> >> >
> >> > Yes, I'm an old fart who can hand key 25wpm (but doesn't anymmore because e-mail
> >> > is easier, not faster), use the net, write assembly programs and even use a
> >> > soldering iron. I even have some idea how the telephone system works and made
> >> > phone calls from my HT before the cell phone was invented. And I certainly do
> >> > not rank myself anywhere near the experimenters and explorers in Ham Radio; I'm
> >> > not that talented.
> >> >
> >> > Dave
> >> > VE3HLU

3765. Re: Can 6146B tubes be used in GG (grounded grid)?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 02:49:23 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <lf00g1locqrkjf4rsfr11dh8ks20gl2k8f@4ax.com>
Source record: 17598

On Sat, 13 Aug 2005 20:45:08 -0400, Ken Scharf
<wa2mzeNOTTHIS@bellsouth.net> wrote:

[snip]
>One advantage of "cathode driven tetrode" (where normal grid bias and
>screen voltage are applied) is that you get higher power gain and
>usually don't need to neutralize the amplifier (technically it is
>IMPOSSIBLE to neutralize a ground grid amplifier anyway).

You should take this up with the guys at Eimac. (Well the used to be
Eimac anyway).

Section 5.4 of "Care and Feeding of Power Grid Tubes" is titled,
"Neutralizing Ground-Grid Amplifiers."

3766. Re: Lattice-wound RF choke replacement, 50 years later

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 02:55:22 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <0o00g1dftlm17i2sf6eii2haifhrmqhu4k@4ax.com>
Source record: 17599
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.components

On 14 Aug 2005 01:25:38 -0700, "Andrew VK3BFA"
<ablight@alphalink.com.au> wrote:

[snip]

>the picture link that Wes posted looks pretty good aesthetically (and
>evey toher way as well) - how was it done, how as the former made up -
>looks like plastic, hopefully a follow-up post from The Man?

Ceramic.

3767. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 02:58:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.15.02.58.52.34540@gmail.com>
Source record: 17600
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Dave:

Interesting, I expect the posts on rec.radio.amateur.homebrew,
rec.radio.amateur.equipment, rec.radio.amateur.swap to change to
reflect that any day now!

John

On Sun, 14 Aug 2005 22:19:18 -0400, Dave Holford wrote:

> Fascinating, I don't know who you talk to but I can only think of a couple of people I
know
> using Drake stuff, and then only as collectors items or though nostalgia. Can't remember
the
> last time I heard someone mention Henry, except in an inductor value, and one of the few
> pictures of Heathkit equipment I have seen in a long time was in a magazine on antique
> equipment a (younger) friend showed me a couple of weeks ago.
>
> I have a real hard time believing that the long overdue dropping of CW will result in
much
> of an influx to HF. If they were interested in HF they would already be here.
>
> I've had a two hour HF swap shop running in the background and I don't think I heard
> anything that old being offered for sale or looked for except for a couple of antique
RCA,
> Hammarlund and National receivers, but they were in the antiques listing. Plenty of DSP
rigs
> and digital stuff, a few people looking for specialized digital ICs. It is quite common
to
> hear current generation equipment being sold by very elderly hams due to deteriorating
> health and/or moving into nursing homes or apartments where they must give up the hobby.
>
> I'm having coffee with an 81 year old tomorrow and he has a DSP HF rig; and a software
> defined receiver running on his backup PC, which he also uses to watch TV and movies. He
> usually has at least one PC in pieces as he reconfigures it and has been inside his ICOM
and
> Kenwood HF rigs with a soldering iron more than once, although as his age creeps up he is
> reducing those activities somewhat. He will probably want to discuss optimizing the data
> base for his SDR receiver.
>
> Not every ham over 40 is using a hand key to a crystal controlled 6L6.
>
> Dave
>

>
> John Smith wrote:
>
>> Dave:
>>
>> Interesting, when I have exchanged station pics, I have never seen the new
>> equip, other than my own...
>>
>> When I exchange equip descriptions, everyone is mentioning drake, henry,
>> heathkit, etc... frankly, last months maybe a year--I gave up paying close
>> attention... in fact, my xmitter pci card is a proto-type which an
>> engineer made a gift of to me when I worked on some software to support
>> it (they will actually market a USB model.) Last time I chatted with him,
>> it was still sitting on his companies "back shelf" waiting for the market
>> to develop... they strongly support dropping CW and expect an influx of
>> new hams which they feel will accept the equipment and make profitable the
>> sales. In the meantime they market to police, fire, hospitals, gov't...
>>
>> John
>>
>> On Sun, 14 Aug 2005 20:55:15 -0400, Dave Holford wrote:
>>
>> > (Apologies to the top posting hater community, but I decided to follow John's lead).
>> >
>> > Got the wrong guy John.
>> >
>> > I've been using most of that stuff for quite a while, and I could point you to a dozen
>> > or so hams well over the age of 70 who not only use it; they understand how it works
>> > and some even tinker with the hardware and software.
>> >
>> > I'm not quite that old yet, but it ain't always that easy to keep up with some of them
>> > when they discuss their latest project.
>> >
>> > About a quarter of a century ago, I was teaching a system using a synthesized HF
>> > sideband transceiver, on a single PCB about 2 or 3 inches square, running from about 7
>> > to 10MHz and digitally controlled either locally or remotely (up to 100 transceivers
>> > controlled from a DEC minicomputer) - would love to have slipped one in my shirt
>> > pocket, taken it home and added a linear! Funnily enough most of the guys I was
>> > working with have decided to become hams within the last 10 or 15 years.
>> >
>> > The HF receiver card in one of my PCs gets far more use than my stand-alone
>> > transceivers with the DSP etc. the card is much more versatile - more modes,
>> > bandwidths etc. etc.. Software defined is the way to go.
>> >
>> > But, and it is a fair sized but, I find I can have much more detailed and interesting
>> > discussions of this technology with older rather than younger folks. I find (just my
>> > experience and maybe the folks I choose to hang out with) that the younger generation
>> > tend to be users who know no more about how it works than my granny knew about how her
>> > telephone worked. But boy can they use it!
>> >

>> > My generation understood it down to the electron level.
>> > My kids understood it down to the IC level.
>> > My grand kids (teenagers - with a few exceptions) know how to use it but don't
>> > understand, or really care, how it works.
>> >
>> > Can't blame them, it's progress. The systems have become so complex that one pretty
>> > much has to specialize and folks with a general knowledge of hardware and software,
>> > theory and practice of entire systems are becoming a vanishing breed. That is true of
>> > much more than communications technology - the guy at the corner gas station probably
>> > can't fix your anti-skid braking system any more than the local pharmacy can sell you
>> > the part to fix your TV any more.
>> >
>> > Dave
>> > Sitting at his computer listening to an HF net on his software defined radio running
>> > on the same processor.
>> >
>> >
>> > John Smith wrote:
>> >
>> >> Dave:
>> >>
>> >> No one is denying you the right to your religion of "amateur worship", we
>> >> all need some high power to look up to. But, you must realize you are in
>> >> a church which has a very small following (mostly other hams, and NOT all
>> >> of them!)
>> >>
>> >> Fact is, the computer is a TV with a tv card inserted--a stereo system
>> >> with a high quality audio card, tuner card inserted--a cd music player
>> >> with cd and proper software--a dvd player with a dvd-cd and proper
>> >> software--a home security system with the proper card and related software
>> >> and backup-power supply--and soon to be an amateur rig with proper
>> >> receiver card and xmitter card (some are already there!)
>> >>
>> >> Fact is, the computer IS amateurs future--like it or not... only reason
>> >> the future is not here right now, old amateurs can't adapt and die
>> >> first... and serve as a hindrance to the new minds bringing the future
>> >> with them...
>> >>
>> >> John
>> >>
>> >> On Sun, 14 Aug 2005 13:20:06 -0400, Dave Holford wrote:
>> >>
>> >> >
>> >> >
>> >> > Dee Flint wrote:
>> >> >
>> >> >> "John Smith" <assemblywizard@gmail.com> wrote in message
>> >> >> news:pan.2005.08.12.21.14.50.207296@gmail.com...
>> >> >> > PM:
>> >> >> >

>> >> >> > Let me give a summary of the "real world."
>> >> >> >
>> >> >> > If you were a child today, you would grow up with the computer.
>> >> >> >
>> >> >> > In elementary school your first "pen pal" would be in a foreign country
>> >> >> > and you would communicate with them via the internet. You would learn to
>> >> >> > IM, IRC, EMAIL, MSN CHAT, YAHOO, WEB CAM, etc....
>> >> >> >
>> >> >> > By high school you would be picking up a computer script and/or language
>> >> >> > and at least have a basic knowledge of programming. Your first hardware
>> >> >> > project would most likely be computer related.
>> >> >> >
>> >> >> > Somewhere along this line, you bump into a ham or a few. You look at them
>> >> >> > using their equipment, it is apparent the internet is superior. They lack
>> >> >> > the ability to exchange pics, apps, music, videos, documents, etc. by
>> >> >> > transmissions taking seconds or minutes. Then, they show you a CW key and
>> >> >> > you are dumb struck, and leave. You return to the internet and current
>> >> >> > technology, never to stray again... you begin a web site and consider
>> >> >> > what position you would like in the computer field, when you grow up...
>> >> >> >
>> >> >> > John
>> >> >> >
>> >> >>
>> >> >> The days of kids being computer gurus have already come and gone. Now they
>> >> >> just play video games and chat. Very few get interested in programming.
>> >> >> Very few do a hardware project. They take their computers to the shop for
>> >> >> upgrades. They only people that I have observed doing their own hardware
>> >> >> upgrades, rebuilding computers, etc are the middle aged and the "old farts"
>> >> >> that you seem to despise so.
>> >> >>
>> >> >> I spend countless hours teaching our interns how to use email, spreadsheets,
>> >> >> etc.
>> >> >>
>> >> >> Dee D. Flint, N8UZE
>> >> >
>> >> > Absolutely. 25 or 30 years ago it was true. Then I could ask an exam question
>> >> > which required writing an ISR in assembly, or even object.
>> >> >
>> >> > Now, forget it! Such questions would never be allowed because the students
>> >> > wouldn't understand the question.
>> >> >
>> >> > My grandkids live for the computer. the blackberry, cellphone and their gadgets,
>> >> > but have no idea what goes on behind the screen, despite the fact that their
>> >> > mother is a specialist in advanced secure systems. The kid who used to cut my
>> >> > grass thinks he is a programmer because he can copy a script from the internet -
>> >> > but say things like "object", "hex", "bus" and this teenage expert looks at me
>> >> > llike I have one eye in the middle of my forehead.
>> >> >
>> >> > If I want to talk to people who build hardware, write efficient imaginative
>> >> > software, and can actually do hex math I go to the QCWA breakfast; where someone

>> >> > always has a new piece of homebrew microwave hardware or some neat little Unix
>> >> > trick to show off.
>> >> >
>> >> > The last QCWA convention I attended had fascinating discussions on cell phone
>> >> > hacking, unix programming, software defined radio along with the old standards
>> >> > of antennas, propagation, etc.
>> >> >
>> >> > Yes, I'm an old fart who can hand key 25wpm (but doesn't anymmore because e-mail
>> >> > is easier, not faster), use the net, write assembly programs and even use a
>> >> > soldering iron. I even have some idea how the telephone system works and made
>> >> > phone calls from my HT before the cell phone was invented. And I certainly do
>> >> > not rank myself anywhere near the experimenters and explorers in Ham Radio; I'm
>> >> > not that talented.
>> >> >
>> >> > Dave
>> >> > VE3HLU

3768. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 03:16:09 UTC
From: Mike Coslo <mremovethiscoslo@adelphia.net>
Message-ID: <ENqdnWbDeOtlIZ3eRVn-qw@adelphia.com>
Source record: 17602
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Dave Holford wrote:
> Fascinating, I don't know who you talk to but I can only think of a couple of people I know
> using Drake stuff, and then only as collectors items or though nostalgia. Can't remember the
> last time I heard someone mention Henry, except in an inductor value, and one of the few
> pictures of Heathkit equipment I have seen in a long time was in a magazine on antique
> equipment a (younger) friend showed me a couple of weeks ago.
>
> I have a real hard time believing that the long overdue dropping of CW will result in much
> of an influx to HF. If they were interested in HF they would already be here.
>
> I've had a two hour HF swap shop running in the background and I don't think I heard
> anything that old being offered for sale or looked for except for a couple of antique RCA,
> Hammarlund and National receivers, but they were in the antiques listing. Plenty of DSP rigs
> and digital stuff, a few people looking for specialized digital ICs. It is quite common to
> hear current generation equipment being sold by very elderly hams due to deteriorating
> health and/or moving into nursing homes or apartments where they must give up the hobby.
>
> I'm having coffee with an 81 year old tomorrow and he has a DSP HF rig; and a software
> defined receiver running on his backup PC, which he also uses to watch TV and movies. He
> usually has at least one PC in pieces as he reconfigures it and has been inside his ICOM and
> Kenwood HF rigs with a soldering iron more than once, although as his age creeps up he is
> reducing those activities somewhat. He will probably want to discuss optimizing the data
> base for his SDR receiver.
>
> Not every ham over 40 is using a hand key to a crystal controlled 6L6.

Do people have their 60th birthday, and suddenly become stupid or
something? I had a PSK31 QSO with a 96 y.o. Hams last year. He was
checking out his new laptop. Had a modern rig also. That's just one
case. There are plenty other oldsters I've QSO'ed with who are trourghly
modern.

- Mike KB3EIA -

3769. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 04:14:24 UTC
From: Cmdr Buzz Corey <us@this.ten>
Message-ID: <2tidnZ2dnZ38GNCanZ2dnXaand6dnZ2dRVn-052dnZ0@gbronline.com>
Source record: 17601
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

John Smith wrote:

>
> Somewhere along this line, you bump into a ham or a few. You look at them
> using their equipment, it is apparent the internet is superior. They lack
> the ability to exchange pics, apps, music, videos, documents, etc. by
> transmissions taking seconds or minutes. Then, they show you a CW key and
> you are dumb struck, and leave. You return to the internet and current
> technology, never to stray again... you begin a web site and consider
> what position you would like in the computer field, when you grow up...
>
> John

Sure looks like this bunch of young folks just didn't leave and return
to the Internet.

http://www.k9ya.org/telegraph/2005/K9YA_1_2005.pdf

3770. Re: Spectrum Analyser from Cell Phones?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 05:32:00 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1d69c8aa12585c29897a0@localhost>
Source record: 17603
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <1124040307.170942.41970@z14g2000cwz.googlegroups.com>,
aiyr.r.bean@lycos.co.uk says...

> I wonder if anyone has successfully converted a
> thrown-away cell-phone into a spectrum analyser?

<snippety of preposterous proposal>

What are you smoking/drinking/injecting? More importantly, why
didn't you offer to share?

Are you trolling, drunk, high, or actually serious? Inquiring
minds want to know.

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped
with surreal ports?"

3771. Re: 6m or 10m CW RX Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 07:01:47 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <kh80g1hhluvbt54gn1qed08hckd5lde0r5@4ax.com>
Source record: 17604

On Fri, 05 Aug 2005 06:43:34 GMT, Andy Ball <null@not.valid> wrote:

>Is anyone here able to point me in the direction of a 10m or
>6m CW receiver kit? I would like something that's fairly
>simple to build (I don't have a lot of test equipment) but
>would perform well enough to let me monitor a few beacons
>and perhaps some fairly local CW activity (if there is any).

Any receiver capable of receiving SSB or DSP will be able to receive CW i.e. some kind of BFO is required. I don't know any way to make a CW _receiver_ in any simpler way than a DSB receiver.

Making a direct conversion receiver would be quite hard for the 10/6 m bands, since there would be a lot of problems with stability. A more practical approach would be to use a crystal controlled convert to convert the signal down to say 3.5 MHz and then use a tunable direct conversion receiver.

Most simple Rx kits for 6 m are FM only (as well as some 10 m versions), which are usually not usable for CW reception. Of course if there is only a single very strong CW in the band (e.g. monitoring if a local beacon is functioning), you might take an FM kit, locate the signal strength output at the FM-detector IC and use it to key an audio oscillator :-). Replacing the ceramic filter in the last (455 kHz) IF with a narrow filter will also help, provided that the receiver is stable enough, so that the signal will remain within the narrow filter bandpass. However, such systems are useless in any crowded bands or for receiving any weak signals.

Paul OH3LWR

3772. Re: Spectrum Analyser from Cell Phones?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 07:15:34 UTC
From: Spike <Aero.Spike@Technologies.invalid>
Message-ID: <k6g0g1hilqbloa1s6husjpc95ro2v3b852@4ax.com>
Source record: 17605
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Wankel Rotary wrote:

>Spike wrote:
>
>> Don't hold your breath, as there seems to be a raft of projects ahead
>> of this one: his own XRC machine, an ATU made from discarded CDs, a
>> DSP project using an FT-707, and of course, the mathematical basis for
>> the Big-K approach to DSP to be proved, peer-reviewed, and then
>> published.
>
>You also forget the gauntlet he laid down in the newsgroups to design a
>transceiver that was roughly based upon re-inventing the wheel.
>
>When people took his suggestion somewhat seriously, he backed away, and,
>as it the case with all Bean-powered projects, let the subject die.

His philosophy seems to boil down to "Don't do as I do, do as I say" -
the motto of the hypocrite.

from
Aero Spike

3773. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 12:41:36 UTC
From: Dave Holford <holford@sympatico.ca>
Message-ID: <43008D80.C36DEAD3@sympatico.ca>
Source record: 17606
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

It's been fun, gotta go catch an airplane - one of those new ones with no propellor.

Dave

John Smith wrote:

> Dave:
>
> Interesting, I expect the posts on rec.radio.amateur.homebrew,
> rec.radio.amateur.equipment, rec.radio.amateur.swap to change to
> reflect that any day now!
>
> John
>
> On Sun, 14 Aug 2005 22:19:18 -0400, Dave Holford wrote:
>
> > Fascinating, I don't know who you talk to but I can only think of a couple of people I know
> > using Drake stuff, and then only as collectors items or though nostalgia. Can't remember the
> > last time I heard someone mention Henry, except in an inductor value, and one of the few
> > pictures of Heathkit equipment I have seen in a long time was in a magazine on antique
> > equipment a (younger) friend showed me a couple of weeks ago.
> >
> > I have a real hard time believing that the long overdue dropping of CW will result in much
> > of an influx to HF. If they were interested in HF they would already be here.
> >
> > I've had a two hour HF swap shop running in the background and I don't think I heard
> > anything that old being offered for sale or looked for except for a couple of antique RCA,
> > Hammarlund and National receivers, but they were in the antiques listing. Plenty of DSP rigs
> > and digital stuff, a few people looking for specialized digital ICs. It is quite common to
> > hear current generation equipment being sold by very elderly hams due to deteriorating
> > health and/or moving into nursing homes or apartments where they must give up the hobby.
> >
> > I'm having coffee with an 81 year old tomorrow and he has a DSP HF rig; and a software
> > defined receiver running on his backup PC, which he also uses to watch TV and movies. He
> > usually has at least one PC in pieces as he reconfigures it and has been inside his

ICOM and
> > Kenwood HF rigs with a soldering iron more than once, although as his age creeps up he
is
> > reducing those activities somewhat. He will probably want to discuss optimizing the
data
> > base for his SDR receiver.
> >
> > Not every ham over 40 is using a hand key to a crystal controlled 6L6.
> >
> > Dave
> >
> >
> > John Smith wrote:
> >
>> Dave:
>>
>> Interesting, when I have exchanged station pics, I have never seen the new
>> equip, other than my own...
>>
>> When I exchange equip descriptions, everyone is mentioning drake, henry,
>> heathkit, etc... frankly, last months maybe a year--I gave up paying close
>> attention... in fact, my xmitter pci card is a proto-type which an
>> engineer made a gift of to me when I worked on some software to support
>> it (they will actually market a USB model.) Last time I chatted with him,
>> it was still sitting on his companies "back shelf" waiting for the market
>> to develop... they strongly support dropping CW and expect an influx of
>> new hams which they feel will accept the equipment and make profitable the
>> sales. In the meantime they market to police, fire, hospitals, gov't...
>>
>> John
>>
>> On Sun, 14 Aug 2005 20:55:15 -0400, Dave Holford wrote:
>>
>> > (Apologies to the top posting hater community, but I decided to follow John's lead).
>> >
>> > Got the wrong guy John.
>> >
>> > I've been using most of that stuff for quite a while, and I could point you to a
dozen
>> > or so hams well over the age of 70 who not only use it; they understand how it works
>> > and some even tinker with the hardware and software.
>> >
>> > I'm not quite that old yet, but it ain't always that easy to keep up with some of
them
>> > when they discuss their latest project.
>> >
>> > About a quarter of a century ago, I was teaching a system using a synthesized HF
>> > sideband transceiver, on a single PCB about 2 or 3 inches square, running from about
7
>> > to 10MHz and digitally controlled either locally or remotely (up to 100 transceivers
>> > controlled from a DEC minicomputer) - would love to have slipped one in my shirt

> >> > pocket, taken it home and added a linear! Funnily enough most of the guys I was
> >> > working with have decided to become hams within the last 10 or 15 years.
> >> >
> >> > The HF receiver card in one of my PCs gets far more use than my stand-alone
> >> > transceivers with the DSP etc. the card is much more versatile - more modes,
> >> > bandwidths etc. etc.. Software defined is the way to go.
> >> >
> >> > But, and it is a fair sized but, I find I can have much more detailed and
interesting
> >> > discussions of this technology with older rather than younger folks. I find (just my
> >> > experience and maybe the folks I choose to hang out with) that the younger
generation
> >> > tend to be users who know no more about how it works than my granny knew about how
her
> >> > telephone worked. But boy can they use it!
> >> >
> >> > My generation understood it down to the electron level.
> >> > My kids understood it down to the IC level.
> >> > My grand kids (teenagers - with a few exceptions) know how to use it but don't
> >> > understand, or really care, how it works.
> >> >
> >> > Can't blame them, it's progress. The systems have become so complex that one pretty
> >> > much has to specialize and folks with a general knowledge of hardware and software,
> >> > theory and practice of entire systems are becoming a vanishing breed. That is true
of
> >> > much more than communications technology - the guy at the corner gas station
probably
> >> > can't fix your anti-skid braking system any more than the local pharmacy can sell
you
> >> > the part to fix your TV any more.
> >> >
> >> > Dave
> >> > Sitting at his computer listening to an HF net on his software defined radio running
> >> > on the same processor.
> >> >
> >> >
> >> > John Smith wrote:
> >> >
> >> >> Dave:
> >> >>
> >> >> No one is denying you the right to your religion of "amateur worship", we
> >> >> all need some high power to look up to. But, you must realize you are in
> >> >> a church which has a very small following (mostly other hams, and NOT all
> >> >> of them!)
> >> >>
> >> >> Fact is, the computer is a TV with a tv card inserted--a stereo system
> >> >> with a high quality audio card, tuner card inserted--a cd music player
> >> >> with cd and proper software--a dvd player with a dvd-cd and proper
> >> >> software--a home security system with the proper card and related software
> >> >> and backup-power supply--and soon to be an amateur rig with proper

> >> >> receiver card and xmitter card (some are already there!)
> >> >>
> >> >> Fact is, the computer IS amateurs future--like it or not... only reason
> >> >> the future is not here right now, old amateurs can't adapt and die
> >> >> first... and serve as a hindrance to the new minds bringing the future
> >> >> with them...
> >> >>
> >> >> John
> >> >>
> >> >> On Sun, 14 Aug 2005 13:20:06 -0400, Dave Holford wrote:
> >> >>
> >> >> >
> >> >> >
> >> >> > Dee Flint wrote:
> >> >> >
> >> >> >> "John Smith" <assemblywizard@gmail.com> wrote in message
> >> >> >> news:pan.2005.08.12.21.14.50.207296@gmail.com...
> >> >> >> > PM:
> >> >> >> >
> >> >> >> > Let me give a summary of the "real world."
> >> >> >> >
> >> >> >> > If you were a child today, you would grow up with the computer.
> >> >> >> >
> >> >> >> > In elementary school your first "pen pal" would be in a foreign country
> >> >> >> > and you would communicate with them via the internet. You would learn to
> >> >> >> > IM, IRC, EMAIL, MSN CHAT, YAHOO, WEB CAM, etc....
> >> >> >> >
> >> >> >> > By high school you would be picking up a computer script and/or language
> >> >> >> > and at least have a basic knowledge of programming. Your first hardware
> >> >> >> > project would most likely be computer related.
> >> >> >> >
> >> >> >> > Somewhere along this line, you bump into a ham or a few. You look at them
> >> >> >> > using their equipment, it is apparent the internet is superior. They lack
> >> >> >> > the ability to exchange pics, apps, music, videos, documents, etc. by
> >> >> >> > transmissions taking seconds or minutes. Then, they show you a CW key and
> >> >> >> > you are dumb struck, and leave. You return to the internet and current
> >> >> >> > technology, never to stray again... you begin a web site and consider
> >> >> >> > what position you would like in the computer field, when you grow up...
> >> >> >> >
> >> >> >> > John
> >> >> >> >
> >> >> >>
> >> >> >> The days of kids being computer gurus have already come and gone. Now they
> >> >> >> just play video games and chat. Very few get interested in programming.
> >> >> >> Very few do a hardware project. They take their computers to the shop for
> >> >> >> upgrades. They only people that I have observed doing their own hardware
> >> >> >> upgrades, rebuilding computers, etc are the middle aged and the "old farts"
> >> >> >> that you seem to despise so.
> >> >> >>
> >> >> >> I spend countless hours teaching our interns how to use email, spreadsheets,

> >> >> >> etc.
> >> >> >>
> >> >> >> Dee D. Flint, N8UZE
> >> >> >
> >> >> > Absolutely. 25 or 30 years ago it was true. Then I could ask an exam question
> >> >> > which required writing an ISR in assembly, or even object.
> >> >> >
> >> >> > Now, forget it! Such questions would never be allowed because the students
> >> >> > wouldn't understand the question.
> >> >> >
> >> >> > My grandkids live for the computer. the blackberry, cellphone and their gadgets,
> >> >> > but have no idea what goes on behind the screen, despite the fact that their
> >> >> > mother is a specialist in advanced secure systems. The kid who used to cut my
> >> >> > grass thinks he is a programmer because he can copy a script from the internet -
> >> >> > but say things like "object", "hex", "bus" and this teenage expert looks at me
> >> >> > llike I have one eye in the middle of my forehead.
> >> >> >
> >> >> > If I want to talk to people who build hardware, write efficient imaginative
> >> >> > software, and can actually do hex math I go to the QCWA breakfast; where someone
> >> >> > always has a new piece of homebrew microwave hardware or some neat little Unix
> >> >> > trick to show off.
> >> >> >
> >> >> > The last QCWA convention I attended had fascinating discussions on cell phone
> >> >> > hacking, unix programming, software defined radio along with the old standards
> >> >> > of antennas, propagation, etc.
> >> >> >
> >> >> > Yes, I'm an old fart who can hand key 25wpm (but doesn't anymmore because e-mail
> >> >> > is easier, not faster), use the net, write assembly programs and even use a
> >> >> > soldering iron. I even have some idea how the telephone system works and made
> >> >> > phone calls from my HT before the cell phone was invented. And I certainly do
> >> >> > not rank myself anywhere near the experimenters and explorers in Ham Radio; I'm
> >> >> > not that talented.
> >> >> >
> >> >> > Dave
> >> >> > VE3HLU

3774. Re: Can 6146B tubes be used in GG (grounded grid)?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 15:04:07 UTC
From: Straydog <asdf@panix.com>
Message-ID: <Pine.NEB.4.63.0508151056580.24912@panix1.panix.com>
Source record: 17607

On Mon, 15 Aug 2005, Roger Leone wrote:

>
> "Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote > >
>
>> One advantage of "cathode driven tetrode" (where normal grid bias and
>> screen voltage are applied) is that you get higher power gain and
>> usually don't need to neutralize the amplifier (technically it is
>> IMPOSSIBLE to neutralize a ground grid amplifier anyway).
>>
>
> Ken:
>
> I think you meant to say that cathode driven tubes have LOWER power gain.
> Grid driven amps can have as much as 10 dB or more gain than cathode driven
> (GG) amps, all other factors being equal. My Johnson Thunderbolt running a
> pair of grid driven 4-400's can be driven to full output with about 20 watts
> of RF drive (representating close to 20 dB of power gain). The same tubes
> in GG configuration would need close to 80 watts to drive them to full
> output.
>
> A grid driven 4CX250 can produce over 200 watts of output with 2 watts of
> drive (per the RCA manual). Because the tube isn't commonly used in GG
> configuration, that manual doesn't provide power gain figures for cathode
> driven service. My guess is you would need more like 8 to 10 watts of
> cathode drive to get the same 200+ watts out.
>
> The widespread use of transceivers in the 100 watt class has made GG amps
> popular since there is no need to attenuate the transceiver's output. With
> my grid driven Thunderbolt, I use a 6 dB attenuator at the amp's input to
> keep from overdriving it.
>
> With the right choice of tube, a GG amp can have a much simpler power
> supply. And since there is no need for neutralization,

Often there is no need for neutralization, but depending on frequency and
wiring layout, yes there is a need for neutralization. Usually its worse
at higher frequencies. And, it can get very very complicated, too.

I have an Ameritron 811-H (four 811s in grounded grid) and it comes from
the factory with one kind of neutralization!!!! It would not be there if
it were not needed.

I had a thunderbolt, too. And it also had neutralization built in.

I also had a Heathkit DX-40 back in my novice days and it would go into self-oscilation (big time) on ten meters if I removed the crystal or shut off the VFO. I made my own neutralization wire and fixed that. Its funny that Rangers had no built in neutralization, either. Same tube, similar (but not identical) circuit in final (6146). You don't know if you need neutralization until you do the tests (read the manuals on this).

Art, W4PON

homebrewing a GG amp
> is quite appealing.

I've built several (including a single 4-400) and I'm happy when I don't need neutralization.

> Roger K6XQ
>
>
>
>

3775. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 15:38:23 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.15.15.38.21.469474@gmail.com>
Source record: 17608
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Walt:

Get a decent newsreader, refer to the text at the bottom of my post you question, that is all there is...

John

On Mon, 15 Aug 2005 09:02:37 +0100, Walt Davidson wrote:

> On Sun, 14 Aug 2005 17:52:07 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>>... define what? And, how in relation to what we are discussing?
>
> To what are you referring? There is no quote preceding your remark,
> so it is completely out of context.
>
> 73 de G3NYY

3776. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 15:40:34 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.15.15.40.33.31654@gmail.com>
Source record: 17609
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Dave:

Just be careful the rest of the plane isn't imaginary and you are actually
leaping off a balcony in that dream...

John

On Mon, 15 Aug 2005 08:41:36 -0400, Dave Holford wrote:

> It's been fun, gotta go catch an airplane - one of those new ones with no propellor.
>
> Dave
>
> John Smith wrote:
>
>> Dave:
>>
>> Interesting, I expect the posts on rec.radio.amateur.homebrew,
>> rec.radio.amateur.equipment, rec.radio.amateur.swap to change to
>> reflect that any day now!
>>
>> John
>>
>> On Sun, 14 Aug 2005 22:19:18 -0400, Dave Holford wrote:
>>
>> > Fascinating, I don't know who you talk to but I can only think of a couple of people I
know
>> > using Drake stuff, and then only as collectors items or though nostalgia. Can't
remember the
>> > last time I heard someone mention Henry, except in an inductor value, and one of the
few
>> > pictures of Heathkit equipment I have seen in a long time was in a magazine on antique
>> > equipment a (younger) friend showed me a couple of weeks ago.
>> >
>> > I have a real hard time believing that the long overdue dropping of CW will result in
much
>> > of an influx to HF. If they were interested in HF they would already be here.
>> >
>> > I've had a two hour HF swap shop running in the background and I don't think I heard
>> > anything that old being offered for sale or looked for except for a couple of antique
RCA,
>> > Hammarlund and National receivers, but they were in the antiques listing. Plenty of
DSP rigs
>> > and digital stuff, a few people looking for specialized digital ICs. It is quite

common to
>> > hear current generation equipment being sold by very elderly hams due to deteriorating
>> > health and/or moving into nursing homes or apartments where they must give up the
hobby.
>> >
>> > I'm having coffee with an 81 year old tomorrow and he has a DSP HF rig; and a software
>> > defined receiver running on his backup PC, which he also uses to watch TV and movies.
He
>> > usually has at least one PC in pieces as he reconfigures it and has been inside his
ICOM and
>> > Kenwood HF rigs with a soldering iron more than once, although as his age creeps up he
is
>> > reducing those activities somewhat. He will probably want to discuss optimizing the
data
>> > base for his SDR receiver.
>> >
>> > Not every ham over 40 is using a hand key to a crystal controlled 6L6.
>> >
>> > Dave
>> >
>> >
>> > John Smith wrote:
>> >
>> >> Dave:
>> >>
>> >> Interesting, when I have exchanged station pics, I have never seen the new
>> >> equip, other than my own...
>> >>
>> >> When I exchange equip descriptions, everyone is mentioning drake, henry,
>> >> heathkit, etc... frankly, last months maybe a year--I gave up paying close
>> >> attention... in fact, my xmitter pci card is a proto-type which an
>> >> engineer made a gift of to me when I worked on some software to support
>> >> it (they will actually market a USB model.) Last time I chatted with him,
>> >> it was still sitting on his companies "back shelf" waiting for the market
>> >> to develop... they strongly support dropping CW and expect an influx of
>> >> new hams which they feel will accept the equipment and make profitable the
>> >> sales. In the meantime they market to police, fire, hospitals, gov't...
>> >>
>> >> John
>> >>
>> >> On Sun, 14 Aug 2005 20:55:15 -0400, Dave Holford wrote:
>> >>
>> >> > (Apologies to the top posting hater community, but I decided to follow John's
lead).
>> >> >
>> >> > Got the wrong guy John.
>> >> >
>> >> > I've been using most of that stuff for quite a while, and I could point you to a
dozen
>> >> > or so hams well over the age of 70 who not only use it; they understand how it
works

>> >> > and some even tinker with the hardware and software.
>> >> >
>> >> > I'm not quite that old yet, but it ain't always that easy to keep up with some of
them
>> >> > when they discuss their latest project.
>> >> >
>> >> > About a quarter of a century ago, I was teaching a system using a synthesized HF
>> >> > sideband transceiver, on a single PCB about 2 or 3 inches square, running from
about 7
>> >> > to 10MHz and digitally controlled either locally or remotely (up to 100
transceivers
>> >> > controlled from a DEC minicomputer) - would love to have slipped one in my shirt
>> >> > pocket, taken it home and added a linear! Funnily enough most of the guys I was
>> >> > working with have decided to become hams within the last 10 or 15 years.
>> >> >
>> >> > The HF receiver card in one of my PCs gets far more use than my stand-alone
>> >> > transceivers with the DSP etc. the card is much more versatile - more modes,
>> >> > bandwidths etc. etc.. Software defined is the way to go.
>> >> >
>> >> > But, and it is a fair sized but, I find I can have much more detailed and
interesting
>> >> > discussions of this technology with older rather than younger folks. I find (just
my
>> >> > experience and maybe the folks I choose to hang out with) that the younger
generation
>> >> > tend to be users who know no more about how it works than my granny knew about how
her
>> >> > telephone worked. But boy can they use it!
>> >> >
>> >> > My generation understood it down to the electron level.
>> >> > My kids understood it down to the IC level.
>> >> > My grand kids (teenagers - with a few exceptions) know how to use it but don't
>> >> > understand, or really care, how it works.
>> >> >
>> >> > Can't blame them, it's progress. The systems have become so complex that one pretty
>> >> > much has to specialize and folks with a general knowledge of hardware and software,
>> >> > theory and practice of entire systems are becoming a vanishing breed. That is true
of
>> >> > much more than communications technology - the guy at the corner gas station
probably
>> >> > can't fix your anti-skid braking system any more than the local pharmacy can sell
you
>> >> > the part to fix your TV any more.
>> >> >
>> >> > Dave
>> >> > Sitting at his computer listening to an HF net on his software defined radio
running
>> >> > on the same processor.
>> >> >
>> >> >

>> >> > John Smith wrote:
>> >> >
>> >> >> Dave:
>> >> >>
>> >> >> No one is denying you the right to your religion of "amateur worship", we
>> >> >> all need some high power to look up to. But, you must realize you are in
>> >> >> a church which has a very small following (mostly other hams, and NOT all
>> >> >> of them!)
>> >> >>
>> >> >> Fact is, the computer is a TV with a tv card inserted--a stereo system
>> >> >> with a high quality audio card, tuner card inserted--a cd music player
>> >> >> with cd and proper software--a dvd player with a dvd-cd and proper
>> >> >> software--a home security system with the proper card and related software
>> >> >> and backup-power supply--and soon to be an amateur rig with proper
>> >> >> receiver card and xmitter card (some are already there!)
>> >> >>
>> >> >> Fact is, the computer IS amateurs future--like it or not... only reason
>> >> >> the future is not here right now, old amateurs can't adapt and die
>> >> >> first... and serve as a hindrance to the new minds bringing the future
>> >> >> with them...
>> >> >>
>> >> >> John
>> >> >>
>> >> >> On Sun, 14 Aug 2005 13:20:06 -0400, Dave Holford wrote:
>> >> >>
>> >> >>>
>> >> >>> >
>> >> >>> > Dee Flint wrote:
>> >> >>> >
>> >> >>> >> "John Smith" <assemblywizard@gmail.com> wrote in message
>> >> >>> >> news:pan.2005.08.12.21.14.50.207296@gmail.com...
>> >> >>> >> > PM:
>> >> >>> >> >
>> >> >>> >> > Let me give a summary of the "real world."
>> >> >>> >> >
>> >> >>> >> > If you were a child today, you would grow up with the computer.
>> >> >>> >> >
>> >> >>> >> > In elementary school your first "pen pal" would be in a foreign country
>> >> >>> >> > and you would communicate with them via the internet. You would learn to
>> >> >>> >> > IM, IRC, EMAIL, MSN CHAT, YAHOO, WEB CAM, etc....
>> >> >>> >> >
>> >> >>> >> > By high school you would be picking up a computer script and/or language
>> >> >>> >> > and at least have a basic knowledge of programming. Your first hardware
>> >> >>> >> > project would most likely be computer related.
>> >> >>> >> >
>> >> >>> >> > Somewhere along this line, you bump into a ham or a few. You look at them
>> >> >>> >> > using their equipment, it is apparent the internet is superior. They lack
>> >> >>> >> > the ability to exchange pics, apps, music, videos, documents, etc. by
>> >> >>> >> > transmissions taking seconds or minutes. Then, they show you a CW key and
>> >> >>> >> > you are dumb struck, and leave. You return to the internet and current

>> >> >> >> > technology, never to stray again... you begin a web site and consider
>> >> >> >> > what position you would like in the computer field, when you grow up...
>> >> >> >> >
>> >> >> >> > John
>> >> >> >> >
>> >> >> >>
>> >> >> >> The days of kids being computer gurus have already come and gone. Now they
>> >> >> >> just play video games and chat. Very few get interested in programming.
>> >> >> >> Very few do a hardware project. They take their computers to the shop for
>> >> >> >> upgrades. They only people that I have observed doing their own hardware
>> >> >> >> upgrades, rebuilding computers, etc are the middle aged and the "old farts"
>> >> >> >> that you seem to despise so.
>> >> >> >>
>> >> >> >> I spend countless hours teaching our interns how to use email, spreadsheets,
>> >> >> >> etc.
>> >> >> >>
>> >> >> >> Dee D. Flint, N8UZE
>> >> >> >
>> >> >> > Absolutely. 25 or 30 years ago it was true. Then I could ask an exam question
>> >> >> > which required writing an ISR in assembly, or even object.
>> >> >> >
>> >> >> > Now, forget it! Such questions would never be allowed because the students
>> >> >> > wouldn't understand the question.
>> >> >> >
>> >> >> > My grandkids live for the computer. the blackberry, cellphone and their gadgets,
>> >> >> > but have no idea what goes on behind the screen, despite the fact that their
>> >> >> > mother is a specialist in advanced secure systems. The kid who used to cut my
>> >> >> > grass thinks he is a programmer because he can copy a script from the internet -
>> >> >> > but say things like "object", "hex", "bus" and this teenage expert looks at me
>> >> >> > llike I have one eye in the middle of my forehead.
>> >> >> >
>> >> >> > If I want to talk to people who build hardware, write efficient imaginative
>> >> >> > software, and can actually do hex math I go to the QCWA breakfast; where someone
>> >> >> > always has a new piece of homebrew microwave hardware or some neat little Unix
>> >> >> > trick to show off.
>> >> >> >
>> >> >> > The last QCWA convention I attended had fascinating discussions on cell phone
>> >> >> > hacking, unix programming, software defined radio along with the old standards
>> >> >> > of antennas, propagation, etc.
>> >> >> >
>> >> >> > Yes, I'm an old fart who can hand key 25wpm (but doesn't anymmore because e-mail
>> >> >> > is easier, not faster), use the net, write assembly programs and even use a
>> >> >> > soldering iron. I even have some idea how the telephone system works and made
>> >> >> > phone calls from my HT before the cell phone was invented. And I certainly do
>> >> >> > not rank myself anywhere near the experimenters and explorers in Ham Radio; I'm
>> >> >> > not that talented.
>> >> >> >
>> >> >> > Dave
>> >> >> > VE3HLU

3777. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 18:52:21 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.15.18.52.20.93520@gmail.com>
Source record: 17610
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Walt:

When you recover the where-with-all to keep up, and a newsreader which is
not prompting you to ask, "What is going on here?"--get back to me...

John

On Mon, 15 Aug 2005 19:50:38 +0100, Walt Davidson wrote:

> On Mon, 15 Aug 2005 08:38:23 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>>Walt:
>>
>>Get a decent newsreader, refer to the text at the bottom of my post you
>>question, that is all there is...
>
> John:
>
> My newsreader is RFC-compliant. It only looks for quotes that
> *precede* any new text.
>
> Anything that is quoted at the end of the message, trailing like a
> long gray beard, is ignored.
>
> HTH.

3778. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 19:05:53 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.15.19.05.52.306634@gmail.com>
Source record: 17611
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Walt:

<yawn>

John

On Mon, 15 Aug 2005 20:04:32 +0100, Walt Davidson wrote:

> On Mon, 15 Aug 2005 11:52:21 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>>Walt:
>>
>>When you recover the where-with-all to keep up, and a newsreader which is
>>not prompting you to ask, "What is going on here?"--get back to me...
>>
>>John
>
> Kill-filed for persistent, ignorant top-posting.
>
> Goodbye.

3779. Re: What Is Ham Radio - A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 22:04:54 UTC
From: Dee Flint <deeflint01@comcast.net>
Message-ID: <h-qdneH-rvULjJzeRVn-qg@comcast.com>
Source record: 17612
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Mike Coslo" <mremovethiscoslo@adelphia.net> wrote in message
news:ENqdnWbDeOtllZ3eRVn-qw@adelphia.com...
> Dave Holford wrote:
>> Fascinating, I don't know who you talk to but I can only think of a
>> couple of people I know
>> using Drake stuff, and then only as collectors items or though nostalgia.
>> Can't remember the
>> last time I heard someone mention Henry, except in an inductor value, and
>> one of the few
>> pictures of Heathkit equipment I have seen in a long time was in a
>> magazine on antique
>> equipment a (younger) friend showed me a couple of weeks ago.
>>
>> I have a real hard time believing that the long overdue dropping of CW
>> will result in much
>> of an influx to HF. If they were interested in HF they would already be
>> here.
>>
>> I've had a two hour HF swap shop running in the background and I don't
>> think I heard
>> anything that old being offered for sale or looked for except for a
>> couple of antique RCA,
>> Hammarlund and National receivers, but they were in the antiques listing.
>> Plenty of DSP rigs
>> and digital stuff, a few people looking for specialized digital ICs. It
>> is quite common to
>> hear current generation equipment being sold by very elderly hams due to
>> deteriorating
>> health and/or moving into nursing homes or apartments where they must
>> give up the hobby.
>>
>> I'm having coffee with an 81 year old tomorrow and he has a DSP HF rig;
>> and a software
>> defined receiver running on his backup PC, which he also uses to watch TV
>> and movies. He
>> usually has at least one PC in pieces as he reconfigures it and has been
>> inside his ICOM and
>> Kenwood HF rigs with a soldering iron more than once, although as his age
>> creeps up he is
>> reducing those activities somewhat. He will probably want to discuss
>> optimizing the data
>> base for his SDR receiver.
>>

>> Not every ham over 40 is using a hand key to a crystal controlled 6L6.
>
> Do people have their 60th birthday, and suddenly become stupid or
> something? I had a PSK31 QSO with a 96 y.o. Hams last year. He was
> checking out his new laptop. Had a modern rig also. That's just one case.
> There are plenty other oldsters I've QSO'ed with who are trourghly modern.
>
> - Mike KB3EIA -

Absolutely. It's often because they are the ones that have both the time
and money to pursue new interests.

Dee D. Flint, N8UZE

3780. Linear wideband power amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-15 22:51:12 UTC
From: Peter Weiss <playfield-bbs@gmx.net>
Message-ID: <1124146272.794600.167840@g43g2000cwa.googlegroups.com>
Source record: 17613

Hello!

I want to build a linear wideband power amplifier with the following specs:

30 MHz to 1 GHz
input 20 mW
output 10 to 20 W

The output should not be very sensible if connected to an unmatched load. The amp is intended for EMI testing in a shielded room.

I have a few of the 2C39 tubes here... I intend to use them in a grounded grid configuration, possibly 2 or 3 stages to get the required amplification (or a pre-stage with PC86, PC88 or similar).

Any hints? Do I have to develop this from scratch, or are there any working circuits around? Everything I found was just for a small frequency area, no wideband application.

CU Peter

3781. RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-16 00:15:01 UTC
From: Tom <nospam@nospam.com>
Message-ID: <9eaMe.614039$cg1.103783@bgtnsc04-news.ops.worldnet.att.net>
Source record: 17614

Got the word today at the neighborhood RadioShack that a catalog will once again be available---no date offered but should be soon.

Tom

3782. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-16 00:32:36 UTC
From: dplatt@radagast.org
Message-ID: <11g2d14ic142b3c@corp.supernews.com>
Source record: 17615

>Got the word today at the neighborhood RadioShack that a catalog will once
>again be available---no date offered but should be soon.

Well, that's a step in a good direction, I suppose. Their Web-site
search engine from Hell was really getting on my nerves.

Now, if they'd just quadruple the size, selection breadth, and quality
of their electronic-components rack...

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3783. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-16 02:30:50 UTC
From: john graesser <graesser@tca.net>
Message-ID: <11g2jd1e1amec32@corp.supernews.com>
Source record: 17617

"Dave Platt" <dplatt@radagast.org> wrote in message
news:11g2d14ic142b3c@corp.supernews.com...
> >Got the word today at the neighborhood RadioShack that a catalog will
once
> >again be available---no date offered but should be soon.
>
> Well, that's a step in a good direction, I suppose. Their Web-site
> search engine from Hell was really getting on my nerves.
>
> Now, if they'd just quadruple the size, selection breadth, and quality
> of their electronic-components rack...

Unfortunately, all their money comes from cell phone sales. I won't be
visiting them until they lose their shirt doing that and have to go back to
selling components.

3784. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-16 02:33:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.16.02.32.59.34019@gmail.com>
Source record: 17618

I think it is mainly the old timers which keep them in business, anyone 40
and younger will grab what they need off the internet (cell phones too)
and get a much better deal...

John

On Mon, 15 Aug 2005 21:30:50 -0500, john graesser wrote:

>
> "Dave Platt" <dplatt@radagast.org> wrote in message
> news:11g2d14ic142b3c@corp.supernews.com...
>> >Got the word today at the neighborhood RadioShack that a catalog will
> once
>> >again be available---no date offered but should be soon.
>>
>> Well, that's a step in a good direction, I suppose. Their Web-site
>> search engine from Hell was really getting on my nerves.
>>
>> Now, if they'd just quadruple the size, selection breadth, and quality
>> of their electronic-components rack...
>
> Unfortunately, all their money comes from cell phone sales. I won't be
> visiting them until they lose their shirt doing that and have to go back to
> selling components.

3785. Homebrew AM transistor radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-16 04:04:08 UTC
From: wrongaddress@att.net
Message-ID: <1124165048.522692.10360@g43g2000cwa.googlegroups.com>
Source record: 17619

I'm attempting to build a small AM broadcast superhet transistor radio from scratch and having a problem with the three IF stages oscillating at the IF frequency (455KHz). The IF coils are salvaged from other radios and the ground connections are to a common bus wire that connects all the IF coil shields. It works reasonably well around 5 volts, but breaks into oscillation (at the IF frequency) if the supply voltage is increased 1/2 volt and the signal drops off significantly if the supply voltage is reduced 1/2 volt. So, it only works within a very small supply voltage range of around 5 to 5.5 volts. The IF stages are decoupled from the supply with a small resistor in series and bypass cap to ground which helps, but doesn't solve the problem. I'm wondering what can be done to stop oscillations and increase gain?

How did they manage to avoid the oscillation problems in the old tube radios that were hand wired without any PC board?

-Bill

3786. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-16 05:48:32 UTC
From: Larry Gagnon <lagagnon@fakeuniserve.com>
Message-ID: <pan.2005.08.16.05.48.32.427893@fakeuniserve.com>
Source record: 17620

On Tue, 16 Aug 2005 00:15:01 +0000, Tom wrote:

> Got the word today at the neighborhood RadioShack that a catalog will once
> again be available---no date offered but should be soon.
>
> Tom

Who cares? Their stuff has been and probably always will be a POS. I
have never seen worse electronic components sold to the general public
than the junk in that store. Avoid them like the plague.

Larry VE7EA

3787. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-16 06:41:01 UTC
From: gsm@mendelson.com
Message-ID: <slrndg32go.ija.gsm@cable.mendelson.com>
Source record: 17621

In article <U1cMe.30078$Tf5.5922@newsread1.mlpsca01.us.to.verio.net>,
clfe wrote:

> Sadly, I think them doing that - is wishful thinking. Actually, were it not
> for the Cell Phones and some other miscellaneous items, it seems to me that
> they would be out of business in the not too distant future. Electromics
> "toys" - can be had at Wal-Mart or any other place, same with TVs, Stereos,
> Computers and phone accessories. The "few" scanners they sell isn't enough
> to hold them. I really do think they're on their last legs. IF they go on
> longer, then all the better. But I think it is going to take a major miracle
> to pick them up. I used to go in a RS store at least 3 times a week. I'm
> lucky if I walk in one - once every couple months. They simply have nothing
> to offer me anymore. I can get all they have - elsewhere, and usually
> cheaper - WITHOUT - the "Do you need a cell phone?" pitch.

Last night I was watching on cable a movie made in 1997 about Star Trek
fans. One of the fans builds things. It showed him going into a Radio
Shack store and asking for parts and electronics help (should I use
a 270 oHm resistor instead of the 3k?).

The back of the store was a maze of parts racks, and they guy knew the
answers.

As Joani Mitchell once said "you don't realize what you've lost until it's
gone".

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (077)-424-1667 IL Fax: 972-2-648-1443 U.S. Voice: 1-215-821-1838
Support the growing boycott of Google by radio users and hobbyists.
It's starting to work, Yahoo has surpassed Google.

3788. Re: Homebrew AM transistor radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-16 07:25:03 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <430194CD.CD5517F8@earthlink.net>
Source record: 17622

wrongaddress@att.net wrote:
>
> I'm attempting to build a small AM broadcast superhet transistor radio
> from scratch and having a problem with the three IF stages oscillating
> at the IF frequency (455KHz). The IF coils are salvaged from other
> radios and the ground connections are to a common bus wire that
> connects all the IF coil shields. It works reasonably well around 5
> volts, but breaks into oscillation (at the IF frequency) if the supply
> voltage is increased 1/2 volt and the signal drops off significantly if
> the supply voltage is reduced 1/2 volt. So, it only works within a very
> small supply voltage range of around 5 to 5.5 volts. The IF stages are
> decoupled from the supply with a small resistor in series and bypass
> cap to ground which helps, but doesn't solve the problem. I'm wondering
> what can be done to stop oscillations and increase gain?
>
> How did they manage to avoid the oscillation problems in the old tube
> radios that were hand wired without any PC board?
>
> -Bill

Try reversing the leads to one of the IF transformer windings to stop
the oscillation.

--
Link to my "Computers for disabled Veterans" project website deleted
after threats were telephoned to my church.

Michael A. Terrell
Central Florida

3789. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-16 10:19:18 UTC
From: clfe <postmaster@clfurent.com>
Message-ID: <U1cMe.30078$Tf5.5922@newsread1.mlpsca01.us.to.verio.net>
Source record: 17616

"Dave Platt" <dplatt@radagast.org> wrote in message
news:11g2d14ic142b3c@corp.supernews.com...
> >Got the word today at the neighborhood RadioShack that a catalog will
> >once
>>again be available---no date offered but should be soon.
>
> Well, that's a step in a good direction, I suppose. Their Web-site
> search engine from Hell was really getting on my nerves.
>
> Now, if they'd just quadruple the size, selection breadth, and quality
> of their electronic-components rack...
>
> --
> Dave Platt <dplatt@radagast.org> AE6EO
> Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

Sadly, I think them doing that - is wishful thinking. Actually, were it not for the Cell Phones and some other miscellaneous items, it seems to me that they would be out of business in the not too distant future. Electromics "toys" - can be had at Wal-Mart or any other place, same with TVs, Stereos, Computers and phone accessories. The "few" scanners they sell isn't enough to hold them. I really do think they're on their last legs. IF they go on longer, then all the better. But I think it is going to take a major miracle to pick them up. I used to go in a RS store at least 3 times a week. I'm lucky if I walk in one - once every couple months. They simply have nothing to offer me anymore. I can get all they have - elsewhere, and usually cheaper - WITHOUT - the "Do you need a cell phone?" pitch.

clf

3790. Re: Spectrum Analyser from Cell Phones?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-16 11:54:11 UTC
From: Howard Long <howard@howardlongxxx.com>
Message-ID: <ddsk53aqr1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 17623
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Hello Polymath

> I wonder if anyone has successfully converted a
> thrown-away cell-phone into a spectrum analyser?
>
> We would seem to have all the necessary components
> in there for free - keyboard, graphical display,
> post-demodulation DSP, Frequency Synthesizer,
> RF good up to 1 GHz (2G5Hz if an ex-WCDMA unit)
>
> Here would seem to be an opportunity to equip
> all Radio Hams with a reasonably state-of-the-art
> piece of test gear, that when coupled with an
> IF generator would give us all a network analyser
> into the bargain!

If you have web access, I have built a scalar network analyser from one of the commonly available TV transmitters http://www.g6lvb.com/Articles/NetAn/index.htm.

These TV transmitters use the SP5055 2.6GHz I2C frequency synthesisers and are easily programmed from a PIC. You could build yourself a spectrum analyser using the synthesiser as the sweep oscillator as I did.

If you successfully reverse engineer a cellphone enough to be able to use any of the parts you describe I am sure that there would be a great deal of interest if you published the information for any particular model.

73, Howard G6LVB

3791. Re: Postage-stamp sized radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-16 12:10:00 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1d668805644c468b9896b4@news-server.socal.rr.com>
Source record: 17624
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <3l1shbF10knmmU1@individual.net>, mcmlviii@comcast.net
says...
> Certainly many sinister reasons exist as well for such a small device.

How about a radio the size of a PCMCIA card that you can slip into your
notebook computer? No external box required, except possibly an
amplifier if you needed it.

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net

3792. Re: Spectrum Analyser from Cell Phones?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-16 14:04:20 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1124201060.675868.219920@g44g2000cwa.googlegroups.com>
Source record: 17625
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

> Many years ago it was done with junked Video
> Tape Recorders and, from what I saw and read,
> very successfully too.

If this is the same project that I remember, it's based mostly around the TV tuner module from an old VCR.

The TV tuners work real nicely as they have a well-defined interface to the VCO control voltage, mixer in, and mixer out. The VCO is also the "right range" (VHF-Lo, VHF-Hi, UHF covers a lot of frequency!) at least for 50MHz up to the top of the UHF TV band. I don't know what they did for frequencies below 50MHz.

The TV tuner module is also nicely interface to (a handful of easily soldered-to pins.)

Cellphones don't really have a well-defined module like the TV tuner in them. They aren't broadband in the same way. Their synthesizers are not broadband either.

Tim.

3793. Re: Postage-stamp sized radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-16 16:12:10 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.16.16.12.08.453945@gmail.com>
Source record: 17627
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

ManyMath:

There are idiots, then again there are truly amazing idiots. You are
amazing!

John

On Sun, 31 Jul 2005 16:50:12 +0100, Polymath wrote:

> The remark from a Yank indicates the state of play in Britland....
>
> "Allodoxaphobia" <bit-bucket@config.com> wrote in message
> news:slrndepscd.kog.bit-bucket@shell.config.com...
>> On Sun, 31 Jul 2005 07:34:23 -0700, Larry wrote:
>>> Polymath wrote:
>>>> Why the attack?
>>>
>>> Does it matter? Killfile them and move on; they are worth no more
>>> effort or attention and are never deserved of any response.
>>
>> Well, certsinly killfile any crosspostings that include uk.radio.amateur.
>> That seems to be where the major sewage leaks are coming from.
>>
>> Jonesy
>> --
>> Marvin L Jones | jonz | W3DHJ | linux
>> Pueblo, Colorado | @ | Jonesy | OS/2 __
>> 38.24N 104.55W | config.com | DM78rf | SK

3794. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-16 16:51:01 UTC
From: gsm@mendelson.com
Message-ID: <slrndg466g.qqs.gsm@cable.mendelson.com>
Source record: 17628

In article <srmMe.30101$Tf5.29477@newsread1.mlpsca01.us.to.verio.net>,
clfe wrote:

> Problem with that scenario is most and I'd dare say a majority of the RS
> clerks didn't have a clue about electronics - to be able to give "that" type
> of answer. They were lucky to know what a resistor was, let alone how to
> substitute one value for another. They were good when they sold parts, the
> other stuff was for the "other" people - not into Electronics. I'm talking
> the toys and gadgets. For anyone wanting to go in for parts only - it has
> seriously lost its touch.

The manager of the Radio Shack I went to before I moved here, was a ham.
All of the employes knew radio (swl or scanners), electronics or computers.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (077)-424-1667 IL Fax: 972-2-648-1443 U.S. Voice: 1-215-821-1838
Support the growing boycott of Google by radio users and hobbyists.
It's starting to work, Yahoo has surpassed Google.

3795. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-16 17:18:45 UTC
From: Reloader <Reloader.1tvlcv@news.radiobanter.com>
Message-ID: <Reloader.1tvlcv@news.radiobanter.com>
Source record: 17632

Back in the '70 you had to demoinstrate knoweledge of electronics before
you could be hired; not an expert, but at least understand what the
customer was looking for. I worked for them until '79. Their new
slogan is "you got questions, we got insults."

--
Reloader

3796. Re: Spectrum Analyser from Cell Phones?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-16 20:23:25 UTC
From: "G1LVN (for it is he)" <gareth.paley@gmail.com>
Message-ID: <ddthvt$m7l$1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 17630
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"Howard Long" <howard@howardlongxxx.com> wrote in message
news:ddsk53aqr1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com...
> Hello Polymath
>
> If you successfully reverse engineer a cellphone enough to be able to use
> any of the parts you describe I am sure that there would be a great deal
> of
> interest if you published the information for any particular model.
>

Sweep oscillator on the X axis of an old junk oscilloscope and the IF stage
of an old multiband radio always did the job for me, mind you that was until
I went to university of course when we found a new use for the spectrum
analyser - listening to Radio 1 in the lab mainly.

3797. Re: Spectrum Analyser from Cell Phones?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-16 20:33:47 UTC
From: zzzpk_pkearn_class_a@its-as-easy-as-they-say-multi_band_cb_is_here.eircom.es.it.net
Message-ID: <43024d91.3121364@news.iol.ie>
Source record: 17631
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"G1LVN \(for it is he\)" <gareth.paley@gmail.com> wrote:

: I went to university of course when we found a new use for the spectrum
: analyser - listening to Radio 1 in the lab mainly.

you mean you didnt use it to heat the place on a cold morning ?

3798. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-16 21:19:04 UTC
From: -ex- <exray@coqui.net>
Message-ID: <82ac1$4302584b$4232bdaa$20550@COQUI.NET>
Source record: 17633

clfe wrote:

> the front. Radio Shack selling basically the same thing the others do - with
> the exception of a few things, will peter out. I give them 10 years tops. I
> hope I'm wrong, but I doubt it. I think their era has come and gone.
>
> clf

10 years? No way. In recent years I've had a few instances to go into a RS looking for stuff for the kids like videogame machines and just odd random non-radio related stuff. They aren't competitive with that stuff either.

Seems to me that they are 'surviving' off of their convenience aspect since most of their urban stores are located in malls and many smaller towns that don't have the big box stores and malls at least have an RS franchise...but they never have a very good stock of anything. When you go into a RS and they can't fit you with a new cellphone battery whats left?

My bet is that there are a lot of red ink stores in their chain and the poor franchisees are basically working only to have a job and to try and salvage their investment. I suspect if it weren't for their franchising schemes the name Radio Shack would be long gone already.

-Bill M

3799. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-16 21:55:55 UTC
From: Dave <drake3d@yahoo.com>
Message-ID: <wM2dnb0lctlw_Z_eRVn-rQ@comcast.com>
Source record: 17634

Well RS is doing well financially, better than the competition. As for what they sell, well, you have to follow the money especially with the rents so high. Cellphones, satellite service and other modern fun things is where the money is now. Parts make up very little of the business, even though they make a high profit on them. The do-it-yourself market is pretty lean now a days, with college areas making up the biggest market. It is to easy to buy a digital rig and get it up and running than a homebrew one. Even though the homebrew one is funner to get going.
The internet also plays a big roll in the dimise of the parts draw.
There is also a few hams left at RS.

Dave
KB1HUP

"-ex-" <exray@coqui.net> wrote in message
news:82ac1$4302584b$4232bdaa$20550@COQUI.NET...
> clfe wrote:
>
>> the front. Radio Shack selling basically the same thing the others do -
>> with the exception of a few things, will peter out. I give them 10 years
>> tops. I hope I'm wrong, but I doubt it. I think their era has come and
>> gone.
>>
>> clf
>
> 10 years? No way. In recent years I've had a few instances to go into a
> RS looking for stuff for the kids like videogame machines and just odd
> random non-radio related stuff. They aren't competitive with that stuff
> either.
>
> Seems to me that they are 'surviving' off of their convenience aspect
> since most of their urban stores are located in malls and many smaller
> towns that don't have the big box stores and malls at least have an RS
> franchise...but they never have a very good stock of anything. When you
> go into a RS and they can't fit you with a new cellphone battery whats
> left?
>
> My bet is that there are a lot of red ink stores in their chain and the
> poor franchisees are basically working only to have a job and to try and
> salvage their investment. I suspect if it weren't for their franchising
> schemes the name Radio Shack would be long gone already.
>
> -Bill M

3800. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-16 22:09:14 UTC
From: clfe <postmaster@clfurent.com>
Message-ID: <srmMe.30101$Tf5.29477@newsread1.mlpsca01.us.to.verio.net>
Source record: 17626

"Geoffrey S. Mendelson" <gsm@mendelson.com> wrote in message
news:slrndg32go.ija.gsm@cable.mendelson.com...
> In article <U1cMe.30078$Tf5.5922@newsread1.mlpsca01.us.to.verio.net>,
> clfe wrote:
>
>> Sadly, I think them doing that - is wishful thinking. Actually, were it
>> not
>> for the Cell Phones and some other miscellaneous items, it seems to me
>> that
>> they would be out of business in the not too distant future. Electromics
>> "toys" - can be had at Wal-Mart or any other place, same with TVs,
>> Stereos,
>> Computers and phone accessories. The "few" scanners they sell isn't
>> enough
>> to hold them. I really do think they're on their last legs. IF they go on
>> longer, then all the better. But I think it is going to take a major
>> miracle
>> to pick them up. I used to go in a RS store at least 3 times a week. I'm
>> lucky if I walk in one - once every couple months. They simply have
>> nothing
>> to offer me anymore. I can get all they have - elsewhere, and usually
>> cheaper - WITHOUT - the "Do you need a cell phone?" pitch.
>
> Last night I was watching on cable a movie made in 1997 about Star Trek
> fans. One of the fans builds things. It showed him going into a Radio
> Shack store and asking for parts and electronics help (should I use
> a 270 oHm resistor instead of the 3k?).
>
> The back of the store was a maze of parts racks, and they guy knew the
> answers.
>
> As Joani Mitchell once said "you don't realize what you've lost until it's
> gone".
>
> Geoff.
>
> --
> Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
> IL Voice: (077)-424-1667 IL Fax: 972-2-648-1443 U.S. Voice:
> 1-215-821-1838
> Support the growing boycott of Google by radio users and hobbyists.
> It's starting to work, Yahoo has surpassed Google.

Problem with that scenario is most and I'd dare say a majority of the RS clerks didn't have a clue about electronics - to be able to give "that" type of answer. They were lucky to know what a resistor was, let alone how to substitute one value for another. They were good when they sold parts, the other stuff was for the "other" people - not into Electronics. I'm talking the toys and gadgets. For anyone wanting to go in for parts only - it has seriously lost its touch.

clf

3801. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-16 22:45:38 UTC
From: -ex- <exray@coqui.net>
Message-ID: <c4cff$43026c94$4232bdaa$13585@COQUI.NET>
Source record: 17635

Dave wrote:

> Well RS is doing well financially, better than the competition. As for
> what they sell, well, you have to follow the money especially with the rents
> so high. Cellphones, satellite service and other modern fun things is where
> the money is now. Parts make up very little of the business, even though
> they make a high profit on them. The do-it-yourself market is pretty lean

I wasn't meaning to compare selling cellphone contracts with selling parts that nobody buys anymore. What I meant to suggest is that they are not even the best choice in the satellite tv/cellphone package market. Sure, they get bulk deals from the main providers but so do a lot of other people who don't have to pay mall-front rent prices and can undercut them at their own game.

Follow the money is very appropo and will likely figure into their ultimate demise. I'll reitirate that its the franchise owners who are taking the beating, not the corporate entity.

-BM

3802. Re: Spectrum Analyser from Cell Phones?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-16 23:08:32 UTC
From: "James F. Mayer" <jfma@ix.netcom.com>
Message-ID: <QluMe.8473$ns.808@newsread1.news.atl.earthlink.net>
Source record: 17636
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"ZZZZPK "
<zzzpk_pkearn_class_a@its-as-easy-as-they-say-multi_band_cb_is_here.eircom.es.it.net>
wrote in message news:43024d91.3121364@news.iol.ie...
> "G1LVN \(for it is he\)" <gareth.paley@gmail.com> wrote:
>
> : I went to university of course when we found a new use for the spectrum
> : analyser - listening to Radio 1 in the lab mainly.
>
> you mean you didnt use it to heat the place on a cold morning ?
>
>

That's what you use the Tektronix 555 for.

3803. Re: Homebrew AM transistor radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-16 23:48:03 UTC
From: tim gorman <tgorman2@cox.net>
Message-ID: <kvttdd.f04.ln@tg6124.ab0wr.net>
Source record: 17637

wrongaddress@att.net wrote:

>
>
> I'm attempting to build a small AM broadcast superhet transistor radio
> from scratch and having a problem with the three IF stages oscillating
> at the IF frequency (455KHz). The IF coils are salvaged from other
> radios and the ground connections are to a common bus wire that
> connects all the IF coil shields. It works reasonably well around 5
> volts, but breaks into oscillation (at the IF frequency) if the supply
> voltage is increased 1/2 volt and the signal drops off significantly if
> the supply voltage is reduced 1/2 volt. So, it only works within a very
> small supply voltage range of around 5 to 5.5 volts. The IF stages are
> decoupled from the supply with a small resistor in series and bypass
> cap to ground which helps, but doesn't solve the problem. I'm wondering
> what can be done to stop oscillations and increase gain?
>
> How did they manage to avoid the oscillation problems in the old tube
> radios that were hand wired without any PC board?
>
> -Bill

If you are getting oscillations then you have a feedback loop somewhere that
you don't want. What are you using for IF amplifiers? Transistors, Fet's,
mmic's, or something else? How are you biasing the stages? Are all three
stages oscillating or only one of them? If you are using transistors or
mmic's you might be better off not even using IF cans.

tim ab0wr

3804. Re: Lattice-wound RF choke replacement, 50 years later

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-17 02:14:46 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1124244886.363413.130370@g49g2000cwa.googlegroups.com>
Source record: 17638
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.components

Wes Stewart wrote:
> On 14 Aug 2005 01:25:38 -0700, "Andrew VK3BFA"
> <ablight@alphalink.com.au> wrote:
>
> [snip]
>
> >the picture link that Wes posted looks pretty good aesthetically (and
> >evey toher way as well) - how was it done, how as the former made up -
> >looks like plastic, hopefully a follow-up post from The Man?
>
> Ceramic.

Hi Wes,
well, not going to be able to homebrew THAT former then !

73 de VK3BFA Andrew

3805. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-17 03:19:49 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4302ACD0.539C9D67@earthlink.net>
Source record: 17639

Reloader wrote:
>
> Back in the '70 you had to demoinstrate knoweledge of electronics before
> you could be hired; not an expert, but at least understand what the
> customer was looking for. I worked for them until '79. Their new
> slogan is "you got questions, we got insults."
>
> --
> Reloader

You've got questions? So do we! ;-)

You've got questions? Come back when you have the answers! ;-)

You've got questions? Go ask someone with an IQ higher than 70! ;-)

You've got questions? What do you expect from us. Answers? ;-)

You've got questions? Go away, I'm trying to sell a cell phone! ;-)

You've got questions? Don't we all? ;-)

Anyone have any more good ones?

--
Link to my "Computers for disabled Veterans" project website deleted
after threats were telephoned to my church.

Michael A. Terrell
Central Florida

3806. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-17 03:59:10 UTC
From: clfe <postmaster@clfurent.com>
Message-ID: <vzrMe.30140$Tf5.17422@newsread1.mlpsca01.us.to.verio.net>
Source record: 17629

"Geoffrey S. Mendelson" <gsm@mendelson.com> wrote in message
news:slrndg466g.qqs.gsm@cable.mendelson.com...
> In article <srmMe.30101$Tf5.29477@newsread1.mlpsca01.us.to.verio.net>,
> clfe wrote:
>
>> Problem with that scenario is most and I'd dare say a majority of the RS
>> clerks didn't have a clue about electronics - to be able to give "that"
>> type
>> of answer. They were lucky to know what a resistor was, let alone how to
>> substitute one value for another. They were good when they sold parts,
>> the
>> other stuff was for the "other" people - not into Electronics. I'm
>> talking
>> the toys and gadgets. For anyone wanting to go in for parts only - it has
>> seriously lost its touch.
>
> The manager of the Radio Shack I went to before I moved here, was a ham.
> All of the employes knew radio (swl or scanners), electronics or
> computers.
>
> Geoff.
>
> --
> Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
> IL Voice: (077)-424-1667 IL Fax: 972-2-648-1443 U.S. Voice:
> 1-215-821-1838
> Support the growing boycott of Google by radio users and hobbyists.
> It's starting to work, Yahoo has surpassed Google.

I don't doubt that at all. "Some" did know what they were doing and/or
selling. But, by and large - most didn't. I was in a store once too where a
customer asked about a Public Service Scanner. The sales lady didn't know
what was what with the three models they listed. I overheard them asking her
about them, as they wanted to buy one. She plain said "I don't know". I
asked if I may help, she said yes. I explained to them what they needed to
know and they did buy "a" scanner. I told the young lady - I know it may not
be required, but you should at least "try" to learn a little of what you're
selling. That store wasn't a RS, but just goes to show, many sales people do
not know their products. THAT can hurt them in the end. People don't want to
or like to buy things they can't use. Especially now with the price of gas
to return something.
The Employee selling the item isn't going to look very good - whether he did
it on purpose or just plain didn't know. In the end, I think the Staples,
Wal-Marts, Office Maxs, (maybe Circuit Citys and so on are going to be in

the front. Radio Shack selling basically the same thing the others do - with the exception of a few things, will peter out. I give them 10 years tops. I hope I'm wrong, but I doubt it. I think their era has come and gone.

clf

3807. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-17 04:26:08 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.17.04.26.07.306586@gmail.com>
Source record: 17641

You have questions? We have puzzles, mysteries, enigmas and impossible
solutions!

John

On Wed, 17 Aug 2005 03:19:49 +0000, Michael A. Terrell wrote:

> Reloader wrote:
>>
>> Back in the '70 you had to demoinstrate knoweledge of electronics before
>> you could be hired; not an expert, but at least understand what the
>> customer was looking for. I worked for them until '79. Their new
>> slogan is "you got questions, we got insults."
>>
>> --
>> Reloader
>
> You've got questions? So do we! ;-)
>
> You've got questions? Come back when you have the answers! ;-)
>
> You've got questions? Go ask someone with an IQ higher than 70! ;-)
>
> You've got questions? What do you expect from us. Answers? ;-)
>
> You've got questions? Go away, I'm trying to sell a cell phone! ;-)
>
> You've got questions? Don't we all? ;-)
>
>
> Anyone have any more good ones?

3808. 73' mag article "TV/VCR TUNER APPLICATIONS by W6WTU

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-17 04:49:13 UTC
From: pdrunen@aol.com
Message-ID: <1124254153.950197.205050@z14g2000cwz.googlegroups.com>
Source record: 17642

Hi group,

W6WTU put out 3 articles in 73' from April 97 to June 97.

I have the second and third, can not locate the April 97 mag in my collection.

Anyone with a scan could capture that article would be do me a good ham favor. I tryed a email address for Hugh, W6WTU but since no reply it could be an old email. Maybe he will see this post.

Basically seeing a bit of VCR dump as most all are moving over to DVD. I can get VCR from 5 to 15 dollar range and can locate co-workers willing to part with an old VCR for the asking.

There I can remove the tuner and make some interesting projects. Currently I have not made anything yet, just beginning. I have a tuner I removed out of an VCR and I am now looking for information about it.

It looks like a panasonic but has a 205052S on it, no telling. There is an exposed card with PINS in ORDER starting from the left

BT
GND
IF
AGC
NC
AUDIO
NC
AFC
+B
M
V
GND

THE OTHER pins are under the metal can and I did not see a name of the PCB either.

Maybe someone can share information about the signals and possible id the manufacturer by the line up?

Another question, I have a UHF tuner taken from a set made in the '80 and it has a knob to rotate to select one of 84 channels.

Out of the tuner is two wires and a RCA jack which goes back up to the VHF tuner.

Can any one tell me was IF frequeny is coming out of the tuner and what mine be the volt on the other two wires? The set was an RCA portable unit.

Paul KJ4UO

3809. Re: Homebrew AM transistor radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-17 09:14:03 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <vdDMe.106878$5N3.66555@bgtnsc05-news.ops.worldnet.att.net>
Source record: 17643

I don't know what you mean by "small resistor" in series with the V+ line. Each amplifier stage should have a series resistor of 100 ohms and a bypass capacitor of .01uF. Actually, you can bypass every other stage if you are using common emitter or common source stages, but I would do it with every amplifier stage.
As far as physical distance for each stage, you should allow 1/2 inch for every 40dB of gain. You shouldn't have this type of problem. A ground plane is always a good idea, but at the very least you should have quite a bit of ground flood on the circuit board. Although it is possible if you have quite a bit of copper foil tape around the board, you can build this circuit on perfboard but you have to be very careful, as you have already discovered. I don't know if they have perfboard that has copper on only one side, but this is one solution.
You had a question about the old hand-wired tubed equipment. With a metal chassis, you would keep the wiring down close to the chassis itself, which would in effect provide that ground plane. A ground is very important to provide a place for the return currents for all of the signals, whether physical wires or copper traces are used.

Pete

<wrongaddress@att.net> wrote in message
news:1124165048.522692.10360@g43g2000cwa.googlegroups.com...
> I'm attempting to build a small AM broadcast superhet transistor radio
> from scratch and having a problem with the three IF stages oscillating
> at the IF frequency (455KHz). The IF coils are salvaged from other
> radios and the ground connections are to a common bus wire that
> connects all the IF coil shields. It works reasonably well around 5
> volts, but breaks into oscillation (at the IF frequency) if the supply
> voltage is increased 1/2 volt and the signal drops off significantly if
> the supply voltage is reduced 1/2 volt. So, it only works within a very
> small supply voltage range of around 5 to 5.5 volts. The IF stages are
> decoupled from the supply with a small resistor in series and bypass
> cap to ground which helps, but doesn't solve the problem. I'm wondering
> what can be done to stop oscillations and increase gain?
>
> How did they manage to avoid the oscillation problems in the old tube
> radios that were hand wired without any PC board?
>
> -Bill
>

3810. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-17 10:37:37 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <b8qdnZs12-75jp7eRVnytg@pipex.net>
Source record: 17644

> Unfortunately, all their money comes from cell phone sales. I won't be
> visiting them until they lose their shirt doing that and have to go back
> to
> selling components.
==========
Ratshack get their income from people living in today's consumers' society
,not from the few dinosaurs who enjoy tinkering with electronics . That's
the reality . If they are reconsidering publishing a catalogue and include
electronic components ,then their marketing people and nobody else consider
this a potentially profitable move .

They wouldn't do it just to please electronics enthousiasts (which include
some home brewing radio amateurs)

Frank GM0CSZ / KN6WH

3811. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-17 11:25:58 UTC
From: clfe <postmaster@clfurent.com>
Message-ID: <o6yMe.30150$Tf5.28828@newsread1.mlpsca01.us.to.verio.net>
Source record: 17640

"-ex-" <exray@coqui.net> wrote in message
news:82ac1$4302584b$4232bdaa$20550@COQUI.NET...
> clfe wrote:
>
>> the front. Radio Shack selling basically the same thing the others do -
>> with the exception of a few things, will peter out. I give them 10 years
>> tops. I hope I'm wrong, but I doubt it. I think their era has come and
>> gone.
>>
>> clf
>
> 10 years? No way. In recent years I've had a few instances to go into a
> RS looking for stuff for the kids like videogame machines and just odd
> random non-radio related stuff. They aren't competitive with that stuff
> either.
>
> Seems to me that they are 'surviving' off of their convenience aspect
> since most of their urban stores are located in malls and many smaller
> towns that don't have the big box stores and malls at least have an RS
> franchise...but they never have a very good stock of anything. When you
> go into a RS and they can't fit you with a new cellphone battery whats
> left?
>
> My bet is that there are a lot of red ink stores in their chain and the
> poor franchisees are basically working only to have a job and to try and
> salvage their investment. I suspect if it weren't for their franchising
> schemes the name Radio Shack would be long gone already.
>
> -Bill M

Bill - BILL - I was "trying" to be nice about it - be conservative - give them time to buy themselves out of this mess. If they go 5 they'll be damned lucky. As to their "Franchising" - knowing what I do, I'd be very hard pressed to want to be a part of their system. I recall a day when they wouldn't allow (at least how I recall it) a store within 10 miles of another. Now, they have stores and francised outlets squeezed in between. Maybe in the quest to try to add more stores for more sales, - they choked themselves. Seems to be a going thing today. A big store chain comes in - claims the best of the world and within a very few short years - declare bankruptcy and shut down. Whatever their problems are - Cell phone sales - TV sets, Phones, Gadgets and so on - just aren't going to cut it. They really did lose the basis of their origins. Sad but true - a sign of the times. It wouldn't surprise me if tomorrow on CNN - they came out with the announcement that RS is calling it quits. Like the death of a famous movie

star or whatever you hold somewhat near and dear - it may startle the mind,
but life goes on.

clf

3812. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-17 12:29:24 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1124281764.249967.269820@g43g2000cwa.googlegroups.com>
Source record: 17645

> Anyone have any more good ones?

You've got questions? We've got blank stares!

3813. Re: Lattice-wound RF choke replacement, 50 years later

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-17 13:23:35 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1124285015.374560.83770@g49g2000cwa.googlegroups.com>
Source record: 17646
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.components

>>> how was it done, how as the former made
>>> up - looks like plastic,

>> Ceramic.

> well, not going to be able to homebrew THAT former then !

What's wrong with, say, G-10 glass epoxy rod for winding RF chokes
around?

Is it flammability/gasses made in a choke fire that would make G-10 be
not preferred?

Tim.

3814. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-17 13:51:01 UTC
From: gsm@mendelson.com
Message-ID: <slrndg6g0k.jt6.gsm@cable.mendelson.com>
Source record: 17647

In article <b8qdnZs12-75jp7eRVnytg@pipex.net>, Highland Ham wrote:
> If they are reconsidering publishing a catalogue and include
> electronic components ,then their marketing people and nobody else consider
> this a potentially profitable move .
>
> They wouldn't do it just to please electronics enthousiasts (which include
> some home brewing radio amateurs)

No, it's the simple demographics. The parts buyers are older people with more disposable income and a technology bent. They won't sell you a cell phone, but they might get you to buy one of their big ticket items while you are there.

Let's face it, if you go to a Radio Shack once a week to pick up parts, like many of us used to do in days gone by, while you are there you are more likely to buy something else than make a trip to one of the big stores especialy to buy a $20 item. I'll bet you that they make profit on that $20 item than some of the big stores make on a $100 item.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (077)-424-1667 IL Fax: 972-2-648-1443 U.S. Voice: 1-215-821-1838
Support the growing boycott of Google by radio users and hobbyists.
It's starting to work, Yahoo has surpassed Google.

3815. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-17 16:22:45 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <11g6p2pod0c39a1@corp.supernews.com>
Source record: 17648

You've got questions? We've got answers. Hell NO I don't know if they are correct.

Jim

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message news:1124281764.249967.269820@g43g2000cwa.googlegroups.com...
>> Anyone have any more good ones?
>
> You've got questions? We've got blank stares!
>

3816. Re: 73' mag article "TV/VCR TUNER APPLICATIONS by W6WTU

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-17 16:58:28 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43036C9F.AFB0C64B@earthlink.net>
Source record: 17649

pdrunen@aol.com wrote:
>
> Hi group,
>
> W6WTU put out 3 articles in 73' from April 97 to June 97.
>
> I have the second and third, can not locate the April 97 mag in my
> collection.
>
> Anyone with a scan could capture that article would be do me a good ham
> favor. I tryed a email address for Hugh, W6WTU but since no reply it
> could be an old email. Maybe he will see this post.
>
> Basically seeing a bit of VCR dump as most all are moving over to DVD.
> I can get VCR from 5 to 15 dollar range and can locate co-workers
> willing to part with an old VCR for the asking.
>
> There I can remove the tuner and make some interesting projects.
> Currently I have not made anything yet, just beginning. I have a tuner
> I removed out of an VCR and I am now looking for information about it.
>
> It looks like a panasonic but has a 205052S on it, no telling. There
> is an exposed card with PINS in ORDER starting from the left
>
> BT
> GND
> IF
> AGC
> NC
> AUDIO
> NC
> AFC
> +B
> M
> V
> GND
>
> THE OTHER pins are under the metal can and I did not see a name of the
> PCB either.

That sounds like the IF module, but there are some with combo
tuner/IF modules.

> Maybe someone can share information about the signals and possible id
> the manufacturer by the line up?

>
> Another question, I have a UHF tuner taken from a set made in the '80
> and it has a knob to rotate to select one of 84 channels.
>
> Out of the tuner is two wires and a RCA jack which goes back up to the
> VHF tuner.
>
> Can any one tell me was IF frequeny is coming out of the tuner and what
> mine be the volt on the other two wires? The set was an RCA portable
> unit.
>
> Paul KJ4UO

Try asking on news:sci.electronics.repair where the TV and VCR people
hang out.

--
Link to my "Computers for disabled Veterans" project website deleted
after threats were telephoned to my church.

Michael A. Terrell
Central Florida

3817. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-17 17:58:03 UTC
From: John Ferrell <johnferrell@earthlink.net>
Message-ID: <LUKMe.6378$RZ2.4115@newsread3.news.atl.earthlink.net>
Source record: 17650

If you buy it at Radio Shack & it has a warranty, they will do their best to honor it. The new storage system for parts sure is better for us with bifocals.

Their demise has been predicted for more than 30 years...
Some of the store help are very knowledgeable, some are not.

--
John Ferrell
http://DixieNC.US

"Geoffrey S. Mendelson" <gsm@mendelson.com> wrote in message news:slrndg466g.qqs.gsm@cable.mendelson.com...
> In article <srmMe.30101$Tf5.29477@newsread1.mlpsca01.us.to.verio.net>,
> clfe wrote:
>
>> Problem with that scenario is most and I'd dare say a majority of the RS
>> clerks didn't have a clue about electronics - to be able to give "that"
>> type
>> of answer. They were lucky to know what a resistor was, let alone how to
>> substitute one value for another. They were good when they sold parts,
>> the
>> other stuff was for the "other" people - not into Electronics. I'm
>> talking
>> the toys and gadgets. For anyone wanting to go in for parts only - it has
>> seriously lost its touch.
>
> The manager of the Radio Shack I went to before I moved here, was a ham.
> All of the employes knew radio (swl or scanners), electronics or
> computers.
>
> Geoff.
>
> --
> Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
> IL Voice: (077)-424-1667 IL Fax: 972-2-648-1443 U.S. Voice:
> 1-215-821-1838
> Support the growing boycott of Google by radio users and hobbyists.
> It's starting to work, Yahoo has surpassed Google.

3818. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-17 20:18:58 UTC
From: john graesser <graesser@tca.net>
Message-ID: <11g76bkik7pa515@corp.supernews.com>
Source record: 17651

"Dave" <drake3d@yahoo.com> wrote in message
news:wM2dnb0lctlw_Z_eRVn-rQ@comcast.com...
> Well RS is doing well financially, better than the competition. As for
> what they sell, well, you have to follow the money especially with the
rents
> so high. Cellphones, satellite service and other modern fun things is
where
> the money is now. Parts make up very little of the business, even though
> they make a high profit on them. The do-it-yourself market is pretty lean
> now a days, with college areas making up the biggest market. It is to easy
> to buy a digital rig and get it up and running than a homebrew one. Even
> though the homebrew one is funner to get going.

I recall a UP story a couple of weeks ago that stated RS had 50 million
profit off of over 1 billion in sales. So they are selling a hell of a lot
but barely staying in the black. 1/2 of 1 percent profit? Even a passbook
savings acct gets a better return than that.

3819. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-17 21:14:44 UTC
From: David Winfrey <nospam@nospam.never.net>
Message-ID: <11g7a64d9dekc0a@corp.supernews.com>
Source record: 17652

John Ferrell <johnferrell@earthlink.net> wrote:
:
: Their demise has been predicted for more than 30 years...
: Some of the store help are very knowledgeable, some are not.
:
One of my friends once went to a Radio Shack and asked if they could
special-order a vacuum tube for his guitar amplifier.

The kid at the counter didn't know what a vacuum tube was, and
suggested that he should try the appliance department at Sears,
as they might sell parts for vacuum cleaners.

David Winfrey
KB3ICR

3820. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-17 23:06:18 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4303C2BD.114C3D6A@earthlink.net>
Source record: 17653

John Ferrell wrote:
>
> If you buy it at Radio Shack & it has a warranty, they will do their best to
> honor it. The new storage system for parts sure is better for us with
> bifocals.

Its a pain in the ass for those who walk with a cane to try to bend
down and look in the bottom drawers without falling, or knocking over
the piles of toys they use to try to hide the cabinets. One store has
them right outside the door to the office, and its dangerous trying to
stand there with the droids running in and out of the office.

--
Link to my "Computers for disabled Veterans" project website deleted
after threats were telephoned to my church.

Michael A. Terrell
Central Florida

3821. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-18 00:07:42 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1d6d712ce24aff529896e2@news-central.giganews.com>
Source record: 17654

In article <4302ACD0.539C9D67@earthlink.net>, mike.terrell@earthlink.net
says...

>
> Anyone have any more good ones?
>
>

You've got questions? We've got batteries!

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

3822. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-18 00:27:56 UTC
From: DRGrok@munged.net
Message-ID: <3eSdnfwuULCOSJ7eRVn-2A@rcn.net>
Source record: 17655

In article <4302ACD0.539C9D67@earthlink.net>, mike.terrell@earthlink.net wrote:
>Reloader wrote:
>>
>> Back in the '70 you had to demoinstrate knoweledge of electronics before
>> you could be hired; not an expert, but at least understand what the
>> customer was looking for. I worked for them until '79. Their new
>> slogan is "you got questions, we got insults."
>>
>> --
>> Reloader
>
> You've got questions? So do we! ;-)
>
> You've got questions? Come back when you have the answers! ;-)
>
> You've got questions? Go ask someone with an IQ higher than 70! ;-)
>
> You've got questions? What do you expect from us. Answers? ;-)
>
> You've got questions? Go away, I'm trying to sell a cell phone! ;-)
>
> You've got questions? Don't we all? ;-)
>
>
>Anyone have any more good ones?
>
You've got questions? We got dumb looks!

Dr. G.

3823. Re: Homebrew AM transistor radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-18 02:13:03 UTC
From: wrongaddress@att.net
Message-ID: <1124331183.204724.283770@o13g2000cwo.googlegroups.com>
Source record: 17656

> I don't know what you mean by "small resistor" in series with the V+ line.
> Each amplifier stage should have a series resistor of 100 ohms and a bypass
> capacitor of .01uF.

I've tried several values, 220,330,510, ect. with 0.05uF bypass.
Doesn't make much difference.

> As far as physical distance for each stage, you should allow 1/2 inch for
> every 40dB of gain. You shouldn't have this type of problem. A ground plane
> is always a good idea,

The IF cans are spaced 1 inch apart and I disconnected the 2nd IF stage
so I only have an oscillator, mixer and single IF amp stage. Same
problem, it always oscillates when the voltage is raised to obtain
reasonable gain.

> Although it is possible if you have quite a bit of copper foil tape around the
> board, you can build this circuit on perfboard but you have to be very careful,
> as you have already discovered.

I took a look inside a AM/FM clock radio I have and checked the
ground connections. There are 3 RF transformers, oscillator, mixer and
single IF stage, and all of the metal shields of the transformers are
isolated. There are no physical connections between the shields of the
3 transformers.

Obviously, I am missing something. Grounding all the transformer
housings on a massive ground plane does not seem to be the answer.

-Bill

3824. Re: Radio problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-18 03:20:48 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <3kv7g15l5d8sbgfqaoqu1ehdj6j4g6rhqd@4ax.com>
Source record: 17657
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

You didn't say how far away from the dynaplate the tuner was? I would
bet that you have a fairly long run with your ground lead to it as
seen in most boats where the antenna system has problems.
You need to have a very short distance between the tuner and the
ground plate, not more than a few feet. Lots of people install the
tuner close to the antenna and run a long ground lead. That is the
wrong way to go as it then allows the coax and power leads that go to
the tuner to become part of the antenna system as well as the radio
itself and its power leads, which you don't want.

Also if you operate in fresh water rather than salt water you may need
more surface area for a ground.

Sail boat or power boat?

73
Gary K4FMX

On Sat, 13 Aug 2005 22:42:52 -0400, Newbie Ham <none@lNOSPAM.com>
wrote:

>Hi Everybody
>
>I hope this isn't the wrong place to ask. if it is, please let me know
>where I should post.
>
>I have a Kenwood TS50 installed on a boat with a SGC autotuner. The
>tuner is grounded to a dynaplate.
>
>I also have a 2000watt inverter/charger built into the boat for ac power
>creation from 12v batteries.
>
>Something strange is going on and I jusr don't know where to start
>trouble shooting.
>
>When I transmit on frequencies like 14300MHZ usb, no problem.
>
>If I transmit on 7628 LSB 100watts the FET's in my inverter blow up! As
>soon as I key the mike I hear a loud pop and there goes another fet.
>
>I've changed them twice now and since the inverter is bolted into an
>awkward spot and weighs 70 pounds (it's all transformer), removing the
>inverter and changing them ain't fun.
>
>Tonight I went so far as to disconnect (as in unplug) the AC supply to

>the inverter and switch it completely off. As in no LEDS lit, everything
>off.
>
>Yet as soon as I keyed the mic, POOF. The fets just blew apart.
>
>Any thoughts as to what might be happening?
>
>FWIW, the coax from radio to tuner runs within about 2 feet of the
>inverter, the radio and tuner are powered from the batteries which power
>the inverter. So the inverter and radio share Pos. and Neg.
>
>I can only think of a few ways this might be happening:
>
>1) Radiated signal from the coax leaking into the inverter.
>2) Radiated signal passing into the inverter via the shared positive or
>negative feeds.
>3) Some weird ground loop issue.
>
>I have no ideas as to how to diagnose this and trouble shoot it without
>having to replace fets everytime. And that's a big job.
>
>Any thoughts would be greatly appreciated.

3825. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-18 04:01:36 UTC
From: GBrown <gkbrown@gwi.net>
Message-ID: <8b2dnYQc7ctxmpneRVn-sw@gwi.net>
Source record: 17658

> > Anyone have any more good ones?
You've got questions? We've got batteries.....

3826. Re: Homebrew AM transistor radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-18 11:36:42 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <ep_Me.19998$Rp5.4063@trnddc03>
Source record: 17659

Bill,

Transistor amplifiers with inputs and outputs tuned to the same frequency turn out to be oscillators, especially if the the tuned frequency is very low compared to the transistor's Ft. If you're using a modern transistor with an Ft of say, 800 Mhz, and you're tuning it to say, 500KHz, then you could have available gain of over 60 dB in one stage. This is a sure-bet oscillator waiting to happen.

You can lower the gain by 'loading' the input and output tuned circuits with parallel resistors (try 1K for starters and work up from there if it stops the oscillation. Just remember that this technique, in addition to lowering the gain, will also load the tuned circuit and degrade selectivity.

You can also try a small resistor (less than a couple hundred ohms) in series with the collector lead of the transistor, or in series with the base lead. This technique will lower the stage gain and actually increase the impedance seen by the tuned circuits, improving selectivity.

Keep in mind that raising the selectivity too much can cause tuned circuit losses, just as parallel loading it will lower selectivity and increase losses.

Joe
W3JDR

<wrongaddress@att.net> wrote in message
news:1124331183.204724.283770@o13g2000cwo.googlegroups.com...
>> I don't know what you mean by "small resistor" in series with the V+
>> line.
>> Each amplifier stage should have a series resistor of 100 ohms and a
>> bypass
>> capacitor of .01uF.
>
> I've tried several values, 220,330,510, ect. with 0.05uF bypass.
> Doesn't make much difference.
>
>> As far as physical distance for each stage, you should allow 1/2 inch for
>> every 40dB of gain. You shouldn't have this type of problem. A ground
>> plane
>> is always a good idea,
>
> The IF cans are spaced 1 inch apart and I disconnected the 2nd IF stage
> so I only have an oscillator, mixer and single IF amp stage. Same
> problem, it always oscillates when the voltage is raised to obtain
> reasonable gain.

>
>> Although it is possible if you have quite a bit of copper foil tape
>> around the
>> board, you can build this circuit on perfboard but you have to be very
>> careful,
>> as you have already discovered.
>
> I took a look inside a AM/FM clock radio I have and checked the
> ground connections. There are 3 RF transformers, oscillator, mixer and
> single IF stage, and all of the metal shields of the transformers are
> isolated. There are no physical connections between the shields of the
> 3 transformers.
>
> Obviously, I am missing something. Grounding all the transformer
> housings on a massive ground plane does not seem to be the answer.
>
> -Bill
>

3827. Re: Homebrew AM transistor radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-18 12:22:31 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <ngt8g15g2drhtruj065o4omv6hg8o1t847@4ax.com>
Source record: 17660

On 17 Aug 2005 19:13:03 -0700, wrongaddress@att.net wrote:

>> I don't know what you mean by "small resistor" in series with the V+ line.
>> Each amplifier stage should have a series resistor of 100 ohms and a bypass
>> capacitor of .01uF.
>
>I've tried several values, 220,330,510, ect. with 0.05uF bypass.
>Doesn't make much difference.
>
>> As far as physical distance for each stage, you should allow 1/2 inch for
>> every 40dB of gain. You shouldn't have this type of problem. A ground plane
>> is always a good idea,
>
>The IF cans are spaced 1 inch apart and I disconnected the 2nd IF stage
>so I only have an oscillator, mixer and single IF amp stage. Same
>problem, it always oscillates when the voltage is raised to obtain
>reasonable gain.
>
>> Although it is possible if you have quite a bit of copper foil tape around the
>> board, you can build this circuit on perfboard but you have to be very careful,
>> as you have already discovered.
>
>I took a look inside a AM/FM clock radio I have and checked the
>ground connections. There are 3 RF transformers, oscillator, mixer and
>single IF stage, and all of the metal shields of the transformers are
>isolated. There are no physical connections between the shields of the
>3 transformers.
>
>Obviously, I am missing something. Grounding all the transformer
>housings on a massive ground plane does not seem to be the answer.
>
>-Bill

I will assume good wiring, lead dress and stage bypassing have been
attended to as even small amounts of feedback regardless the cause
will insitgate oscillation.

Transistors have internal capacitance from collector to base and in
high impedence RF amplifiers that serves to couple input to output
and make a fine oscillator. The gain attainable before oscillation
was usually listed as MUG (max usable gain) and is usually specified
with a test circuit. Often that circuit was neutralized (more later)
to allow best gain without oscillation. For a .455khz IF a stage gain
of more than around 35DB from one transistor is begging for
instability.

There are several solutions for that. One is reduce the gain, not always a good solution but sometimes required. Another is to neutalize the amplifier. Neutralization is to feed back some of the signal out of phase back to the base lead to balance out the signal comming back via the collector base capacitance. Like anything enough is good too much is bad.

As it turns out most ransistor radios of the 50s up till the do it all on a chip era had to cope with unintentional feedback. Most applied both of the mentioned solutions, reduce the per stage gains and apply neutralization.

As to how to apply neutalization... Varies depending on circuit. Assuming your using common IF cans and generic transistor circuit it's usually easy. The output IF can has three terminals on the tuned side, one is meant for DC power, another is collector and the remaining is the out of phase feedback to the base via a capacitor in the range of 1 to 10pf. Which pin is which, depends of the can and who made it. Another way if the IF can is not tapped is to feed back some fo the secondary winding to the base. The tricky part here is if the secondary is backward it will make oscillation worse and you will have to reverse the seconday IF transformer leads. What you are shooting for is a stable amplifier.

One of the side effects is that if the applied neutralization is too small the stage will have some regeneration but not oscillate and that is also unstable though a very high gain state to be in. Strive for stability. The stage should not oscillate at any reasonable voltage or tuning adjustment.

All of the proceeding is predicated on the transistor stage oscillating at the IF frequency. It is possible due to various factors that the transistor is oscillation at VHF and a number of other frequencies as well. This is trickier, as you need to suppress that and then deal with the IF oscillation if still present. VHF oscillation can be killed with a 100ohm resistor in series with the collector lead. The resistor and the collector lead should be short. There is no measurable gain lost at IF frequencies to that resistor as it's size is very small compared to the load.

Having built more than few radios with high gain IF stages I've had to deal with this problem more than once. Hope it helps.

Allison
KB1GMX

3828. Re: Homebrew AM transistor radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-18 13:10:46 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <qN%Me.110661$5N3.86013@bgtnsc05-news.ops.worldnet.att.net>
Source record: 17661

A ground plane should make the system more stable. The radios that I have
been designing over the years have gains in the I.F. systems that range from
90 to 120dB, depending on the topology. You are definitely getting signal
feedback through your power supply rails. 100 to 120 ohms is about as high
as you want to go as far as decoupling resistor values. .05uF is too high of
a value for a decoupling cap.............01uF is what you should use for
local decoupling.
You should also have at least one bulk decoupling cap that has a value in
the range of 10 to 47uF. The larger decoupling cap cancels out the
inductance of your power supply wiring while the smaller local decoupling
caps cancel out the inductance of the bulk cap.

Pete

<wrongaddress@att.net> wrote in message
news:1124331183.204724.283770@o13g2000cwo.googlegroups.com...
>> I don't know what you mean by "small resistor" in series with the V+
>> line.
>> Each amplifier stage should have a series resistor of 100 ohms and a
>> bypass
>> capacitor of .01uF.
>
> I've tried several values, 220,330,510, ect. with 0.05uF bypass.
> Doesn't make much difference.
>
>> As far as physical distance for each stage, you should allow 1/2 inch for
>> every 40dB of gain. You shouldn't have this type of problem. A ground
>> plane
>> is always a good idea,
>
> The IF cans are spaced 1 inch apart and I disconnected the 2nd IF stage
> so I only have an oscillator, mixer and single IF amp stage. Same
> problem, it always oscillates when the voltage is raised to obtain
> reasonable gain.
>
>> Although it is possible if you have quite a bit of copper foil tape
>> around the
>> board, you can build this circuit on perfboard but you have to be very
>> careful,
>> as you have already discovered.
>
> I took a look inside a AM/FM clock radio I have and checked the
> ground connections. There are 3 RF transformers, oscillator, mixer and
> single IF stage, and all of the metal shields of the transformers are
> isolated. There are no physical connections between the shields of the

> 3 transformers.
>
> Obviously, I am missing something. Grounding all the transformer
> housings on a massive ground plane does not seem to be the answer.
>
> -Bill
>

3829. Re: Lattice-wound RF choke replacement, 50 years later

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-18 14:27:19 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1124375239.026042.303810@o13g2000cwo.googlegroups.com>
Source record: 17662
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.components

Tim Shoppa wrote:
> >>> how was it done, how as the former made
> >>> up - looks like plastic,
>
> >> Ceramic.
>
> > well, not going to be able to homebrew THAT former then !
>
> What's wrong with, say, G-10 glass epoxy rod for winding RF chokes
> around?
>
> Is it flammability/gasses made in a choke fire that would make G-10 be
> not preferred?
>
> Tim.

Hi Tim,
got no idea really - over the years I have sort of got used to things bursting into flames occassionally(sp) hi hi , so dont worry about it but just give it a go and see what happens. I also dont leave things running un-attended, so am not the complete lunatic I would seem.

To me, the main criteria is whats on hand - there are not REALLY huge voltages and currents there, so a bit of latitude in the materials selection process seems to me, at any rate, quite reasonable.

No doubt one of the space shuttle designers on this group will promptly debunk my theories.....

And yes, I sometimes DO represent the lunatic fringe of radio - guess I never really grew up. But I have fun.....

Andrew VK3BFA

3830. Re: 73' mag article "TV/VCR TUNER APPLICATIONS by W6WTU

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-18 17:12:09 UTC
From: Art Clemons <n8blk@aolSPAM.com>
Message-ID: <AaSdnYjXfsr3XJneRVn-iA@comcast.com>
Source record: 17663

pdrunen@aol.com wrote:

> I have the second and third, can not locate the April 97 mag in my
> collection.
>
> Anyone with a scan could capture that article would be do me a good ham
> favor. I tryed a email address for Hugh, W6WTU but since no reply it
> could be an old email. Maybe he will see this post.

If you're near a big city and its library, it's likely that the reference section would have a copy on micro-fiche. Only thing to remember is that by then it was called "73 Amateur Radio Today".

3831. Re: Radio problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-18 19:09:48 UTC
From: Bruce in Alaska <bruceg@btpost.net>
Message-ID: <bruceg-431B51.11110418082005@netnews.worldnet.att.net>
Source record: 17664
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

In article <3kv7g15l5d8sbgfqaoqu1ehdj6j4g6rhqd@4ax.com>,
Gary Schafer <gaschafer@comcast.net> wrote:

> You didn't say how far away from the dynaplate the tuner was? I would
> bet that you have a fairly long run with your ground lead to it as
> seen in most boats where the antenna system has problems.
> You need to have a very short distance between the tuner and the
> ground plate, not more than a few feet. Lots of people install the
> tuner close to the antenna and run a long ground lead. That is the
> wrong way to go as it then allows the coax and power leads that go to
> the tuner to become part of the antenna system as well as the radio
> itself and its power leads, which you don't want.
>
> Also if you operate in fresh water rather than salt water you may need
> more surface area for a ground.
>
> Sail boat or power boat?
>
> 73
> Gary K4FMX
>
> On Sat, 13 Aug 2005 22:42:52 -0400, Newbie Ham <none@lNOSPAM.com>
> wrote:
>
> >Hi Everybody
> >
> >I hope this isn't the wrong place to ask. if it is, please let me know
> >where I should post.
> >
> >I have a Kenwood TS50 installed on a boat with a SGC autotuner. The
> >tuner is grounded to a dynaplate.
> >
> >I also have a 2000watt inverter/charger built into the boat for ac power
> >creation from 12v batteries.
> >
> >Something strange is going on and I jusr don't know where to start
> >trouble shooting.
> >
> >When I transmit on frequencies like 14300MHZ usb, no problem.
> >
> >If I transmit on 7628 LSB 100watts the FET's in my inverter blow up! As
> >soon as I key the mike I hear a loud pop and there goes another fet.
> >

> >I've changed them twice now and since the inverter is bolted into an
> >awkward spot and weighs 70 pounds (it's all transformer), removing the
> >inverter and changing them ain't fun.
> >
> >Tonight I went so far as to disconnect (as in unplug) the AC supply to
> >the inverter and switch it completely off. As in no LEDS lit, everything
> >off.
> >
> >Yet as soon as I keyed the mic, POOF. The fets just blew apart.
> >
> >Any thoughts as to what might be happening?
> >
> >FWIW, the coax from radio to tuner runs within about 2 feet of the
> >inverter, the radio and tuner are powered from the batteries which power
> >the inverter. So the inverter and radio share Pos. and Neg.
> >
> >I can only think of a few ways this might be happening:
> >
> >1) Radiated signal from the coax leaking into the inverter.
> >2) Radiated signal passing into the inverter via the shared positive or
> >negative feeds.
> >3) Some weird ground loop issue.
> >
> >I have no ideas as to how to diagnose this and trouble shoot it without
> >having to replace fets everytime. And that's a big job.
> >
> >Any thoughts would be greatly appreciated.
>

Sounds like you got this problem nailed Gary.... I would suspect that
the RF Ground between the tuner and the radio is somewhere close to 1/4
Wave and is the Power wires to the inverter are also near 1/4 Wave for
the 40 Meter band, or maybe 1/8 Wave. A couple of good RF Type .1 uf
Caps across Inverter Power Leads, at both ends, should tame the problem,
after the RF Ground is shortened up to make it a good Low Impedance,
Wideband RF Ground.

Bruce in alaska
the Inverter
--
add a <2> before @

3832. ** FLEA at MIT ** Sunday August 21st Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-18 19:53:12 UTC
From: w1gsl@mit.edu
Message-ID: <4304e727$0$569$b45e6eb0@senator-bedfellow.mit.edu>
Source record: 17665
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

This coming Sunday....

+++ Now even more Buyers Parking !!!
Thanks to TKT we have use of their new parking lot
across Albany St from the SWAPFEST !!!

!! ** More Buyers PARKING is available ** for details see
http://web.mit.edu/w1gsl/Public/flyer

*** !!!! In our Traditional GARAGE and the adjacent lot !!!! ****
so come rain or shine or super heat the Flea is on !!!

********* $1 buyers discount with hardcopy of this notice ********

COMPUTERS - ELECTRONICS - HAM RADIO - COMPUTERS - ELECTRONICS - HAM RADIO

FLEA all SUMMER at MIT
Sunday August 21st 2005
9AM-2PM

Come to the city for a great flea - plenty of free parking.

MIT's electronics and ham radio flea will take
place on the third Sunday of each month this summer,
April thru October.

There is tailgate space for over 600 sellers and
free, off-street parking for >2000 cars!

Buyers admission is $5 (you get $1 off if
you're lucky enough to have a copy of our ad)
and sellers spaces are $20 for the first and
$15 for each additional at the gate.

The flea will be held at the corner of Albany and
Main streets in Cambridge; right in the Kendall
Square area from 9AM to 2PM, with sellers set-up
time starting at 7AM.

SEASON PASS + Advance Seller Discount

A sellers discount season pass is available which
offers a 30% discount. By prepaying you get a
discount and earlier admission. See the registration form.

*** Attention Sellers ***
Prepaid vendors.. Season Pass or monthly,

will be admitted FIRST.
Separate lines will form prior to gate opening
for prepaid and nonprepaid vendors

!! RAIN or SHINE !! Have no fear of rain, a covered
well illuminated tailgate area is available for all
sellers (6'8" clearance).

Talk-in: 145.23- (PL 88.5) W1BOS/R and
W1XM/R-449.725/444.725 (PL 114.8/2A).

Sponsors: MIT Electronics Research Society
MIT UHF Repeater Association (W1XM)
MIT Radio Society (W1MX)
Harvard Wireless Club (W1AF)

For more info / advanced reservations 617 253 3776

********** $1 buyers discount with hard copy of this notice ***********

<<<<<<<<<<<<<<<<<<<<<< cut here >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

Mail the coupon below by the 5th of the month to be a Prepaid Vendor.

FLEA at MIT 2005 Rates

SELLERS

To use your prepaid spaces the named vendor MUST be present.
Rates include one admission per space.

Advance $17 First space - includes $10 Cambridge Vendor License
$12 Additional Spaces
Must be received by the 5th of the month.

Gate Admission $20 First Space - includes $10 Cambridge Vendor License
$15 Additional Spaces
Admission is after the prepaid vendors

Early Bird Buyer -Admission after the prepaid vendor line is admitted. ~ 7:15AM
** You may not sell. **
$15 per person at the gate.

****************************** cut here ******************************

FLEA at MIT 2005 Advance Space Application

____April ____May ____June ____ July ____Aug ___Sept ____Oct
@ $17 for the first each month + $12 each additional

Name _____ Call _____ $ Included_____

Address _____ Phone _____ Make Check to
The MIT Radio Society
City _____ State _____ Zip _____ PO Box 397082
Cambridge MA 02139

E-mail _____

****
Steve Finberg W1GSL w1gsl@mit.edu
PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754
****

3833. Re: Can 6146B tubes be used in GG (grounded grid)?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 02:26:07 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <ypbNe.15579$xW.10019@bignews6.bellsouth.net>
Source record: 17666

Roger Leone wrote:
> "Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote > >
>
>>One advantage of "cathode driven tetrode" (where normal grid bias and
>>screen voltage are applied) is that you get higher power gain and
>>usually don't need to neutralize the amplifier (technically it is
>>IMPOSSIBLE to neutralize a ground grid amplifier anyway).
>>
>
>
> Ken:
>
> I think you meant to say that cathode driven tubes have LOWER power gain.
> Grid driven amps can have as much as 10 dB or more gain than cathode driven
> (GG) amps, all other factors being equal. My Johnson Thunderbolt running a
> pair of grid driven 4-400's can be driven to full output with about 20 watts
> of RF drive (representating close to 20 dB of power gain). The same tubes
> in GG configuration would need close to 80 watts to drive them to full
> output.
>
Actually I meant to say that the "cathode drive tetrode" has HIGHER gain
than a TRUE grounded grid amp. The only difference in gain between a
grid driven amp and a cathode driven tetrode amp would be due to the
driving power lost in the input circuit. But don't forget that in a
cathode driven circuit, some of the input power actually feeds through
and appears as part of the output, so it really isn't 'lost'.

Your statement about needing 80 watts to get full output in gg would
NOT be true if you ran the 4-400's in "cathode driven tetrode" service.
The BIG difference is applying normal bias and screen voltage rather
than grounding both grids and running in zero bias class B. I suspect
you'd need less than 25-30 watts for full output in "cathode driven
tetrode". BTW you'd need quite a bit LESS than 20 watts drive in
grid driven service, if you ran the tubes in class AB1 where only
voltage (no grid current) is required. (But it might take THREE tubes
to get the same output as TWO in class B or AB2).

> A grid driven 4CX250 can produce over 200 watts of output with 2 watts of
> drive (per the RCA manual). Because the tube isn't commonly used in GG
> configuration, that manual doesn't provide power gain figures for cathode
> driven service. My guess is you would need more like 8 to 10 watts of
> cathode drive to get the same 200+ watts out.
>
Sounds about right. Depends on how good your input matching network is.
Those figures must be for class AB2 though. In class AB1 your IMD goes

way down and the driving power might be only 1-2 watts in cathode drive.
> The widespread use of transceivers in the 100 watt class has made GG amps
> popular since there is no need to attenuate the transceiver's output. With
> my grid driven Thunderbolt, I use a 6 dB attenuator at the amp's input to
> keep from overdriving it.
>
> With the right choice of tube, a GG amp can have a much simpler power
> supply. And since there is no need for neutralization, homebrewing a GG amp
> is quite appealing.
>
A newer way is to run tetrodes in grid driven service with a 50 to 200
ohm high power non inductive swamping resistor from grid to ground. NO
matching network needed, same drive requirement as grounded grid, no
neutralization. Waste of power though. Many commerical amps using
Sevtlana tetrodes using this circuit.

3834. Re: Homebrew AM transistor radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 02:30:14 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <ptbNe.15586$xW.8991@bignews6.bellsouth.net>
Source record: 17667

wrongaddress@att.net wrote:
> I'm attempting to build a small AM broadcast superhet transistor radio
> from scratch and having a problem with the three IF stages oscillating
> at the IF frequency (455KHz). The IF coils are salvaged from other
> radios and the ground connections are to a common bus wire that
> connects all the IF coil shields. It works reasonably well around 5
> volts, but breaks into oscillation (at the IF frequency) if the supply
> voltage is increased 1/2 volt and the signal drops off significantly if
> the supply voltage is reduced 1/2 volt. So, it only works within a very
> small supply voltage range of around 5 to 5.5 volts. The IF stages are
> decoupled from the supply with a small resistor in series and bypass
> cap to ground which helps, but doesn't solve the problem. I'm wondering
> what can be done to stop oscillations and increase gain?
>
> How did they manage to avoid the oscillation problems in the old tube
> radios that were hand wired without any PC board?
>
> -Bill
>
As other have mentioned, those salvage if cans were meant to be used
with a neutralized amplifier. You could also re-wire the if stages
to be grounded base, which usually don't need neutralization.

Also look for transistors with lower FT. Most transistors meant for
audio frequency use will give enough gain at 455khz.

3835. Re: Homebrew AM transistor radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 03:37:57 UTC
From: wrongaddress@att.net
Message-ID: <1124422677.068571.201020@z14g2000cwz.googlegroups.com>
Source record: 17668

Well, I don't have an exact dB gain figure, but I hooked up the mixer stage by itself and I get about 300 to 400 mV p-p with a generator connected to the antenna coil using 3 turns of wire around the coil and a 50 ohm resistor in series. The generator is set to 400mV p-p and I get about the same amount out which is fairly stable from 9 volt supply to 6 volts.

The first stage seems to be working right, no oscillations, and stable output as the supply changes, and reasonable gain.

The transistor is a 2N4123 with a Ft of 250 MHz and hfe of 50-200. It is biased using a 1k emitter resistor at 1 volt, or about 1 mA.

I assume this stage works ok and will investigate number 2.

-Bill

3836. Re: Homebrew AM transistor radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 03:55:49 UTC
From: wrongaddress@att.net
Message-ID: <1124423749.191058.131690@g47g2000cwa.googlegroups.com>
Source record: 17669

Correction to other post. The output is 3 volts p-p.

3837. Re: Homebrew AM transistor radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 04:04:14 UTC
From: -ex- <exray@coqui.net>
Message-ID: <b3112$43055a41$4232bd1d$28547@COQUI.NET>
Source record: 17670

wrongaddress@att.net wrote:

>
> I assume this stage works ok and will investigate
> number 2.
>
> -Bill
>

The thing to watch out for, and I hope this isn't too redundant, is that the perfectly working stage can start misbehaving or regenerating once the following stage is connected and activated. At least you've proven that its not self-oscillating but don't assume that it wont start regenerating afterwards due to errant coupling issues. Sounds like you're making good accurate measurements so that would reveal such a situation.

-Bill #2

3838. Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 06:04:34 UTC
From: -ex- <exray@coqui.net>
Message-ID: <8a32d$43057675$4232bd1d$17412@COQUI.NET>
Source record: 17671
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

I finally gathered up my recent homebrew project photos and put them on a single webpage to show off. You can see it here. Yeah, I'm kinda proud...this is a great hobby.

http://www.sparkbench.com/homebrew/homebrew.html

-Bill M

3839. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 07:10:17 UTC
From: Jim Strickland <ubergeek72@gmail.com>
Message-ID: <1124435417.266674.127760@g43g2000cwa.googlegroups.com>
Source record: 17672
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

-ex- wrote:
> I finally gathered up my recent homebrew project photos and put them on
> a single webpage to show off. You can see it here. Yeah, I'm kinda
> proud...this is a great hobby.
>
> http://www.sparkbench.com/homebrew/homebrew.html
>
> -Bill M

Wow. Are these cases home made, or made from other radios? Your
homebrew stuff is gorgeous.

-Jim

3840. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 07:15:20 UTC
From: beerbarrel@cox.net
Message-ID: <1124435720.495671.182940@g43g2000cwa.googlegroups.com>
Source record: 17673
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

Awesome Bill!

3841. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 07:21:30 UTC
From: -ex- <exray@coqui.net>
Message-ID: <a9263$4305887c$4232bd1d$19268@COQUI.NET>
Source record: 17674
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

Jim Strickland wrote:

> -ex- wrote:
>
>>I finally gathered up my recent homebrew project photos and put them on
>>a single webpage to show off. You can see it here. Yeah, I'm kinda
>>proud...this is a great hobby.
>>
>>http://www.sparkbench.com/homebrew/homebrew.html
>>
>>-Bill M
>
>
> Wow. Are these cases home made, or made from other radios? Your
> homebrew stuff is gorgeous.
>
> -Jim
>
Thank yew! Mostly homemade cases.

-Bill

3842. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 07:59:30 UTC
From: Jeffrey D Angus <jangus@socal.rr.com>
Message-ID: <CjgNe.2911$HR5.1891@tornado.socal.rr.com>
Source record: 17675
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

-ex- wrote:

> I finally gathered up my recent homebrew project photos

Heh, I see you have "issues" with black panels.

Nice work exray.

Jeff

--
"They that can give up essential liberty to obtain a little temporary
safety deserve neither liberty nor safety." Benjamin Franklin
"A life lived in fear is a life half lived."
Tara Morice as Fran, from the movie "Strictly Ballroom"

3843. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 10:32:06 UTC
From: John Hagman <yonny@att.net>
Message-ID: <11gbd98cputm079@corp.supernews.com>
Source record: 17676
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

WOW, Bill....

You should be getting a grant, even more so than me. Many people get less done all year at their job. You really are an impossible catagory of person to define- the Radiomaster Cracker Slacker how about :) ?

Congrats, it's great to know you.

John H.

3844. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 10:34:11 UTC
From: Larry Fowkes <larry@lfowkesNOSPAM.com>
Message-ID: <4305b650$0$3733$2c56edd9@news.cablerocket.com>
Source record: 17591
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

"-ex-" <exray@coqui.net> wrote in message
news:8a32d$43057675$4232bd1d$17412@COQUI.NET...
> I finally gathered up my recent homebrew project photos and put them on
> a single webpage to show off. You can see it here. Yeah, I'm kinda
> proud...this is a great hobby.
>
> http://www.sparkbench.com/homebrew/homebrew.html
>
> -Bill M

Bill,

Where did you find the brass binding posts used on your batteries and some of the sets? Making up some "refillable" B and C batteries is on my to do list.

Your sets are beautiful, I sure wish I had those kind of woodworking skills.

Larry Fowkes

3845. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 11:10:55 UTC
From: benjamaniac <benjamaniac@yahoo.com>
Message-ID: <de4ent$9287$1@news3.infoave.net>
Source record: 17677
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

Great stuff !!!!!!!!

"-ex-" <exray@coqui.net> wrote in message
news:8a32d$43057675$4232bd1d$17412@COQUI.NET...
> I finally gathered up my recent homebrew project photos and put them on
> a single webpage to show off. You can see it here. Yeah, I'm kinda
> proud...this is a great hobby.
>
> http://www.sparkbench.com/homebrew/homebrew.html
>
> -Bill M

3846. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 11:28:57 UTC
From: MAc <mac_dx@tosiewytnie.poczta.onet.pl>
Message-ID: <de4fpdkcu1@news.onet.pl>
Source record: 17678
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

great!!!!!!!

sp9mrn

3847. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 11:29:48 UTC
From: Mr Fed UP <mrfedup@bellsouth.net>
Message-ID: <8qjNe.36586$rp.16180@bignews1.bellsouth.net>
Source record: 17679
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

Geeeee very nice. I am an OM and hard to impress but that's gooood.

BTW did you buy/refurbish any old power dams to get all them to work
at the same time? hi

Now to find someone qualified to give an insurance quote eh.

73 K4TWO

"-ex-" <exray@coqui.net> wrote in message
news:8a32d$43057675$4232bd1d$17412@COQUI.NET...
>I finally gathered up my recent homebrew project photos and put them on a
>single webpage to show off. You can see it here. Yeah, I'm kinda
>proud...this is a great hobby.
>
> http://www.sparkbench.com/homebrew/homebrew.html
>
> -Bill M

3848. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 13:56:40 UTC
From: Haggis
Message-ID: <sylNe.190015$9A2.181938@edtnps89>
Source record: 17680
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

On 19-Aug-2005, -ex- <exray@coqui.net> wrote:

> I finally gathered up my recent homebrew project photos and put them on
> a single webpage to show off. You can see it here. Yeah, I'm kinda
> proud...this is a great hobby.
>
> http://www.sparkbench.com/homebrew/homebrew.html
>
> -Bill M

Wow! My own little projects pale in comparison. Great work!

Haggis.

3849. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 14:35:54 UTC
From: Tim Mullen <tim@panix.com>
Message-ID: <de4qoa$7h9$1@reader2.panix.com>
Source record: 17681
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

In <11gbd98cputm079@corp.supernews.com> "John Hagman" <yonny@att.net> writes:

> WOW, Bill....

>You should be getting a grant

Right? I'd vote for a MacArthur.

Bill, you're a one-man old-tyme radio factory!

--
Tim Mullen

Am I in your basement? Looking for antique televisions, fans, etc.
------ finger this account or call anytime: (212)-463-0552 -------

3850. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 15:29:27 UTC
From: TerryJ <suptjudatcomcastdotnet>
Message-ID: <9NadnfgavqpFZ5jeRVn-3g@comcast.com>
Source record: 17682
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

You are not bragging, just displaying your art collection. Great work!
"-ex-" <exray@coqui.net> wrote in message
news:8a32d$43057675$4232bd1d$17412@COQUI.NET...
>I finally gathered up my recent homebrew project photos and put them on a
>single webpage to show off. You can see it here. Yeah, I'm kinda
>proud...this is a great hobby.
>
> http://www.sparkbench.com/homebrew/homebrew.html
>
> -Bill M

3851. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 15:48:55 UTC
From: Bruce Mercer <maxbud12@XXXsigecom.net>
Message-ID: <PYKdnbZUzp31YpjeRVn-qQ@sigecom.net>
Source record: 17683
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

"-ex-" <exray@coqui.net> wrote in message
news:8a32d$43057675$4232bd1d$17412@COQUI.NET...
>I finally gathered up my recent homebrew project photos and put them on a
>single webpage to show off. You can see it here. Yeah, I'm kinda
>proud...this is a great hobby.
>
> http://www.sparkbench.com/homebrew/homebrew.html
>
> -Bill M

Wow! 'One' of my favorites is that "19" set. I love the way the tube is showcased.

Bruce

3852. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 16:06:22 UTC
From: puns <puns@verizon.net>
Message-ID: <2snNe.696$M3.404@trnddc05>
Source record: 17684

Bill......I love radios with the tuning eyes!
"-ex-" <exray@coqui.net> wrote in message
news:8a32d$43057675$4232bd1d$17412@COQUI.NET...
>I finally gathered up my recent homebrew project photos and put them on a
>single webpage to show off. You can see it here. Yeah, I'm kinda
>proud...this is a great hobby.
>
> http://www.sparkbench.com/homebrew/homebrew.html
>
> -Bill M

3853. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 16:35:05 UTC
From: Steven <ManyRumours@lycos.com>
Message-ID: <1124469305.880463.216980@o13g2000cwo.googlegroups.com>
Source record: 17685
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

You're excellent indeed. That's a lot or work too. Congratulations.

3854. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 17:27:52 UTC
From: xrongor <hacky@smackeycrackey.com>
Message-ID: <de54ql$9bh1$1@news3.infoave.net>
Source record: 17686
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

you better get all that stuff back to the museum before they find out who
stole it <g>

very nice.

randy

"-ex-" <exray@coqui.net> wrote in message
news:8a32d$43057675$4232bd1d$17412@COQUI.NET...
>I finally gathered up my recent homebrew project photos and put them on a
>single webpage to show off. You can see it here. Yeah, I'm kinda
>proud...this is a great hobby.
>
> http://www.sparkbench.com/homebrew/homebrew.html
>
> -Bill M

3855. Microwave transformer HF PA Powersupply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 18:31:07 UTC
From: Sven Arne Astrup <sastrup@online.no>
Message-ID: <F--dnQqfzJj0uJveRVnzvA@telenor.com>
Source record: 17687

Hallo!

I am seeking some info about using transformers from microwave ovens in HF PA power supplies. As one side of the secondary winding is connected to the transformer core, I am a bit confused on how to do the voltage doubling.

Any info on the subject is appreciated.

73 de Sven LA6KJ

--

All incoming and outgoing E-mail
scanned by NAV 2005.

3856. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 21:35:39 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <dakcg1lvm4g3nerpkmeqlehau7ikpe9aou@4ax.com>
Source record: 17688
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

Yogi Berra said "it ain't bragging if you can do it".
You certainly can do it...
Thanks for the share.

On Fri, 19 Aug 2005 02:04:34 -0400, -ex- <exray@coqui.net> wrote:

>I finally gathered up my recent homebrew project photos and put them on
>a single webpage to show off. You can see it here. Yeah, I'm kinda
>proud...this is a great hobby.
>
>http://www.sparkbench.com/homebrew/homebrew.html
>
>-Bill M

3857. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 21:58:12 UTC
From: Phil Nelson <philnelson@nospam.xyz>
Message-ID: <e7OdnZ2dnZ1aYmK_nZ2dnWHIm96dnZ2dRVn-zJ2dnZ0@giganews.com>
Source record: 17689
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

Beautiful stuff. You are putting us (well, me anyway) to shame!

Phil Nelson

3858. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 22:05:52 UTC
From: -ex- <exray@coqui.net>
Message-ID: <60946$430657c2$4232be08$2928@COQUI.NET>
Source record: 17690
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

Phil Nelson wrote:

> Beautiful stuff. You are putting us (well, me anyway) to shame!
>
> Phil Nelson
>
>

Hey Phil, I did that first Doerle from YOUR website!

Tnx,
Bill

3859. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-19 23:24:39 UTC
From: Lou deGonzague <zenith@nycap.rr.com>
Message-ID: <XStNe.5478$PM3.5143@twister.nyroc.rr.com>
Source record: 17691
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

Bill, this is really a great collection of projects that is really what radio was in the early days. It is an inspiration for all of us to do more than just recap a radio to make it play. I have been collecting part to do what you are doing some day when I retire. Maybe I shouldn't wait for that since we never know what fate will bring us tomorrow.

-ex- wrote:
> I finally gathered up my recent homebrew project photos and put them on
> a single webpage to show off. You can see it here. Yeah, I'm kinda
> proud...this is a great hobby.
>
> http://www.sparkbench.com/homebrew/homebrew.html
>
> -Bill M

3860. FA:WESTON & SIMPSO METERS+

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 01:14:03 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <vtvNe.115586$5N3.16889@bgtnsc05-news.ops.worldnet.att.net>
Source record: 17692
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Several Simpson meter of the same type and a Weston meter + other items too;
see at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking, heytubeguy

3861. FA: GLASS FIXED VACUUM CAPS +

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 01:16:44 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <0wvNe.637674$cg1.6991@bgtnsc04-news.ops.worldnet.att.net>
Source record: 17693
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Jennings and D&W glass fixed vacuum capacitors + meters and other things,
see at;

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

tnx for looking, heytubeguy

3862. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 02:09:17 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns96B7C317A5847spectrumhogstarbandn@207.106.93.175>
Source record: 17694
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

-ex- <exray@coqui.net> wrote in news:8a32d$43057675$4232bd1d$17412
@COQUI.NET:

> I finally gathered up my recent homebrew project photos and put them on
> a single webpage to show off. You can see it here. Yeah, I'm kinda
> proud...this is a great hobby.
>
> http://www.sparkbench.com/homebrew/homebrew.html
>
> -Bill M

Damn! I am impressed. Please accept my amazement of your skills.

Where do you get parts for those projects? (knobs, dials, etc.)

Ed K7AAT

3863. Re: Stan's Parts Shop

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 02:51:23 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1d703a887a235d129896e3@news-central.giganews.com>
Source record: 17695
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,sci.electronics.equipment

In article <0babg19cs1957uniis63ag9coh922c2k0u@4ax.com>,
ximac@btinternet.com says...
> Hi,
>
> On the subject site W7NI advertises a CD version of the 1975
> Tektronix catalogue. Unfortunately he hasn't replied to an email
> of mine, and as the last site update is March '04, I wonder if he
> is still trading? Any pointers to similar CD would be much
> appreciated.
>
> Cheers - Joe
>

Stan can be a bit slow in responding to email, but he is very much still
in business, and very much worth the wait. He spends a lot of time on
the TekScopes group on Yahoo Groups; you might try to ping him there, in
case his email address has changed recently.

-- john, KE5FX

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

3864. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 03:14:44 UTC
From: -ex- <exray@coqui.net>
Message-ID: <c7e33$4306a027$4232bddb$16011@COQUI.NET>
Source record: 17696
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

Ed wrote:
> -ex- <exray@coqui.net> wrote in news:8a32d$43057675$4232bd1d$17412
> @COQUI.NET:
>
>
>>I finally gathered up my recent homebrew project photos and put them on
>>a single webpage to show off. You can see it here. Yeah, I'm kinda
>>proud...this is a great hobby.
>>
>>http://www.sparkbench.com/homebrew/homebrew.html
>>
>>-Bill M
>
>
>
> Damn! I am impressed. Please accept my amazement of your skills.
>
> Where do you get parts for those projects? (knobs, dials, etc.)
>
>
> Ed K7AAT

Thanks, Ed. I'm an ebay junkie when it comes to parts hunting.

-Bill WX4A/KP4

3865. Re: Homebrew AM transistor radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 05:49:15 UTC
From: wrongaddress@att.net
Message-ID: <1124516955.436855.299510@g49g2000cwa.googlegroups.com>
Source record: 17697

I sucessfully hooked up two stages with no oscillation problems. I added a 560 ohm load resistor across the output winding of the first stage. The LO oscillator is a separate circuit (JFET) and there are no physical connections from the the oscillator to the mixer stage. It seems to mix and produce the IF from just the radiation from the LO capacitor to the station tuning capacitor.

The IF modulated output is about 2 volts p-p on a strong station, 600 mV on a average station, and only 50mV on weak stations.

It's almost usable, but not quite. I need to raise the weak stations another 12 dB or so. Also, the LO oscillator is leaking into the output at the high end of the band. I get 100mV of noise from the LO toward the high end.

Is it a good idea to try and raise the gain of the 2 existing stages, or try to add a third stage to raise the gain?

I've noticed some transistor radios use only one IF amplifier stage while others use 2.

What are the advantages of the third stage if enough gain can be obtained from just 2?

-Bill

3866. The Weekly F.A.Q.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 07:32:00 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1124523120.544365.180540@g43g2000cwa.googlegroups.com>
Source record: 17548
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.radio.amateur

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,

competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

3867. Re: The Weekly F.A.Q.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 08:55:28 UTC
From: Conrad Poos <poos@hamsexual.com>
Message-ID: <4eCNe.9104$Il.5309@fe2.news.blueyonder.co.uk>
Source record: 17549
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.radio.amateur

Polymath wrote:

> Users, such as broadcasters,
> the po lice and armed farces, CBers and mobile phone
> users have to purchase ready-made gear.

Even though its true that only amateurs are allowed to make their own stuff, I don't see the relevance of bringing the armed services, police etc into the argument. This FarceAQ becomes increasingly bitter and bizarre with each passing week.

<yoda>
Strong in this one is the dark side of the farce!!
</yoda>

Poos

--
vy 73 de Conrad Poos

"Ich bin ein Jedi radio amateur"

3868. Re: The Weekly F.A.Q.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 09:06:02 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <5LCdnea5at7tbpveRVnysA@pipex.net>
Source record: 17550
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.radio.amateur

> Even though its true that only amateurs are allowed to make their own
> stuff, I don't see the relevance of bringing the armed services, police
> etc into the argument. This FarceAQ becomes increasingly bitter and
> bizarre with each passing week.
==========
My suggestion : Just ignore FarceAQs.

Frank GM0CSZ / KN6WH

3869. Re: The Weekly F.A.Q.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 09:10:11 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <5LCdneG5at7tbpveRVnysA@pipex.net>
Source record: 17551
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.radio.amateur

```
> Even though its true that only amateurs are allowed to make their own
> stuff, I don't see the relevance of bringing the armed services, police
> etc into the argument. This FarceAQ becomes increasingly bitter and
> bizarre with each passing week.
============================
Suggestion : Just ignore FarceAQs

Frank GM0CSZ / KN6WH
```

3870. Re: The Weekly F.A.Q.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 10:17:33 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1124533053.584932.124700@g43g2000cwa.googlegroups.com>
Source record: 17552
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.radio.amateur

Perhaps it is that those who respond in a negative style,
or those who respond with Childish Broadcasts (CB), are
from the very group of CBers that are
warned against in the FAQ?

I just hope that we have not left it too late to
prevent Ham Radio from becoming a gangrenous
degeneration of such non-technical CBers.

Highland Ham wrote:
> > Even though its true that only amateurs are allowed to make their own
> > stuff, I don't see the relevance of bringing the armed services, police
> > etc into the argument. This FarceAQ becomes increasingly bitter and
> > bizarre with each passing week.
> ========================
> My suggestion : Just ignore FarceAQs.
>
>
> Frank GM0CSZ / KN6WH

3871. Re: Spectrum Analyser from Cell Phones?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 10:50:46 UTC
From: zzzpk_pkearn_class_a@its-as-easy-as-they-say-multi_band_cb_is_here.eircom.es.it.net
Message-ID: <43070a10.451985@news.iol.ie>
Source record: 17553
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"James F. Mayer" <jfma@ix.netcom.com> wrote:

: > you mean you didnt use it to heat the place on a cold morning ?
:
: That's what you use the Tektronix 555 for.

tee hee...

had a dream the other night that i was back fixing 621-a3's !!

3872. Re: Homebrew AM transistor radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 10:52:22 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <GXDNe.3612$137.914@trnddc08>
Source record: 17554

Bill,

Good to hear that you tamed the oscillation, but the 560 ohm load resistor seems a bit severe...have you tried something in the few kohms range?

50 mv out of the mixer on a 'weak' station sounds pretty good. What is the combined gain of the two IF stages? Are they possibly overloading ?

Also, how are you coupling the antenna into the mixer?

Joe
W3JDR

<wrongaddress@att.net> wrote in message
news:1124516955.436855.299510@g49g2000cwa.googlegroups.com...
>I sucessfully hooked up two stages with no oscillation problems. I
> added a 560 ohm load resistor across the output winding of the first
> stage. The LO oscillator is a separate circuit (JFET) and there are no
> physical connections from the the oscillator to the mixer stage. It
> seems to mix and produce the IF from just the radiation from the LO
> capacitor to the station tuning capacitor.
>
> The IF modulated output is about 2 volts p-p on a strong station, 600
> mV on a average station, and only 50mV on weak stations.
>
> It's almost usable, but not quite. I need to raise the weak stations
> another 12 dB or so. Also, the LO oscillator is leaking into the output
> at the high end of the band. I get 100mV of noise from the LO toward
> the high end.
>
> Is it a good idea to try and raise the gain of the 2 existing stages,
> or try to add a third stage to raise the gain?
>
> I've noticed some transistor radios use only one IF amplifier stage
> while others use 2.
>
> What are the advantages of the third stage if enough gain can be
> obtained from just 2?
>
> -Bill
>

3873. Re: The Weekly F.A.Q.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 10:55:13 UTC
From: Conrad Poos <poos@hamsexual.com>
Message-ID: <l_DNe.6509$jr4.5704@fe3.news.blueyonder.co.uk>
Source record: 17555
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.radio.amateur

Polymath wrote:

> I just hope that we have not left it too late to
> prevent Ham Radio from becoming a gangrenous
> degeneration of such non-technical CBers.

Better a non-technical CBer than a hate-filled mentalist!

Poos

--
vy 73 de Conrad Poos

"Ich bin ein radio amateur"

3874. Op amp supply-rail question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 11:14:53 UTC
From: Ian Liston-Smith <ian@morse-code.NO.SPAM.TODAY.fsnet.co.uk>
Message-ID: <312eg1he7tdtr9tvanovs7ek3n8q7f8efi@4ax.com>
Source record: 17556

I'd like to build a tone control circuit using the LF353 dual op amp. The circuit has bass, mid range and treble adjustments.

The problem:
The circuit (see http://www.ece.ucsb.edu/courses/ECE002/2C_Su05Makaremi/lf353.pdf circuit on page 7) uses dual voltage rails of +15 and -15 volts, though for line input levels, this will probably work down to +8 and -8 volts. But I want to run it from a single +12 volt supply.

Usually, two 100k resistors across the supply, their junction connected at the non-inverting input, alows an op amp to run from a single supply, the output floating at about half supply volts. This is fine for my use, but will it work with a dual op amp? I've searched my documentation, but found no reference to doing this for dual op amps. If it will work, will say two 100k resistors (one to +12v the other to ground, junction to pin 3) work? Does it need another 100k or so between their junction to pin 3 to isolate the input audio from the two 100k resistor potential devider?

The first op ampin the LF353 application notes is only a buffer in the tone control circuit, so I guess I could avoid the problem and use a single CA3130 or similar op amp and use the 100k devider trick, and still use the tone control components. (I doubt the LF353 has any special properties for this particular use.)

If anyone has another three-control op amp circuit wthat runs from a single 12v supply, I'd be interested.

Thanks...

Ian

3875. Re: The Weekly F.A.Q.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 11:34:55 UTC
From: the real ME <realME@here.there>
Message-ID: <de74gv$9o3$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 17557
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.radio.amateur

"Conrad Poos" <poos@hamsexual.com> wrote in message
news:4eCNe.9104$Il.5309@fe2.news.blueyonder.co.uk...
> Polymath wrote:
>
>> Users, such as broadcasters,
>> the po lice and armed farces, CBers and mobile phone
>> users have to purchase ready-made gear.
>
> Even though its true that only amateurs are allowed to make their own
> stuff, I don't see the relevance of bringing the armed services, police
> etc into the argument. This FarceAQ becomes increasingly bitter and
> bizarre with each passing week.
>
> <yoda>
> Strong in this one is the dark side of the farce!!
> </yoda>
>
> Poos
>
> --
> vy 73 de Conrad Poos
>
> "Ich bin ein Jedi radio amateur"

Wot ? You not kilfiled the twat yet ?

3876. Re: Op amp supply-rail question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 14:12:05 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1d70da155f5c251e98968e@192.168.42.131>
Source record: 17558

In article <312eg1he7tdtr9tvanovs7ek3n8q7f8efi@4ax.com>, ian@morse-code.NO.SPAM.TODAY.fsnet.co.uk says...

> I'd like to build a tone control circuit using the LF353 dual op amp.
> The circuit has bass, mid range and treble adjustments.

<snippety>

> though for line input levels, this will probably work down to +8 and
> -8 volts. But I want to run it from a single +12 volt supply.

<snippety-two>

The solution: You can easily get aftermarket DC/DC converter modules which will take your +12 in, and provide bipolar 15V out.

Some examples:

Power-One, p/n DFC10U24D15, in stock at DigiKey for about $71. Vin range of 9-36, Vout +/-15 at 300mA per, isolated outputs. .PDF spec sheet is at:

http://www.power-one.com/resources/products/datasheet/dfc10d.pdf

A less expensive solution with slightly lower output voltages can be found at Jameco on this link.

http://www.jameco.com/webapp/wcs/stores/servlet/ProductDisplay?langId=-1&storeId=10001&catalogId=10001&productId=161728&pa=161728PS

If the link doesn't work, try searching for Mean Well part #DKE15A-12. This one will give you +/-12V at 625mA each, isolated output, for $35 and change.

I'm sure there are plenty of other manufacturers with products that can address your application. Happy hunting.

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped with surreal ports?"

3877. Re: Op amp supply-rail question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 14:23:21 UTC
From: zzzpk_pkearn_class_a@its-as-easy-as-they-say-multi_band_cb_is_here.eircom.es.it.net
Message-ID: <43073cad.1024007@news.iol.ie>
Source record: 17559

Ian Liston-Smith <ian@morse-code.NO.SPAM.TODAY.fsnet.co.uk> wrote:

: Usually, two 100k resistors across the supply, their junction
: connected at the non-inverting input, alows an op amp to run from a
: single supply, the output floating at about half supply volts. This is
: fine for my use, but will it work with a dual op amp? I've searched my

try it and see

3878. Re: The Weekly F.A.Q.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 16:48:04 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1124556484.683367.276260@z14g2000cwz.googlegroups.com>
Source record: 17560
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.radio.amateur

If you think that a very genuine concern being
expressed about what Ham Radio is and what it is
not is a troll, then I fear that you yourself may
have been taken in by the CB fanatics and have become
a CBer although misbelieving that you were a Radio Ham.

Do not side with the infantile Childish Broadcasters (CBers)
who use such unnecessary phraseology as "hate-filled
mentalist".

(There is no hate in what I publish - all-comers are
welcome to join the ranks of _REAL_ Radio Hams - there
are no exceptions! However, that is not to say that we
must accept the Mongolian Hordes of untechnical CBers
as our fellows because that is one thing that they ain't.)

Jim Higgins wrote:
> On Sat, 20 Aug 2005 10:55:13 GMT, in
> <l_DNe.6509$jr4.5704@fe3.news.blueyonder.co.uk>, Conrad Poos
> <poos@hamsexual.com> wrote:
> >Polymath wrote:
> >> I just hope that we have not left it too late to
> >> prevent Ham Radio from becoming a gangrenous
> >> degeneration of such non-technical CBers.
> >Better a non-technical CBer than a hate-filled mentalist!
> Better that you get the same clue most got some time ago and
> realize the author of this "FAQ" is a troll and you're feeding
> him.
> Non-technical CBers are just another bunch of guys having fun
> with their hobby. Live and let live. There's absolutely nothing
> redeeming about troll feeders.

3879. Re: The Weekly F.A.Q.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 16:53:22 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.20.16.53.19.637228@gmail.com>
Source record: 17563
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.radio.amateur

PM:

What you "publish" is bizarre...

Frankly, in my very humble opinion, I can't imagine anyone short of a
ma'roon being able to "see it" for any resemblance of truth... anyone with
common sense would be ashamed to associate themselves with such... but
hey, never hurts to try...

... good luck ...

John

On Sat, 20 Aug 2005 09:48:04 -0700, Polymath wrote:

> If you think that a very genuine concern being
> expressed about what Ham Radio is and what it is
> not is a troll, then I fear that you yourself may
> have been taken in by the CB fanatics and have become
> a CBer although misbelieving that you were a Radio Ham.
>
> Do not side with the infantile Childish Broadcasters (CBers)
> who use such unnecessary phraseology as "hate-filled
> mentalist".
>
> (There is no hate in what I publish - all-comers are
> welcome to join the ranks of _REAL_ Radio Hams - there
> are no exceptions! However, that is not to say that we
> must accept the Mongolian Hordes of untechnical CBers
> as our fellows because that is one thing that they ain't.)
>
> Jim Higgins wrote:
>> On Sat, 20 Aug 2005 10:55:13 GMT, in
>> <l_DNe.6509$jr4.5704@fe3.news.blueyonder.co.uk>, Conrad Poos
>> <poos@hamsexual.com> wrote:
>> >Polymath wrote:
>> >> I just hope that we have not left it too late to
>> >> prevent Ham Radio from becoming a gangrenous
>> >> degeneration of such non-technical CBers.
>> >Better a non-technical CBer than a hate-filled mentalist!
>> Better that you get the same clue most got some time ago and
>> realize the author of this "FAQ" is a troll and you're feeding
>> him.
>> Non-technical CBers are just another bunch of guys having fun
>> with their hobby. Live and let live. There's absolutely nothing

>> redeeming about troll feeders.-

3880. Re: Op amp supply-rail question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 17:12:47 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <11gep4s4reiq848@corp.supernews.com>
Source record: 17561

It will work just fine with a couple of caveats. One, there needs to be a goodly sized filter capacitor at the junction of the 100K resistors. If you can stand a couple of seconds "warm up", a 100 uF will serve admirably. Two, if the noninverting inputs (+ inputs) have any function other than bias (i.e. if there is feedback to them or they are an active input) then yes, you will need some sort of isolation resistor network. How you gin that network up and keep voltage drop from happening is up to you.

Jim

> Usually, two 100k resistors across the supply, their junction
> connected at the non-inverting input, alows an op amp to run from a
> single supply, the output floating at about half supply volts. This is
> fine for my use, but will it work with a dual op amp?

3881. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 17:15:13 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <11gep9e18h4pv51@corp.supernews.com>
Source record: 17562
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

I believe Dizzy Dean said it first.

Jim

"John Ferrell" <johnferrell@sprintmail.com> wrote in message
news:dakcg1lvm4g3nerpkmeqlehau7ikpe9aou@4ax.com...

> Yogi Berra said "it ain't bragging if you can do it".

3882. Phillips EE Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 18:34:04 UTC
From: Tom <nospam@nospam.com>
Message-ID: <wIKNe.642036$cg1.602951@bgtnsc04-news.ops.worldnet.att.net>
Source record: 17564

This web site brought back quite a few memories... I played around with one of the 'EE' kits in the early 60's when I was in Thailand---Pop picked it up for me when he was in Hong Kong.

http://ee.old.no/

Judging by the links presented on the page, these kits played a major role in shaping the lives of many engineers-to-be in Europe and elsewhere. I don't remember seeing these kits marketed extensively in the US although every now and then I come across a Ham's bio that contains a fond reference to them.

Tom

3883. Re: Homebrew AM transistor radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 18:36:53 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <tbteg11fr8c3390n7t7v0sagdf8kdmsj0n@4ax.com>
Source record: 17565

On 19 Aug 2005 22:49:15 -0700, wrongaddress@att.net wrote:

>I sucessfully hooked up two stages with no oscillation problems. I
>added a 560 ohm load resistor across the output winding of the first
>stage.

You could load the primary instead, values in the range of 10k to 80k
would be tried.

> The LO oscillator is a separate circuit (JFET) and there are no
>physical connections from the the oscillator to the mixer stage. It
>seems to mix and produce the IF from just the radiation from the LO
>capacitor to the station tuning capacitor.

Not uncommon, one circuit copuples to another due to adjacent
components. However, the Mixer may not be seeing the optimum
LO level for best gain or overload characteristics.

>The IF modulated output is about 2 volts p-p on a strong station, 600
>mV on a average station, and only 50mV on weak stations.
>
>It's almost usable, but not quite. I need to raise the weak stations
>another 12 dB or so. Also, the LO oscillator is leaking into the output
>at the high end of the band. I get 100mV of noise from the LO toward
>the high end.

Any number of factors here. More gain means more stanility problems.

>Also, the LO oscillator is leaking into the output
>at the high end of the band. I get 100mV of noise from the LO toward
>the high end.

The LO could be noisy due to design error. The front end (loopstick
in AM BCB radios) may be tuned better at that end of the band and you
hearing (seeing) more noise. Or you are seeing better coupling of the
LO (increses with frequency) and better mixer gain. The MW range
(300kc to 3mhz) has a very high backgound noise both teresterial and
man made.
.
>Is it a good idea to try and raise the gain of the 2 existing stages,
>or try to add a third stage to raise the gain?

NO, they are only conditonally stable as is. That load on the one
transformer is both robbing gain and also giving a little stability.

>I've noticed some transistor radios use only one IF amplifier stage
>while others use 2.

Depends on perfomance. Those with one are pretty tepid in the
sensitivity department.

>What are the advantages of the third stage if enough gain can be
>obtained from just 2?

Many AM radios apply AGC to one or more stages to "level"
the strong and weak stations for even audio output and to prevent
later states from overloading. More stages allow for more applied AGC
and overall better perfomance.

Allison KB1GMX

3884. Re: Op amp supply-rail question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 18:42:54 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <g5ueg1dcnlkdgcfnnlqqaog16bl1kagpio@4ax.com>
Source record: 17566

On Sat, 20 Aug 2005 12:14:53 +0100, Ian Liston-Smith
<ian@morse-code.NO.SPAM.TODAY.fsnet.co.uk> wrote:

>
>I'd like to build a tone control circuit using the LF353 dual op amp.
>The circuit has bass, mid range and treble adjustments.

>>>>>>>>>>>snippage>>>>>>>>>>>>
>
>Usually, two 100k resistors across the supply, their junction
>connected at the non-inverting input, alows an op amp to run from a
>single supply, the output floating at about half supply volts. This is
>fine for my use, but will it work with a dual op amp? I've searched my
>documentation, but found no reference to doing this for dual op amps.
>If it will work, will say two 100k resistors (one to +12v the other to
>ground, junction to pin 3) work? Does it need another 100k or so
>between their junction to pin 3 to isolate the input audio from the
>two 100k resistor potential devider?

Use two 10k and at least 100uf or more of filtering . Works in
designs I've built. Also insure the supply rails are well filtered
and the input and output capacitors are suitably sized.

>The first op ampin the LF353 application notes is only a buffer in
>the tone control circuit, so I guess I could avoid the problem and
>use a single CA3130 or similar op amp and use the 100k devider trick,
>and still use the tone control components. (I doubt the LF353 has any
>special properties for this particular use.)

Use the buffer, the circuit will behave better with input sources of
unknown impedence.

The 353 is a nice low noise opamp.

>If anyone has another three-control op amp circuit wthat runs from a
>single 12v supply, I'd be interested.

There are but the one you have with an artificial ground point will
behave well.

Allison
KB1GMX

3885. DYMEK DA9

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 22:08:10 UTC
From: Dxer 1600 <rjr@optonline.net>
Message-ID: <q4ONe.2972$_7.361@fe08.lga>
Source record: 17567
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi
I just picked up a (stoner) Dymek DA9 active antenna. The tuning cap has somehow been bypassed and it does nothing to affect the station. I was told that this was bypassed intentionally so as to be a broadband antenna. I'd like to resore ti to original and use the tuning cap as a preselector.

Does anyone have a print / schematic on this unit ?

Thanks!

3886. Re: Phillips EE Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-20 22:49:30 UTC
From: Bob Liesenfeld <wb0poq@visi.com>
Message-ID: <4307B37A.3333ACE7@visi.com>
Source record: 17568

Tom wrote:

> This web site brought back quite a few memories... I played around with one
> of the 'EE' kits in the early 60's when I was in Thailand---Pop picked it up
> for me when he was in Hong Kong.

Yup, I had one of these as a kid. Probably the EE-20. Loved it. It was a sophisticated toy. As I got older, I used (read blew up) a lot of the components in my own experiments. Sigh.....wish I had kept it intact.

Bob WB0POQ

3887. Re: Spectrum Analyser from Cell Phones?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-21 00:36:03 UTC
From: "G1LVN (for it is he)" <gareth.paley@gmail.com>
Message-ID: <de8i9j$t87$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 17569
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
news:1124201060.675868.219920@g44g2000cwa.googlegroups.com...
>
> Cellphones don't really have a well-defined module like the TV tuner in
> them. They aren't broadband in the same way. Their synthesizers are
> not broadband either.
>
You obviously not seen the design to make a Nokia 3310 into a Cellphone
jammer. - Simple sweep osillator curcuit built on veroboard into the battery
compartment ? Just plug the mains addaptor into a stangard 240v 13A
GNER/VIRGIN power outlet and enjoy hours of
non-mobile-phone-interrupted-journey.

--
73deG1LVN
http://www.outpimp.com/?x=481566961

3888. Re: The Weekly F.A.Q.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-21 01:05:28 UTC
From: M0WWS <gareth.paley@gmail.com>
Message-ID: <1124586328.922655.16590@f14g2000cwb.googlegroups.com>
Source record: 17570
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.radio.amateur

10-4 good buddy. Keep your shiney side up and your dirty side down (profound even for CB ?) we up we down we left we right we catch you on the flip side. Bye bye for now, bye bye for them, bye bye for who,m bye bbye for whom, we gotta a zoom. You up You down we down we out bye bye and best 73s 88s 51s and 501's we clear...

3889. Re: Spectrum Analyser from Cell Phones?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-21 01:08:28 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.21.01.08.26.858557@gmail.com>
Source record: 17573
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

G1LVN:

Such things can be done, but that certainly sounds much less than workable!

The plans there might better function as a "Burnt Wiring Smell Generator!"
I have built a few of 'em, most likely there are still a few left waiting
to be built in my future...

John

On Sun, 21 Aug 2005 00:36:03 +0000, G1LVN (for it is he) wrote:

> Nokia 3310

3890. Re: Phillips EE Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-21 01:21:13 UTC
From: Tom <nospam@nospam.com>
Message-ID: <dGQNe.643720$cg1.368829@bgtnsc04-news.ops.worldnet.att.net>
Source record: 17571

Bob Liesenfeld <wb0poq@visi.com> wrote in message
news:4307B37A.3333ACE7@visi.com...
>
>
> Tom wrote:
>
> > This web site brought back quite a few memories... I played around with
one
> > of the 'EE' kits in the early 60's when I was in Thailand---Pop picked
it up
> > for me when he was in Hong Kong.
>
> Yup, I had one of these as a kid. Probably the EE-20. Loved it. It
was a
> sophisticated toy. As I got older, I used (read blew up) a lot of the
> components in my own experiments. Sigh.....wish I had kept it intact.
>
> Bob WB0POQ
>
I looked though my stuff and all I could find of my EE20 was a heat sink,
the ferrite rod and the Valvo OA76 diode (I think that diode came from the
kit).

Blew up components is right... I recall electrolytic capacitors coming apart
when they were hooked up wrong---I had to get new 100 mf capacitors.

I remember building the:
Vochtigheidsindicator (moisture indicator)
Automatische nachtlamp
Morse-code apparaat met oortelefoon
Morse-code apparaat met luidspreker

Did you see this link to the EE20?
http://www.rrd.demon.nl/Philips%20experimenteerdozen/foto_ee20.htm
I tried to download the pdf template file but I didn't get anything.

You're right, they were nicely put together kits. I'll keep my eyes open on
eBay for them---maybe even try the Dutch eBay.

Tom

3891. Re: Phillips EE Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-21 01:27:24 UTC
From: Tom <nospam@nospam.com>
Message-ID: <0MQNe.643747$cg1.41239@bgtnsc04-news.ops.worldnet.att.net>
Source record: 17572

Sorry, I meant this link to the EE20
http://members.lycos.nl/bouwdoos/ee8.html

3892. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-21 06:31:02 UTC
From: Dennis Daly <DDALY4@Twcny.rr.com>
Message-ID: <GcVNe.6905$PM3.4455@twister.nyroc.rr.com>
Source record: 17574
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

"-ex-" <exray@coqui.net> wrote in message
news:8a32d$43057675$4232bd1d$17412@COQUI.NET...
> I finally gathered up my recent homebrew project photos and put them on
> a single webpage to show off. You can see it here. Yeah, I'm kinda
> proud...this is a great hobby.
>
> http://www.sparkbench.com/homebrew/homebrew.html
>
> -Bill M

A true craftsman!
Beautiful..As usual.

Den

3893. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-21 08:00:41 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <JwWNe.267587$x96.189240@attbi_s72>
Source record: 17575
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

Congratulations on your interesting and well done homebrew projectts.

Bill W0IYH

"-ex-" <exray@coqui.net> wrote in message
news:8a32d$43057675$4232bd1d$17412@COQUI.NET...
>I finally gathered up my recent homebrew project photos and put them on a
>single webpage to show off. You can see it here. Yeah, I'm kinda
>proud...this is a great hobby.
>
> http://www.sparkbench.com/homebrew/homebrew.html
>
> -Bill M

3894. Re: Spectrum Analyser from Cell Phones?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-21 10:34:19 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <mbudnbOne7g5xZXeRVnyiQ@pipex.net>
Source record: 17576
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

> You obviously not seen the design to make a Nokia 3310 into a Cellphone
> jammer. - Simple sweep osillator curcuit built on veroboard into the
> battery compartment ? Just plug the mains addaptor into a stangard 240v
> 13A GNER/VIRGIN power outlet and enjoy hours of
> non-mobile-phone-interrupted-journey.
=======
For US based readers of this NG : GNER= Great North East Railways . VIRGIN
= Virgin Trains (from the same stock as Virgin Atlantic)
The trains running from London - Edinburgh -Aberdeen vv apparently have
240V-AC sockets for hooking up laptops and other electrical devices.

Frank GM0CSZ / KN6WH

3895. Re: Microwave transformer HF PA Powersupply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-21 11:58:38 UTC
From: amdxjunk <nojunk@knology>
Message-ID: <29492$43086c70$18d6b479$8475@KNOLOGY.NET>
Source record: 17577

Hi Sven,
QEX Jan/Feb 1998 has an article using four microwave oven transformers
to build a HV power supply. Glancing thru I see that a magnetic shunt is
removed from the transformers as these will cause poor regulation.
I'll read it today a see if I can add more info. I recommend you locate the
article.
Mike

"Sven Arne Astrup" <sastrup@online.no> wrote in message
news:F--dnQqfzJj0uJveRVnzvA@telenor.com...
> Hallo!
>
> I am seeking some info about using transformers from microwave ovens in HF
> PA power supplies. As one side of the secondary winding is connected to
the
> transformer core, I am a bit confused on how to do the voltage doubling.
>
> Any info on the subject is appreciated.
>
> 73 de Sven LA6KJ
>
> --
>
>
> All incoming and outgoing E-mail
> scanned by NAV 2005.
>
>

3896. Re: Spectrum Analyser from Cell Phones?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-21 12:15:43 UTC
From: Alex Gibson <news@alxx.net>
Message-ID: <3mrc9qF18atjlU2@individual.net>
Source record: 17579
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1124040307.170942.41970@z14g2000cwz.googlegroups.com...
>I wonder if anyone has successfully converted a
> thrown-away cell-phone into a spectrum analyser?
>
> We would seem to have all the necessary components
> in there for free - keyboard, graphical display,
> post-demodulation DSP, Frequency Synthesizer,
> RF good up to 1 GHz (2G5Hz if an ex-WCDMA unit)
>
> Here would seem to be an opportunity to equip
> all Radio Hams with a reasonably state-of-the-art
> piece of test gear, that when coupled with an
> IF generator would give us all a network analyser
> into the bargain!
>

A few people are looking at turning one of the xilinx S3 (spartan3)
starter kits into spectrum analysers and logic analyser with a vga output.
http://www.xilinx.com/xlnx/xebiz/designResources/ip_product_details.jsp?sGlobalNavPick=PRO
DUCTS&sSecondaryNavPick=Design+Tools&category=&iLanguageID=1&key=DO-SPAR3-DK

http://www.fpga4fun.com/digitalscope.html
http://www.fpga4fun.com/board_flashy.html

Problem with a lot of the phone stuff is getting access to the chips pins
for programming
(if they had them in the first place).
Chips are factory programmed and not reprogrammable.

3897. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-21 12:58:59 UTC
From: Eddie Brimer <eb062559@aol.com>
Message-ID: <1124629139.879571.274690@g43g2000cwa.googlegroups.com>
Source record: 17578
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

bill, do you make your own cabinets? nice work!

3898. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-21 14:49:23 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <Tv0Oe.54015$084.32306@attbi_s22>
Source record: 17580
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

No, they are made by Hammond Co. in Canada and purchased through the Newark Catalog. They are excellent steel cabinets and quite heavy. I have made some cabinets in the past, but nothing as nice as these.

Bill W0IYH

"Eddie Brimer" <eb062559@aol.com> wrote in message news:1124629139.879571.274690@g43g2000cwa.googlegroups.com...
> bill, do you make your own cabinets? nice work!
>

3899. Re: Microwave transformer HF PA Powersupply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-21 15:10:02 UTC
From: amdxjunk <nojunk@knology>
Message-ID: <73fae$4308994d$18d6b479$1316@KNOLOGY.NET>
Source record: 17581

Hi Sven,
The author built a 500V screen supply and a 2700V plate supply.
The magnetic shunts must be driven out using a hammer and a
chisel of about the same size as the shunt.
The author had MOT's with the secondary unconnected to the case.
He did design so if he had to replace a MOT it would work with a
case connected secondary. He mounted the transformers so they were
insulated from everything except the case of the others. The cases were
the center tap.
With the large output capacitor, he designed in a slow start circuit to
prevent damage from large inrush currents trying to charge the cap.

I located an article below that has more info.
I searched " Build a high voltage power supply at low cost QEX"
The author is Randy Henderson WI5W

>Michael A. Terrell wrote:
>>
>>
>> The welded cores can cause problems. This has been discussed on the
>>various sci.electronics.* groups a number of times
>>
>The key phrase to search for is "magnetic shunt". Typically the magnetic
>shunt consists of two extra blocks of laminations between the primary
>and secondary bobbins. This has been added to give the transformer a
>current-limiting characteristic, which is necessary to power a magnetron
>- but is exactly the opposite of what you need for normal vacuum tubes.
>
>In many oven transformers, the magnetic shunt blocks can be driven out
>with a large punch, to leave a more normal-looking transformer.
>
>The not-so-good news is that you're still left with a transformer that
>has a very high secondary voltage and rather high secondary resistance,
>which will give poor voltage regulation in typical amateur use. Also one
>end of the secondary winding is usually grounded to the core. Even if
>you can get to the grounded end to disconnect it, the insulation close
>to the core is not designed for typical full-wave bridge applications.
>
>Some people have had limited success with a pair of identical
>transformers connected as a "centre-tapped" winding... but remember that
>in two separate transformers the core magnetization by the DC components
>will not cancel.
>
>It all seems like a lot of effort for rather poor results.

The worst problem is idle current, 1.2-1.5A on 240VAC, so you should
use the extra space and add 100turns for the primary, and reduce the
idle current to 0.3A. This will also reduce the output voltage below
2kV DC. Many cores are standard E120 types and it isn't worth the
trouble of trying to use the original rubbish

I've planned to bring some information on
http://home.online.no/~la8ak/d4.htm , but haven't translated it into
English yet

73
LA8AK

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/91n.htm

"Sven Arne Astrup" <sastrup@online.no> wrote in message
news:F--dnQqfzJj0uJveRVnzvA@telenor.com...
> Hallo!
>
> I am seeking some info about using transformers from microwave ovens in HF
> PA power supplies. As one side of the secondary winding is connected to
the
> transformer core, I am a bit confused on how to do the voltage doubling.
>
> Any info on the subject is appreciated.
>
> 73 de Sven LA6KJ
>
> --
>
>
> All incoming and outgoing E-mail
> scanned by NAV 2005.
>
>

3900. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-21 17:09:31 UTC
From: -ex- <exray@coqui.net>
Message-ID: <cdc98$4308b54c$4232bd63$382@COQUI.NET>
Source record: 17582
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

William E. Sabin wrote:

> No, they are made by Hammond Co. in Canada and purchased through the Newark
> Catalog. They are excellent steel cabinets and quite heavy. I have made
> some cabinets in the past, but nothing as nice as these.
>
> Bill W0IYH

Its easier than you think to make these little cabinets. My "woodshop" consists of a clear area on the floor in the shack where I can sit and do small-scale woodworking. Woodshop machinery includes a cheapo Black and Decker sabre saw, and a cheapo Craftsman (or whatever lasts more than 90 days) finishing sander. Recently I upgraded to a little Micromark hobby-sized table saw and a small Skil belt sander for convenience. Hey, who needs a good saw if you have a good belt sander?!?

I won't be making any kitchen cabinets or furniture with this setup unless its for dollhouses!

-Bill

3901. Re: Spectrum Analyser from Cell Phones?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-21 18:08:34 UTC
From: dlharmon <harmon.darrell@gmail.com>
Message-ID: <1124647714.567868.62660@g43g2000cwa.googlegroups.com>
Source record: 17583
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Alex Gibson wrote:
>
> A few people are looking at turning one of the xilinx S3 (spartan3)
> starter kits into spectrum analysers and logic analyser with a vga output.
> http://www.xilinx.com/xlnx/xebiz/designResources/ip_product_details.jsp?sGlobalNavPick=P
RODUCTS&sSecondaryNavPick=Design+Tools&category=&iLanguageID=1&key=DO-SPAR3-DK
>
> http://www.fpga4fun.com/digitalscope.html
> http://www.fpga4fun.com/board_flashy.html
>
> Problem with a lot of the phone stuff is getting access to the chips pins
> for programming
> (if they had them in the first place).
> Chips are factory programmed and not reprogrammable.

I really like the idea of an FPGA based spectrum analyzer. I have been
planning to put one together for a while and have started on
schematics. Rather than doing VGA output I am using USB to a PC. I
have the FPGA/DSP board up and running.

It will probably be some form of a dual conversion design with the
input signal being upconverted to an IF around 2GHz and then fed to a
quadrature demodulator.

One other really nice thing that can be done with a FPGA easily is a
Arbitrary waveform generator using block rams as a lookup table.

http://dlharmon.com/dspcard/adcdac.html

Darrell Harmon

3902. TS 140S PROBLEM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-22 09:25:03 UTC
From: JAVI <ea1evr@telecable.es>
Message-ID: <1124702703.530290.247980@o13g2000cwo.googlegroups.com>
Source record: 17584

Hello:
I have a problem with my ts140s. After 3 year of inactivity i power up my all transceiver and it stay 1 month powered but not transmiting. after that i note:
-when i rotate the know down slowly the frecuency goes up 1.9 khz per step.
- when i rotate the knob down fast the frecuency goes down ok (fast).
- when i rotate the knob up slowly the frecuency goes up ok (0.1 khz up).
- when i rotate the knob up fast it works ok.

I reset the microprocesor but the bug don´t fix.
Any idea about the problem???.
Many thanks an 73.

3903. Re: TS 140S PROBLEM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-22 12:22:33 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <G_mdnZ2dnZ019aKInZ2dnX1flN6dnZ2dRVn-0p2dnZ0@bright.net>
Source record: 17585

Does the TS 140S have a "button type battery" to power memory circuits
for the CPU? If so, maybe it needs to be replaced. If it does and you
replace it, remember to reset the CPU after replacing the battery...

Scott
N0EDV

JAVI wrote:

> Hello:
> I have a problem with my ts140s. After 3 year of inactivity i power
> up my all transceiver and it stay 1 month powered but not transmiting.
> after that i note:
> -when i rotate the know down slowly the frecuency goes up 1.9
> khz per step.
> - when i rotate the knob down fast the frecuency goes down ok
> (fast).
> - when i rotate the knob up slowly the frecuency goes up ok (0.1
> khz up).
> - when i rotate the knob up fast it works ok.
>
> I reset the microprocesor but the bug doni¿½t fix.
> Any idea about the problem???.
> Many thanks an 73.
>

3904. Re: TS 140S PROBLEM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-22 13:57:29 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1124719049.399458.236680@f14g2000cwb.googlegroups.com>
Source record: 17587

JAVI wrote:
> Hello:
> I have a problem with my ts140s. After 3 year of inactivity i power
> up my all transceiver and it stay 1 month powered but not transmiting.
> after that i note:
> -when i rotate the know down slowly the frecuency goes up 1.9
> khz per step.
> - when i rotate the knob down fast the frecuency goes down ok
> (fast).
> - when i rotate the knob up slowly the frecuency goes up ok (0.1
> khz up).
> - when i rotate the knob up fast it works ok.
>
> I reset the microprocesor but the bug don´t fix.
> Any idea about the problem???.
> Many thanks an 73.

No, I cant tell you whats wrong. You need to get a service manual, and a cro, and have a look for it - starting at the output of the dial generator and going from there. Maybe someone else has seen this exact fault before, and can say which $.00 part to replace.

73 de VK3BFA Andrew

3905. Re: Phillips EE Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-22 13:57:35 UTC
From: Richard <nearlynews_email@ntlworld.com>
Message-ID: <3mu3s8F18kt7eU1@individual.net>
Source record: 17586

"Bob Liesenfeld" <wb0poq@visi.com> wrote in message
news:4307B37A.3333ACE7@visi.com...
>
>
> Tom wrote:
>
> > This web site brought back quite a few memories... I played around with
one
> > of the 'EE' kits in the early 60's when I was in Thailand---Pop picked
it up
> > for me when he was in Hong Kong.
>
> Yup, I had one of these as a kid. Probably the EE-20. Loved it. It
was a
> sophisticated toy. As I got older, I used (read blew up) a lot of the
> components in my own experiments. Sigh.....wish I had kept it intact.
>
> Bob WB0POQ
>

Ha. That's takes me right back to '66.

I was so keen to put the radio together I did not bother with understanding
resistor colour codes, I just banged anything in for the resistors. Then
one of the electroylitics went "Bang!". Happy days.

3906. Re: TS 140S PROBLEM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-22 14:02:58 UTC
From: JAVI <ea1evr@telecable.es>
Message-ID: <1124719378.552367.52880@g44g2000cwa.googlegroups.com>
Source record: 17588

Hello Scott:
i thought about it, but it´s stranger the knob work correctly
when iturn the knob down (up work correctly).
Many thanks for info, this is the next test i will make. maybe
today.
73

3907. Re: Op amp supply-rail question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-22 16:29:00 UTC
From: Peter Barbella <nonobar@verizon.net>
Message-ID: <g3nOe.2774$p32.1095@trndny06>
Source record: 17589

Hello,

Use 10K resistors instead of 100K resistors and be sure to include a fat
Capacitor from the midpoint to ground. Then tie the ground end of the 10k
resistor on pin 3 and pin 5 to the junction of the resistor divider and cap.
(do not tie it to pin 3 directly). Should work with limited dynamic range.

Regards,
Pete
KB1LZH
"Ian Liston-Smith" <ian@morse-code.NO.SPAM.TODAY.fsnet.co.uk> wrote in
message news:312eg1he7tdtr9tvanovs7ek3n8q7f8efi@4ax.com...
>
> I'd like to build a tone control circuit using the LF353 dual op amp.
> The circuit has bass, mid range and treble adjustments.
>
> The problem:
> The circuit (see
> http://www.ece.ucsb.edu/courses/ECE002/2C_Su05Makaremi/lf353.pdf
> circuit on page 7) uses dual voltage rails of +15 and -15 volts,
> though for line input levels, this will probably work down to +8 and
> -8 volts. But I want to run it from a single +12 volt supply.
>
> Usually, two 100k resistors across the supply, their junction
> connected at the non-inverting input, alows an op amp to run from a
> single supply, the output floating at about half supply volts. This is
> fine for my use, but will it work with a dual op amp? I've searched my
> documentation, but found no reference to doing this for dual op amps.
> If it will work, will say two 100k resistors (one to +12v the other to
> ground, junction to pin 3) work? Does it need another 100k or so
> between their junction to pin 3 to isolate the input audio from the
> two 100k resistor potential devider?
>
> The first op ampin the LF353 application notes is only a buffer in
> the tone control circuit, so I guess I could avoid the problem and
> use a single CA3130 or similar op amp and use the 100k devider trick,
> and still use the tone control components. (I doubt the LF353 has any
> special properties for this particular use.)
>
> If anyone has another three-control op amp circuit wthat runs from a
> single 12v supply, I'd be interested.
>
> Thanks...
>
> Ian

3908. FS/FT: Motorola Base Station/Repeater?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-22 18:29:42 UTC
From: Gene Rodgers <oldcodger@verizon.net>
Message-ID: <qQoOe.4175$Hi.2873@trnddc04>
Source record: 17590

I have a Transmitter which is rack mounted in a cabinet and capable of over 150 watts but will dead key transmit at 120 watts (continuous). The transmit is variable from 5 watts to 120 watts. I also have a dual Receiver rack mounted in a cabinet. Both have power supplies and are very heavy duty pieces of equipment. Wouldn't take much to convert to a 440 repeater or use as is for volunteer fire department or small city.
Units must be picked up in Dallas.Comes complete with manuals for both.
Will sell (make offer) or trade for good Ham HF rig, or ????.

Pictures of manual & rig:
http://www.grodgers.com/dfwforsale/transmitter440.jpg
http://www.grodgers.com/dfwforsale/receiver440.jpg

Units are skid mounted and virtually unused. Appereantly this was a backup unit.

Contact me at ke5bfa@comcast.net or reply to this email.

Gene

3909. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-22 23:10:10 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11gkmq4jollsr20@corp.supernews.com>
Source record: 17592

"Reloader" <Reloader.1tvlcv@news.radiobanter.com> wrote in message
news:Reloader.1tvlcv@news.radiobanter.com...
> Back in the '70 you had to demoinstrate knoweledge of electronics before
> you could be hired; not an expert, but at least understand what the
> customer was looking for. I worked for them until '79. Their new
> slogan is "you got questions, we got insults."

I doubt that requiring applicants to demonstrate knowledge of electronics would work anymore. I believe that most Radio Shacks start people at minimum wage plus commisions on cell phones, extended warranties, etc., so when that's the 'deal' you're looking at, a would-be employee can do just as well working at many other stores that don't require any particular knowledge of what it is, exactly, that the store is selling.

Personally, I think you could run many stores with, say, 2/3 the people and pay them 3/2 as much as normal and thereby demand some actual skills and retain them (and work 3/2 as hard!), but unfortunately that doesn't seem to be the standard business strategy these days.

---Joel Kolstad

3910. Re: Microwave transformer HF PA Powersupply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-22 23:30:15 UTC
From: Skipp says hello <nospamatthistime@yahoo.com>
Message-ID: <dedn67$217$1@skeeter.ucdavis.edu>
Source record: 17593

Hi Sven,

There's a public group on Yahoo all about building rf amplifiers. You can find it at:

http://groups.yahoo.com/group/rfamplifiers/

In the files section of the group... I've placed a copy of the Microwave Oven QEX article. There's also some pictures in the photos section of the same group. The group is open to everyone...

enjoy
skipp

: Sven Arne Astrup <sastrup@online.no> wrote:
: Hallo!

: I am seeking some info about using transformers from microwave ovens in HF
: PA power supplies. As one side of the secondary winding is connected to the
: transformer core, I am a bit confused on how to do the voltage doubling.

: Any info on the subject is appreciated.

: 73 de Sven LA6KJ

: --

: All incoming and outgoing E-mail
: scanned by NAV 2005.

3911. Yahoo RF Amplifiers Group

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-22 23:36:09 UTC
From: Skipp <skippnospamplease@yahoo.com>
Message-ID: <dednh9$217$2@skeeter.ucdavis.edu>
Source record: 17594

Hello there,

Just a shameless plug for the Yahoo rfamplifiers group, which is open to
the public and happy to have questions thrown to the group.

http://groups.yahoo.com/group/rfamplifiers/

Hope to see you there...

cheers
skipp

3912. Re: Yahoo RF Amplifiers Group

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-22 23:37:44 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.22.23.37.42.722241@gmail.com>
Source record: 17595

Skipp:

Really needs to be a newsgroup started on rf power-amps/linears ...

John

On Mon, 22 Aug 2005 23:36:09 +0000, Skipp wrote:

>
> Hello there,
>
> Just a shameless plug for the Yahoo rfamplifiers group, which is open to
> the public and happy to have questions thrown to the group.
>
> http://groups.yahoo.com/group/rfamplifiers/
>
> Hope to see you there...
>
> cheers
> skipp

3913. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-23 00:39:48 UTC
From: rbean@shell.core.com
Message-ID: <11gks2kmtouq3fc@corp.supernews.com>
Source record: 17596
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

shoppa@trailing-edge.com writes:

>I'm looking for a solid desktop (either pizza-box or mini-tower)
>computer case that has an all-metal exterior for shielding RFI. This
>is for use around radios etc. I realize that SVGA monitors, mice, and
>keyboard leak too, but right now I'm looking mainly at the PC box.

I know this is an old thread, but I have a related question:

Quite a few people are building their own PC cases these days--
for example, http://www.mini-itx.com (follow the links on the right side
of the page).

As far as I can see, none of these has *any* RF shielding at all. And I
have yet to hear of them causing any problems (these are not ham radio
operators). The only RF problems I've heard of recently (with consumer
electronics) are microwave ovens interfering with some kinds of cordless
phones.

I'm thinking maybe the only kind of RFI "the masses" are worried about
is TV, and they all have cable...

So I'm thinking of building a computer case for a specific use, and
I'm wondering if I should bother to worry about shielding (evidence
suggests maybe not).

My first thought was aluminum foil, but aluminum forms a non-conductive
oxide, and I don't know if it would ground reliably (not to mention the
"tinfoil hat" jokes). My second thought was copper foil from
http://www.onlinemetals.com (around $.98/sq ft, but shipping adds quite
a bit).

Any comments?

PS:
I like this one:
http://www.mini-itx.com/projects/cardboardcube/

3914. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-23 00:46:38 UTC
From: adykes@panix.com
Message-ID: <dedrleimg1@panix5.panix.com>
Source record: 17597
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

In article <11gks2kmtouq3fc@corp.supernews.com>,
Ron Bean <rbean@shell.core.com> wrote:
>
>shoppa@trailing-edge.com writes:
>
>>I'm looking for a solid desktop (either pizza-box or mini-tower)
>>computer case that has an all-metal exterior for shielding RFI. This
>>is for use around radios etc. I realize that SVGA monitors, mice, and
>>keyboard leak too, but right now I'm looking mainly at the PC box.
>
>I know this is an old thread, but I have a related question:
>
>Quite a few people are building their own PC cases these days--
>for example, http://www.mini-itx.com (follow the links on the right side
>of the page).
>
>As far as I can see, none of these has *any* RF shielding at all. And I
>have yet to hear of them causing any problems (these are not ham radio
>operators). The only RF problems I've heard of recently (with consumer
>electronics) are microwave ovens interfering with some kinds of cordless
>phones.
>
>I'm thinking maybe the only kind of RFI "the masses" are worried about
>is TV, and they all have cable...
>
>So I'm thinking of building a computer case for a specific use, and
>I'm wondering if I should bother to worry about shielding (evidence
>suggests maybe not).
>

What are you worried about? Ham and short wave fans have a legit
issue, and I guess people doing *very* high quality audio do also.

If you don't fit in a special catagory try taking the top of a
standard PC and hold an AM and an FM radio right next to the running
PC and listen for the noise. You won't hear much. Try it again with
the lid on.

PC cases are built to FCC and European specs for radio emissions. They
are fairly tightly sealed.

The vast amount of emmisions that *do* come out go over all the wires
connected to the PC.

Pick up an ARRL handboox about sheilding and RF interferance
if you want to learn more.

http://www.arrl.org/

--
a d y k e s @ p a n i x . c o m

Don't blame me. I voted for Gore.

3915. Re: Phillips EE Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-23 01:25:16 UTC
From: Bob Liesenfeld <wb0poq@visi.com>
Message-ID: <430A7AFC.53618F62@visi.com>
Source record: 17448

>
> > >
>
> Ha. That's takes me right back to '66.
>
> I was so keen to put the radio together I did not bother with understanding
> resistor colour codes, I just banged anything in for the resistors. Then
> one of the electroylitics went "Bang!". Happy days.

Heheheh. My take on that was to figure that all those resistors and caps in a 2 stage AF amp were not really needed to make it work, they just made it work *better*. So.....I ended up building a 2 stage direct coupled amp before I even knew what direct coupled was......till one of the transistors got so hot >it< went BANG!
--Sigh-- To recapture some of that wide eyed "Will it work!?" Do kids even think that way today? My experience says no. :(

Bob WB0POQ

3916. Re: Op amp supply-rail question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-23 01:41:10 UTC
From: Roger Leone <raleoneTAKEOUT@sbcglobal.net>
Message-ID: <W8vOe.671$A%1.629@newssvr13.news.prodigy.com>
Source record: 17449

Ian:

A friend of mine designed a bass/treble equalizer around the LF353, using a single supply. Several people (including me) have duplicated this circuit with good results. Perhaps you can use the DC parts of the circuit in your 3 channel equalizer: www.tleone.com/roger/mic_eq.jpg

Roger K6XQ

3917. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-23 02:10:22 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <iAvOe.7658$137.958@trnddc08>
Source record: 17450

john graesser wrote:
> "Dave" <drake3d@yahoo.com> wrote in message
> news:wM2dnb0lctlw_Z_eRVn-rQ@comcast.com...
>
>> Well RS is doing well financially, better than the competition. As for
>>what they sell, well, you have to follow the money especially with the
>
> rents
>
>>so high. Cellphones, satellite service and other modern fun things is
>
> where
>
>>the money is now. Parts make up very little of the business, even though
>>they make a high profit on them. The do-it-yourself market is pretty lean
>>now a days, with college areas making up the biggest market. It is to easy
>>to buy a digital rig and get it up and running than a homebrew one. Even
>>though the homebrew one is funner to get going.
>
>
> I recall a UP story a couple of weeks ago that stated RS had 50 million
> profit off of over 1 billion in sales. So they are selling a hell of a lot
> but barely staying in the black. 1/2 of 1 percent profit? Even a passbook
> savings acct gets a better return than that.
>

Um, as I recall, 1 billion is 1000 million (in the USA where Radio Shack
is). So that would be 50/1000 or 5% profit.

John

3918. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-23 02:16:03 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <DFvOe.7720$137.7077@trnddc08>
Source record: 17451

Larry Gagnon wrote:
> On Tue, 16 Aug 2005 00:15:01 +0000, Tom wrote:
>
>
>>Got the word today at the neighborhood RadioShack that a catalog will once
>>again be available---no date offered but should be soon.
>>
>>Tom
>
>
> Who cares? Their stuff has been and probably always will be a POS. I
> have never seen worse electronic components sold to the general public
> than the junk in that store. Avoid them like the plague.
>
> Larry VE7EA

Maybe they should go back to selling leather.

John

3919. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-23 06:47:08 UTC
From: Phil B <pcb999@NOSPAMcomcast.net>
Message-ID: <frmdnZ2dnZ2xg7OsnZ2dnfdbl96dnZ2dRVn-z52dnZ0@comcast.com>
Source record: 17452
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

Bill,

I'm a little late after all the oozing from others, but I must say your homebrews are fascinating and your other project sequence photos are wonderful. You web site is great!

Phil B

3920. Re: Brag Page

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-23 11:29:01 UTC
From: -ex- <exray@coqui.net>
Message-ID: <b3d88$430b087d$4232bd43$7775@COQUI.NET>
Source record: 17453
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

Phil B wrote:
> Bill,
>
> I'm a little late after all the oozing from others, but I must say your
> homebrews are fascinating and your other project sequence photos are
> wonderful. You web site is great!
>
> Phil B
>
>

Thank you!
Bill

3921. MB3763P - where to buy?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-23 13:22:19 UTC
From: Tomek <python@interia.pl>
Message-ID: <def7ucmfd1@news.lublin.pl>
Source record: 17454

Hello,
I am looking for MB3763P (Bidirectional motor driver from Fujitsu)
Do you know where I can buy the chip?

73 from Poland
Tomek
sp8ncg

3922. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-23 13:51:02 UTC
From: case_dude <case_dude@case.net>
Message-ID: <430B29C4.7FC83D15@case.net>
Source record: 17455
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

Just get one of the name brand pc's from a yard sale,
or thrift shop. These cases have paint inside that
helps stop the emi from getting out.

Good quality cables are also a must.

case_dude

3923. HP 8558B Analyser Problem - Help Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-23 13:58:18 UTC
From: John A <e45gkf@yahoo.co.uk>
Message-ID: <defa29fit1@newsg1.svr.pol.co.uk>
Source record: 17456

Hi All,

My HP8558B has developed a fault. Could anyone advise?

Up to about 4MHz the sweep consists of a distorted 0MHz peak then a sloping, noise-free, baseline. Above 4MHz the analyser works fine At a Reference Level switch setting of -30dB there is about one division of noise nad signal appear as expected

The distortion of the 0MHz peak and the slope of the 0 to 4MHz section of the sweep varies with the setting of the Reference Level Switch but the actual gain settings seem to be correct, once you are above 4MHz. Also odd single spikes appear in this region at different Ref Level settings

Anything else you need to know?

TIA

John

3924. Re: HP 8558B Analyser Problem - Help Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-23 18:42:26 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <m6KOe.127634$5N3.67339@bgtnsc05-news.ops.worldnet.att.net>
Source record: 17457

This is a dumb question, but I have to ask.....does this only show up at the wider I.F. bandwidth settings? If so, this is normal. Do you have the sweep set to automatic or manual mode? If you have your sweep set to manual mode and your sweep is set too fast, this can occur.

Pete

"John A" <e45gkf@yahoo.co.uk> wrote in message news:defa29fit1@newsg1.svr.pol.co.uk...
> Hi All,
>
> My HP8558B has developed a fault. Could anyone advise?
>
> Up to about 4MHz the sweep consists of a distorted 0MHz peak then a
> sloping,
> noise-free, baseline. Above 4MHz the analyser works fine At a Reference
> Level switch setting of -30dB there is about one division of noise nad
> signal appear as expected
>
> The distortion of the 0MHz peak and the slope of the 0 to 4MHz section of
> the sweep varies with the setting of the Reference Level Switch but the
> actual gain settings seem to be correct, once you are above 4MHz. Also odd
> single spikes appear in this region at different Ref Level settings
>
> Anything else you need to know?
>
> TIA
>
> John
>
>

3925. HamPoll.Com

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-23 21:21:44 UTC
From: Charles Brabham <n5pvl@sbcglobal.net>
Message-ID: <IrMOe.1022$yo7.877@newssvr23.news.prodigy.net>
Source record: 17458

HamPoll is here in order to give amateurs a chance to speak for themselves, and in time to provide reasonably accurate and significant polling data on a variety of issues related to the amateur radio service.

You are welcome to browse the polling data we have, but we especially encourage US amateurs visiting here to register with thier callsign and vote in the HamPoll Polling Station.

Whether you come to browse, to discuss or submit new polls, or to tender your vote, be sure to visit regularly as new polls are included from time to time, and the poll data changes as more hams participate day to day.

Stop by at: http://www.hampoll.com

Charles Brabham, N5PVL

Director: USPacket http://www.uspacket.org
Admin: HamBlog.Com http://www.hamblog.com
---------- HamPoll.Com http://www.hampoll.com
---------- DigiBlog http://www.uspacket.org/digiblog/

3926. Re: HamPoll.Com

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-23 21:59:32 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <7%MOe.689$mH.39@fed1read07>
Source record: 17459

You will probably lose half your readers by asking them to register

I don't register for anything

And I get very little spam

Sorry

--
CL -- I doubt, therefore I might be !

"Charles Brabham" <n5pvl@sbcglobal.net> wrote in message
news:IrMOe.1022$yo7.877@newssvr23.news.prodigy.net...
> HamPoll is here in order to give amateurs a chance to speak for
> themselves, and in time to provide reasonably accurate and significant
> polling data on a variety of issues related to the amateur radio service.
>
> You are welcome to browse the polling data we have, but we especially
> encourage US amateurs visiting here to register with thier callsign and
> vote in the HamPoll Polling Station.
>
> Whether you come to browse, to discuss or submit new polls, or to tender
> your vote, be sure to visit regularly as new polls are included from time
> to time, and the poll data changes as more hams participate day to day.
>
> Stop by at: http://www.hampoll.com
>
> Charles Brabham, N5PVL
>
> Director: USPacket http://www.uspacket.org
> Admin: HamBlog.Com http://www.hamblog.com
> ---------- HamPoll.Com http://www.hampoll.com
> ---------- DigiBlog http://www.uspacket.org/digiblog/
>
>

3927. Re: HamPoll.Com

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-23 23:10:31 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11gnb7a3c1ifq9f@corp.supernews.com>
Source record: 17460

I associate a .com web site extension as having a commercial, for-profit purpose. Asking for people to register and leave information about personal preferences makes it look an awful lot like you're collecting data to sell for marketing purposes. If that's not the purpose of your commercial enterprise, I suggest that you state clearly what the purpose is, how you make your money, and why people need to register in order to leave their opinions. If it's a non-profit enterprise, I suggest you get an .org extension, and clearly state on the site that it's not for profit.

Roy Lewallen, W7EL

Charles Brabham wrote:
> HamPoll is here in order to give amateurs a chance to speak for themselves,
> and in time to provide reasonably accurate and significant polling data on a
> variety of issues related to the amateur radio service.
>
> You are welcome to browse the polling data we have, but we especially
> encourage US amateurs visiting here to register with thier callsign and vote
> in the HamPoll Polling Station.
>
> Whether you come to browse, to discuss or submit new polls, or to tender
> your vote, be sure to visit regularly as new polls are included from time to
> time, and the poll data changes as more hams participate day to day.
>
> Stop by at: http://www.hampoll.com
>
> Charles Brabham, N5PVL
>
> Director: USPacket http://www.uspacket.org
> Admin: HamBlog.Com http://www.hamblog.com
> ---------- HamPoll.Com http://www.hampoll.com
> ---------- DigiBlog http://www.uspacket.org/digiblog/
>
>

3928. WTD: Powerpole 180A Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-23 23:20:30 UTC
From: "Richard W. Solomon, W1KSZ" <w1ksz@earthlink.net>
Message-ID: <6mbng1199dj1p6ji91rf198rrnh99jrr00@4ax.com>
Source record: 17461

The Glenayre Power Supply I got with it's companion Amp uses 180A Powerpole Connectors for the 28 vdc output. Anyone got a spare couple of these beasties ?? Even better would be the interconnecting power cable, there are two ~1/4" pins for the +DC and two ~1/4" jacks for the -DC. I found a GR double plug fits the -DC, but the +DC has me stumped. I hate to tack solder a lead on them (too tacky !!).

73, Dick, W1KSZ

3929. Re: Powerpole 180A Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 01:59:23 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <GOCdnZ2dnZ0fPzm1nZ2dnR1Jlt6dnZ2dRVn-yZ2dnZ0@comcast.com>
Source record: 17462

"Richard W. Solomon, W1KSZ" <w1ksz@earthlink.net> wrote in message
news:6mbng1199dj1p6ji91rf198rrnh99jrr00@4ax.com...
> The Glenayre Power Supply I got with it's companion Amp uses 180A
> Powerpole Connectors for the 28 vdc output. Anyone got a spare couple
> of these beasties ?? Even better would be the interconnecting power
> cable, there are two ~1/4" pins for the +DC and two ~1/4" jacks for
> the -DC. I found a GR double plug fits the -DC, but the +DC has me
> stumped. I hate to tack solder a lead on them (too tacky !!).
>
> 73, Dick, W1KSZ
>

I assume you are referring to the Anderson "SB" series PowerPole connectors?
http://www.powerwerx.com/category.asp?CtgID=3579

w9gb

3930. Re: Powerpole 180A Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 02:03:30 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <3oednZ2dnZ3A9UnknZ2dneVIlt6dnZ2dRVn-0Z2dnZ0@comcast.com>
Source record: 17463

"Richard W. Solomon, W1KSZ" <w1ksz@earthlink.net> wrote in message
news:6mbng1199dj1p6ji91rf198rrnh99jrr00@4ax.com...
> The Glenayre Power Supply I got with it's companion Amp uses 180A
> Powerpole Connectors for the 28 vdc output. Anyone got a spare couple
> of these beasties ?? Even better would be the interconnecting power
> cable, there are two ~1/4" pins for the +DC and two ~1/4" jacks for
> the -DC. I found a GR double plug fits the -DC, but the +DC has me
> stumped. I hate to tack solder a lead on them (too tacky !!).
>
> 73, Dick, W1KSZ
>
Powerwerz PowerPole web page
http://www.powerwerx.com/category.asp?CtgID=1001

Anderson Power Products
http://www.andersonpower.com/#

3931. Re: HamPoll.Com

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 02:17:22 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrndgnm5i.22nr.bit-bucket@shell.config.com>
Source record: 17464

On Tue, 23 Aug 2005 21:21:44 GMT, Charles Brabham wrote:
> HamPoll is here in order to give amateurs a chance to speak for themselves,
> and in time to provide reasonably accurate and significant polling data on a
> variety of issues related to the amateur radio service.

Hell, that's what I thought usenet was for...

Jonesy W3DHJ

3932. Stable Regen Receiver--Does it Exist??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 02:30:56 UTC
From: kizerian@xmission.com
Message-ID: <1124850656.892394.139930@f14g2000cwb.googlegroups.com>
Source record: 17465

I have built a few dozen regen receivers and they all seem to work well enough on AM signals--some extremely well--but kind of fall apart when it comes to STABLE reception of CW and SSB.

Has anyone ever built a solid state regen that does well with CW and SSB? If so I would love to know how you did it (I'd even share my some of my massive collection of radio parts with you)...before I go off and build another dozen regens.

I have a box full of prototypes affectionately dubbed my radio reject graveyard (or dead radio pile)...I just don't want to be up to my neck in more prototypes before I finally get a good one.

Seriously thinking of skipping it and building a simple DC or superhet.

Bruce Kizerian kk7zz
www.elmerdude.com

3933. Re: Stable Regen Receiver--Does it Exist??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 02:33:08 UTC
From: -ex- <exray@coqui.net>
Message-ID: <a7c01$430bdc65$4232bdec$26095@COQUI.NET>
Source record: 17466

kizerian@xmission.com wrote:

> I have built a few dozen regen receivers and they all seem to work well
> enough on AM signals--some extremely well--but kind of fall apart when
> it comes to STABLE reception of CW and SSB.
>
> Has anyone ever built a solid state regen that does well with CW and
> SSB? If so I would love to know how you did it
>

Check out something like one of the superhet regens. I've done a couple
of tube versions which are quite stable.

-Bill

3934. Re: Stable Regen Receiver--Does it Exist??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 03:07:41 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <dego9t$ic7$1@theodyn.ncf.ca>
Source record: 17467

(kizerian@xmission.com) writes:
> I have built a few dozen regen receivers and they all seem to work well
> enough on AM signals--some extremely well--but kind of fall apart when
> it comes to STABLE reception of CW and SSB.
>
> Has anyone ever built a solid state regen that does well with CW and
> SSB? If so I would love to know how you did it (I'd even share my some
> of my massive collection of radio parts with you)...before I go off and
> build another dozen regens.
>
> I have a box full of prototypes affectionately dubbed my radio reject
> graveyard (or dead radio pile)...I just don't want to be up to my neck
> in more prototypes before I finally get a good one.
>
> Seriously thinking of skipping it and building a simple DC or superhet.
>
I don't know. But for much of their life, they have been treated as
simple receivers. First in the twenties or so, when things were expensive
so it was as minimal as possible. In more recent decades, because they
were seen as a beginner item, an alternative to a complicated superhet.

Simple is bound to mean tradeoffs. Realistically they are oscillators,
yet how often is the care put into them that someone puts into a
free running oscillator? A thick piece of wire for the coil, built
really strong to avoid microphonics, with temperature compensating
capacitors and voltage regulation, just like in a vfo. Add a stage
of isolation between the antenna and the detector, just as you'd
isolate a vfo from it's load. Bypass it will, instead of saving
money by having only one capacitor. Use a good sturdy variable capacitor,
rather than the one you got out of the AM portable.

If you built an oscillator like most regens are built, would you
expect much stability?

One of the neat things about solid state is that the cost of
extra active components is virtually nill, in terms of actual price
and in terms of space. You're not blowing the food budget to
buy that single tube so you can try out the receiver you built.

Look at Charles Kitchins work. Unlike when solid state
first came along, he went back to the basics, read up on the
early articles about regeneration, and then proceeded to try
to make them better in solid state form. So you see that extra
stage to isolate the detector from the antenna. You see a voltage
regulator. And it will still be cheaper than that single tube

receiver in the old days.

I've never built a regen, but the things he puts in his receivers were things I had been thinking about if I'd wanted to build a good regen.

Michael VE2BVW

3935. Material for Flexible Whip antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 03:45:54 UTC
From: David <david@orbitcoms.com>
Message-ID: <S3SOe.8590$FA3.4667@news-server.bigpond.net.au>
Source record: 17468
Cross-posted to: alt.ham-radio,aus.radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I am looking for the Black (Nylon,Polythene ???) tubing around 6mm OD
and wall thickness of 1mm for construction of 900 MHz whip antenna.
It needs to be fairly rigid as it is glued to an SMA plug.

If anyone can advise what material is typically used and where I could
purchase
a reel of it (maybe it is even pressure tubing for pnuematics ?), it would
be much
appreciated. Australian source would be preferrable.

Thank in advance

Regards

David

3936. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 04:08:13 UTC
From: rbean@shell.core.com
Message-ID: <11gnsldr4to7hd0@corp.supernews.com>
Source record: 17469
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

adykes@panix.com (Al Dykes) writes:

>What are you worried about? Ham and short wave fans have a legit
>issue, and I guess people doing *very* high quality audio do also.
>
>If you don't fit in a special catagory try taking the top of a
>standard PC and hold an AM and an FM radio right next to the running
>PC and listen for the noise. You won't hear much. Try it again with
>the lid on.

I'm not worried about anything specific, but I know the manufacturers go to great lengths to pass an rfi test, and yet it seems they are solving a non-problem.

I do occasionally run PCs with the covers off, but I seldom have a radio or TV on, so if I were causing any interference anywhere (eg in the apartment nextdoor) I wouldn't notice it. I've heard urban legends about early microcomputers causing interference, were they noisier or were old TVs more sensitive to it?

3937. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 04:09:39 UTC
From: rbean@shell.core.com
Message-ID: <11gnso32vif8vfa@corp.supernews.com>
Source record: 17470
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

case_dude <case_dude@case.net> writes:

>Just get one of the name brand pc's from a yard sale,
>or thrift shop. These cases have paint inside that
>helps stop the emi from getting out.

I would have no problem spending money on a commercially made case, if I could find one I liked. IMHO, they all suck. Flashy plastic and poor access even with all the covers off (I didn't consider rackmount cases because I'd like it to be semi-portable).

I do have one "beige box" here, but I seldom open that one, so I don't care how awkward it is to mount stuff in it. The other one I frequently swap out components and I want one that gives me better access with the covers off. I'm considering a "semi-monocoque" design with no frame.

3938. Re: Stable Regen Receiver--Does it Exist??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 04:28:01 UTC
From: Bill Janssen <billj9@ieee.org>
Message-ID: <IHSOe.5100$cg.3429@news02.roc.ny>
Source record: 17471

kizerian@xmission.com wrote:

>I have built a few dozen regen receivers and they all seem to work well
>enough on AM signals--some extremely well--but kind of fall apart when
>it comes to STABLE reception of CW and SSB.
>
>Has anyone ever built a solid state regen that does well with CW and
>SSB? If so I would love to know how you did it (I'd even share my some
>of my massive collection of radio parts with you)...before I go off and
>build another dozen regens.
>
>I have a box full of prototypes affectionately dubbed my radio reject
>graveyard (or dead radio pile)...I just don't want to be up to my neck
>in more prototypes before I finally get a good one.
>
>Seriously thinking of skipping it and building a simple DC or superhet.
>
>Bruce Kizerian kk7zz
>www.elmerdude.com
>
>
Figure out how to make a stable oscillator at the frequency you are
interested in. Then convert that design
to a regen. I think that is as close as you will get.

Bill K7NOM

3939. Re: Material for Flexible Whip antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 05:22:50 UTC
From: Mal <spam@bigpond.net.au>
Message-ID: <KuTOe.8690$FA3.7066@news-server.bigpond.net.au>
Source record: 17472
Cross-posted to: alt.ham-radio,aus.radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

http://www.mobileone.com.au/antenna/default.htm
"David" <david@orbitcoms.com> wrote in message
news:S3SOe.8590$FA3.4667@news-server.bigpond.net.au...
>I am looking for the Black (Nylon,Polythene ???) tubing around 6mm OD
> and wall thickness of 1mm for construction of 900 MHz whip antenna.
> It needs to be fairly rigid as it is glued to an SMA plug.
>
> If anyone can advise what material is typically used and where I could
> purchase
> a reel of it (maybe it is even pressure tubing for pnuematics ?), it would
> be much
> appreciated. Australian source would be preferrable.
>
> Thank in advance
>
> Regards
>
> David
>

3940. Re: HamPoll.Com

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 06:50:48 UTC
From: Charles Brabham <n5pvl@sbcglobal.net>
Message-ID: <cNUOe.1944$L77.1164@newssvr19.news.prodigy.com>
Source record: 17473

"Caveat Lector" <UALLBeware@9984reader.com> wrote in message
news:7%MOe.689$mH.39@fed1read07...
> You will probably lose half your readers by asking them to register
>
> I don't register for anything
>
> And I get very little spam
>
> Sorry
>

Nothing to be sorry about.

Anonymous polling does not return accurate results. Instead you get:

Poll stuffing.
SPAMBOT polling.
multiple votes from sicko clowns.
various other forms of cheating that add up to bogus results.

The guys who would only vote anonymous are no big loss. We don't feel bad about our missing your anonymous vote - and neither should you... Anonymous votes are worse than useless.

Registration before voting is fairly universal around the world - in relation to voting activity that is of any significance. If you want your vote to count and are not ashamed of your own opinion, you should have no trouble registering to vote in our polls.

Charles Brabham, N5PVL

Director: USPacket http://www.uspacket.org
Admin: HamBlog.Com http://www.hamblog.com
---------- HamPoll.Com http://www.hampoll.com
---------- DigiBlog http://www.uspacket.org/digiblog/

3941. Re: HamPoll.Com

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 06:50:48 UTC
From: Charles Brabham <n5pvl@sbcglobal.net>
Message-ID: <cNUOe.1945$L77.776@newssvr19.news.prodigy.com>
Source record: 17474

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:11gnb7a3c1ifq9f@corp.supernews.com...
>I associate a .com web site extension as having a commercial, for-profit
>purpose. Asking for people to register and leave information about personal
>preferences makes it look an awful lot like you're collecting data to sell
>for marketing purposes. If that's not the purpose of your commercial
>enterprise, I suggest that you state clearly what the purpose is, how you
>make your money, and why people need to register in order to leave their
>opinions. If it's a non-profit enterprise, I suggest you get an .org
>extension, and clearly state on the site that it's not for profit.
>
> Roy Lewallen, W7EL

Did you see any ads there at HamPoll, Einstien?

We do not hold ourselves responsible for the associations that pop up in
some people's minds from time to time. - They've got a million of them, and
who could keep up with them all? (Or give a hoot)

If you are convinced that HamPoll.Com is part of some kind of commercial
conspiracy, your best bet would be to move on, go find something else to
wring your hands over.

Charles Brabham, N5PVL

Director: USPacket http://www.uspacket.org
Admin: HamBlog.Com http://www.hamblog.com
---------- HamPoll.Com http://www.hampoll.com
---------- DigiBlog http://www.uspacket.org/digiblog/

3942. Re: HamPoll.Com

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 06:52:39 UTC
From: Charles Brabham <n5pvl@sbcglobal.net>
Message-ID: <XOUOe.1947$L77.425@newssvr19.news.prodigy.com>
Source record: 17475

"Allodoxaphobia" <bit-bucket@config.com> wrote in message
news:slrndgnm5i.22nr.bit-bucket@shell.config.com...
> On Tue, 23 Aug 2005 21:21:44 GMT, Charles Brabham wrote:
>> HamPoll is here in order to give amateurs a chance to speak for
>> themselves,
>> and in time to provide reasonably accurate and significant polling data
>> on a
>> variety of issues related to the amateur radio service.
>
> Hell, that's what I thought usenet was for...

I never did find much polling data on usenet. - Just a bunch of guys
discussing stuff, some of whom might or might not be hams.

Charles Brabham, N5PVL

Director: USPacket http://www.uspacket.org
Admin: HamBlog.Com http://www.hamblog.com
---------- HamPoll.Com http://www.hampoll.com
---------- DigiBlog http://www.uspacket.org/digiblog/

3943. Re: HamPoll.Com

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 09:54:23 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <U5edna9RFf9T3pHeRVnyvA@pipex.net>
Source record: 17476

> Registration before voting is fairly universal around the world - in
> relation to voting activity that is of any significance. If you want your
> vote to count and are not ashamed of your own opinion, you should have no
> trouble registering to vote in our polls.
>
> Charles Brabham, N5PVL
==========
Charles , Whatever your objectives with this web site , I shall NEVER
participate ,registered or non-registered ,because I find this type of
polling a useless activity , it is doing something just for the sake of
doing ,without having any positive / constructive end result, it is just
taking up bandwidth.

Frank GM0CSZ / KN6WH

3944. Re: Material for Flexible Whip antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 10:42:51 UTC
From: David <david@orbitcoms.com>
Message-ID: <LaYOe.8939$FA3.3480@news-server.bigpond.net.au>
Source record: 17477
Cross-posted to: alt.ham-radio,aus.radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Mal,

I cannot see on the web page where they mention the material used for the
Whip Radome ?
They also don't seem to sell any tubing.

Can you advise me which page they advertise the tubing ?

Thanks

"Mal" <spam@bigpond.net.au> wrote in message
news:KuTOe.8690$FA3.7066@news-server.bigpond.net.au...
> http://www.mobileone.com.au/antenna/default.htm
> "David" <david@orbitcoms.com> wrote in message
> news:S3SOe.8590$FA3.4667@news-server.bigpond.net.au...
>>I am looking for the Black (Nylon,Polythene ???) tubing around 6mm OD
>> and wall thickness of 1mm for construction of 900 MHz whip antenna.
>> It needs to be fairly rigid as it is glued to an SMA plug.
>>
>> If anyone can advise what material is typically used and where I could
>> purchase
>> a reel of it (maybe it is even pressure tubing for pnuematics ?), it
>> would be much
>> appreciated. Australian source would be preferrable.
>>
>> Thank in advance
>>
>> Regards
>>
>> David
>>
>
>

3945. Re: Material for Flexible Whip antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 12:17:14 UTC
From: Roger Conroy <rogerconroy@nospam.hotmail.com>
Message-ID: <deiemklmc1@ctb-nnrp2.saix.net>
Source record: 17487
Cross-posted to: alt.ham-radio,aus.radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"David" <david@orbitcoms.com> wrote in message
news:S3SOe.8590$FA3.4667@news-server.bigpond.net.au...
>I am looking for the Black (Nylon,Polythene ???) tubing around 6mm OD
> and wall thickness of 1mm for construction of 900 MHz whip antenna.
> It needs to be fairly rigid as it is glued to an SMA plug.
>
> If anyone can advise what material is typically used and where I could
> purchase
> a reel of it (maybe it is even pressure tubing for pnuematics ?), it would
> be much
> appreciated. Australian source would be preferrable.
>
> Thank in advance
>
> Regards
>
> David

Try a gardening shop. Drip/micro spray irrigation uses pvc tubing that might
fit your requirement.
Don't forget to do a microwave oven test on the material because some black
plastics are carbon filled.

73
Roger ZR3RC

3946. Re: HamPoll.Com

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 12:26:55 UTC
From: W8LNA <W8LNA@arrl.net>
Message-ID: <jlZOe.555$Xo3.333@news01.roc.ny>
Source record: 17478

Charles Brabham wrote:
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:11gnb7a3c1ifq9f@corp.supernews.com...
>
>>I associate a .com web site extension as having a commercial, for-profit
>>purpose. Asking for people to register and leave information about personal
>>preferences makes it look an awful lot like you're collecting data to sell
>>for marketing purposes. If that's not the purpose of your commercial
>>enterprise, I suggest that you state clearly what the purpose is, how you
>>make your money, and why people need to register in order to leave their
>>opinions. If it's a non-profit enterprise, I suggest you get an .org
>>extension, and clearly state on the site that it's not for profit.
>>
>>Roy Lewallen, W7EL
>
>
> Did you see any ads there at HamPoll, Einstien?
>
> We do not hold ourselves responsible for the associations that pop up in
> some people's minds from time to time. - They've got a million of them, and
> who could keep up with them all? (Or give a hoot)
>
> If you are convinced that HamPoll.Com is part of some kind of commercial
> conspiracy, your best bet would be to move on, go find something else to
> wring your hands over.

So when someone makes a suggestion you're going to insult them? If they
don't want to register they're ashamed of something? Out of the many
web site on the internet this is how you solicit participants?

Friendly suggestions: Allow unregistered readers to vote and list how
many voters are registered or not along with your poll data so those
reading the polls can make their own conclusions. Fix your web page so
it doesn't open a new window when I click on 'Forums' (Mozilla Firefox
1.0.6 browser), if I want it opened in a new window or tab I can do that
myself. Keep in mind what associations the majority of potential
readers may make and try to draw the line of what you'll act on and what
you won't not so far over on your side of things. You'll need a lot of
subscribers to get polling that has any statistical significance, I also
suggest you treat people with some basic respect if you want this thing
to get off the ground, Einstein himself may have been eccentric but he
was also polite.

You need us to make this work, so far you haven't shown that we need you
at all.

Galen, W8LNA

3947. Re: Stable Regen Receiver--Does it Exist??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 13:21:20 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <opsog1pvvd35he36nrtrio3ifbcsml44cb@4ax.com>
Source record: 17479

May be I should not post before the second cup of coffee in the morning, but it seems to me that stable regeneration nets out to a Q-Multiplier. Don't let me discourage your activities, you would not be the first to find a new life for an old method.

Personally, I find myself thinking about Parametric amplifiers a good bit these days...

On 23 Aug 2005 19:30:56 -0700, kizerian@xmission.com wrote:

>I have built a few dozen regen receivers and they all seem to work well
>enough on AM signals--some extremely well--but kind of fall apart when
>it comes to STABLE reception of CW and SSB.
>
>Has anyone ever built a solid state regen that does well with CW and
>SSB? If so I would love to know how you did it (I'd even share my some
>of my massive collection of radio parts with you)...before I go off and
>build another dozen regens.
>
>I have a box full of prototypes affectionately dubbed my radio reject
>graveyard (or dead radio pile)...I just don't want to be up to my neck
>in more prototypes before I finally get a good one.
>
>Seriously thinking of skipping it and building a simple DC or superhet.
>
>Bruce Kizerian kk7zz
>www.elmerdude.com

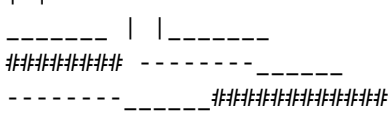
3948. Re: HP 8558B Analyser Problem - Help Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 13:22:05 UTC
From: John A <e45gkf@yahoo.co.uk>
Message-ID: <dehsaf$6o5$1@news8.svr.pol.co.uk>
Source record: 17480
Body handling: HTML body converted to readable text

Hi Pete,

1. The sweep is in automatic.

2. The phenomena is as described - 0MHz peak then flat, noiseless, sloping sections - at all bandwidth settings. I see where you're coming from - but I'm not that wet behind the ears! In fact, when you centre the 0MHz peak on the screen, the slope of the noiseless sections either side are the same - i.e., from left to right, the sweep is noise into -4MHz, then a slope DOWNWARDS to just before the 0MHz peak, then the true, quite narrow, 0MHz peak, then a further sloping downwards section to +4MHz - where normal behaviour is resumed. A bit like this (typed, and intended to be views in Plain Text)



Note that this Spectrum Analyser worked well both where I used to work AND for two to three years after I rescued it from the firm's scrap pile and brought it home to my shack - i.e. what it is doing now is definitely NOT what I have been used to it doing!

My guess was that the problem might be overloading due to mixer mis-balance - if all of the mixers are supposed to be balanced, that is. Uncoupling either input to the mixer which converts down from 304 to 21.4MHz gets rid of the 0MHz peak, which I take to be proof that that mixer is balanced, but I've got no test gear covering above 50MHz and so I can't debug the front end of the Analyser.

Does this further info help? I've been told that there are loads of Spectrum Analyser and/or HP experts in this group.

John

"Pete KE9OA" wrote in message
news:m6KOe.127634$5N3.67339@bgtnsc05-news.ops.worldnet.att.net...
> This is a dumb question, but I have to ask.....does this
> only show up at the wider I.F. bandwidth settings? If so, this is normal.
Do
> you have the sweep set to automatic or manual mode? If you have your sweep
> set to manual mode and your sweep is set too fast, this can occur.
>
> Pete

>
> "John A" wrote in message
> news:defa29fit1@newsg1.svr.pol.co.uk...
> > Hi All,
> >
> > My HP8558B has developed a fault. Could anyone advise?
> >
> > Up to about 4MHz the sweep consists of a distorted 0MHz peak then a
> > sloping,
> > noise-free, baseline. Above 4MHz the analyser works fine At a Reference
> > Level switch setting of -30dB there is about one division of noise nad
> > signal appear as expected
> >
> > The distortion of the 0MHz peak and the slope of the 0 to 4MHz section
of
> > the sweep varies with the setting of the Reference Level Switch but the
> > actual gain settings seem to be correct, once you are above 4MHz. Also
odd
> > single spikes appear in this region at different Ref Level settings
> >
> > Anything else you need to know?
> >
> > TIA
> >
> > John
> >
> >
>
>
"Pete KE9OA" wrote in message
news:m6KOe.127634$5N3.67339@bgtnsc05-news.ops.worldnet.att.net...
> This is a dumb question, but I have to ask.....does this
> only show up at the wider I.F. bandwidth settings? If so, this is normal.
Do
> you have the sweep set to automatic or manual mode? If you have your sweep
> set to manual mode and your sweep is set too fast, this can occur.
>
> Pete
>
> "John A" wrote in message
> news:defa29fit1@newsg1.svr.pol.co.uk...
> > Hi All,
> >
> > My HP8558B has developed a fault. Could anyone advise?
> >
> > Up to about 4MHz the sweep consists of a distorted 0MHz peak then a
> > sloping,
> > noise-free, baseline. Above 4MHz the analyser works fine At a Reference
> > Level switch setting of -30dB there is about one division of noise nad
> > signal appear as expected

> >
> > The distortion of the 0MHz peak and the slope of the 0 to 4MHz section
of
> > the sweep varies with the setting of the Reference Level Switch but the
> > actual gain settings seem to be correct, once you are above 4MHz. Also
odd
> > single spikes appear in this region at different Ref Level settings
> >
> > Anything else you need to know?
> >
> > TIA
> >
> > John
> >
> >
>
>

3949. Re: HamPoll.Com

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 13:51:42 UTC
From: Charles Brabham <n5pvl@sbcglobal.net>
Message-ID: <OX_Oe.1282$eQ.978@newssvr30.news.prodigy.com>
Source record: 17481

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:U5edna9RFf9T3pHeRVnyvA@pipex.net...
>> Registration before voting is fairly universal around the world - in
>> relation to voting activity that is of any significance. If you want your
>> vote to count and are not ashamed of your own opinion, you should have no
>> trouble registering to vote in our polls.
>>
>> Charles Brabham, N5PVL
> ====================
> Charles , Whatever your objectives with this web site , I shall NEVER
> participate ,registered or non-registered ,because I find this type of
> polling a useless activity , it is doing something just for the sake of
> doing ,without having any positive / constructive end result, it is just
> taking up bandwidth.
>
> Frank GM0CSZ / KN6WH

That's cool. If we had to wait until everybody agreed on everything, we
wouldn't get much done, would we?

You can take your insulting tone though, and stick it where the sun don't
shine.

Charles Brabham, N5PVL

Director: USPacket http://www.uspacket.org
Admin: HamBlog.Com http://www.hamblog.com
---------- HamPoll.Com http://www.hampoll.com
---------- DigiBlog http://www.uspacket.org/digiblog/

3950. Re: HamPoll.Com

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 13:58:15 UTC
From: Charles Brabham <n5pvl@sbcglobal.net>
Message-ID: <X1%Oe.1284$eQ.572@newssvr30.news.prodigy.com>
Source record: 17482

"W8LNA" <W8LNA@arrl.net> wrote in message
news:jIZOe.555$Xo3.333@news01.roc.ny...
> Charles Brabham wrote:
>> "Roy Lewallen" <w7el@eznec.com> wrote in message
>> news:11gnb7a3c1ifq9f@corp.supernews.com...
>>
>>>I associate a .com web site extension as having a commercial, for-profit
>>>purpose. Asking for people to register and leave information about
>>>personal preferences makes it look an awful lot like you're collecting
>>>data to sell for marketing purposes. If that's not the purpose of your
>>>commercial enterprise, I suggest that you state clearly what the purpose
>>>is, how you make your money, and why people need to register in order to
>>>leave their opinions. If it's a non-profit enterprise, I suggest you get
>>>an .org extension, and clearly state on the site that it's not for
>>>profit.
>>>
>>>Roy Lewallen, W7EL
>>
>>
>> Did you see any ads there at HamPoll, Einstien?
>>
>> We do not hold ourselves responsible for the associations that pop up in
>> some people's minds from time to time. - They've got a million of them,
>> and who could keep up with them all? (Or give a hoot)
>>
>> If you are convinced that HamPoll.Com is part of some kind of commercial
>> conspiracy, your best bet would be to move on, go find something else to
>> wring your hands over.
>
> So when someone makes a suggestion you're going to insult them?

When they are couched in an insulting tone, you betcha I will.

>
> Friendly suggestions:

Tell you what: I'll run my web-site and you run yours, if you have one.

>
> You need us to make this work, so far you haven't shown that we need you
> at all.

I don't need whiners here on usenet, that's for sure.

Nobody is obligated to like the services I offer. The fact that I do offer
such services does not obligate me to stand still for abuse.

Or dumb advice, well-intentioned or otherwise.

Have a nice day! :-p

Charles Brabham, N5PVL

Director: USPacket http://www.uspacket.org
Admin: HamBlog.Com http://www.hamblog.com
---------- HamPoll.Com http://www.hampoll.com
---------- DigiBlog http://www.uspacket.org/digiblog/

3951. Re: HamPoll.Com

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 14:10:23 UTC
From: Charles Brabham <n5pvl@sbcglobal.net>
Message-ID: <jd%Oe.1285$eQ.765@newssvr30.news.prodigy.com>
Source record: 17483

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:11gnb7a3c1ifq9f@corp.supernews.com...
>I associate a .com web site extension as having a commercial, for-profit
>purpose. Asking for people to register and leave information about personal
>preferences makes it look an awful lot like you're collecting data to sell
>for marketing purposes. If that's not the purpose of your commercial
>enterprise, I suggest that you state clearly what the purpose is, how you
>make your money, and why people need to register in order to leave their
>opinions. If it's a non-profit enterprise, I suggest you get an .org
>extension, and clearly state on the site that it's not for profit.
>
> Roy Lewallen, W7EL

The data is constantly on public display, for anybody to do anything they
want to with.

That makes it kinda hard to sell...

Think it through. - Especially before making ignorant, ugly accusations on
usenet, OM.

Charles Brabham, N5PVL

Director: USPacket http://www.uspacket.org
Admin: HamBlog.Com http://www.hamblog.com
---------- HamPoll.Com http://www.hampoll.com
---------- DigiBlog http://www.uspacket.org/digiblog/

3952. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 15:23:44 UTC
From: Win <w0lz@winlyn.us>
Message-ID: <0s3pg1lmnlk3tqf8d6840lojpl3k1i1rg5@4ax.com>
Source record: 17485

I worked for weeks to get the RFI out of my computer. It was coming from within a commerical RFI protected case. I had S-9 plus readings on 40 and 80 meters. When I finally turned my attention to AC power cord and filtered it, levels dropped into the normal band noise.

win w0lz

3953. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 17:14:19 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <430CAAE7.4C653B22@earthlink.net>
Source record: 17486
Cross-posted to: comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

Ron Bean wrote:
>
> I'm not worried about anything specific, but I know the manufacturers go
> to great lengths to pass an rfi test, and yet it seems they are solving
> a non-problem.
>
> I do occasionally run PCs with the covers off, but I seldom have a radio
> or TV on, so if I were causing any interference anywhere (eg in the
> apartment nextdoor) I wouldn't notice it. I've heard urban legends about
> early microcomputers causing interference, were they noisier or were old
> TVs more sensitive to it?

Early PCs had a lower frequency system clock so there were more
harmonics to beat against other signals to cause interference. The
original IBM PC had a 4.77 MHz system clock that caused all kinds of
problems. There wasn't' a TV channel that didn't have at least one
harmonic, and some had two. The interference dropped off as the
frequency went up, but some early computers could wipe out the upper UHF
TV channels.

--
Link to my "Computers for disabled Veterans" project website deleted
after threats were telephoned to my church.

Michael A. Terrell
Central Florida

3954. Re: HP 8558B Analyser Problem - Help Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 19:22:35 UTC
From: John A <e45gkf@yahoo.co.uk>
Message-ID: <deihdb$m2g$1@news8.svr.pol.co.uk>
Source record: 17488

See

http://homepage.eircom.net/~ei9gq/spec2.jpg

for a screen shot.

John

3955. Broadband Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 20:49:39 UTC
From: DPhil <DPhil@breathemail.net>
Message-ID: <430cdcfe_3@mk-nntp-1.news.uk.worldonline.com>
Source record: 17489

I am trying to build the amplifier in W1FB's QRP Notebook, p.135, Fig 4-18
Capacitors C8, C14 & C18 no value is specified, No other broadband
amplifier in this book or EMRFD show a capacitor between collector and
ground. Are these capacitors needed, if so what value and what purpose
do they serve?

TIA

Phil G8AAE

3956. Re: Powerpole 180A Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 20:53:45 UTC
From: "Richard W. Solomon, W1KSZ" <w1ksz@earthlink.net>
Message-ID: <9hnpg15mc8el1keek6gfnbkvbu2in37bgs@4ax.com>
Source record: 17490

No, they are the SINGLEPOLE Connectors.

http://www.andersonpower.com/products/pp/sp.html

73, Dick, W1KSZ

On Tue, 23 Aug 2005 20:59:23 -0500, "gb" <onw9mapsgb@no.arrl.spam.net>
wrote:

>"Richard W. Solomon, W1KSZ" <w1ksz@earthlink.net> wrote in message
>news:6mbng1199dj1p6ji91rf198rrnh99jrr00@4ax.com...
>> The Glenayre Power Supply I got with it's companion Amp uses 180A
>> Powerpole Connectors for the 28 vdc output. Anyone got a spare couple
>> of these beasties ?? Even better would be the interconnecting power
>> cable, there are two ~1/4" pins for the +DC and two ~1/4" jacks for
>> the -DC. I found a GR double plug fits the -DC, but the +DC has me
>> stumped. I hate to tack solder a lead on them (too tacky !!).
>>
>> 73, Dick, W1KSZ
>>
>
>I assume you are referring to the Anderson "SB" series PowerPole connectors?
>http://www.powerwerx.com/category.asp?CtgID=3579
>
>w9gb
>

3957. Re: Broadband Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 20:59:23 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11gpnsuppmqv4dd@corp.supernews.com>
Source record: 17491

DPhil wrote:

> I am trying to build the amplifier in W1FB's QRP Notebook, p.135, Fig 4-18
> Capacitors C8, C14 & C18 no value is specified, No other broadband
> amplifier in this book or EMRFD show a capacitor between collector and
> ground. Are these capacitors needed, if so what value and what purpose
> do they serve?
>
> TIA
>
> Phil G8AAE
>
>
>
>

Schematic? My edition of "QRP Notebook" only goes to page 77.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

3958. Re Broadband Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 21:22:29 UTC
From: DPhil <DPhil@breathemail.net>
Message-ID: <430ce4af_3@mk-nntp-1.news.uk.worldonline.com>
Source record: 17492

Sorry should have said 2Edn. 1991.
This goes to 174 pages.

Thanks

Phil G8AAE

3959. Re: Stable Regen Receiver--Does it Exist??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 22:30:02 UTC
From: clf <allspamautodeleted@trashcan.com>
Message-ID: <_u%Oe.30889$Tf5.16944@newsread1.mlpsca01.us.to.verio.net>
Source record: 17484

"John Ferrell" <johnferrell@sprintmail.com> wrote in message
news:opsog1pvvd35he36nrtrio3ifbcsml44cb@4ax.com...
> May be I should not post before the second cup of coffee in the
> morning, but it seems to me that stable regeneration nets out to a
> Q-Multiplier. Don't let me discourage your activities, you would not
> be the first to find a new life for an old method.
>
> Personally, I find myself thinking about Parametric amplifiers a good
> bit these days...
>
> On 23 Aug 2005 19:30:56 -0700, kizerian@xmission.com wrote:
>
>>I have built a few dozen regen receivers and they all seem to work well
>>enough on AM signals--some extremely well--but kind of fall apart when
>>it comes to STABLE reception of CW and SSB.
>>
>>Has anyone ever built a solid state regen that does well with CW and
>>SSB? If so I would love to know how you did it (I'd even share my some
>>of my massive collection of radio parts with you)...before I go off and
>>build another dozen regens.
>>
>>I have a box full of prototypes affectionately dubbed my radio reject
>>graveyard (or dead radio pile)...I just don't want to be up to my neck
>>in more prototypes before I finally get a good one.
>>
>>Seriously thinking of skipping it and building a simple DC or superhet.
>>
>>Bruce Kizerian kk7zz
>>www.elmerdude.com
>

I have an older - but in reasonably decent condition - Radio Shack Regen receiver which does like 590 KC - 30 MHz - operates on 4 "C" batteries and has a jack for external power - bought it at an estate sale. I was able to scrounge up a manual for it too. I've used it a few times, but Regens are not my idea of a good time. Have thought of putting it out to the public for those who like em - but not sure yet if I'll do that. Maybe I'll give it another shot - let it try to earn it's keep. It is small enough, I thought about using it with a QRP transmitter and have a nice portable set up. Maybe I'll try to tune it up per the manual. I hadn't tried that yet - the radio became a back burner project since I bought it. Tuning "may" make a world of difference! Who knows when the thing was last checked or if it was even done right to start with. The thing is kinda neat looking, so would hate to get rid of it. But, if I"m not going to use it, no sense letting it collect

dust.

clf

3960. Re: Broadband Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-24 22:50:56 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <b7upg1tcb68r27mhan4om6jl2haol2802s@4ax.com>
Source record: 17493

On Wed, 24 Aug 2005 21:49:39 +0100, "DPhil" <DPhil@breathemail.net>
wrote:

>I am trying to build the amplifier in W1FB's QRP Notebook, p.135, Fig 4-18
>Capacitors C8, C14 & C18 no value is specified, No other broadband
>amplifier in this book or EMRFD show a capacitor between collector and
>ground. Are these capacitors needed, if so what value and what purpose
>do they serve?
>
>TIA
>
>Phil G8AAE

Not meaning to be rude did you read the caption below the schematic?

Extracted text for those that do not have the book:
"..C8, C14 and C18 are shown only as optional units if it is desired
to roll off the high frequency response for a special application."

That should be enough explanation.

Allison

3961. Re: Stable Regen Receiver--Does it Exist??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-25 01:33:01 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <hd9Pe.1477$u_6.1108@newssvr17.news.prodigy.com>
Source record: 17494

There's a good article in Jan/Feb 2004 QEX by WD5HOH for A Cascade Regenerative Receiver with two regen stages. The article covers what must be done to achieve stability with references to other regen articles.

--

73
Hank WD5JFR
<kizerian@xmission.com> wrote in message news:1124850656.892394.139930@f14g2000cwb.googlegroups.com...
>I have built a few dozen regen receivers and they all seem to work well
> enough on AM signals--some extremely well--but kind of fall apart when
> it comes to STABLE reception of CW and SSB.
>
> Has anyone ever built a solid state regen that does well with CW and
> SSB? If so I would love to know how you did it (I'd even share my some
> of my massive collection of radio parts with you)...before I go off and
> build another dozen regens.
>
> I have a box full of prototypes affectionately dubbed my radio reject
> graveyard (or dead radio pile)...I just don't want to be up to my neck
> in more prototypes before I finally get a good one.
>
> Seriously thinking of skipping it and building a simple DC or superhet.
>
> Bruce Kizerian kk7zz
> www.elmerdude.com
>

3962. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-25 02:08:00 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <5K9Pe.641$Rc.306027@news20.bellglobal.com>
Source record: 17496

"john graesser" <graesser@tca.net> wrote in message
news:11g76bkik7pa515@corp.supernews.com...
>
> I recall a UP story a couple of weeks ago that stated RS had 50 million
> profit off of over 1 billion in sales. So they are selling a hell of a lot
> but barely staying in the black. 1/2 of 1 percent profit? Even a passbook
> savings acct gets a better return than that.

50 x10^6 / 10^9 * 100% = 5% - that's not so bad

3963. Motorola RF Power Transistors???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-25 02:25:01 UTC
From: xxx <Mrxxx@xxx.com>
Message-ID: <bsaqg1dgplb7m09eij6014q4vajee6i9oc@4ax.com>
Source record: 17495

I have acquired some Motorola RF power transistors srf 1076,srf1077
and srf1800 does anyone have any info datasheets or even know where
they
were used??? Any help would be appreciated.
Greg vk5xgh
vk5xgh@nospamaztec.aunz.com
remove nospam

3964. Re: Motorola RF Power Transistors???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-25 02:52:19 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <a-CdnVGwl8v3r5DeRVn-vA@comcast.com>
Source record: 17497

"xxx" <Mrxxx@xxx.com> wrote in message
news:bsaqg1dgplb7m09eij6014q4vajee6i9oc@4ax.com...
>I have acquired some Motorola RF power transistors srf 1076,srf1077
> and srf1800 does anyone have any info datasheets or even know where
> they
> were used??? Any help would be appreciated.
> Greg vk5xgh
> vk5xgh@nospamaztec.aunz.com
> remove nospam

Good place to start .... RF Parts
http://www.rfparts.com/mototran.html

w9gb

3965. Re: Microwave transformer HF PA Powersupply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-25 03:55:56 UTC
From: Sven Arne Astrup <sastrup@online.no>
Message-ID: <4pednbuif6DT3JDeRVnzvA@telenor.com>
Source record: 17348

Hallo!

Thanks to everyone who responded to my posting. I finally found some
information on the subject, appreciate it very much.

73 de Sven LA6KJ

"Skipp says hello" <nospamatthistime@yahoo.com> skrev i melding
news:dedn67$217$1@skeeter.ucdavis.edu...
> Hi Sven,
>
> There's a public group on Yahoo all about building rf amplifiers. You can
> find it at:
>
> http://groups.yahoo.com/group/rfamplifiers/
>
> In the files section of the group... I've placed a copy of the Microwave
> Oven QEX article. There's also some pictures in the photos section of the
> same group. The group is open to everyone...
>
> enjoy
> skipp
>
> : Sven Arne Astrup <sastrup@online.no> wrote:
> : Hallo!
>
> : I am seeking some info about using transformers from microwave ovens in
> HF
> : PA power supplies. As one side of the secondary winding is connected to
> the
> : transformer core, I am a bit confused on how to do the voltage doubling.
>
> : Any info on the subject is appreciated.
>
> : 73 de Sven LA6KJ
>
> : --
>
>
> : All incoming and outgoing E-mail
> : scanned by NAV 2005.
>
>

3966. Re: Op amp supply-rail question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-25 06:14:02 UTC
From: "Dana H. Myers" <dana.myers@gmail.com>
Message-ID: <keydndZms4I7_JDeRVn-2w@comcast.com>
Source record: 17349

Ian Liston-Smith wrote:
> I'd like to build a tone control circuit using the LF353 dual op amp.
> The circuit has bass, mid range and treble adjustments.
>
> The problem:
> The circuit (see
> http://www.ece.ucsb.edu/courses/ECE002/2C_Su05Makaremi/lf353.pdf
> circuit on page 7) uses dual voltage rails of +15 and -15 volts,
> though for line input levels, this will probably work down to +8 and
> -8 volts. But I want to run it from a single +12 volt supply.
>
> Usually, two 100k resistors across the supply,

What is magical about 100k?

3967. Re: Op amp supply-rail question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-25 10:52:25 UTC
From: Ian Liston-Smith <ian@morse-code.NO.SPAM.TODAY.fsnet.co.uk>
Message-ID: <uk8rg1pn15krbvq737eao7phf7lk988b7e@4ax.com>
Source record: 17350

Thanks to all who have replied. I've certainly got some ideas now.

On Wed, 24 Aug 2005 23:14:02 -0700, "Dana H. Myers"
<dana.myers@gmail.com> wrote:

>Ian Liston-Smith wrote:
>> I'd like to build a tone control circuit using the LF353 dual op amp.
>> The circuit has bass, mid range and treble adjustments.
>>
>> The problem:
>> The circuit (see
>> http://www.ece.ucsb.edu/courses/ECE002/2C_Su05Makaremi/lf353.pdf
>> circuit on page 7) uses dual voltage rails of +15 and -15 volts,
>> though for line input levels, this will probably work down to +8 and
>> -8 volts. But I want to run it from a single +12 volt supply.
>>
>> Usually, two 100k resistors across the supply,
>
>What is magical about 100k?

3968. fa: Last hours: Vac Fixed Caps...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-25 13:55:17 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <95kPe.133544$5N3.98453@bgtnsc05-news.ops.worldnet.att.net>
Source record: 17351
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

See at :

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

other items being added as well, check back , tnx 73 heytubeguy

3969. Help on 4CX1500B Data

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-25 15:37:21 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <QAlPe.961$mH.733@fed1read07>
Source record: 17352

Jose CT1FSL e-mailed for help on an amplifier project
Can someone help him?

Hi
i'm making an amplifire with 2 4cx1500b tubs but i need info about the
soket conections, can helpe me?
I need to know were to conect grid, scrin an catode in soket tube,
need the schematikes for the tube soket, can help on this?
thanks
jose ct1fsl

His e-mail is ct1fsl <ct1fsl@sapo.pt>
Thanks

--
CL -- I doubt, therefore I might be !

3970. Re: Help on 4CX1500B Data

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-25 15:57:15 UTC
From: "Harold E. Johnson" <w4zcb@mchsi.com>
Message-ID: <vTlPe.280657$_o.178581@attbi_s71>
Source record: 17353

"Caveat Lector" <UALLBeware@9984reader.com> wrote in message
news:QAlPe.961$mH.733@fed1read07...
> Jose CT1FSL e-mailed for help on an amplifier project
> Can someone help him?
>
> Hi

I use the tube, I'll take care of it.

W4ZCB

3971. Re: Help on 4CX1500B Data

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-25 16:01:12 UTC
From: Peter Weiss <playfield-bbs@gmx.net>
Message-ID: <1124985672.111266.265490@g43g2000cwa.googlegroups.com>
Source record: 17354

Hi!

> i'm making an amplifire with 2 4cx1500b tubs but i need info about the
> soket conections, can helpe me?

Look here:

<http://www.g8wrb.org/data/Eimac/4CX1500B.pdf>
<http://www.g8wrb.org/data/Eimac/4CX1500A.pdf>

CU Peter

3972. Re: Help on 4CX1500B Data

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-25 16:49:51 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <PEmPe.964$mH.524@fed1read07>
Source record: 17355

Wow thanks much folks
Helps meet our charter

97.1 Basis and purpose.
(e) Continuation and extension of the amateur's unique ability to enhance international goodwill.

--
CL -- I doubt, therefore I might be !

"Harold E. Johnson" <w4zcb@mchsi.com> wrote in message
news:vTlPe.280657$_o.178581@attbi_s71...
>
> "Caveat Lector" <UALLBeware@9984reader.com> wrote in message
> news:QAlPe.961$mH.733@fed1read07...
>> Jose CT1FSL e-mailed for help on an amplifier project
>> Can someone help him?
>>
>> Hi
>
> I use the tube, I'll take care of it.
>
> W4ZCB
>

3973. The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-25 22:19:49 UTC
From: eternalsquire@comcast.net
Message-ID: <1125008389.118793.289820@g14g2000cwa.googlegroups.com>
Source record: 17356

All,

I know this sounds like a troll, but it is not, I assure you. I am at a point where I may be forced to consider a career change. My wife wants to teach at a reservation for the next several years, and as I do not see very many days left in my 20 odd-year career as a software designer, I am very much tempted to take her up on this.

Since I have a had an abiding interest in building amateur gear from parts, and since I hear a lot of complaints on this group about certain retail chains not being responsive to amateurs, I thought I should do a little bit of "market research" and ask my potential customers what they might want to see from my store if I should start one.

I know that I can't be all things to all people, and I also know from Idiots Guide to Starting a Business that retail sales can be a tough row to hoe.

My few advantages are that I would (hopefully) thoroughly know my product, that I would be organized where a lot of scrap shops aren't, that I would listen to what the customer wants, and that I wouldn't be going into this simply for sentimental reasons but hopefully to make a small profit to supplement my wife's earnings

So, what is the perfect homebrewer store for you all?

1) Lots of discretes at low prices?
2) Transceiver and other kits sold at slight markup?
3) Parts kits and boards for successful homebrew designs found on the net?
4) A depot to drop off and buy antique gear and test equipment?
5) Home-made precision such as crystal filters, diode mixers, amplifier modules?

Anything I haven't thought of?

Thanks,

The Eternal Squire

3974. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-25 22:51:14 UTC
From: Tom <nospam@nospam.com>
Message-ID: <CXrPe.673915$cg1.106978@bgtnsc04-news.ops.worldnet.att.net>
Source record: 17357

<eternalsquire@comcast.net> wrote in message
news:1125008389.118793.289820@g14g2000cwa.googlegroups.com...
> All,
>
> I know this sounds like a troll, but it is not, I assure you. I am at
> a point where I may be forced to consider a career change. My wife
> wants to teach at a reservation for the next several years, and as I do
> not see very many days left in my 20 odd-year career as a software
> designer, I am very much tempted to take her up on this.
>
> Since I have a had an abiding interest in building amateur gear from
> parts, and since I hear a lot of complaints on this group about certain
> retail chains not being responsive to amateurs, I thought I should do a
> little bit of "market research" and ask my potential customers what
> they might want to see from my store if I should start one.

Have you considered military/industry surplus/salvage along the lines of
Fair Radio Sales in Ohio or Skycraft Parts in Florida? I can't speak for
Fair but Skycraft turns in a very handsome profit six days a week year after
year and they are always crowded with patrons from kids building a crystal
set to aerospace engineers. There are breaks for a salvage operation as
well. Maybe it would be worth you while to visit them.

DRMS (Defense Reutilization and Marketing Service)
http://www.drms.dla.mil/

3975. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-25 23:25:57 UTC
From: Mr Fed UP <mrfedup@bellsouth.net>
Message-ID: <rqsPe.255$2_.100@bignews6.bellsouth.net>
Source record: 17358

Ok.... you asked for it... lol
New hams and lots of us OT's have been frustrated at the hodge podge
arrangement of radios and accessories. Why the new person always asks
is what should I buy..... The ad's and tech info on the products need to
have a "boiled" down list of what it takes to make it all work. i.e.
examples
of radio antenna match need? Power supply? key? mic? Amp? Vertical ?
Slope?
dipole? random wire. Play radio only at home or in car too. Poor lids.
:-(and the whole
works for recommended uses like DX or contest or just rag chew.
Maybe several "typical STATION set ups for a few ranges of total cost"
Even for an OT you just cant tell from the ad's what it's going to cost in
the end
or what it will do or not do very well.

Hope your career lasts a while... seeing all the sw jobs going over seas
just
like the mfg jobs have. Hope they plan to sell the products over seas...
no one here will have a job/money to buy it.

Load Accumulator what? Which mag core ? tube! Reset!!!!
Sure ain't C or what ever else has come along in the last 10 years
since I got to retire and play with my toys. LOL

A straight key is the one for the ignition huh?

Good luck 73 K4TWO

A good Elmer list of hams who can show off their stations
and be able to "guide" a new person into the hobby without
going broke and with enough knowledge that what ever the
Elmer is showing has taken a good while to accumulate.
What ever station you build... its never right forever so it is a
life time job of rebuilding the new station for the new
and varied aspects of ham radio. Even the ARRL
handbook is an accumulation of many folks efforts.
Ham Radio is just TOO big to be a master of all
the hobby. (although some declare that they are LOL)

I didn't have an Elmer so many years back as a
novice, I was pizzzed off for 2 years before I learned
that DX didn't live in my novice band.

P.S. Make it all free, won't last long but be big hit.

You do plan on a web site eh? I have bought most of
my recent "ham stuff" on ebay or other places on the web.
By the time I spend gas and time shopping or going to
hamfests, I can have the same items shipped the next day.
Just won four 50mhz crystal mobile rigs for $6 costs more
to ship them than the purchase fee from ebay auction. But
look out 6m here I come. Tune Tweek Diddle Diddle smoke.
I need a big garage.

Need good pictures / prices and web site to sell these days.
Most commercial places are too cheap (price fixing?) to put
prices in mag' advert's and web advert's some dont even
put an email address up due to spam and customers that
are unhappy.

Yeah, I got my rag chew award a long time back lol

A copy of an email I sent to the ARRL recently below:>>>>

ALL the files and adverts I see in QST or on the web can drowned and
overwhelm a new ham.
What is ALWAYS missing is "what this radio needs to work is.... AC line...
DC power supply... Antenna match... Types of Antennas a user might connect.
Sheeez get some of the basics out to the "New Hams" they want to sell
these things too.
Let them know about how much MORE it is going to cost than the listed price
of the current unit under test.
How about a Key or Speaker or Mic, need a rotor?.... Come on lets get the
newbies a chance to spend his few dollars with out getting
a box and then wish for Christmas to come so he/she can connect it up and
really get on the air.
Go look at the advert's and "reviews" as though you were NEW to the hobby
and about to invest some hard earned money.
While most of the tech info can be impressive, it is fluff to a newbie.
Just tell me how it worked and what needed to make it usable.
How much were all those "options they said were available?" Money for what
filter? What warrantee??? It is the price of a car is it 5 years too?
Thanks.... Hope this message gets to where it will do some good.
Might even put some "shop and compare tables" out for them.
I been around a long time and was getting ready to upgrade from my GTX757II
to a "last good radio" for my retired years and wading through
all the poo has just about put me off buying another radio. I did apply
for a new 4 land call for retired call... I hope Vanity call. Can get a
little vain when that's all that is left. hihi
I just spent 2 days rebuilding the optical dial that froze up in my 757 so I
better move on before it gets arthritis again.
Now WHAT to buy?? eh

<eternalsquire@comcast.net> wrote in message
news:1125008389.118793.289820@g14g2000cwa.googlegroups.com...
> All,
>
> I know this sounds like a troll, but it is not, I assure you. I am at

> a point where I may be forced to consider a career change. My wife
> wants to teach at a reservation for the next several years, and as I do
> not see very many days left in my 20 odd-year career as a software
> designer, I am very much tempted to take her up on this.
>
> Since I have a had an abiding interest in building amateur gear from
> parts, and since I hear a lot of complaints on this group about certain
> retail chains not being responsive to amateurs, I thought I should do a
> little bit of "market research" and ask my potential customers what
> they might want to see from my store if I should start one.
>
> I know that I can't be all things to all people, and I also know from
> Idiots Guide to Starting a Business that retail sales can be a tough
> row to hoe.
>
> My few advantages are that I would (hopefully) thoroughly know my
> product, that I would be organized where a lot of scrap shops aren't,
> that I would listen to what the customer wants, and that I wouldn't be
> going into this simply for sentimental reasons but hopefully to make a
> small profit to supplement my wife's earnings
>
> So, what is the perfect homebrewer store for you all?
>
> 1) Lots of discretes at low prices?
> 2) Transceiver and other kits sold at slight markup?
> 3) Parts kits and boards for successful homebrew designs found on the
> net?
> 4) A depot to drop off and buy antique gear and test equipment?
> 5) Home-made precision such as crystal filters, diode mixers, amplifier
> modules?
>
> Anything I haven't thought of?
>
> Thanks,
>
> The Eternal Squire
>

3976. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 01:18:53 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <delqlt$d3i$1@theodyn.ncf.ca>
Source record: 17360

(eternalsquire@comcast.net) writes:
> All,
>
> I know this sounds like a troll, but it is not, I assure you. I am at
> a point where I may be forced to consider a career change. My wife
> wants to teach at a reservation for the next several years, and as I do
> not see very many days left in my 20 odd-year career as a software
> designer, I am very much tempted to take her up on this.
>
> Since I have a had an abiding interest in building amateur gear from
> parts, and since I hear a lot of complaints on this group about certain
> retail chains not being responsive to amateurs,

You do realize that for some reason people like to gripe about Radio
Shack. They have contempt for the place, while all the while expecting
it to deal with them.

Radio Shack hasn't been a main place to buy parts since a few years after
Tandy bought it in the sixties. Selection was/is limited and prices high.
They were a great place to get something quick, because a store would likely
be nearby, and a place to get them in the off hours.

But just because people like to gripe about Radio Shack doesn't mean
a thing about the state of buying parts generally. Note they are griping
at one store, not talking about other places.

There are plenty of places to buy parts. Sadly they may not be in a cluster
downtown in your city, which was the case decades ago. But they still
exist. Some places have risen up to deal with specialty items, filling
a void that is missing. Amidon is a classic example, starting at a time
when toroids were virtually unknown, and being the standard for buying
the cores in small quantities (be it the hobbyist or the prototyper).

So you really need to not be looking at the griping at Radio Shack,
or Radio Shack itself, but at what exists today and whether it
can fill the market, or if there are gaps that need filling.

Michael VE2BVW

3977. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 01:19:50 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns96BDBAC58DDB7spectrumhogstarbandn@207.106.92.175>
Source record: 17359

My opinion, the easist way to profit is by unique product development and marketing, or in the service sector. I just can't see making a living in amateur radio retail... the competition is stiff and the profit margins are small.

You are a software developer? I suggest you use your talents to develop something in the amateur software area. Can't off hand suggest more specifically, but digital radio, digital voice, and even video are areas one might look into. Then there are the other peripheral products like logging, QSL, maps, world time and geographical info, radio control, propagation info, antenna measurement, etc, and a whole lot more I can't even think of at the moment.. Good luck.

Ed K7AAT

3978. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 01:57:44 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <delsuockn1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 17362

Don't forget the 3-feet cardboard box filled with junk.

3979. Re: HamPoll.Com

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 01:59:24 UTC
From: WN0BFS/3 <wn0bfs@spambob.com>
Message-ID: <1125021564.645647.111070@g43g2000cwa.googlegroups.com>
Source record: 17361

Charles Brabham wrote:
> HamPoll is here in order to give amateurs a chance to speak for themselves,
> and in time to provide reasonably accurate and significant polling data on a
> variety of issues related to the amateur radio service.
>

Kewl websight, CB.

So, if the browser window is smaller than the text,
the pour ham is sposed to GUESS whats' at the bottom?

Keepupthegoodwork.

3's & 8's!

WN0BFS/3

3980. Re: HamPoll.Com

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 02:14:44 UTC
From: WN0BFS/3 <wn0bfs@spambob.com>
Message-ID: <1125022484.547210.197400@g43g2000cwa.googlegroups.com>
Source record: 17363

Charles Brabham wrote:
> HamPoll is here in order to give amateurs a chance to speak for themselves,
> and in time to provide reasonably accurate and significant polling data on a
> variety of issues related to the amateur radio service.
>

Kewl websight, CB.

So, if the browser window is smaller than the text,
the pour ham is sposed to GUESS whats' at the bottom?

Keepupthegoodwork.

3's & 8's!

WN0BFS/3

3981. Re: HamPoll.Com

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 02:15:39 UTC
From: WN0BFS/3 <wn0bfs@spambob.com>
Message-ID: <1125022539.522962.325280@o13g2000cwo.googlegroups.com>
Source record: 17364

Stoopid Google!

3982. Re: RadioShack Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 02:35:31 UTC
From: Greysky <greyskyat@sbcglobaldot.net>
Message-ID: <TdvPe.711$5k1.441@newssvr27.news.prodigy.net>
Source record: 17365

"Geoffrey S. Mendelson" <gsm@mendelson.com> wrote in message
news:slrndg32go.ija.gsm@cable.mendelson.com...
> In article <U1cMe.30078$Tf5.5922@newsread1.mlpsca01.us.to.verio.net>,
> clfe wrote:
>
>> Sadly, I think them doing that - is wishful thinking. Actually, were it
>> not
>> for the Cell Phones and some other miscellaneous items, it seems to me
>> that
>> they would be out of business in the not too distant future. Electromics
>> "toys" - can be had at Wal-Mart or any other place, same with TVs,
>> Stereos,
>> Computers and phone accessories. The "few" scanners they sell isn't
>> enough
>> to hold them. I really do think they're on their last legs. IF they go on
>> longer, then all the better. But I think it is going to take a major
>> miracle
>> to pick them up. I used to go in a RS store at least 3 times a week. I'm
>> lucky if I walk in one - once every couple months. They simply have
>> nothing
>> to offer me anymore. I can get all they have - elsewhere, and usually
>> cheaper - WITHOUT - the "Do you need a cell phone?" pitch.
>
> Last night I was watching on cable a movie made in 1997 about Star Trek
> fans. One of the fans builds things. It showed him going into a Radio
> Shack store and asking for parts and electronics help (should I use
> a 270 oHm resistor instead of the 3k?).
>
> The back of the store was a maze of parts racks, and they guy knew the
> answers.
>
> As Joani Mitchell once said "you don't realize what you've lost until it's
> gone".
>
> Geoff.
>

Yeah. I remember when they were getting rid of all those paperback
electronics books, you know like "Op amp Circuits" and "NAND Gate circuits",
and a bunch of ones by Carr. They were obsoleting the entire line for 25
cents a book. I still have dozens and dozens of those books in my closet
somewhere. Old friends indeed..."

Greysky

3983. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 04:38:24 UTC
From: eternalsquire@comcast.net
Message-ID: <1125031104.344654.180860@o13g2000cwo.googlegroups.com>
Source record: 17366

Ah, yes, I remember those well from hamfests.

I wonder, should I be the equivalent of FTD and offer to ship
3 foot cardboard boxes of unsorted electronics in lieu of flowers
for the YL or YM who really wants to say 88's to that special
ham in thier life?? :) :) :)

It would save on cataloging:)

Keep those suggestions coming, please!

3984. Manual for MFJ-1276 TNC?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 10:03:38 UTC
From: xrenfredm@hotmail.com
Message-ID: <430ee8a5.23133834@news.xtra.co.nz>
Source record: 17367

Anyone out there got a manual for one of these? Sure would appreciate it if someone can dig one out or has a copy in Adobe pdf. Many thanks, Renfred.
Remove (X) from xrenfred for correct email address...thanks.

3985. Homebrew radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 11:14:55 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <PQCPe.308069$xm3.11392@attbi_s21>
Source record: 17368

The QRZ.com for W0IYH has several improvements to the brief discussion, if anyone is interested.

Bill W0IYH

3986. Re: HamPoll.Com

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 11:58:36 UTC
From: Charles Brabham <n5pvl@sbcglobal.net>
Message-ID: <MtDPe.2759$eQ.2120@newssvr30.news.prodigy.com>
Source record: 17369

"WN0BFS/3" <wn0bfs@spambob.com> wrote in message
news:1125021564.645647.111070@g43g2000cwa.googlegroups.com...
>
> Charles Brabham wrote:
>> HamPoll is here in order to give amateurs a chance to speak for
>> themselves,
>> blah blah etc. and so forth.
>
> Kewl websight, CB.
>
> So, if the browser window is smaller than the text,
> the pour ham is sposed to GUESS whats' at the bottom?

I found and fixed the problem you mentioned... Now I can shrink it down
pretty small, and it is still usable. (Not much I can do about the forum
though...)

Thanks for the 'heads up"!

Charles Brabham, N5PVL

Director: USPacket http://www.uspacket.org
Admin: HamBlog.Com http://www.hamblog.com
---------- HamPoll.Com http://www.hampoll.com
---------- DigiBlog http://www.uspacket.org/digiblog/

3987. Re: Manual for MFJ-1276 TNC?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 12:55:19 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <430F1137.8010207@bloomer.net>
Source record: 17370

For some reason, I didn't see a manual for an MFJ-1276 at the MFJ website. Double check which model you have and you can search the MFJ site again. They have pdf manuals for bunches of their products, so I'm wondering why I didn't see one for a 1276...

http://www.mfjenterprises.com/manuals.php

Scott
N0EDV

Renfred wrote:
> Anyone out there got a manual for one of these? Sure would appreciate
> it if someone can dig one out or has a copy in Adobe pdf. Many thanks,
> Renfred.
> Remove (X) from xrenfred for correct email address...thanks.

3988. Re: Homebrew radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 13:11:41 UTC
From: "Harold E. Johnson" <w4zcb@mchsi.com>
Message-ID: <hyEPe.281437$x96.127319@attbi_s72>
Source record: 17371

> The QRZ.com for W0IYH has several improvements to the brief discussion, if
> anyone is interested.
>
> Bill W0IYH

You do great photo work as well Bill, that's the sharpest image I think I've I've ever seen on QRZ. Can almost see where you're tuned to! Looking forward to finding you on the bands again, will certainly recoignize the call next time instead of trying to think of where I've heard it before.

My modified IYH MRF-150's are alive and doing well, been a couple years now, so I think they're in for the long haul. How do you operate without a monitorscope? Mine is on whenever the rig is on. Instant reminder when I've forgotten which antenna is selected and the like. (Haven't yet modified my little STAR to automate that process like I had on my Signal One.)

Regards
W4ZCB

3989. Re: Homebrew radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 14:09:33 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <xoFPe.283871$_o.83156@attbi_s71>
Source record: 17372

I have a new Sony digital camera 7.2 megapixel that I have been slowly learning how to use. I shoot pix using a tripod and max megapixel (20 megabytes), then I use a program that creates an optimum JPEG file that QRZ.com prefers that is a little less than 500 kilobytes. I use an external diffused flash that works quite well, attached to the Sony. I can shoot a dozen pix and delete all but the one I want (at no cost for film and developing).

My push pull MRF150 PA has been faultless for more than 4 years. I clean out the dust occasionally. The protection circuits all work quite well. Ameritron has a new 600 W PA that uses 4 MRF150s. I don't want to live that dangerously. My ancient 30L-1 works beautifully at 600 W. At 800 W it starts to deteriorate, so just 1.25 dB of ALC keeps it happy.

The 572B tubes are Chinese from RF Parts in L.A., but they use American made thoriated tungsten filaments and seem to be quite reliable when not abused. A matched quad costs about $200.

I have everything I need to keep everything working OK but I don't need to keep it all connected all the time.

Bill W0IYH

"Harold E. Johnson" <w4zcb@mchsi.com> wrote in message
news:hyEPe.281437$x96.127319@attbi_s72...
>> The QRZ.com for W0IYH has several improvements to the brief discussion,
>> if
>> anyone is interested.
>>
>> Bill W0IYH
> You do great photo work as well Bill, that's the sharpest image I think
> I've
> I've ever seen on QRZ. Can almost see where you're tuned to! Looking
> forward
> to finding you on the bands again, will certainly recoignize the call next
> time instead of trying to think of where I've heard it before.
>
> My modified IYH MRF-150's are alive and doing well, been a couple years
> now,
> so I think they're in for the long haul. How do you operate without a
> monitorscope? Mine is on whenever the rig is on. Instant reminder when
> I've
> forgotten which antenna is selected and the like. (Haven't yet modified my
> little STAR to automate that process like I had on my Signal One.)
>
> Regards

> W4ZCB
>
>
>

3990. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 14:43:46 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <tUFPe.15431$1g2.1853@fe05.lga>
Source record: 17373

<eternalsquire@comcast.net> wrote in message
news:1125008389.118793.289820@g14g2000cwa.googlegroups.com...

> little bit of "market research" and ask my potential customers what
> they might want to see from my store if I should start one.

Of course, market guidance is a good thing, but keep in mind that this
newsgroup is probably far from representative.

> So, what is the perfect homebrewer store for you all?

DigiKey, with some RF parts added.

> 1) Lots of discretes at low prices?

There are lots of places to get discretes. This is no longer the problem it
used to be. The problem is getting them at a local store. RS used to fill
that bill, and there used to be a number of local electronics retailers.
But to tap that market, you need to be everywhere. In a market large enough
to justify that sort of presence, there are already competitors.

> 2) Transceiver and other kits sold at slight markup?

What can you offer that AES and the like can't? Unfortunately, I think a
lot of stores suffer from spending time helping folks understand the
products, only to have the customer go get it at Texas Towers for five bucks
less. Hams are cheap. If you are going to sell transceivers you gotta be
near the lowest price. Now maybe a wide range of kits might be a market
with little competition.

> 3) Parts kits and boards for successful homebrew designs found on the
> net?

There are a lot more homebrew possibilities out there than there are kits,
but that is a pretty low margin market. Still, I wonder if something simple
like providing parts kits for FAR Circuits boards might not be a
possibility. Provide a needed service and keep your costs down by
leveraging someone else's board mill.

> 4) A depot to drop off and buy antique gear and test equipment?

Again, you need to be everywhere. If your wife plans on working on a
reservation, it sounds like the place you will be might be a pretty small
market.

> 5) Home-made precision such as crystal filters, diode mixers, amplifier
> modules?

Filters might work. Mixers, amps etc are already available from Minicircuits. But filters for common homebrew IFs might be a market.

> Anything I haven't thought of?

One thing that occurs to me is that almost any project nowadays involves a microcontroller of some type, typically a PIC or AVR. Even though programmers are trivial to build, the need for a programmed micro is a show stopper for a lot of potential builders. That might make an interesting niche.

Take a look at the successful guys.

DigiKey has almost a half million SKUs. Although they are shy on RF parts, for almost anything else you want they are gonna have it. They have a fabulous search facility on their website and the best customer service on the planet. Their prices might not be the best, but they make up for it by being terribly easy to deal with.

AES is an expert at lightening your wallet. Their prices are pretty low, when you call them you will talk to someone who knows what it is you want. And the next day the rig shows up on your doorstep. Simple, painless, and close to the lowest price.

Ever call International Crystal for a crystal? Their prices may be high, but they will make sure you get exactly what you need. If you have a commercial radio, no matter how obscure, they know what kind of crystal it takes. Doing something weird? Tell them about your circuit. They are dedicated to getting you what you need.

If you are going to be out in the boondocks, like it sounds, then you need something you can do online. The good news is that is relatively cheap. The bad news is that now you are competing with an entire planet full of competitors, so you need to come up with something really unique.

..

3991. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 16:30:09 UTC
From: eternalsquire@comcast.net
Message-ID: <1125073809.367452.144380@g49g2000cwa.googlegroups.com>
Source record: 17374

Sage advice!

"If you are going to be out in the boondocks, like it sounds, then you need
something you can do online."

Not totally boondocks. The place where my wife will be working can be seen from the Interstate. All along the Interstate for bunches and bunches of miles can be seen places where one can get souveniers and inexpensive Native jewelery and other handicrafts. Along roads in all directions for hundreds of miles are signs leading to these various places.

I have been tempted to try some type of Doctor Demento theme type technological curiosity shop stocked with ham kits, gear, and license guides, as well Jacob's Ladders, black light lamps, crystal sets, and introductory science stuff for the pre-teens... it might fit right in with the rest of the tourist trap area but I'm really uncertain I want to completely take my chances on it.

"The good news is that is relatively cheap. The bad news is that now you are competing with an entire planet full of
competitors, so you need to come up with something really unique."

Ah, yes, the perils of globalization, which caused what I do best to be offshored in the first place. This is kidding: now its a contest between one expensive genius versus a planetfull of poorly paid geniuses working for a multinational. The latter will win every time.

At least I won't be too bored reversing roles with my wife for the next couple years:

While I wait for my ham customers to drive in, I could do software and/or hardware R&D.

The IF idea sounds definitely good.

More ideas, anyone?

3992. Re: Manual for MFJ-1276 TNC?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 17:01:50 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns96BE66588373Espectrumhogstarbandn@207.106.92.175>
Source record: 17375

> For some reason, I didn't see a manual for an MFJ-1276 at the MFJ
> website. Double check which model you have and you can search the MFJ
> site again. They have pdf manuals for bunches of their products, so I'm
> wondering why I didn't see one for a 1276...
>
> http://www.mfjenterprises.com/manuals.php
>
> Scott
> N0EDV

I couldn't find the 1276 manual listed on MFJ's website, either.
However, if it were me, I'd either call their 800 number, or email them
with the question. They are very good at responding.

Ed K7AAT

3993. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 17:31:37 UTC
From: Tom <nospam@nospam.com>
Message-ID: <ZIIPe.678621$cg1.141654@bgtnsc04-news.ops.worldnet.att.net>
Source record: 17376

<eternalsquire@comcast.net> wrote in message
news:1125008389.118793.289820@g14g2000cwa.googlegroups.com...
> All,
>
> I know this sounds like a troll, but it is not, I assure you. I am at
> a point where I may be forced to consider a career change. My wife
> wants to teach at a reservation for the next several years, and as I do
> not see very many days left in my 20 odd-year career as a software
> designer, I am very much tempted to take her up on this.
>
> Since I have a had an abiding interest in building amateur gear from
> parts, and since I hear a lot of complaints on this group about certain
> retail chains not being responsive to amateurs, I thought I should do a
> little bit of "market research" and ask my potential customers what
> they might want to see from my store if I should start one.

I was reading the responses to your post when a thought prompted me to add another comment. The electronics market for the amateur in Japan is exceedingly more developed that what it is here in the US. Every now and then I hear of interesting amateur equipment, electronics devices and parts that, for some reason, are not available in the US---I sure would like to have one of those Sony automobile receivers with short-wave. Heaven knows what they have for the computer hobbyist. Possibly, an import operation of sort can fill the void---an interesting niche.

For the life of me I can't remember what part of Tokyo the famous electronics district is in.

Maybe I shouldn't have posted this---the idea sounds good to me too.

3994. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 18:42:10 UTC
From: craigm <none@domain.invalid>
Message-ID: <9oJPe.15483$1g2.13753@fe05.lga>
Source record: 17377

Tom wrote:
> <eternalsquire@comcast.net> wrote in message
> news:1125008389.118793.289820@g14g2000cwa.googlegroups.com...
>
>>All,
>>
>>I know this sounds like a troll, but it is not, I assure you. I am at
>>a point where I may be forced to consider a career change. My wife
>>wants to teach at a reservation for the next several years, and as I do
>>not see very many days left in my 20 odd-year career as a software
>>designer, I am very much tempted to take her up on this.
>>
>>Since I have a had an abiding interest in building amateur gear from
>>parts, and since I hear a lot of complaints on this group about certain
>>retail chains not being responsive to amateurs, I thought I should do a
>>little bit of "market research" and ask my potential customers what
>>they might want to see from my store if I should start one.
>
>
> I was reading the responses to your post when a thought prompted me to add
> another comment. The electronics market for the amateur in Japan is
> exceedingly more developed that what it is here in the US. Every now and
> then I hear of interesting amateur equipment, electronics devices and parts
> that, for some reason, are not available in the US---I sure would like to
> have one of those Sony automobile receivers with short-wave. Heaven knows
> what they have for the computer hobbyist. Possibly, an import operation of
> sort can fill the void---an interesting niche.
>
> For the life of me I can't remember what part of Tokyo the famous
> electronics district is in.

Akihabara

>
> Maybe I shouldn't have posted this---the idea sounds good to me too.
>
>

3995. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 18:45:15 UTC
From: eternalsquire@comcast.net
Message-ID: <1125081915.412415.325230@g44g2000cwa.googlegroups.com>
Source record: 17378

Tom,

The district in question is the Ahikhabara (sp?). From what I have heard and read it is the largest elex flea-market in the world.

There is also the possibility that we could import discretes and other parts directly from small shops in India and China.

The only problem is that it seems that US Customs import duties for electronics coming in from Japan are rather punitive to small-time operators. Maybe I am wrong.

Maybe you and I should go into this one together :)

3996. A Weekly F.A.Q. - What Is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 18:56:13 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1125082573.078138.29130@g47g2000cwa.googlegroups.com>
Source record: 17379
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.radio.amateur

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,

competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

3997. Re: A Weekly F.A.Q. - What Is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 19:28:58 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <denqhqgem1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 17380
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.radio.amateur

"Polymath" wrote
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.

==========

I do not wholely agree.

There are many radio amateurs who are, or have been, professional engineers, not necessarily radio engineers, who contribute in their many various ways towards the hobby.

'Hobby' is perhaps not the best of descriptions. It is an international affair.

Reg, G4FGQ

3998. Re: A Weekly F.A.Q. - What Is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 19:46:53 UTC
From: ...
Message-ID: <430f71f9$0$97132$ed2619ec@ptn-nntp-reader03.plus.net>
Source record: 17381
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.radio.amateur

why is amateur radio not a hobby ?

Definition of a hobby

A spare-time recreational pursuit

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:denqhqgem1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com...
>
> "Polymath" wrote
> > Ham Radio is a technical pursuit for those who
> > are interested in the science of radio wave
> > propagation and who are also interested in the
> > way that their radios function. It has a long-standing
> > tradition of providing a source of engineers who
> > are born naturals.
>
> ============================
>
> I do not wholely agree.
>
> There are many radio amateurs who are, or have been, professional
> engineers, not necessarily radio engineers, who contribute in their
> many various ways towards the hobby.
>
> 'Hobby' is perhaps not the best of descriptions. It is an
> international affair.
> ----
> Reg, G4FGQ
>
>

3999. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 22:18:53 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <deo4gd$4t1$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 17382

The civilised Japanese, technologically and socially, are much in advance of the so-called western democracies, excepting perhaps the Scandinavians. The Chinese and Indians are very rapidly catching up.

In the meantime, the well-armed Americans are slowly descending into civil war.

4000. Re: HP 8558B Analyser Problem - Help Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 22:36:12 UTC
From: Frank <ve6cb@nospam.telus.net>
Message-ID: <wPMPe.213249$HI.190788@edtnps84>
Source record: 17383

"John A" <e45gkf@yahoo.co.uk> wrote in message
news:deihdb$m2g$1@news8.svr.pol.co.uk...
> See
>
> http://homepage.eircom.net/~ei9gq/spec2.jpg
>
>
> for a screen shot.

Assume the center is a zero frequency. Looks suspiciously like LO IF overload to me. Try a 10 dB pad in the mixer output -- should be easy to get at. As you mentioned there may be a mixer balance problem. I thought the HP8558B used to plug in a HP141T display, but found a pic on the web, and it appears to be a later generation. I have occasionally seen the results of transmitting directly into those old spectrum analyzers, and in the 70s, it was $1,000 for the attenuator, and $1,000 for the mixer. Sure hope you don't have that kind of problem.

Regards,

Frank

4001. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 22:46:30 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <2s2dnZ2dnZ24ZZfxnZ2dnVgGkt6dnZ2dRVnyqZ2dnZ0@pipex.net>
Source record: 17384

> There is also the possibility that we could import discretes and other
> parts directly from small shops in India and China.
>
> The only problem is that it seems that US Customs import duties for
> electronics coming in from Japan are rather punitive to small-time
> operators. Maybe I am wrong.
>
> Maybe you and I should go into this one together :)
==========
In Britain there are few 1 man or family companies selling components.
Have a look at
www.modecomponents.co.uk
www.jabdog.co.uk
www.sycomcomp.co.uk

In western european countries there are a number of traders selling surplus components incl RF parts ,who move from fleamarket to fleamarket ,from country to country. A number buy surplus army kit from eastern europe and sell these as components.....they have done that for many years ,hence must have a reasonable income from these activities .
I have seen a web site related to the sale (auction) of US Government equipment (located in Virginia) with some mouthwatering electronic (test)equipment . There should be a market for this equipment ,even as components.

The marketing question remains : Is there a substantial ham homebrew market in the USA . How many of the approx 700000 licenced Hams in the USA purchase electronic components on a more or less regular basis ?

Surplus people in the USA like 'Surplus of Nebraska ' and 'Peter Dahl' seem rather expensive.

Frank GM CSZ / KN6WH.

4002. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 22:48:25 UTC
From: eternalsquire@comcast.net
Message-ID: <1125096505.794229.110250@o13g2000cwo.googlegroups.com>
Source record: 17385

Let's stick to topic, we can organize the offshored labor union
later...

I want to know what hams really want when they go out to buy stuff, as
an initial guess I am willing to listen to what they say they want.

The Eternal Squire

4003. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-26 22:56:06 UTC
From: eternalsquire@comcast.net
Message-ID: <1125096966.669910.167880@g14g2000cwa.googlegroups.com>
Source record: 17386

Yes, but others like ALL Electronics and MECI are quite inexpensive... except that they aren't configured to sell to hams exclusively.

I think part of the answer might be to look at the offshoring problem in reverse... Our manufacturing has been offshored for 20 years or more, backoffice has been offshored for 10 years or more, and software has been offshored for about 5 years....

So, other countries are creating discretes and subassemblies to place into entertainment, consumer, gaming, and white goods... with only a nod give to RF. Fortunately, many discretes being sold for above purposes could be used for ham purposes with some ingenuity, we do it all the time!

What I think we need to do is buy cheap components from offshore and sell at slight markup, that implies finding sources direct from India, China, Korea, etc. Japan is more a consumer than a manufacturer.

Maybe instead of a store we need to start a buying club?

The Eternal Squire

4004. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 00:25:42 UTC
From: Tom <nospam@nospam.com>
Message-ID: <aqOPe.138314$5N3.111832@bgtnsc05-news.ops.worldnet.att.net>
Source record: 17387

<eternalsquire@comcast.net> wrote in message
news:1125081915.412415.325230@g44g2000cwa.googlegroups.com...
> Tom,
>
> The district in question is the Ahikhabara (sp?). From what I have
> heard and read it is the largest elex flea-market in the world.
>
> There is also the possibility that we could import discretes and other
> parts directly from small shops in India and China.
>
> The only problem is that it seems that US Customs import duties for
> electronics coming in from Japan are rather punitive to small-time
> operators. Maybe I am wrong.
>
> Maybe you and I should go into this one together :)

Yes... thanks to craigm as well, it is Akihabara. Here are some web pages:

Akihabara News:
http://www.akihabaranews.com/en/

Akihabara homepage:
http://www.akiba.or.jp/index_e.html
http://www.akiba.or.jp/english/

4005. Re: A Weekly F.A.Q. - What Is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 02:36:38 UTC
From: Bill Sohl <billsohl@mindspring.com>
Message-ID: <WkQPe.2877$FW1.2704@newsread3.news.atl.earthlink.net>
Source record: 17388
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.radio.amateur

On the individual/personal level,
for a great many of us it IS a hobby.

Strictly speaking, however, amateur radio is, by FCC
rules definition, a service.

Cheers,
Bill K2UNK

"..." <..@..> wrote in message
news:430f71f9$0$97132$ed2619ec@ptn-nntp-reader03.plus.net...
> why is amateur radio not a hobby ?
>
> Definition of a hobby
>
> A spare-time recreational pursuit
>
>
> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
> news:denqhqgem1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com...
>>
>> "Polymath" wrote
>> > Ham Radio is a technical pursuit for those who
>> > are interested in the science of radio wave
>> > propagation and who are also interested in the
>> > way that their radios function. It has a long-standing
>> > tradition of providing a source of engineers who
>> > are born naturals.
>>
>> ============================
>>
>> I do not wholely agree.
>>
>> There are many radio amateurs who are, or have been, professional
>> engineers, not necessarily radio engineers, who contribute in their
>> many various ways towards the hobby.
>>
>> 'Hobby' is perhaps not the best of descriptions. It is an
>> international affair.
>> ----
>> Reg, G4FGQ
>>
>>
>

>

4006. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 03:43:57 UTC
From: eternalsquire@comcast.net
Message-ID: <1125114237.916158.230530@o13g2000cwo.googlegroups.com>
Source record: 17389

Two issues:

A) I think in order to deal with the Akihabara we are going to need at least 2 more things: 1) a Japanese ham willing to buy for us, and 2) a US Customs broker or equivalent.

B) We still don't know our target market. Would it be consumer equipment, ham equipment, rf subassemblies, or discretes? Remember, the lower the integration, the less up-front investment in inventory would be required.

C) If this was such a desireable thing to do, why hasn't it been done before?

The Eternal Squire

4007. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 04:40:47 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <430FEECD.60604@invalid.invalid>
Source record: 17390

xpyttl wrote:
> There are a lot more homebrew possibilities out there than there are kits,
> but that is a pretty low margin market. Still, I wonder if something simple
> like providing parts kits for FAR Circuits boards might not be a
> possibility. Provide a needed service and keep your costs down by
> leveraging someone else's board mill.

When I saw the original post this is PRECISELY what came to mind.

--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

4008. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 04:44:29 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <430FEFAC.2070008@invalid.invalid>
Source record: 17391

Highland Ham wrote:
> The marketing question remains : Is there a substantial ham homebrew market
> in the USA . How many of the approx 700000 licenced Hams in the USA purchase
> electronic components on a more or less regular basis ?

I would not rule out the possibility of being able to grow a market that
doesn't currently exist.

I think a significant number of hams don't homebrew not because they
don't want to -- but because it's difficult to find parts.

Make part shopping easy, and you could make customers of people who
aren't buying from *anyone* right now.

Then again, you could also lose your shirt<grin>.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

4009. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 06:46:55 UTC
From: eternalsquire@comcast.net
Message-ID: <1125125215.194247.199450@g43g2000cwa.googlegroups.com>
Source record: 17392

I suppose we could use Drake's Law: I'd estimate that perhaps only 1 in 10 Hams are interested in homebrewing, 1 in 10 have the skill, and 1 in 10 have the means to stock up a large parts library: basically an interested audience of 1 in 1000 hams, meaning an audience of no more than 700 hardcore homebrewers. Can that be right, only 700 of us potentially on this newsgroup?

Although, if I provide the service of the homebrewer's parts library: reasonable price, fast shipment, good ranges of discretes for 160-6 M construction, then I could address up to 7000 hams who have both the interest and skill who don't want to kit but do want to try something new.

If I bundle the parts kits with the FAR boards, I suppose I could address the 1-3 additional people on the bottom end of the skill scale. Now we have an audience of up to 21000 hams, a nice healthy audience.

If only one of 100 hams in the kit audience buys a kit per year, then I have only 210 sales per year. If the average parts kit cost me $50 and I mark it up by $5 I only make about $1 of profit per kit after taxes and expenses. 210 sales per year X $1 per kit is $210 per year. Not good!

Or are there things of which I am not considering.

Yawn,

The Eternal Squire

4010. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 07:07:54 UTC
From: Mr Fed UP <mrfedup@bellsouth.net>
Message-ID: <vhUPe.652$wb5.271@bignews1.bellsouth.net>
Source record: 17393

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:2s2dnZ2dnZ24ZZfxnZ2dnVgGkt6dnZ2dRVnyqZ2dnZ0@pipex.net...

snipped..

> In western european countries there are a number of traders selling
> surplus components incl RF parts ,who move from fleamarket to fleamarket
> ,from country to country. A number buy surplus army kit from eastern
> europe and sell these as components.....they have
> done that for many years ,hence must have a reasonable income from these
> activities .
> I have seen a web site related to the sale (auction) of US Government
> equipment (located in Virginia) with some mouthwatering electronic
> (test)equipment . There should be a market for this equipment ,even as
> components.
> Frank GM�CSZ / KN6WH.

FYI:

I was watching the "US Government" site a while and found the auctions
exceeded anything I would call a "deal on equipment"
The site is http://www.govliquidation.com/index.html
I don't know how it would work for an overseas buyer though,

73 K4TWO Gary

4011. Re: Manual for MFJ-1276 TNC?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 07:16:35 UTC
From: xrenfredm@hotmail.com
Message-ID: <431012f1.38057804@news.xtra.co.nz>
Source record: 17394

Thanks for your input Scott and Ed. I did have a look at their website before posting and also noticed that the only one missing was the one I have! Murphy's Law.....I will take your advice and try emailing them Thanks guys. Cheers, Renfred. ZL1BDL

On Fri, 26 Aug 2005 17:01:50 GMT, Ed <Huckleberry_REMOVE_@bigvalley.net> wrote:

>
>> For some reason, I didn't see a manual for an MFJ-1276 at the MFJ
>> website. Double check which model you have and you can search the MFJ
>> site again. They have pdf manuals for bunches of their products, so I'm
>> wondering why I didn't see one for a 1276...
>>
>> http://www.mfjenterprises.com/manuals.php
>>
>> Scott
>> N0EDV
>
>
> I couldn't find the 1276 manual listed on MFJ's website, either.
>However, if it were me, I'd either call their 800 number, or email them
>with the question. They are very good at responding.
>
>
> Ed K7AAT

Remove (X) from xrenfred for correct email address...thanks.

4012. HP141T Repair

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 08:52:06 UTC
From: Wim Ton <wimton@blueyonder.co.uk>
Message-ID: <WQVPe.45117$Il.3264@fe2.news.blueyonder.co.uk>
Source record: 17395

I got a HP141T with 8554B and 8552B plugins.

After replacing some transistors and fuses in the powersupply, I decided on a careful power up with a Variac

There is some light on the CRT and a horizontal sweep at the top of the screen (I suppose the picture is out of alignment because of the incorrect voltages)

It turns out that the ribbon cable to the CRT anode and storage electrodes is split open and arching between 2 wires, even without the full mains power applied.

Any suggestings on:

Where to get a new cable?
How to repair them?
How to remove the CRT, as this is not mentioned in the service manual I downloaded from BAMA.

Thanks in advance, Wim

4013. Re: HP141T Repair

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 09:47:33 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1125136053.281202.40810@o13g2000cwo.googlegroups.com>
Source record: 17396

Wim Ton wrote:
> I got a HP141T with 8554B and 8552B plugins.
>
> After replacing some transistors and fuses in the powersupply, I decided on
> a careful power up with a Variac
>
> There is some light on the CRT and a horizontal sweep at the top of the
> screen (I suppose the picture is out of alignment because of the incorrect
> voltages)
>
> It turns out that the ribbon cable to the CRT anode and storage electrodes
> is split open and arching between 2 wires, even without the full mains power
> applied.
>
> Any suggestings on:
>
> Where to get a new cable?
> How to repair them?
> How to remove the CRT, as this is not mentioned in the service manual I
> downloaded from BAMA.
>
> Thanks in advance, Wim

I think your chances of a new cable would be zero - and if you did, it would be as old as the original one in there. I suggest you cut out the old cable, and replace with a salvaged length from a scrap monitor/tv set etc. Carefully heat shrink your connections, and cable tie the sections clear of grounds. There is only a few KV there (its a relatively small tube) so flashover shouldnt be a problem. The out of vertical alignment trace could be another issue - but hey, lets deal with the smoke and flames first hi hi

73 de VK3BFA Andrew

4014. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 10:54:23 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <JDXPe.17799$1g2.16423@fe05.lga>
Source record: 17397

<eternalsquire@comcast.net> wrote in message
news:1125125215.194247.199450@g43g2000cwa.googlegroups.com...

> than 700 hardcore homebrewers. Can that be right, only 700 of us
> potentially on this newsgroup?

I don't know about "hardcore", but many AmQRP kits sell that many in the
first week. OK, you could say that a kit really isn't homebrew. But there
are a lot of people out there who like to melt solder.

> and expenses. 210 sales per year X $1 per kit is $210 per year. Not
> good!

Hardly cover the state's cut for licenses.

..

4015. 15-tube homebrew receiver for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 14:30:26 UTC
From: David J Windisch <davidjw@cinci.rr.com>
Message-ID: <6O_Pe.48873$2Q3.31183@tornado.ohiordc.rr.com>
Source record: 17298

Hi, all concerned:

This one was on ebay a while ago. Bids didn't get past the reserve, and I made an after-auction offer which was accepted.

There was no information on what is inside.

I've gotten as far as turning it on, listening on 40M, and documenting the tube lineup.

Its general form is:

6AK5-6JH8-6JH8-6BJ6 X3-6AQ5, with l-o's, bfo, detectors, agc-amps, S-meter circuitry. The r-f stage has separate peaking. The 1st-lo is tuned by a smoooooth National PW-type drive The second i-f has provisions for 2 switched 9-pin plug-in-style mechanical filters and a "wide" position. Sri -- the filters are long gone. Power supply is internal, with plug-in solid-state
rectifier and a couple of 0B2's. Line cord has one of those fused plugs which
purist-collectors drool over. I don't have a pic of the bottom side; however, it's nicely
homebrewed.

Date codes on the tubes are '50s and '60s. All but two of the shields are those nice ones with dissipators inside.

There are 5-pin plug-in coils for 80-10M, and extra BUD ceramic forms, in a box.

Physically, it is H9"XW12" with tilt built in to the design, and 18" deep. It weighs around 30 lb.

I have the ebay jpg's, which can be emailed to interested
parties.

My original intent was to find an "HBT-XX" homebrew transmitter to go with it, and the intent has fallen by the wayside. Oh, well . . .

$300 plus about $40 for insured ground shipping to conus.

73, and tks for reading.

4016. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 15:33:26 UTC
From: briefer@cox.net
Message-ID: <1125156806.745712.88480@o13g2000cwo.googlegroups.com>
Source record: 17299

What about this:

Instead of offering a "stock" of parts or even a "stock" of predefined kitted parts... offer a "part collection service." Someone who wants to build a homebrew project could send you the schematic/article; you would review the requirements and email them a quick quote on what it would cost to provide the parts and the estimated time required. If they approve, and order, you then collect the parts from your own sources: some would be your "stock on hand", some would be orders you place to other suppliers.

Advantage to buyer: one stop shopping; no need to spend hours going over catalogs and going to different suppliers in order to get a pile of parts together for a project. They dream of a project...they end up with a bag-o-parts. It might take a little longer, and be a little more expensive, to get the parts (because you might have to go find some of them); but it will be a "turn key" operation for the buyer.

Advantage to you: You don't have to stock certain predefined "kits" or go to the labor of building kits that might just sit on your shelf for months. All you have to do is keep on hand a good range of basic parts (that you pick up surplus, or on sale, when you can). In other words, just keep a good "junk box" stock for yourself. If the customer needs a part you don't have, then your cost to acquire it, and the delay, can be figured into your quote.

Brad
WA5PSA

4017. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 16:06:03 UTC
From: Roger Conroy <rogerconroy@nospam.hotmail.com>
Message-ID: <deq31osrq1@ctb-nnrp2.saix.net>
Source record: 17300

<eternalsquire@comcast.net> wrote in message
news:1125125215.194247.199450@g43g2000cwa.googlegroups.com...
>I suppose we could use Drake's Law: I'd estimate that perhaps only 1
> in 10 Hams are interested in homebrewing, 1 in 10 have the skill, and 1
> in 10 have the means to stock up a large parts library: basically an
> interested audience of 1 in 1000 hams, meaning an audience of no more
> than 700 hardcore homebrewers. Can that be right, only 700 of us
> potentially on this newsgroup?
>
> Although, if I provide the service of the homebrewer's parts library:
> reasonable price, fast shipment, good ranges of discretes for 160-6 M
> construction, then I could address up to 7000 hams who have both the
> interest and skill who don't want to kit but do want to try something
> new.
>
> If I bundle the parts kits with the FAR boards, I suppose I could
> address the 1-3 additional people on the bottom end of the skill scale.
> Now we have an audience of up to 21000 hams, a nice healthy audience.
>
> If only one of 100 hams in the kit audience buys a kit per year, then I
> have only 210 sales per year. If the average parts kit cost me $50 and
> I mark it up by $5 I only make about $1 of profit per kit after taxes
> and expenses. 210 sales per year X $1 per kit is $210 per year. Not
> good!
>
> Or are there things of which I am not considering.
>
> Yawn,
>
> The Eternal Squire

Why limit your potential market to only the USA?

4018. Re: A Weekly F.A.Q. - What Is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 16:13:08 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1d7a30f173213132989697@192.168.42.131>
Source record: 17301
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.radio.amateur

In article <1125082573.078138.29130@g47g2000cwa.googlegroups.com>,
aiyr.r.bean@lycos.co.uk says...

> What is Ham Radio?

<snippety>

Sooooo many more things than Airy R. Bean, no matter how he may
have misspelled his name in the message headers, could ever imagine.

> Radio Hams are in a unique privileged position in that
> they can construct and operate their own equipment! No-one
> else has this privilege. Users, such as broadcasters,
> the po lice and armed farces, CBers and mobile phone
^^^^^^^^^^^^^

Isn't that what we have going on in Iraq at this very moment?

> users have to purchase ready-made gear. Manufacturers
> are not licensed to operate their gear. Radio Hams
> are qualified to design, build and then
> operate their own pieces of equipment. They do this

A gross (and inaccurate) generalization. A great many hams I've
met in recent years barely remember what Ohm's Law is, let alone how to
do anything resembling design. They do indeed purchase their radios
'off-the-shelf,' talk about the things that matter to them on the air,
however non-technical the subject matter may be, and often show up at
radio club meetings.

And you know what? The vast majority of them are very smart, very
nice people who, while they're very interested in the public-service and
volunteer emergency service aspects of amateur radio, and may have made
significant contributions to the hobby and their community in other
ways, may never have so much as learned how to pick up a soldering
pencil.

Lack of real electronics experience does not make someone with a
ham license any less worthy of respect, Beany, no matter what you may
believe. I say this as an amateur radio license holder for the last 27
years (first as WD6EOS, then later as KC7GR), and as a professional
electronics engineering tech (for just about the same number of years).

And, for the record: Yes, I've been tinkering with electronic and
radio projects for most of my life.

Many have said that amateur radio is a dying hobby. Personally, I don't believe that. However, if there is any grain of truth to such statements, it's not the lack of technical skill in SOME newcomers to the hobby that's hurting the hobby.

What will quickly kill amateur radio will be expressing ongoing disrespect and hostility to those who choose to contribute to the service in non-technical ways. You don't need to know how to use a multimeter or whatever to be a good on-air operator, or to be of value in a disaster situation.

You can continue to post whatever kind of misguided "FAQ" you want to, Beany-boy. It won't change the fact that I, at least, have seen enough of your previous rantings on Usenet over the last few years to know your true colors.

PLONK!

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped with surreal ports?"

4019. Re: A Weekly F.A.Q. - What Is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 16:23:31 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1125159811.400778.79320@f14g2000cwb.googlegroups.com>
Source record: 17302
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.radio.amateur

Your Childish Broadcast (CB) below serves to
classify you.

Those whom you mention who are operators but
who are non-technical are the CBers whom I warn
against in the FAQ.

Ham Radio is not about operating - that is CB Radio
including CBers-Masquerading-As-Radio-Hams whom you
repeatedly mention.

I have never "ranted" on the Internet - I have only
posted sincere and genuine concerns about the decline
in Ham Radio by the influx of the very Childish
Broadcasters (CBers) that you typify.

If you have indeed been around for as long as you
claim, then you should know better than to enjoin
an international public forum in the rather
silly and infantile style that you adopted.

Shame on you.

Stupid boy.

Dr. Anton T. Squeegee wrote:
> In article <1125082573.078138.29130@g47g2000cwa.googlegroups.com>,
> aiyr.r.bean@lycos.co.uk says...
>
> > What is Ham Radio?
>
> <snippety>
>
> Sooooo many more things than Airy R. Bean, no matter how he may
> have misspelled his name in the message headers, could ever imagine.
>
> > Radio Hams are in a unique privileged position in that
> > they can construct and operate their own equipment! No-one
> > else has this privilege. Users, such as broadcasters,
> > the po lice and armed farces, CBers and mobile phone
> ^^^^^^^^^^^^^
>
> Isn't that what we have going on in Iraq at this very moment?
>
> > users have to purchase ready-made gear. Manufacturers

> > are not licensed to operate their gear. Radio Hams
> > are qualified to design, build and then
> > operate their own pieces of equipment. They do this
>
> A gross (and inaccurate) generalization. A great many hams I've
> met in recent years barely remember what Ohm's Law is, let alone how to
> do anything resembling design. They do indeed purchase their radios
> 'off-the-shelf,' talk about the things that matter to them on the air,
> however non-technical the subject matter may be, and often show up at
> radio club meetings.
>
> And you know what? The vast majority of them are very smart, very
> nice people who, while they're very interested in the public-service and
> volunteer emergency service aspects of amateur radio, and may have made
> significant contributions to the hobby and their community in other
> ways, may never have so much as learned how to pick up a soldering
> pencil.
>
> Lack of real electronics experience does not make someone with a
> ham license any less worthy of respect, Beany, no matter what you may
> believe. I say this as an amateur radio license holder for the last 27
> years (first as WD6EOS, then later as KC7GR), and as a professional
> electronics engineering tech (for just about the same number of years).
>
> And, for the record: Yes, I've been tinkering with electronic and
> radio projects for most of my life.
>
> Many have said that amateur radio is a dying hobby. Personally, I
> don't believe that. However, if there is any grain of truth to such
> statements, it's not the lack of technical skill in SOME newcomers to
> the hobby that's hurting the hobby.
>
> What will quickly kill amateur radio will be expressing ongoing
> disrespect and hostility to those who choose to contribute to the
> service in non-technical ways. You don't need to know how to use a
> multimeter or whatever to be a good on-air operator, or to be of value
> in a disaster situation.
>
> You can continue to post whatever kind of misguided "FAQ" you want
> to, Beany-boy. It won't change the fact that I, at least, have seen
> enough of your previous rantings on Usenet over the last few years to
> know your true colors.
>
> *PLONK!*
>
>
> --
> Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
> (Known to some as Bruce Lane, ARS KC7GR,
> kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com

> "If Salvador Dali had owned a computer, would it have been equipped
> with surreal ports?"

4020. Re: HP141T Repair

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 18:52:02 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11h1dijl5t06scb@corp.supernews.com>
Source record: 17303

Wim Ton wrote:
> Any suggestings on:
>
> Where to get a new cable?

http://www.glkinst.com/cables/hp_cables.htm

That was the first hit on a Google search of

HP 141T cables

Roy Lewallen, W7EL

4021. Re: A Weekly F.A.Q. - What Is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 19:18:41 UTC
From: "John L. Sielke" <w2agn@NOSPAMw2agn.net>
Message-ID: <4310BC91.5020508@NOSPAMw2agn.net>
Source record: 17304
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.radio.amateur

Polymath wrote:
> Your Childish Broadcast (CB) below serves to
> classify you.
>
> Those whom you mention who are operators but
> who are non-technical are the CBers whom I warn
> against in the FAQ.
>
> Ham Radio is not about operating - that is CB Radio
> including CBers-Masquerading-As-Radio-Hams whom you
> repeatedly mention.
>
> I have never "ranted" on the Internet - I have only
> posted sincere and genuine concerns about the decline
> in Ham Radio by the influx of the very Childish
> Broadcasters (CBers) that you typify.
>
> If you have indeed been around for as long as you
> claim, then you should know better than to enjoin
> an international public forum in the rather
> silly and infantile style that you adopted.
>
> Shame on you.
>
> Stupid boy.
>
> Dr. Anton T. Squeegee wrote:
>
>>In article <1125082573.078138.29130@g47g2000cwa.googlegroups.com>,
>>aiyr.r.bean@lycos.co.uk says...
>>
>>
>>>What is Ham Radio?
>>
>> <snippety>
>>

Having read this thread, I must agree with the assessment that lowering standards will NOT help Ham Radio. In the USA, the ARRL is doing its best to turn the HF bands into an email forwarding facility, by pushing regulations that will allow PACTOR II and III, used by the PROPRIETARY SCS Modems, and Winlink, across ALL the bands. Soon there will be nothing but robots, relaying email to and from the internet. Anyone who

can get a cereal-box license and is willing to spend $1000+ for the modem, as well as whatever an HF rig will go for, will be able to use the "ARRL HF Internet Service Provider."

4022. Re: A Weekly F.A.Q. - What Is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 19:31:18 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <pan.2005.08.27.19.31.16.285058@gmail.com>
Source record: 17305
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.radio.amateur

John:

How do you figure anyone here is for lowering standards?

We are for bringing standards up-to-date and getting rid of archaic,
seldom used methods and "historic concepts."

No one is for reducing standards... indeed, how could standards fall much
lower than where they exist now? Amateur radio is already decades behind
technology... that should be nothing less than totally obvious--well,
other than to the the totally clueless...

John

On Sat, 27 Aug 2005 15:18:41 -0400, John L. Sielke wrote:

> Polymath wrote:
>> Your Childish Broadcast (CB) below serves to
>> classify you.
>>
>> Those whom you mention who are operators but
>> who are non-technical are the CBers whom I warn
>> against in the FAQ.
>>
>> Ham Radio is not about operating - that is CB Radio
>> including CBers-Masquerading-As-Radio-Hams whom you
>> repeatedly mention.
>>
>> I have never "ranted" on the Internet - I have only
>> posted sincere and genuine concerns about the decline
>> in Ham Radio by the influx of the very Childish
>> Broadcasters (CBers) that you typify.
>>
>> If you have indeed been around for as long as you
>> claim, then you should know better than to enjoin
>> an international public forum in the rather
>> silly and infantile style that you adopted.
>>
>> Shame on you.
>>
>> Stupid boy.
>>
>> Dr. Anton T. Squeegee wrote:
>>
>>>In article <1125082573.078138.29130@g47g2000cwa.googlegroups.com>,

>>>aiyr.r.bean@lycos.co.uk says...
>>>
>>>
>>>>What is Ham Radio?
>>>
>>> <snippety>
>>>
>
> Having read this thread, I must agree with the assessment that lowering
> standards will NOT help Ham Radio. In the USA, the ARRL is doing its
> best to turn the HF bands into an email forwarding facility, by pushing
> regulations that will allow PACTOR II and III, used by the PROPRIETARY
> SCS Modems, and Winlink, across ALL the bands. Soon there will be
> nothing but robots, relaying email to and from the internet. Anyone who
> can get a cereal-box license and is willing to spend $1000+ for the
> modem, as well as whatever an HF rig will go for, will be able to use
> the "ARRL HF Internet Service Provider."

4023. Re: HP141T Repair

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 21:26:52 UTC
From: Wim Ton <wimton@blueyonder.co.uk>
Message-ID: <wU4Qe.47170$Il.23324@fe2.news.blueyonder.co.uk>
Source record: 17306

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:11h1dijl5t06scb@corp.supernews.com...
> Wim Ton wrote:
> > Any suggestings on:
> >
> > Where to get a new cable?
>
> http://www.glkinst.com/cables/hp_cables.htm
>
> That was the first hit on a Google search of
>
> HP 141T cables
>
> Roy Lewallen, W7EL

Thanks for the link! May come in handy when I have repaired the thing and
found an affordabe tracking generator.

Wim

4024. Yaesu FL-7000 : what's the right price???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 22:07:01 UTC
From: Rightrik <gaggiorNOSPAM@tin.it>
Message-ID: <3nc6g3Fs6iiU1@individual.net>
Source record: 17307

Hello, i would like to add a 500/600w solid state amplifier to my HF station (Kenwood TS870 & Kenwod TS-2000, sometimes Yaesu FT100d), possibly with an automatic antenna tuner.

Yaesu FL-7000 seems to be the best choice for this needs, what do you think about it?

What is the price of a good used?

What's his most weak point to first-check before buying ?

Thank you very much,

Riccardo IK5WQO

4025. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 22:35:35 UTC
From: LenAnderson@ieee.org
Message-ID: <1125182134.943504.259590@o13g2000cwo.googlegroups.com>
Source record: 17308

From: "Tom" on Sat 27 Aug 2005 00:25

><eternalsquire@comcast.net> wrote in message
>news:1125081915.412415.325230@g44g2000cwa.googlegroups.com...
>> Tom,
>>
>> The district in question is the Ahikhabara (sp?). From what I have
>> heard and read it is the largest elex flea-market in the world.
>
>Yes... thanks to craigm as well, it is Akihabara. Here are some web pages:
>
>Akihabara News:
>http://www.akihabaranews.com/en/
>
>Akihabara homepage:
>http://www.akiba.or.jp/index_e.html
>http://www.akiba.or.jp/english/

AKIHABARA! :-) Fabulous place in Tokyo!

In the early 1950s (!) it was far from a "flea-market" but rather a
collection of hundreds of small shops selling ALL SORTS of radio
and electronic parts, kits, ready-built stuff. Fantastic then.

The best kit I ever put together was a monophonic "high-fidelity"
amplifier with preamp, the preamp box containing a TRF AM receiver
for superb AM reproduction...purchased at a small price by this
then-GI in 1954, assembled, used, sent home and used in the States
for several years.

Akihabara has been written up in lots of electronics magazines,
from Audio Engineering to (I think) all of the U.S. amateur radio
periodicals. From talking to others in-person who had visited it
in 1970s and 1980s, it is well-worth a look-see for anyone who
gets to Tokyo, Japan.

LenAnderson@ieee.org

4026. Re: Homebrew radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 22:38:59 UTC
From: LenAnderson@ieee.org
Message-ID: <1125182339.576304.12270@g43g2000cwa.googlegroups.com>
Source record: 17309

From: "William E. Sabin" on Fri 26 Aug 2005 14:09

>I have a new Sony digital camera 7.2 megapixel that I have been slowly
>learning how to use. I shoot pix using a tripod and max megapixel (20
>megabytes), then I use a program that creates an optimum JPEG file that
>QRZ.com prefers that is a little less than 500 kilobytes. I use an external
>diffused flash that works quite well, attached to the Sony. I can shoot a
>dozen pix and delete all but the one I want (at no cost for film and
>developing).

Having controlled my "megapixel jealousy," let me suggest a very
easy field-expedient extreme close-up adapter: An ordinary large
magnifying glass. :-)

With an LCD screen now the optical viewfinder replacement on
cameras, a magnifying glass held in front of the lens can be
positioned easily for focus, even with the auto-focus varieties.
It can get in there very close for detail shots of the ever-
shrinking size of modern electronic components. I've used a 4"
diameter office type of magnifier glass with great successs on
close-ups using a Panasonic auto-focus digital camera,
magnifier held in the hand.

LenAnderson@ieee.org

4027. Re: Desktop metal shielded PC case?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-27 23:21:00 UTC
From: case_dude <case_dude@case_dude.com>
Message-ID: <4310F55B.8394D750@case_dude.com>
Source record: 17310

Many of the pc power supplies used in the clones
have minimal or no filtering inside them,
once they get the contracts, they strip them down,
eliminate filters and add jumpers to them.

Win wrote:

> I worked for weeks to get the RFI out of my computer. It was coming
> from within a commerical RFI protected case. I had S-9 plus readings
> on 40 and 80 meters. When I finally turned my attention to AC power
> cord and filtered it, levels dropped into the normal band noise.
>
> win w0lz

4028. FT-1000D - 4th IF notch & prod det - frequencies? function?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-28 02:14:06 UTC
From: ka9s@arrl.net
Message-ID: <1125195246.661927.198090@g14g2000cwa.googlegroups.com>
Source record: 17311

I would like to understand the frequency scheme of the 4th mixer, 4th IF / notch filter, and product detector of my FT-1000D. I would also like to know how these stages function. I bought my FT-1000D in 1992 and it is still my main/most modern rig. It's a workhorse and I appreciate that.

I have the Yaesu FT-1000 Technical Supplement document. It's thick, heavy, and full of good information. But it is totally lacking in any sort of functional description of the rig. I had been spoiled with American boat anchor documentation like Drake and Hammarlund. They go to great lengths to describe the function of each circuit in their rigs. Yaesu acts like it's some great secret, or puzzle to figure out.

Here is what I have surmised so far:

The four local oscillator injection sources are centralized on one circuit board they call the "Local Unit". This makes sense as they have to coordinate the frequency shift of some injection oscillators to realize the IF shift and variable width functions. It's the fourth IF, notch filter, and product detector that are not obvious to reverse engineer. I have surmised the following frequencies:

1st LO - 73.63MHz - 103.62 MHZ (hi side injection to correspond with the tuning range of 100 KHz - 30 MHz).

1st IF - 73.62 MHZ (roofing filter).

2nd LO - 65.405 MHz +- 1.5 KHz (low side injection +- shift / width).

2nd IF - 8.215 MHz (first set of filters)

3rd LO - 8.67112 MHZ +- 1.5 KHz (hi side injection +- shift / width).

3rd IF - 455 KHz (second set of filters)

4th LO - 12.635 MHZ ? (High side injection?)

4th IF - 12.18 MHz? (It seems that this IF exists only to add the LC notch filter).

Product detector oscillator - 12.18 MHZ?

It looks like the LC circuit of the notch filter is fixed in frequency. It seems that the "tuning" of the notch is accomplished by IF shifting the 4th IF. There is an oscillator on the IF Unit (Q 2056). It has two crystals (X2002 - 12.280 MHz, and X2003 - 12.283

MHz). I am guessing one or the other crystal is active based on the rig being in USB or LSB. This oscillator is "pulled" in frequency by a varicap diode D 2080 and the front panel variable resistor "Notch" VR 8901-1. This oscillator seems to be mixed with the 4th LO though I can't figure any mixer product that makes sense to me.

The choice of 12.18 MHZ for the 4th IF and notch filter seem poor at best. (I had to reverse engineer this frequency value as it is not documented anywhere I could find.) The achievable Q of a LC notch at 12.18 MHz is going to leave the notch fairly wide (and it is - a crappy notch compared to my Drake R-4C - why bother?). Why they didn't use the 455 KHz IF to implement the LC notch and leave the receiver a triple conversion design is a puzzle to me.

It seems that the injection signal for the product detector does not come from the Local Unit. There is an oscillator Q 3002 with the crystal X 3001 - 12.18 MHZ on the AF Unit board.

Am I even close with this explanation of the 4th IF / notch and product detector? Can anyone explain how this is actually working? Is there any way to make the notch filter narrower / deeper?

Expert insights always welcome.

73s - Jeff - KA9S

4029. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-28 03:23:44 UTC
From: eternalsquire@comcast.net
Message-ID: <1125199424.188078.225790@g44g2000cwa.googlegroups.com>
Source record: 17312

But then again, I dropped a zero because I was so tired writing the letter. Would be 2100 sales per year, not 210. With 1$ net profit margin on a $50 sale, that would be $2100 per year.

4030. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-28 03:32:27 UTC
From: eternalsquire@comcast.net
Message-ID: <1125199947.326228.201120@g49g2000cwa.googlegroups.com>
Source record: 17313

Because unless I know different from an authoritative source, US Customs pretty much considers anything much above a transistor to be military dual-use tech in the post 9/11 era. Take a look at the Ebay ads these days... you'll hardly ever see a US Ebay willing to sell outside CONUS due to export hassles.

Importing is almost as bad... Outside of NAFTA or CAFTA expect pay to duties in excess of 12 to 50 percent above your $400 annual exemption for gift items.

The Eternal Squire

4031. Homebrew Web Site, New Homebrew PODCAST

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-28 07:15:55 UTC
From: meara.london@virgin.net
Message-ID: <1125213355.424736.270820@g14g2000cwa.googlegroups.com>
Source record: 17314
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I've updated my web site and added some new homebrew content.

http://www.qsl.net/n2cqr/

I've also included info on a new PODCAST program on homebrewing that Mike, KL7R, and I have put together. It is called SolderSmoke and I think it will be of interest to members of these groups. Mike (in Juneau) and I (in London) regularly discuss our homebrew projects. We've turned the QSOs into a kind of radio program. You can listen to it via your computer, or you can subscribe and have episodes automatically downloaded to your MP-3 player. Then you can listen to homebrew-oriented QSOs while on your way to work, or wherever.

I hope you like it. Feedback welcome. Here is the URL for the website: http://www.qsl.net/n2cqr/

73 from London
Bill N2CQR M0HBR CU2JL

4032. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-28 07:39:56 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11h2qif115ukic7@corp.supernews.com>
Source record: 17315

eternalsquire@comcast.net wrote:
> Because unless I know different from an authoritative source, US
> Customs pretty much considers anything much above a transistor to be
> military dual-use tech in the post 9/11 era. Take a look at the Ebay
> ads these days... you'll hardly ever see a US Ebay willing to sell
> outside CONUS due to export hassles.
>. . .

Hm, that's interesting. I just put a customs declaration on the package like I always have, and haven't had any extra problems since 9/11.

I'll bet a lot of people avoid exporting because of the large number of recipients who beg them to falsify the customs tag to minimize the value or declare it as a gift. It seems that people don't want to pay the high taxes they've imposed on themselves via their nominally democratic governments. Don't hear much complaining about accepting the social services those taxes pay for, though.

Roy Lewallen, W7EL

4033. Re: Homebrew radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-28 09:07:42 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <y9fQe.286773$x96.222074@attbi_s72>
Source record: 17316

Thanks for the info. I'll keep it in mind. My miniature bench vise can hold the glass steady.

My Sony has a built-in zoom feature that works pretty well. The auto-focus works OK, but works better with a little background light.

The savings in film and developing costs is a true breakthrough for an amateur casual photographer like me who needs to do everything at least a dozen times and likes to see the immediate results.

Bill W0IYH, Life Member IEEE

<LenAnderson@ieee.org> wrote in message
news:1125182339.576304.12270@g43g2000cwa.googlegroups.com...
> From: "William E. Sabin" on Fri 26 Aug 2005 14:09
>
>>I have a new Sony digital camera 7.2 megapixel that I have been slowly
>>learning how to use. I shoot pix using a tripod and max megapixel (20
>>megabytes), then I use a program that creates an optimum JPEG file that
>>QRZ.com prefers that is a little less than 500 kilobytes. I use an
>>external
>>diffused flash that works quite well, attached to the Sony. I can shoot a
>>dozen pix and delete all but the one I want (at no cost for film and
>>developing).
>
> Having controlled my "megapixel jealousy," let me suggest a very
> easy field-expedient extreme close-up adapter: An ordinary large
> magnifying glass. :-)
>
> With an LCD screen now the optical viewfinder replacement on
> cameras, a magnifying glass held in front of the lens can be
> positioned easily for focus, even with the auto-focus varieties.
> It can get in there very close for detail shots of the ever-
> shrinking size of modern electronic components. I've used a 4"
> diameter office type of magnifier glass with great successs on
> close-ups using a Panasonic auto-focus digital camera,
> magnifier held in the hand.
>
> LenAnderson@ieee.org
>

4034. Re: A Weekly F.A.Q. - What Is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-28 10:43:55 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <4311950b.407019803@news.blueyonder.co.uk>
Source record: 17317
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.radio.amateur

On Fri, 26 Aug 2005 20:46:53 +0100, "..." <..@..> wrote:

>why is amateur radio not a hobby ?
>
>Definition of a hobby
>
>A spare-time recreational pursuit

Sadly, for many it's a way of life... takes over from family, kids,
work etc... hardly a hobby then!

4035. Re: A Weekly F.A.Q. - What Is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-28 11:04:26 UTC
From: Bill Sohl <billsohl@mindspring.com>
Message-ID: <_SgQe.3101$_84.2648@newsread1.news.atl.earthlink.net>
Source record: 17318
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,uk.radio.amateur

"Peter" <microwaves@blueyonder.co.uk> wrote in message
news:4311950b.407019803@news.blueyonder.co.uk...
> On Fri, 26 Aug 2005 20:46:53 +0100, "..." <..@..> wrote:
>
>>why is amateur radio not a hobby ?
>>
>>Definition of a hobby
>>
>>A spare-time recreational pursuit
>
> Sadly, for many it's a way of life... takes over from family, kids,
> work etc... hardly a hobby then!

That's true for every hobby or recreational sport.
There's always a minority of enthusiasts (hams, golfers,
you name it) that are extremists.

Cheers,
Bill S.

4036. Re: Homebrew Web Site, New Homebrew PODCAST

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-28 12:12:52 UTC
From: Johnson <jdwalton@comt.net>
Message-ID: <nuGdnSMEHqLvNYzeRVn-ig@comcast.com>
Source record: 17319
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Nice to see a VF-1 still in operation -- I used this with an SB10 adapter
about 4 decades ago.

<meara.london@virgin.net> wrote in message
news:1125213355.424736.270820@g14g2000cwa.googlegroups.com...
> I've updated my web site and added some new homebrew content.
>
> http://www.qsl.net/n2cqr/
>
> I've also included info on a new PODCAST program on homebrewing that
> Mike, KL7R, and I have put together. It is called SolderSmoke and I
> think it will be of interest to members of these groups. Mike (in
> Juneau) and I (in London) regularly discuss our homebrew projects.
> We've turned the QSOs into a kind of radio program. You can listen to
> it via your computer, or you can subscribe and have episodes
> automatically downloaded to your MP-3 player. Then you can listen to
> homebrew-oriented QSOs while on your way to work, or wherever.
>
> I hope you like it. Feedback welcome. Here is the URL for the
> website: http://www.qsl.net/n2cqr/
>
> 73 from London
> Bill N2CQR M0HBR CU2JL
>

4037. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-28 15:42:40 UTC
From: Mr Fed UP <mrfedup@bellsouth.net>
Message-ID: <jWkQe.9805$7F.8102@bignews3.bellsouth.net>
Source record: 17320

Well while adding to my check-it-out in my spare time sites.....
www.jabdog.co.uk came up empty. Any of the letters in error?
I wouldn't have a guess as to a search for your site listed
Thanks K4TWO Gary

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:2s2dnZ2dnZ24ZZfxnZ2dnVgGkt6dnZ2dRVnyqZ2dnZ0@pipex.net...
>> There is also the possibility that we could import discretes and other
>> parts directly from small shops in India and China.
>>
>> The only problem is that it seems that US Customs import duties for
>> electronics coming in from Japan are rather punitive to small-time
>> operators. Maybe I am wrong.
>>
>> Maybe you and I should go into this one together :)
> ==========
> In Britain there are few 1 man or family companies selling components.
> Have a look at
> www.modecomponents.co.uk
> www.jabdog.co.uk
> www.sycomcomp.co.uk
>
> In western european countries there are a number of traders selling
> surplus components incl RF parts ,who move from fleamarket to fleamarket
> ,from country to country. A number buy surplus army kit from eastern
> europe and sell these as components.....they have
> done that for many years ,hence must have a reasonable income from these
> activities .
> I have seen a web site related to the sale (auction) of US Government
> equipment (located in Virginia) with some mouthwatering electronic
> (test)equipment . There should be a market for this equipment ,even as
> components.
>
> The marketing question remains : Is there a substantial ham homebrew
> market in the USA . How many of the approx 700000 licenced Hams in the USA
> purchase electronic components on a more or less regular basis ?
>
> Surplus people in the USA like 'Surplus of Nebraska ' and 'Peter Dahl'
> seem rather expensive.
>
> Frank GM0CSZ / KN6WH.
>
>
>

>

4038. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-28 21:35:57 UTC
From: eternalsquire@comcast.net
Message-ID: <1125264957.880470.64690@g49g2000cwa.googlegroups.com>
Source record: 17321

This is a capital idea. I can only see one little problem: what if the parts list is spread between 3 or 4 vendors and I have to pay $5 handling fee to each vendor? This can get pretty expensive fairly quickly for the customer.

The Eternal Squire

4039. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-28 21:37:47 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <YMedndab2KY1s4_eRVnytw@pipex.net>
Source record: 17322

> Well while adding to my check-it-out in my spare time sites.....
> www.jabdog.co.uk came up empty. Any of the letters in error?
> I wouldn't have a guess as to a search for your site listed
> Thanks K4TWO Gary
==========
Apologies . Web site is : www.jabdog.com I have checked site : It
is there !
e-mail address : peter@jab.demon.co.uk
Advertises in SPRAT ,Journal of the G-QRP Club.
I have purchased components a few times ; very good with assorted coil packs
incl Toko
Also Micrometals & Fairite Iron Dust and Ferrite cores for RF
Variable caps and a good range of semi-conductors
Reasonable if not low prices.
Focus on homebrew community.

Frank GM0CSZ / KN6WH

4040. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-28 21:37:47 UTC
From: eternalsquire@comcast.net
Message-ID: <1125265067.253443.76900@g49g2000cwa.googlegroups.com>
Source record: 17323

Um, I really did need to talk with someone familiar with US Customs for importing as well as exporting. Could you reply to me by email?

Thanks,

The Eternal Squire

4041. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-29 11:19:31 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4312EF51.2D49A24@earthlink.net>
Source record: 17324

eternalsquire@comcast.net wrote:
>
> This is a capital idea. I can only see one little problem: what
> if the parts list is spread between 3 or 4 vendors and I have to
> pay $5 handling fee to each vendor? This can get pretty expensive
> fairly quickly for the customer.
>
> The Eternal Squire

I think that the idea was that you would be able to combine orders from several people per order to each supplier to reduce the overall shipping costs. Also, buying by the standard break saves money, per unit. I have a lot of parts on hand where it was cheaper to order more than I needed because the next break was less than ordering a smaller amount. EX: $1.45 each. $12.50/10 or $100/100 and I needed 85 parts. 85 * $1.25 = $106.25 so I got 15 extra parts, and saved $6.25. I've done a lot of repair jobs over the years with parts I got for "Free" that way.

--
Link to my "Computers for disabled Veterans" project website deleted after threats were telephoned to my church.

Michael A. Terrell
Central Florida

4042. Re: Manual for MFJ-1276 TNC?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-29 16:41:29 UTC
From: Bill Grimwood <bill@grimwood.net>
Message-ID: <96603$43133abe$42b8eba0$21011@EDELTACOM.COM>
Source record: 17325

I had a piece of equipment that the manual was not on their website so I called them and they sent me a copy.

Give them a call.

Bill

"Renfred" <xrenfredm@hotmail.com> wrote in message news:430ee8a5.23133834@news.xtra.co.nz...
> Anyone out there got a manual for one of these? Sure would appreciate
> it if someone can dig one out or has a copy in Adobe pdf. Many thanks,
> Renfred.
> Remove (X) from xrenfred for correct email address...thanks.

4043. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-29 17:13:47 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1125335627.933550.94170@g47g2000cwa.googlegroups.com>
Source record: 17326

> I wouldn't be going into this simply for sentimental
> reasons but hopefully to make a small profit to
> supplement my wife's earnings

You might want to emphasize "small" in profit. It's unlikely you'll make much more money at this then you would at a minimum-wage job. Of course, you might not like any minimum-wage jobs so you're left with pursuing your hobby and making a few bucks at it too, and that's not bad at all.

If your wife were a specialist doctor to Hollywood stars or a high-paid lawyer then sure, knock yourself out with a home-based business. But she's not gonna be making a lot of money by teaching at a reservation.

> I do not see very many days left in my 20 odd-year career
> as a software designer

Don't knock selling what you already know, there are ways to contract out programming services from anywhere in the world quite easily.

> So, what is the perfect homebrewer store for you all?

I'd say to go for whatever you enjoy the most. If you aren't sure what you like, dip your feet in several pools and see what sells. Others here lament the "good old days" of homebrewing, but as far as I am concerned we're in it right now. Components from 70 years ago till yesterday are on E-bay all the time, and modern parts are available over the web in small quantities quite easily. Anyone is free to mix and match industrial with consumer with military with ham technologies as they choose - and this is exactly what homebrewers were doing 30, 50, 70 years ago as well, except now we have access to so much more of all of it!

Tim.

4044. Re: Homebrew radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-29 18:54:33 UTC
From: LenAnderson@ieee.org
Message-ID: <1125341673.312092.22190@g43g2000cwa.googlegroups.com>
Source record: 17327

From: William E. Sabin on Aug 28, 2:07 am

>Thanks for the info. I'll keep it in mind. My miniature bench vise can hold
>the glass steady.

Unless you do time-exposures (rare), it is possible to hand-hold
the magnifier without blurring or distortion. The LCD is better
than the 35mm SLR through-the-lens viewfinder in my opinion.

>My Sony has a built-in zoom feature that works pretty well. The auto-focus
>works OK, but works better with a little background light.

Most seem to be like that...more light the better. I've used a
20 W halogen-bulb mini desk light from the IKEA store for good
Illumination on small subjects. According to the old Norwood
photo meter it has the same output as a 150 W incandescent
flood at 2 feet. ["over 150 W CW above 300 GHz" - :-)]

>The savings in film and developing costs is a true breakthrough for an
>amateur casual photographer like me who needs to do everything at least a
>dozen times and likes to see the immediate results.

As one who got into "serious" amateur photography in high school
(Class of '51), 35mm route, I have to say it's *FANTASTIC*! :-)

Wife and I got a Panasonic that holds all images on a 3 1/2" floppy
"Super Disk" (over 500 MB) back in 2000. A couple years ago I
started to "take notes" on various projects with that camera, find
it is ideal to show progress, even to show oscilloscope screen
waveforms (tripod or other stable mounting recommended, plus a large
cover cloth to cut out background reflections).

That Panasonic model went off the market but it continues to work
fine. A new Aiptek still/motion-picture we just got cost only a
third of the Panasonic's price; I'm still getting acquainted with
it only two weeks out of the box. Smaller, lighter, it has a
manually-selectable short-range focus capability. The tripod we
use with it (in place of cheap supplied mini-tripod) was bought
by me in NYC in 1952 for use with a Kodak Retina II 35mm range-
finder camera. [sometimes pack-ratting is good :-)]

>Bill W0IYH, Life Member IEEE

LenAnderson@ieee.org

(also Life Member, IEEE)

4045. Re: Homebrew radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-29 20:57:32 UTC
From: laura halliday <marsgal42@hotmail.com>
Message-ID: <1125349052.546074.161270@o13g2000cwo.googlegroups.com>
Source record: 17328

LenAnder...@ieee.org wrote:

> Having controlled my "megapixel jealousy," let me suggest
> a very easy field-expedient extreme close-up adapter: An
> ordinary large magnifying glass. :-)

I do closeups the old-fashioned way with my Digital Rebel,
using an extension tube to hold the lens farther away
from the sensor than it would otherwise sit. With such
gear it's easy to blow up an individual component (or
coax connector, or coin, or whatever) to fill the entire
frame.

Never found any EOS-mount extension tubes, so I use an
EOS-to-M42 adapter and my screwmount Pentax lenses and
extension tubes. The Pentax lenses work really well on
a DSLR for general photography, though you have to run
the camera fully manually when you do.

Laura Halliday VE7LDH "Que les nuages soient notre
Grid: CN89mg pied a terre..."
ICBM: 49 16.05 N 122 56.92 W - Hospital/Shafte

4046. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-29 22:04:41 UTC
From: eternalsquire@comcast.net
Message-ID: <1125353081.965959.186860@f14g2000cwb.googlegroups.com>
Source record: 17329

Tim,

I appreciate the encouragement. It really isn't about the money tho.

The way things are turning out, I am going to be reversing roles with my wife for at least the next few years. I'm actually looking foward to doing this for several reasons:

1) Caring for my baby girl (22 mo) and possibly one other being planned for is going to allow me to lay down the foundation of my children being a lot closer to me by the time they become teenagers.

2) Up where we are going, there is fairly little light pollution. Last time I actually had a chance to see the entire Milky Way was in my mid-20's.

3) I'm essentially an ABD in Computer Science with about 20 broken years experience working from drivers from GUIs to everything inbetween, in 5 languages and 10 platforms, and I'm only 43. There isn't a whole lot I haven't done for either small companies, large ones, or on contract, so it is all starting to become the same....

4) What I'd really like to do is create Open Source tools at a much higher level of quality than I have seen by a lot of sometime authors. I have plenty of ideas and now at least some time every day to think great thoughts that won't be owned by an employer.

5) I got into hardware and software primarly as an escape from an abusive family growing up. After being on antidepressants for 10 years, shrunk to a fare-thee-well, and having a terrific wife and a wonderful girl for my family, my family has become my escape from my work rather than then other way around. This is a good thing, but it is no wonder that I am tired of working for a wage.

6) I am looking forward to doing a lot of homebrewing and a little DX where I don't have to worry about how my antenna looks to the neighbors.

So I really don't know what I want to do. I am learning that being a full time homemaker won't be all scones and cream but that the some time I'll have to be creative will be more than than I had been having in a cube.

Problem is, I don't know just where to start.

The Eternal Squire

4047. FA:HUGE GE/Westingh. Meters,+ tubes+stuff....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-29 22:18:57 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <IRLQe.148330$5N3.42443@bgtnsc05-news.ops.worldnet.att.net>
Source record: 17330
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Hugh GE and a Westinghouse meters; and a few tubes, and few other things too: see at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking, 73 heytubeguy

4048. Re: Homebrew radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-30 00:43:06 UTC
From: LenAnderson@ieee.org
Message-ID: <1125362586.592539.323430@g47g2000cwa.googlegroups.com>
Source record: 17331

From: laura halliday on Aug 29, 1:57 pm

>LenAnder...@ieee.org wrote:
>
>> a very easy field-expedient extreme close-up adapter: An
>> ordinary large magnifying glass. :-)
>
>I do closeups the old-fashioned way with my Digital Rebel,
>using an extension tube to hold the lens farther away
>from the sensor than it would otherwise sit. With such
>gear it's easy to blow up an individual component (or
>coax connector, or coin, or whatever) to fill the entire
>frame.

I used to do that with my Exacta VX 35mm SLR and
three extra lenses plus the extension tubes (circa 1954
and duty-free store). Problem is the WAIT and
developing fuss (changing bag, loading the developing
tank, timing out the Microdol, etc.). Then one finds
a few frames less than optimum and those have to be
done over. :-(

As Bill Sabin remarked the digital camera lets one
check the image NOW...and (as I love) do it in color.
INSTANT IMAGING. Gotta love it for visual note-taking
as a project goes through its stages.

Not to mention scope photos done directly, economical
given the cost of digital scopes nowadays. No messy
residue from Polaroid packs as they were as late as in
the 1980s. For easy recording of scope settings, just
refocus, reframe and get the whole front panel in a
second shot. Every setting on the scope's front panel
is right there for reference. [the old changing bag
now does double duty as a background-light shield when
taking scope shots, not the best but it is black...]

A packed-with-printer/scanner/whatever digitial image
editing program can size up the digital photos, make
them black-and-white (if desired), size them...and the
result stored in the PC or on CDs (no emulsion
reticulation worries or wrong "color temperature").
The little camera memory stick (or SuperDisk floppy
in the Panasonic) can then be erased and one has
"recyclable film!" :-)

LenAnderson@ieee.org

4049. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-30 10:20:42 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <NIydnZ2dnZ3cV0rBnZ2dnW2vid6dnZ2dRVnyoZ2dnZ0@pipex.net>
Source record: 17332

> 4) What I'd really like to do is create Open Source tools at a much
> higher level of quality than I have seen by a lot of sometime authors.
> I have plenty of ideas and now at least some time every day to think
> great thoughts that won't be owned by an employer.
==========
That's great . Being a radio amateur you might be in a position to promote
Linux , so that Linux will be increasingly used for amateur radio software.
Perhaps you might do some work for ARRL ,such that in future all Ham Radio
software ARRL are associated with can ALSO be run on a Linux box.
In spite of Linux gaining terrain ,at the moment most Ham Radio software can
only be run on Windoze or DOS .

Frank GM0CSZ / KN6WH The future : A penguin with
an HT

4050. Philips/Magnavox D2999 service manual, schematic needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-30 11:50:52 UTC
From: Nicolas Boretos <nospam_nicolas@maich.gr>
Message-ID: <1125402652.728785@athnrd02>
Source record: 17333

Hi,

Can anyone help out here...

regards,
nicolas

4051. Re: Philips/Magnavox D2999 service manual, schematic needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-30 19:30:38 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <mnc9h1hsjig98fcfh615p9u5p9496pu3p7@4ax.com>
Source record: 17334

Hi,

On Tue, 30 Aug 2005 14:50:52 +0300, Nicolas Boretos
<nospam_nicolas@maich.gr> wrote:

>Hi,
>
>Can anyone help out here...
>
>regards,
>nicolas

I have a PDF file of the user manual for the Philips D2999
containing the schematics. It is just under 2MB. Let me know if it
is of any use to you. It is just under 2MB.

Cheers - Joe (G3LLV)

4052. NE602 Primer article?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-30 20:18:35 UTC
From: Jeff <jeff_164@NOSPAMhotmail.com>
Message-ID: <xa3Re.7232$iM2.728148@news.xtra.co.nz>
Source record: 17335
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Has anyone seen a Web copy of the article
"NE602 Primer"- by Carr featured in Elektor Electronics Jan. '92
Im interested to get the article.
Ive looked at the Elektor site, but their back issues dont go back that far.
regards,
JEFF
ZL3JK
New Zealand
jeff_164@NOSPAMhotmail.com
(remove the NOSPAM)

4053. APRS Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-30 21:19:21 UTC
From: "Richard W. Solomon, W1KSZ" <w1ksz@earthlink.net>
Message-ID: <m9j9h1h6vimbamdrr9h0enjj4l32qn7913@4ax.com>
Source record: 17336

Can anyone tell me if I can use a Kantronics KAM on APRS ?

Tnx, Dick, W1KSZ

4054. Re: APRS Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-30 21:41:36 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <HaidnQvamo0NT4neRVn-uw@bright.net>
Source record: 17337

Is there anything special for APRS vs. regular packet? As far as the TNC, I wouldn't think so. I assume there is some program running that read the GPS data and sends the info to any ordinary TNC which gets sent out as a regular packet. Therefore, I would think ANY TNC would work OK for APRS.

APRS is all I hear these days. Does ANYBODY still use packet for keyboard to keyboard communication? I'm desperately looking for other ops in Western WI (to do some 2m and 70cm SSB testing with packet) to chat with on good old packet.

Scott
N0EDV

Richard W. Solomon, W1KSZ wrote:

> Can anyone tell me if I can use a Kantronics KAM on APRS ?
>
> Tnx, Dick, W1KSZ

4055. phase angle and impedance of resonant circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-30 22:38:41 UTC
From: eternalsquire@comcast.net
Message-ID: <1125441521.799326.31340@f14g2000cwb.googlegroups.com>
Source record: 17338

All,

I'm an Advanced studying for my Extra, and so far I am getting 66% on the practice exams without even studying after about 3 years of homebrewing. I need a few extra points to make it over the top, and since I am a builder (of sorts) I would like to do it using the electrical principles part of the exam.

However, the questions pool provides the answers but not how to get them. I'd rather be able to understand how to arrive at it without a calculator.

Problem class 1: impedance and phase angle of RLC parallel circuit where component values and frequency are known.

Problem class 2: impedance and phase angle of RLC series circuit where

component values and frequency are known.

Could I calculate these graphically using tip-to-tail summation of impedance vectors?

>From what I understand, |Z| = 2 pi F L, |Z| = 2 pi / (F C), |Z| = R
But how can I get the phase angle or the conjugate pair so that I can do the vector addition?

Thanks in advance,

The Eternal Squire

4056. Re: NE602 Primer article?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-30 22:40:26 UTC
From: Malcolm Moore <abor1953needle@yahoodagger.co.nz>
Message-ID: <9tn9h1t20sllcdh24nkh930f2id4csbblh@4ax.com>
Source record: 17339
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Wed, 31 Aug 2005 08:18:35 +1200, "Jeff"
<jeff_164@NOSPAMhotmail.com> wrote:

>Has anyone seen a Web copy of the article
>"NE602 Primer"- by Carr featured in Elektor Electronics Jan. '92
>Im interested to get the article.
>Ive looked at the Elektor site, but their back issues dont go back that far.
>regards,
>JEFF

Hi Jeff,
I have a paper copy. I'm in Wellington. Email me and we'll
sort out the best way of getting it to you.
--
Regards
Malcolm
Remove sharp objects to get a valid e-mail address

4057. Re: phase angle and impedance of resonant circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-30 22:51:03 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <11h9omdp0ns6196@corp.supernews.com>
Source record: 17340

eternalsquire@comcast.net wrote:

> All,
>
> I'm an Advanced studying for my Extra, and so far I am getting 66% on
> the practice exams without even studying after about 3 years of
> homebrewing. I need a few extra points to make it over the top, and
> since I am a builder (of sorts) I would like to do it using the
> electrical principles part of the exam.
>
> However, the questions pool provides the answers but not how to get
> them. I'd rather be able to understand how to arrive at it without a
> calculator.
>
> Problem class 1: impedance and phase angle of RLC parallel circuit
> where component values and frequency are known.
>
> Problem class 2: impedance and phase angle of RLC series circuit where
>
> component values and frequency are known.
>
> Could I calculate these graphically using tip-to-tail summation of
> impedance vectors?
>
>>From what I understand, |Z| = 2 pi F L, |Z| = 2 pi / (F C), |Z| = R
> But how can I get the phase angle or the conjugate pair so that I can
> do the vector addition?
>
> Thanks in advance,
>
> The Eternal Squire
>

I was going to ask what study materials you're using -- but you're not, are you?

IIRC this is discussed in the ARRL handbook, which you should have if you're homebrewing.

You calculate the series circuit impedance by adding the impedances of the parts, which you can do graphically, or by adding all of the real parts and all of the imaginary parts. You must calculate the parallel circuit impedance as 1/(the circuit admittance), the latter being the sum of the admittances of all the parts.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

4058. Re: phase angle and impedance of resonant circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-30 23:59:05 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11h9smd2nk4gvf2@corp.supernews.com>
Source record: 17341

eternalsquire@comcast.net wrote:
> All,
>
> I'm an Advanced studying for my Extra, and so far I am getting 66% on
> the practice exams without even studying after about 3 years of
> homebrewing. I need a few extra points to make it over the top, and
> since I am a builder (of sorts) I would like to do it using the
> electrical principles part of the exam.
>
> However, the questions pool provides the answers but not how to get
> them. I'd rather be able to understand how to arrive at it without a
> calculator.
>
> Problem class 1: impedance and phase angle of RLC parallel circuit
> where component values and frequency are known.

Set up axes with R being the horizontal axis and X the vertical axis. To enter a value of R of, say, three ohms, begin at the origin and draw a vector that points to the right, 3 units long. To add a reactance to that, draw a vector from the tip of the R vector, but going up or down -- inductive reactance goes up, capacitive reactance down, with length equal to the amount of reactance. [XL = 2 * pi * f * L, XC = 1/(2 * pi * f * C)] You can add any number of Rs and Xs this way. When you're done, draw a vector from the origin to the tip of the last vector. Its length is the magnitude of the total impedance and the angle it makes with the real (R) axis is the phase angle. In terms of R and X, the horizontal distance from the origin to the tip of the last vector is the resistance of the total impedance, and the vertical distance is the X.

What you've been doing is adding impedances in series, so that's appropriate for figuring the total impedance of a series RLC circuit. To work with parallel circuits, do the same thing but with conductance and susceptance rather than resistance and reactance. The horizontal axis is conductance (1/R) and the vertical axis is susceptance (1/X). Vectors representing conductance point to the right; inductive susceptance points down and capacitive susceptance points up. When you get finished, the distance from the origin to the tip of the last vector is the magnitude of the admittance (1/|Z|) and the angle from the real axis is the angle of the admittance. This is the negative of the angle of the impedance.

This is hard to explain without diagrams, but I'm sure there are lots of good graphical explanations available in handbooks and on the web.

Roy Lewallen, W7EL

>
> Problem class 2: impedance and phase angle of RLC series circuit where
>
> component values and frequency are known.
>
> Could I calculate these graphically using tip-to-tail summation of
> impedance vectors?
>
>>From what I understand, |Z| = 2 pi F L, |Z| = 2 pi / (F C), |Z| = R
> But how can I get the phase angle or the conjugate pair so that I can
> do the vector addition?
>
> Thanks in advance,
>
> The Eternal Squire
>

4059. Re: phase angle and impedance of resonant circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-31 01:06:19 UTC
From: LenAnderson@ieee.org
Message-ID: <1125450379.710375.139310@g47g2000cwa.googlegroups.com>
Source record: 17342

From: eternalsqu...@comcast.net on Aug 30, 3:38 pm

>All,
>
>I'm an Advanced studying for my Extra, and so far I am getting 66% on
>the practice exams without even studying after about 3 years of
>homebrewing. I need a few extra points to make it over the top, and
>since I am a builder (of sorts) I would like to do it using the
>electrical principles part of the exam.
>
>However, the questions pool provides the answers but not how to get
>them. I'd rather be able to understand how to arrive at it without a
>calculator.

You need some DEFINITIONS made clear first. See following...

>Problem class 1: impedance and phase angle of RLC parallel circuit
>where component values and frequency are known.
>
>Problem class 2: impedance and phase angle of RLC series circuit where
>component values and frequency are known.
>
>Could I calculate these graphically using tip-to-tail summation of
>impedance vectors?

...if you have some polar-coordinate graph paper, yes.

>From what I understand, |Z| = 2 pi F L, |Z| = 2 pi / (F C), |Z| = R

WRONG. Impedance Z = Resistance R + j Reactance X for a series-
resonant circuit. Further, X_L = 2 pi F L and X_C = -1 / (2pi F C).

"|Z|" is MAGNITUDE of impedance; you can't do "phase calculations"
using just magnitudes of either Z or Y.

Note: Admittance Y is composed of conductance G = 1 / R (real
part) and susceptances B_L = -1 / (2 pi F L) and B_C = 2 pi F C
(imaginary part).

>But how can I get the phase angle or the conjugate pair so that I can
>do the vector addition?

A "conjugate match" (or "pair") results when the magnitude of
inductive reactance is exactly equal to the magnitude of capacitive
reactance. Their relative phase angles are 180 degrees and
opposed; they "cancel" each other. In a series-resonant circuit
that leaves you with ONLY the RESISTIVE part of the complex

number expression for impedance.

|Z| = SQRT (R^2 + X^2), Impedance phase PHA = Tan (X / R)

You must assign a polarity to X in order to maintain relative phase angles. Capacitive reactance is assigned a negative value while inductive reactance is assigned a positive value.

For admittance Y (such as with a parallel-resonant circuit), the magnitude (|Y|) is the same square-root of the sums of the squares (and thus always positive), but the inductive susceptance is negative and the capacitive susceptance is positive in value.

Doing "vector plotting" is generally NOT a good short-cut way to get acquainted with either Y or Z...UNLESS you ALWAYS keep in mind the relative phase of inductance and the relative phase of capacitance...and forget the small frequency differences where reactance/susceptance of L is bigger/smaller than reactance/susceptance of C. AT RESONANCE the angles are EQUAL in magnitude but opposed in phase; they equate to zero.

The rules of arithmetic of the "rectangular form" of complex quantities is well-known and mentioned in all sorts of texts, including the mathematics handbooks. Going through numbers with rectangular form is no more harder/easier than trying to plot vectors with polar form representation.

Assignment to the student: Learn the rectangular-form arithmentic rules for complex quantities. ANY text that has anything to say about complex quantities will have those rules.

A hint to keep from re-inventing the wheel. The HP 32S and 33 scientific pocket calculators have both forms' arithmentic rules preprogrammed...AND they do both the real and imaginary part calculations and answer displays like right now. The HP 33 costs about $50 new.

LenAnderson@ieee.org

4060. Re: phase angle and impedance of resonant circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-31 04:22:53 UTC
From: eternalsquire@comcast.net
Message-ID: <1125462173.686052.208460@g47g2000cwa.googlegroups.com>
Source record: 17343

Actually I lent my handbook for a few weeks out to an 11-year old boy who was was selling magazines door to door for his school, he thought my lab was "neat" and I told him about the hobby.

4061. Re: phase angle and impedance of resonant circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-31 04:27:18 UTC
From: eternalsquire@comcast.net
Message-ID: <1125462438.841216.185990@f14g2000cwb.googlegroups.com>
Source record: 17344

"When you get finished,
the distance from the origin to the tip of the last vector is the
magnitude of the admittance (1/|Z|) and the angle from the real axis is
the angle of the admittance. This is the negative of the angle of the
impedance."

Do you mean that the angle the admittance is in the opposite quadrant
of the impedance?

4062. Re: phase angle and impedance of resonant circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-31 07:23:09 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11hamn1p14c0cdb@corp.supernews.com>
Source record: 17345

eternalsquire@comcast.net wrote:
> "When you get finished,
> the distance from the origin to the tip of the last vector is the
> magnitude of the admittance (1/|Z|) and the angle from the real axis is
> the angle of the admittance. This is the negative of the angle of the
> impedance."
>
> Do you mean that the angle the admittance is in the opposite quadrant
> of the impedance?

If the angle of the admittance is 20 degrees, the angle of the impedance is -20 degrees. Draw a set of axes. Draw a vector at an angle of 20 degrees from the real (horizontal) axis (20 degrees counterclockwise from the axis). Now draw another vector at an angle of -20 degrees from that axis (20 degrees clockwise from the axis). Are they in opposite quadrants?

Roy Lewallen, W7EL

4063. Re: phase angle and impedance of resonant circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-31 07:32:26 UTC
From: eternalsquire@comcast.net
Message-ID: <1125473546.791826.289710@o13g2000cwo.googlegroups.com>
Source record: 17346

THANKS for explaining it so simply.

>From the Advanced part I already knew:
1) P = I I R, P = EI
2) ELI the ICE man
These came in handy since the Extra restates some Advanced questions.

I've taken the EHAM practice tests for extra and passed them 3 times in a row by memorizing:

1) Tip to tail reactances for magniture and angle for series resonant circuit
2) Tip to tail reciprocal reactances parallel resonant circuit, take reciprocal back and opposite angle for answer.
2) BW = F/Q (sorry for the mnemonic: f**k over you, you rhymes with Q)
3) reactance = 2 pi F value, reciprocal for capacitors

And now I am getting 77% to 85%, which is enough, I think. There's sections of the exam which are not relevant to my use of the hobby, just as there are other sections not relevant to other people's use.

I am beginning to understand that what the Extra written test is purported to measure is exposure to a number of facets of amateur radio actively pursued over a number of years. Essentially, if you practice at least 3 to 5 seperate parts of amateur radio for at least a few years, you'll already know the bulk of the exam.

That's what got me 55% - 66% of the way already. All I needed to do was practice a little to extend what I already knew about circuits from building.

I'll keep practicing till VEC time.

Thanks a million, folks!

The Eternal Squire

4064. Re: phase angle and impedance of resonant circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-31 07:35:00 UTC
From: eternalsquire@comcast.net
Message-ID: <1125473700.712442.193150@f14g2000cwb.googlegroups.com>
Source record: 17347

Nope, they are not. I found that out the hard way when working the
exam questions tonight.

4065. Re: phase angle and impedance of resonant circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-31 07:38:38 UTC
From: eternalsquire@comcast.net
Message-ID: <1125473918.294745.212200@f14g2000cwb.googlegroups.com>
Source record: 17398

Oops, one other thing I forgot to mention:

Q = XL / XR

The Eternal Squire

4066. Re: phase angle and impedance of resonant circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-31 07:45:40 UTC
From: eternalsquire@comcast.net
Message-ID: <1125474340.502477.51090@g49g2000cwa.googlegroups.com>
Source record: 17399

Len,

Thanks for your advice regarding the calculator. I found that the various questions are constructed to be answered correctly simply by using vector graphical methods, long division, and approximation of inputs for fast figuring.

The Eternal Squire

4067. Re: phase angle and impedance of resonant circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-31 08:22:45 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11haq6pluumpvdc@corp.supernews.com>
Source record: 17400

eternalsquire@comcast.net wrote:
> Oops, one other thing I forgot to mention:
>
> Q = XL / XR
>
> The Eternal Squire

Two problems.

1. It's XL / R. There's no such thing as XR, in this context anyway.
2. Q = XL / R only when the R and L are in series. The Q of a parallel R-L is R / XL.

You can remember those by using a little thought. The Q of an inductor is highest if it has zero series resistance or if it has infinite shunt resistance. Conversely, if you put a very large resistor in series with an inductor, you won't be able to distinguish the circuit from just the resistor. So the Q will be very low. In the parallel case, a low value of resistor will make the inductor become insignificant, trashing the Q.

Good luck with your exam!

Roy Lewallen, W7EL

4068. Re: Philips/Magnavox D2999 service manual, schematic needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-31 12:50:55 UTC
From: Nicolas Boretos <nospam_nicolas@maich.gr>
Message-ID: <1125492655.792526@athnrd02>
Source record: 17401

Joe McElvenney wrote:
> Hi,
>
> On Tue, 30 Aug 2005 14:50:52 +0300, Nicolas Boretos
> <nospam_nicolas@maich.gr> wrote:
>
>
>>Hi,
>>
>>Can anyone help out here...
>>
>>regards,
>>nicolas
>
>
> I have a PDF file of the user manual for the Philips D2999
> containing the schematics. It is just under 2MB. Let me know if it
> is of any use to you. It is just under 2MB.
>
>
> Cheers - Joe (G3LLV)
Thanx alot Joe, could sure use it...

regards,

nikos

4069. Philps/Magnavox D2999 help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-08-31 13:18:20 UTC
From: Nicolas Boretos <nospam_nicolas@maich.gr>
Message-ID: <1125494300.955139@athnrd02>
Source record: 17402

Hi,

I wonder if I could tap into some collective insight here while waiting
for a manual and schem, (thanx Joe), here's where I'm at with the radio...

1. The machine comes on, I get a display, all leds for frequency bands
are on, Iguess that only FM, default, or the last band selected should
be on) half of them dimmer than the other half. Can repeatedly turn
radio off and on if no other function/button is selected. If I push a
button of two, I can neither turn the machine off, nor select any other
bands, have to unplug...

2. When the machine sits a bit, off (power plug attached) It comes on,
and now I am even able to tune a bit w/ the encoder, and even key in a
frequency, and it changes, and plays a bit, then dies...Letting it sit a
couple of minutes, it can be switched back on, and tunes and plays a bit
more, starts to growl...and then the sound stops, its stuck and I turn
it off..

While I'm not even a mediocre tech, it sounds like a cap is initially
empty, charges, then starts to leak...IIRC, a power supply cap, or drop
in ps voltage might be might explain the growl.....
Maybe the same in the 5v supply? Or should I freeze spray the thing???

The radio uses, AFAIS, among others,

M5840 cpu
MM5481 led driver?
MM5368 oscillator
TDA1571 mixer
TDA5700 radio chip

Anyway, would really appreciate some help....

regards,

nikos

4070. Re: HP 8558B Analyser Problem - Help Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-01 09:16:45 UTC
From: John A <e45gkf@nosp.am.yahoo.co.uk>
Message-ID: <df6gum$4pf$1@newsg1.svr.pol.co.uk>
Source record: 17403

Hi Frank,

I've done something just as easy - I unscrewed the LO input to the first mixer but left it close enough to couple in some LO. Problem fixed, but gain - of course - well down. Then I reinstated the first mixer LO and did the same thing with the third mixer LO - with the same result. If my brain is working this means that AN, if not THE, overload is occurring beyond the third mixer. I still thing the first mixer may be the area to work on, though. Any thoughts?

KBO, as Churchill used to say!

Thanks,

John

"Frank" <ve6cb@nospam.telus.net> wrote in message
news:wPMPe.213249$HI.190788@edtnps84...
>
> "John A" <e45gkf@yahoo.co.uk> wrote in message
> news:deihdb$m2g$1@news8.svr.pol.co.uk...
> > See
> >
> > http://homepage.eircom.net/~ei9gq/spec2.jpg
> >
> >
> > for a screen shot.
>
> Assume the center is a zero frequency. Looks suspiciously like LO IF
> overload to me. Try a 10 dB pad in the mixer output -- should be easy to
> get at. As you mentioned there may be a mixer balance problem. I thought
> the HP8558B used to plug in a HP141T display, but found a pic on the web,
> and it appears to be a later generation. I have occasionally seen the
> results of transmitting directly into those old spectrum analyzers, and in
> the 70s, it was $1,000 for the attenuator, and $1,000 for the mixer. Sure
> hope you don't have that kind of problem.
>
> Regards,
>
> Frank
>
>

4071. Help finding equivalent diodes needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-01 10:54:45 UTC
From: John A <e45gkf@nosp.am.yahoo.co.uk>
Message-ID: <df6mmf$858$1@newsm1.svr.pol.co.uk>
Source record: 17404

I've an HP 8558B Spectrum Analyser with dud diodes in its first mixer (one shows 0.33v forward, high resistance reverse, the other 11 ohms either way around)

The official part 08558-20095 and its replacement 08558-60152 have long become obsolete. Can anyone suggest a substitute? The application is in a low power balanced mixer mixing input signals in the range 0 to 1500MHz with a Local Oscillator tuning from 2050MHz to 3550MHz to produce a signal passing through a 5000MHz low-pass filter to a 2050MHz bandpass filter. The present diodes are small glass wire-ended diodes about 4mm long and about 1mm diameter.

Many thanks in advance.

John

4072. Re: Help finding equivalent diodes needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-01 14:13:56 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43170CA7.DC07AEED@earthlink.net>
Source record: 17405

John A wrote:
>
> I've an HP 8558B Spectrum Analyser with dud diodes in its first mixer (one
> shows 0.33v forward, high resistance reverse, the other 11 ohms either way
> around)
>
> The official part 08558-20095 and its replacement 08558-60152 have long
> become obsolete. Can anyone suggest a substitute? The application is in a
> low power balanced mixer mixing input signals in the range 0 to 1500MHz with
> a Local Oscillator tuning from 2050MHz to 3550MHz to produce a signal
> passing through a 5000MHz low-pass filter to a 2050MHz bandpass filter. The
> present diodes are small glass wire-ended diodes about 4mm long and about
> 1mm diameter.
>
> Many thanks in advance.
>
> John

Can you replace the mixer with something from Mini-circuits?
http://www.minicircuits.com/

--
Link to my "Computers for disabled Veterans" project website deleted
after threats were telephoned to my church.

Michael A. Terrell
Central Florida

4073. Re: Help finding equivalent diodes needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-01 17:02:17 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2005.09.01.17.02.17.259034@oceanfree.net>
Source record: 17406

On Thu, 01 Sep 2005 11:54:45 +0100, John A wrote:

> The present diodes are small glass wire-ended diodes about 4mm long and
> about 1mm diameter.

Hello John,

I have a UHF mixer in my junkbox. It has a pair of of glass
Schottky diodes about the same size as yours. I think they
are HP 8000 series. I know that they work well on 23CM.
Picture here: http://homepage.eircom.net/~ei9gq/diode.jpg

They are yours if you want them.

73, Ed. EI9GQ.

--
linux-2.6.13
Remove 'X' to reply by e-mail.

4074. What Is Ham Radio?.....A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-01 18:11:38 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1125598298.766344.4330@g14g2000cwa.googlegroups.com>
Source record: 17407
Cross-posted to: rec.radio.amateur.policy,uk.radio.amateur,rec.radio.amateur.homebrew

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,

competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

4075. Re: What Is Ham Radio?.....A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-01 18:15:17 UTC
From: EL84 <el84@nospam.aol.com>
Message-ID: <3noupoF2lsp0U1@individual.net>
Source record: 17408
Cross-posted to: rec.radio.amateur.policy,uk.radio.amateur,rec.radio.amateur.homebrew

"Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1125598298.766344.4330@g14g2000cwa.googlegroups.com...
> What is Ham Radio?
Yawn, same record, needle stuck

4076. Re: What Is Ham Radio?.....A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-01 18:18:43 UTC
From: Somebody <somebody@anonymous.null>
Message-ID: <43174605$0$97098$ed2619ec@ptn-nntp-reader03.plus.net>
Source record: 17409
Cross-posted to: rec.radio.amateur.policy,uk.radio.amateur,rec.radio.amateur.homebrew

EL84 wrote:
> "Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
> news:1125598298.766344.4330@g14g2000cwa.googlegroups.com...
>
>>What is Ham Radio?
>
> Yawn, same record, needle stuck
>
>

It's a waste of time, it hasn't really changed things has it?

Tiresome though.

4077. Re: What Is Ham Radio?.....A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-01 20:58:01 UTC
From: scotland_glasgow@yahoo.co.uk
Message-ID: <1125608281.462511.212590@g43g2000cwa.googlegroups.com>
Source record: 17410
Cross-posted to: rec.radio.amateur.policy,uk.radio.amateur,rec.radio.amateur.homebrew

Polymath, Any chance of going back to the hole you live in and give us all a break as your weekly whinge is BORING !!!!!

4078. zener in HP 6111A D.C. power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-01 22:19:00 UTC
From: "Joe L." <joe@falseaddress2004.net>
Message-ID: <joe-F3EBCD.17190001092005@news.covad.net>
Source record: 17411

Hi. I'm repairing a H.P. 6111A D.C. power supply and need to replace a shorted diode. It is CR32. If anyone out there has the service manual, could you please tell me what this part is? It seems to be marked GE1-3.2Z so it's not a stretch to think that it's a 3.2V zener, but I'd like to know for sure. Thanks.

--
Joe

4079. Ham Radio (sic) NotFAQs

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-01 23:58:58 UTC
From: Spike <Aero.Spike@Technologies.invalid>
Message-ID: <0e5fh1597sol4b4bgvb8qkjj4gel1l0ofj@4ax.com>
Source record: 17412
Cross-posted to: rec.radio.amateur.policy,uk.radio.amateur,rec.radio.amateur.homebrew

Ham Radio (sic) is full of myths.

Do not be taken in by them, no matter how badly expressed.

The following is a collection of items that have been claimed as facts by supporters of UK 'ham radio' (sic), that needed correcting in order not to mislead the uncritical reader

Bookmark for future reference, as these items tend to recur.

New items added. This is Version V. It replaces all other Versions.

[ ] In the UK, no repeat no licence of any kind is necessary to specify, design, construct, modify, repair, own, or (under some circumstances) test an Amateur transmitter.

[ ] A pass in a current examination for a UK Amateur Licence qualifies the successful candidate for the issue of a UK Licence. Holders of the appropriate levels of licence are permitted to operate transmitting equipment that is not subject to a formal approvals procedure, and to carry out technical investigations. A qualification for a Licence, or the Licence itself, is not, repeat not, a qualification to specify, design, construct, modify, repair, or own transmitting equipment. See above.

[ ] Before sunrise on Friday, September 1st, 1939, Germany attacked Poland at 4:45am, when the Battleship "Schleswig-Holstein", on a so-called goodwill visit, opened fire on the Polish naval depot and garrison at Westeplatte. World War II had begun. An hour later, first German units crossed the Polish border. Britain entered the war two days later. She did not repeat not start WWII.

[ ] Because the 'dimensions' of both sides of the Radar Range Equation need a term having the units of square metres in order to balance, references to ratios of these terms expressed in terms of decibels does not repeat not imply that they are in themselves a ratio of powers.

[ ] FM can be demodulated by an AM receiver using the 'Slope Detection' method. Placing an NBFM signal entirely within a channel in a channelised AM receiver is not repeat not Slope Detection.

[ ] A company's Returns Policy is not repeat not an admission that it deliberately produces shoddy goods, no matter how well wrapped at the time of purchase.

[ ] An IP Address in the headers of one's posts is not repeat not Secret Information.

[ ] An exemplary driver is not repeat not one who makes an obscene gesture to show that the other driver is an idiot.

[ ] An exemplary driver is not repeat not one who repeats an obscene gesture to confirm that the other driver is an idiot.

[ ] XRC is not repeat not a suitable method of differentiating between the 80 percent of metals that have FCC crystal structure.

[ ] Millimetre-waves are not repeat not generated by 'nuclear emissions'.

[ ] The length of the day on this planet is not repeat not 23H20.

[ ] A spring/damper model is not repeat not a mechanical analogue of a capacitor/inductor.

[ ] Dehumidifiers do not repeat not work by absorbing heat.

[ ] Gas Company piping is not repeat not blue in colour.

[ ] 1 deciBel is not repeat not equal to 10 Bels.

from
Aero Spike

from
Aero Spike

4080. Re: Help finding equivalent diodes needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-02 01:46:57 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <dibfh15mmtivalqcsa0s8igkm2e883vtsl@4ax.com>
Source record: 17413

On Thu, 01 Sep 2005 17:02:17 +0000, Eamon Skelton
<Xnospam@oceanfree.net> wrote:

>On Thu, 01 Sep 2005 11:54:45 +0100, John A wrote:
>
>
>> The present diodes are small glass wire-ended diodes about 4mm long and
>> about 1mm diameter.
>
>Hello John,
>
>I have a UHF mixer in my junkbox. It has a pair of of glass
>Schottky diodes about the same size as yours. I think they
>are HP 8000 series. I know that they work well on 23CM.
>Picture here: http://homepage.eircom.net/~ei9gq/diode.jpg
>
>
>They are yours if you want them.
>
>73, Ed. EI9GQ.

Ed, could you contact me off-list please. I have a couple of
questions to ask. My e-mail follows in suitable munged-up fashion.

r c n i x o n (at) m*i*n*d*s*p*r*i*n*g (dot) c&o&m

Just remove the obvious characters.

Thanks,

Russ - kf4wxd

4081. RF-circuit board

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-02 07:19:35 UTC
From: Fero <def4@pobox.sk>
Message-ID: <1125645575.256209.260480@g47g2000cwa.googlegroups.com>
Source record: 17414

Hi
what is the difference between RF-circuit board (high frequency) and
non-RF-circuit board ?
What happen when I use non-RF-circuit board for 900 MHz frequency ?

Thanks

Fero

4082. Re: Help finding equivalent diodes needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-02 08:12:03 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2005.09.02.08.12.03.355088@oceanfree.net>
Source record: 17415

On Fri, 02 Sep 2005 01:46:57 +0000, Russ wrote:

> Ed, could you contact me off-list please. I have a couple of questions to
> ask. My e-mail follows in suitable munged-up fashion.
>
> r c n i x o n (at) m*i*n*d*s*p*r*i*n*g (dot) c&o&m

Hello Russ,

Thats the most munging I have ever seen in an
e-mail address. Remove the leading X from my From:
address. User: nospam Domain: oceanfree.net

73, Ed. EI9GQ.

--
linux-2.6.13
Remove 'X' to reply by e-mail.

4083. Re: RF-circuit board

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-02 11:53:40 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <83XRe.5841$FW1.5430@newsread3.news.atl.earthlink.net>
Source record: 17416

"Fero" <def4@pobox.sk> wrote in message
news:1125645575.256209.260480@g47g2000cwa.googlegroups.com...
> Hi
> what is the difference between RF-circuit board (high frequency) and
> non-RF-circuit board ?
> What happen when I use non-RF-circuit board for 900 MHz frequency ?
>
> Thanks
>
> Fero
>
The differance is the material the copper is on. It can cause the tuned
circuits to be differant and it may be so lossey the material will burn if
the power is high enough.

4084. Re: What Is Ham Radio?.....A Weekly F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-02 19:07:19 UTC
From: Rob Gibson <astroknutt@yahoo.co.uk>
Message-ID: <dfa7t7$m1f$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 17417
Cross-posted to: rec.radio.amateur.policy,uk.radio.amateur,rec.radio.amateur.homebrew

<scotland_glasgow@yahoo.co.uk> wrote in message
news:1125608281.462511.212590@g43g2000cwa.googlegroups.com...
> Polymath, Any chance of going back to the hole you live in and give us
> all a break as your weekly whinge is BORING !!!!!
>

You don't have to read it, it's not compulsory.

4085. Re: RF-circuit board

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-02 19:40:35 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1125690035.759489.188140@g14g2000cwa.googlegroups.com>
Source record: 17418

Fero wrote:
"what is the difference between RF-circuit board (high frequency) and
non-RF-circuit board ?
What happen when I use non-RF-circuit board for 900 MHz frequency ? "

It could be the dielectric substrate material of the board as Ralph
wrote, or it could also be just how the board is laid out. At least,
it's not quite clear to me from your question that it's strictly the
board material.

As for material, for low-power things at least, we generally don't
bother with expensive Duroid or Teflon or similar substrates out to
1GHz. We find that good FR-4 fiberglass-epoxy material will usually
work OK. One of the concerns that you should be aware of, though, is
that the dielectric constant of FR-4 is NOT as well controlled as the
dielectric constant of the better (and much more expensive) RF
substrates. Also, the dielectric constant for FR-4 is quite a bit
higher, leading to narrower traces and therefore higher loss, to
achieve the same transmission line impedances (or smaller pads to get
the same capacitance). So if you have a layout designed for some
particular dielectric constant and it uses transmission lines and/or
physical structures to do filtering or impedance matching, expect to
have to modify it to work properly if you use a different substrate
material. Obviously, it's also important to pay attention to the
dielectric thickness if you're trying to get particular microstrip
impedances.

The freeware "RFSim99" program has a tool for doing some simple
microstrip calcs, and you should be able to find web applets that cover
much more complicated cases like buried microstrip, stripline, balanced
microstrip, etc. You can also find free/student/trial programs that
analyze more complex structures, though all that may be going well
beyond what you're interested in.

Cheers,
Tom

4086. Re: Help finding equivalent diodes needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-02 20:23:36 UTC
From: Pete KE9OA <p.gianako@worldnet.att.net>
Message-ID: <cx2Se.3160$qY1.1660@bgtnsc04-news.ops.worldnet.att.net>
Source record: 17419

Hey John,
An HP1N5711 diode should do the trick. I sent a few to a fellow in Canada
some months back that had a blown 1st mixer in his 8558. I have about 150 on
hand and I would also be glad to send a few your way.

Pete

"Eamon Skelton" <Xnospam@oceanfree.net> wrote in message
news:pan.2005.09.02.08.12.03.355088@oceanfree.net...
> On Fri, 02 Sep 2005 01:46:57 +0000, Russ wrote:
>
>
>> Ed, could you contact me off-list please. I have a couple of questions
>> to
>> ask. My e-mail follows in suitable munged-up fashion.
>>
>> r c n i x o n (at) m*i*n*d*s*p*r*i*n*g (dot) c&o&m
>
> Hello Russ,
>
> Thats the most munging I have ever seen in an
> e-mail address. Remove the leading X from my From:
> address. User: nospam Domain: oceanfree.net
>
> 73, Ed. EI9GQ.
>
> --
> linux-2.6.13
> Remove 'X' to reply by e-mail.
>

4087. oscillator problem: pulling crystal abt 500 Hz in LT2S SSB Electronics -transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-03 08:02:02 UTC
From: Pasi <tuomi@sci.fi>
Message-ID: <dfbl9k$fp9$1@phys-news1.kolumbus.fi>
Source record: 17420

I have SSB Electronics transverter LT2S. Its 116 MHz crystal oscillator is about 500 Hz off the frequency eg. running somewhere 116 000, 500 kHz. How could this be tuned to pulled 116 MHz? Or is even impossible/too hard to do?

See picture http://www.g1ogy.com/projects/LT2S/page13.jpg

The oscillator is T1/Q1 I am talking about. Any ideas, any help?

73 Pasi, oh2pt, tuomi@sci.fi

4088. Re: oscillator problem: pulling crystal abt 500 Hz in LT2S SSB Electronics -transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-03 10:09:47 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2005.09.03.10.09.47.235287@oceanfree.net>
Source record: 17421

On Sat, 03 Sep 2005 11:02:02 +0300, Pasi wrote:

> The oscillator is T1/Q1 I am talking about. Any ideas, any help?
>
> 73 Pasi, oh2pt, tuomi@sci.fi

What happens if you adjust L7?

73, Ed. EI9GQ.

--
linux-2.6.13
Remove 'X' to reply by e-mail.

4089. Re: oscillator problem: pulling crystal abt 500 Hz in LT2S SSB Electronics -transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-03 12:06:22 UTC
From: nn <nn@nn.nn>
Message-ID: <dfc3km$5f6$1@phys-news1.kolumbus.fi>
Source record: 17422

"Eamon Skelton" <Xnospam@oceanfree.net> wrote in message
news:pan.2005.09.03.10.09.47.235287@oceanfree.net...
> What happens if you adjust L7?
>
> 73, Ed. EI9GQ.

I haven't touched it. But as far as I understand its there to avoid
oscillation
to disturb regulation process insuide L09. So it should have nothing
to do with the crystal "pushing". (Let me know if I am totally wrong... :)

Pasi, oh2pt

4090. Re: NE602 Primer article?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-03 12:38:45 UTC
From: Jake <Jake@Idontwantspam.com>
Message-ID: <8e0jh11v2h6laefvk4u3nnh8curdotrc4a@4ax.com>
Source record: 17423
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Wed, 31 Aug 2005 08:18:35 +1200, "Jeff" <jeff_164@NOSPAMhotmail.com>
wrote:

>Has anyone seen a Web copy of the article
>"NE602 Primer"- by Carr featured in Elektor Electronics Jan. '92
>Im interested to get the article.
>Ive looked at the Elektor site, but their back issues dont go back that far.
>regards,
>JEFF
>ZL3JK
>New Zealand
>jeff_164@NOSPAMhotmail.com
>(remove the NOSPAM)

Check the Philips app notes on NE612

"AN1982 - Applying the Oscillator of the NE602 in Low Power Mixer
Applications", Signetics Linear Products Data Book, Page 4-80

AN1983 Crystal Oscillators And Frequency Multipliers Using The NE602

Phillips Electronic Semiconductor - Standard ICs [Support ...
English, Crystal oscillators and frequency multipliers using the NE602 and
NE5212 ...
www.standardics.philips.com/support/appnotes/

Jake
--
After one hundred and fifty years and many thousands of firearms
control laws introduced throughout the world to reduce crime and the
supply of guns to criminals. The list of successes should be long and
illustrious. Where is the list? ~~ P. Moss

4091. Old Fashioned SS QRP CW TX ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-03 13:57:48 UTC
From: SpamHog <n1jpr@hotmail.com>
Message-ID: <1125755868.846171.213790@g47g2000cwa.googlegroups.com>
Source record: 17424

I'd like to build myself a small SS QRP CW TX with a broad transmit frequency range (say 3-10 or 5-15 MHz), and clean output. Something I could use now on the current ham bands with a CW-capable digital portable RX, but could forget in a cupboard and use anywhere else if the need / right arises in n year's time.

Hardwired band limits may look reassuring from a legal standpoint, yet almost all commercial radios DO let you get into trouble, frequency wise, so what the heck... + you don't know what the future has in store.

I figure it would be plenty to put together the following:

- always on VFO

- a couple of quasi-linear _tuned_ (!) amp stages
built around a 3-section variable capacitor

- no bandswitching, no plug in tuning coils
or HRO-style coil drawers

- always-on buffer

- power keying on PA

- electronic QSK

- switched receive-mode VFO-offset cap,
patched it into QSK,
to kick it way off the operating frequency
(and off the _amp_chain_passband_ as well !)
& fully kill output + avoid any issues
in isofrequency operation

- pi network, PA current meter.

I'd draw the line this side of DDS, with huff-puff to be perhaps added at a later stage, but I'm open to convincing.

I could sure dream up a circuit, but I wonder where to look for inspiration. I know e.g. no solid state professional transmitters of such ilk...

1960's solid state tactical radios perhaps?

Ideas anyone?

4092. Re: oscillator problem: pulling crystal abt 500 Hz in LT2S SSB Electronics -transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-03 18:00:47 UTC
From: fmmck@aol.com
Message-ID: <fmmck-0309051400470001@acadb6bd.ipt.aol.com>
Source record: 17425

In article <dfc3km$5f6$1@phys-news1.kolumbus.fi>, "nn" <nn@nn.nn> wrote:

> "Eamon Skelton" <Xnospam@oceanfree.net> wrote in message
> news:pan.2005.09.03.10.09.47.235287@oceanfree.net...
> > What happens if you adjust L7?
> >
> > 73, Ed. EI9GQ.
>
> I haven't touched it. But as far as I understand its there to avoid
> oscillation
> to disturb regulation process insuide L09. So it should have nothing
> to do with the crystal "pushing". (Let me know if I am totally wrong... :)

Pasi-

The 1 microfarad capacitor prevents the regulator from oscillating.

L7 would normally be adjusted for maximum output from the oscillator stage, but may also have an effect on frequency. Since it is all you have to adjust, I suggest you adjust it.

I believe the crystal is connected in a series-resonant configuration, which is less affected by circuit values. The only recourse may be to purchase a new crystal.

73, Fred, K4DII

4093. Re: oscillator problem: pulling crystal abt 500 Hz in LT2S SSB Electronics -transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-03 22:05:43 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <AKOdnWAMpJOpg4feRVnyjg@pipex.net>
Source record: 17426

> I believe the crystal is connected in a series-resonant configuration,
> which is less affected by circuit values. The only recourse may be to
> purchase a new crystal.
==========
If crystal is indeed in series-resonant config. , by putting a trimmer of a
few pF in series with the crystal, it will highly likely be possible to pull
the freq 500 Hz.
After all this is only just over 4ppm of the nominal frequency.

Frank GM0CSZ / KN6WH

4094. Re: Old Fashioned SS QRP CW TX ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-03 23:52:51 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11hkdqlo3gedg87@corp.supernews.com>
Source record: 17427

SpamHog wrote:
> . . .
> I could sure dream up a circuit, but I wonder where to look for
> inspiration. I know e.g. no solid state professional transmitters of
> such ilk...
>
> 1960's solid state tactical radios perhaps?
>
> Ideas anyone?

Experimental Methods in RF Design, available from the ARRL. Or its predecessor _Solid State Design for the Radio Amateur_. The latter book is out of print, but you might be able to find a used copy.

Roy Lewallen, W7EL

4095. Re: oscillator problem: pulling crystal abt 500 Hz in LT2S SSB Electronics -transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-04 10:16:10 UTC
From: Pasi <tuomi@sci.fi>
Message-ID: <dfehgoidc1@phys-news1.kolumbus.fi>
Source record: 17428

Frank and Fred,

Thank you for your help. I will try L7 first (and then trimmer of pair of twisted wires).
Let's see what happens. I need counter to borrow first.. I will be back.

73 Pasi, oh2pt

4096. Re: oscillator problem: pulling crystal abt 500 Hz in LT2S SSB Electronics -transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-04 11:00:05 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2005.09.04.11.00.05.346076@oceanfree.net>
Source record: 17429

On Sat, 03 Sep 2005 15:06:22 +0300, nn wrote:

> "Eamon Skelton" <Xnospam@oceanfree.net> wrote in message
> news:pan.2005.09.03.10.09.47.235287@oceanfree.net...
>> What happens if you adjust L7?
>>
>> 73, Ed. EI9GQ.
>
> I haven't touched it. But as far as I understand its there to avoid
> oscillation
> to disturb regulation process insuide L09. So it should have nothing to do
> with the crystal "pushing". (Let me know if I am totally wrong... :)
>
> Pasi, oh2pt

It looks like a fairly low inductance which resonates with
the 12pf, 68pf and other capacitances in the oscillator to form
a 116MHz tuned circuit. Try adjusting it to see if it will
pull the oscillator to the correct frequency. If you turn
it too far, it will reduce the L.O. output or stop it
from running. If you are not happy with the result, you
can always put it back where it was.

If all else fails, you could try putting a variable capacitor
or inductor in series with the crystal.

73, Ed. EI9GQ

--
linux-2.6.13
Remove 'X' to reply by e-mail.

4097. Re: oscillator problem: pulling crystal abt 500 Hz in LT2S SSB Electronics -transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-04 11:09:14 UTC
From: Pasi <tuomi@sci.fi>
Message-ID: <dfekkd$q2m$1@phys-news1.kolumbus.fi>
Source record: 17430

"Eamon Skelton" <Xnospam@oceanfree.net> wrote in message
news:pan.2005.09.04.11.00.05.346076@oceanfree.net...
> a 116MHz tuned circuit. Try adjusting it to see if it will
> pull the oscillator to the correct frequency. If you turn
> it too far, it will reduce the L.O. output or stop it
> from running. If you are not happy with the result, you
> can always put it back where it was.
>
> If all else fails, you could try putting a variable capacitor
> or inductor in series with the crystal.
>
> 73, Ed. EI9GQ

Ed,

What is the best way to know the value before i touch it?
Should I measure the voltage after this coil - or how?
And most probably there is RF-voltmeter needed?

Pasi

4098. Re: oscillator problem: pulling crystal abt 500 Hz in LT2S SSB Electronics -transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-04 11:52:12 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <LtOdnayKeq16QofeRVn-rQ@bright.net>
Source record: 17431

Count the number of turns as you adjust. If it has little or no effect
on frequency, return the slug to its original position by turning in the
opposite direction for the same number of turns you counted while
adjusting it.

Scott
N0EDV

Pasi wrote:
> "Eamon Skelton" <Xnospam@oceanfree.net> wrote in message
> news:pan.2005.09.04.11.00.05.346076@oceanfree.net...
>
>>a 116MHz tuned circuit. Try adjusting it to see if it will
>>pull the oscillator to the correct frequency. If you turn
>>it too far, it will reduce the L.O. output or stop it
>>from running. If you are not happy with the result, you
>>can always put it back where it was.
>>
>>If all else fails, you could try putting a variable capacitor
>>or inductor in series with the crystal.
>>
>>73, Ed. EI9GQ
>
>
> Ed,
>
> What is the best way to know the value before i touch it?
> Should I measure the voltage after this coil - or how?
> And most probably there is RF-voltmeter needed?
>
> Pasi
>
>

4099. Re: RF-circuit board

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-04 12:07:25 UTC
From: Fero <def4@pobox.sk>
Message-ID: <1125835645.355237.20020@z14g2000cwz.googlegroups.com>
Source record: 17432

Hi Tom,
thanks for answer. I will make device for data-transfer on 900 MHz with
nRF905 from Nordic. I have no experience in so high frequency. This
device is low power transmitter. I am not sure what happen wenn I use
standard (non-RF) circuit board. Probably output power will be low or
cann I waiting another problems ?

Cheers,

Fero

4100. Re: oscillator problem: pulling crystal abt 500 Hz in LT2S SSB Electronics -transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-04 14:05:28 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2005.09.04.14.05.28.367430@oceanfree.net>
Source record: 17433

On Sun, 04 Sep 2005 14:09:14 +0300, Pasi wrote:

> What is the best way to know the value before i touch it? Should I measure
> the voltage after this coil - or how? And most probably there is
> RF-voltmeter needed?
>
> Pasi

It would be very difficult if not impossible to find the
exact inductance of L7 while it is in circuit.

Just count the number of degrees of rotation you make
to the tuning slug. You could mark the slug and former
with white paint or tipex before you start. If you don't have a
VHF frequency counter, you could use a 2M beacon as a frequency reference.
Most of the 2M beacons audible from here are correct to within +/- 200Hz.
GB3MCB is usually within 100Hz.

Even a very good crystal oscillator is unlikely to
be stable to less than 1 ppm, so there is little
point in trying to get an error of less than 100Hz.

73, Ed. EI9GQ.

--
linux-2.6.13
Remove 'X' to reply by e-mail.

4101. Re: oscillator problem: pulling crystal abt 500 Hz in LT2S SSB Electronics -transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-04 19:37:20 UTC
From: Pasi <tuomi@sci.fi>
Message-ID: <dffien$7cs$1@phys-news1.kolumbus.fi>
Source record: 17434

Hi everyone,

Transverter is now on correct frequency. LO was tunable through
this L7. And it is still oscillating after the pull :)

I was very pessimistic that this L7 would affect on freq. Thank you
for your advice. Btw, I have to say that this German piece of electronic
has really good quolity inside the box.

73 Pasi, oh2pt

"Eamon Skelton" <Xnospam@oceanfree.net> wrote in message
news:pan.2005.09.04.14.05.28.367430@oceanfree.net...
> On Sun, 04 Sep 2005 14:09:14 +0300, Pasi wrote:
>
>
>> What is the best way to know the value before i touch it? Should I
>> measure
>> the voltage after this coil - or how? And most probably there is
>> RF-voltmeter needed?
>>
>> Pasi
>
> It would be very difficult if not impossible to find the
> exact inductance of L7 while it is in circuit.
>
> Just count the number of degrees of rotation you make
> to the tuning slug. You could mark the slug and former
> with white paint or tipex before you start. If you don't have a
> VHF frequency counter, you could use a 2M beacon as a frequency reference.
> Most of the 2M beacons audible from here are correct to within +/- 200Hz.
> GB3MCB is usually within 100Hz.
>
> Even a very good crystal oscillator is unlikely to
> be stable to less than 1 ppm, so there is little
> point in trying to get an error of less than 100Hz.
>
> 73, Ed. EI9GQ.
>
>
> --
> linux-2.6.13
> Remove 'X' to reply by e-mail.
>

4102. Re: Old Fashioned SS QRP CW TX ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-04 21:41:49 UTC
From: Phil <phil@nospampse.be>
Message-ID: <xSJSe.186220$RG2.10355762@phobos.telenet-ops.be>
Source record: 17435

"SpamHog" <n1jpr@hotmail.com> wrote in message
news:1125755868.846171.213790@g47g2000cwa.googlegroups.com...
> I'd like to build myself a small SS QRP CW TX with a broad transmit
> frequency range (say 3-10 or 5-15 MHz), and clean output. Something I
> could use now on the current ham bands with a CW-capable digital
> portable RX, but could forget in a cupboard and use anywhere else if
> the need / right arises in n year's time.
>
> Hardwired band limits may look reassuring from a legal standpoint, yet
> almost all commercial radios DO let you get into trouble, frequency
> wise, so what the heck... + you don't know what the future has in
> store.
>
> I figure it would be plenty to put together the following:
>
> - always on VFO
>
> - a couple of quasi-linear _tuned_ (!) amp stages
> built around a 3-section variable capacitor
>
> - no bandswitching, no plug in tuning coils
> or HRO-style coil drawers
>
> - always-on buffer
>
> - power keying on PA
>
> - electronic QSK
>
> - switched receive-mode VFO-offset cap,
> patched it into QSK,
> to kick it way off the operating frequency
> (and off the _amp_chain_passband_ as well !)
> & fully kill output + avoid any issues
> in isofrequency operation
>
> - pi network, PA current meter.
>
> I'd draw the line this side of DDS, with huff-puff to be perhaps added
> at a later stage, but I'm open to convincing.
>
> I could sure dream up a circuit, but I wonder where to look for
> inspiration. I know e.g. no solid state professional transmitters of
> such ilk...

>
> 1960's solid state tactical radios perhaps?
>
> Ideas anyone?
>

Hello,

Try to get hold of an HW8, an old Heathkit QRP CW Transceiver.

Lots of modifications and/or extensions can be found on the internet.

Use an old RC4 (Drake) for listening. With some effort, you can let those
two rigs transceive.

Plenty of projects around that idea!

Have fun.

4103. Re: Old Fashioned SS QRP CW TX ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-05 16:45:42 UTC
From: SpamHog <n1jpr@hotmail.com>
Message-ID: <1125938742.272074.326510@g14g2000cwa.googlegroups.com>
Source record: 17436

I was poring over a HW-9 schematic already.

Very cool, cept it's anything but broad range: doubler/tripler, mixers, LOs, all sorts of acrobatics that cut down the number of components but make the whole more inflexible.

Right now I am thinking about using:

- a signal generator

- 1 driver and 2 or 3 massively derated finals in parallel, all AB class or so, with broadband RF transformers, i/o at 50 ohm or so

- perhaps a bit of negative feedback

- putting all the filtering at the end, such as 3 tank circuits with 3-section VC + pi network; doing so would possibly simplify the mechanics of providing effective shielding.

4104. Re: RF-circuit board

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-05 17:50:15 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1125942615.521449.254260@g44g2000cwa.googlegroups.com>
Source record: 17437

Hi Fero,

Since I'm not familiar with the nRF905, I can't really anticipate what problems you might run into. I do expect that at 900MHz, if you can come up with a proper layout and execute it correctly, standard FR-4 (modern fiberglass-epoxy) dielectric shouldn't be a significant problem. I'm assuming that the whole board is small and you don't have more than a couple cm trace length. Obviously, if you ran a few meters of microstrip, you'd have noticable loss. Perhaps someone with some nRF905 experience can give you more help. I did bring up the Nordic website, but the ap note files for the demo boards were in some format my 'puter doesn't understand. (Why doesn't eveyone include a PDF version??) Since Nordic seems to try to provide lots of info on their web site, perhaps they would answer an email about your concerns.

Cheers,
Tom

4105. Re: Stable Regen Receiver--Does it Exist??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-05 18:01:29 UTC
From: SpamHog <n1jpr@hotmail.com>
Message-ID: <1125943289.589816.107320@g47g2000cwa.googlegroups.com>
Source record: 17438

I assume you are talking about temperature induced drift, as opposed as frequency lability due to hand effect, changes in regen setting etc.

I have experienced such stability over time that SSB pitch would stay dead on for days (run on and off) in the shortwave range with the radio tuned on a volmet station half a continent away. In this instance, I was running a 1-tuber with direct heated filament, battery powered, and cap-throttle regen control, but the lessons apply in general.

The main tricks in my book are quite simple:
- keep oscillator power as close to zero as humanly possible
- keep voltages stable
- select LARGE components and hookup wires
- ensure ventilation!

In a word, make sure the oscillator basically runs at ambient temperature.

If you were referring to frequency lability caused by other factors, I have good news in the hand effect department, and mixed news in the regen control area.

Hand effect can be more or less got rid of by proper shielding or decoupling. You can find an interesting discussion here: http://tinyurl.com/dr936 .

In a word: keep your body away from ANY capacitance related to the oscillating tank circuit - and that mainly refers to the ANTENNA, not the variable capacitor or the coil. If there is a sizeable antenna-case capacitance, then a change in body-case capacitance affects antenna and inevitably the tank circuit too.

So the oscillating tank circuit must be properly decoupled (usually by RF amp/buffer stage ahead of the regen detector)
OR
it must be well enclosed + the antenna coax fed
... or both.

I would like to experiment with cap-decoupling by putting a slitted-shield around the tuning coil, and putting a separate antenna coil next to it, but never got around to doing so. Even theoretically, the idea of such a trick gives me a headache.

In the regen control department, the mixed news is that capacitive throttling is considered the "best performing" way to go, but can't avoid to affect the tuned frequency.

[In theory you could, of course, what with a small co-shafted VC that removes capacitance from the main LC as the throttle cap adds it, but it must be a pretty complicated law, and I don't know of anyone who tried it :)]

You can instead turn to the gain-control way, DC-controlling one of the following:
- second grid voltage in a pentode
- plate voltage in a triode
- base voltage in a transistor
or some such like.

All of the above minimize frequency change especially in tube designs (where varicap effects are basically nonexistent), but can suffer from annoying hysteresis, in my experience more than cap throttle. Not sure where the "high performance" advantage of cap throttle is though...

Another trick I wish I had tried is changing a *stabilized* voltage, as opposed to using a simple throttle pot. That could be done with a variable regulator IC and might remediate the hysteresis.

Another trick is to use a couple of effects working in opposite directions, such as a resistive throttle that adds gain but shunts more RF to ground, such as in the Charles Kitchin "Beginner's Radio".

See www2.arrl.org/tis/info/HTML/regen/
with many derivatives linked in this article of mine:
http://www.geocities.com/filippo_cattaneo/desert-ratt.html .

I think the same trick may be in use in the MFJ-8100 regen, but I can't tell what's trimmer and what's main control pot.
(hand drawn schematic may be here:
www.diagram.com.ua/list/mogik.shtml
sorry Martin!).

So, there's hope.

4106. Re: RF-circuit board

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-05 21:03:12 UTC
From: Jim <kill-spam@no-spam.org>
Message-ID: <MK2dnaNpbowKL4HeRVn-3Q@comcast.com>
Source record: 17439

The application note for the NRF905 does specify FR4 board with 1.54mm substrate thickness. FR4 is the board material used for almost all printed circuit boards, so you can use a regular board and just make sure the thickness is 1.544mm.

http://www.nordicsemi.no/files/Product/applications/nAN900-04_nRF905_RF_and_antenna_layout_rev2_0.pdf

here is the link for most od the documents related to the NRF905.

http://www.nvlsi.no/index.cfm?obj=search&act=searchResult

Jim
N6BIU

--

14:04 Pacific Time Zone
Sep 5 2005

International Time
21:04 UTC
05.09.2005
>

4107. Re: Old Fashioned SS QRP CW TX ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-05 21:31:27 UTC
From: Phil <phil@nospampse.be>
Message-ID: <PO2Te.186976$we6.10382399@phobos.telenet-ops.be>
Source record: 17440

"SpamHog" <n1jpr@hotmail.com> wrote in message
news:1125938742.272074.326510@g14g2000cwa.googlegroups.com...
>I was poring over a HW-9 schematic already.
>
> Very cool, cept it's anything but broad range: doubler/tripler, mixers,
> LOs, all sorts of acrobatics that cut down the number of components but
> make the whole more inflexible.
>
> Right now I am thinking about using:
>
> - a signal generator
>
> - 1 driver and 2 or 3 massively derated finals in parallel, all AB
> class or so, with broadband RF transformers, i/o at 50 ohm or so
>
> - perhaps a bit of negative feedback
>
> - putting all the filtering at the end, such as 3 tank circuits with
> 3-section VC + pi network; doing so would possibly simplify the
> mechanics of providing effective shielding.
>

I have no idea in what the HW-9 differs from the HW-8 in the transmitter
stages.

I know the receiver of the HW-9 is more elaborate than the direct reception
of the HW-8.

I do not feel comfortable with broadband signal generators in transmitters
since they tend to be noisy and jittery.

To some extend, it could work on FM, but I doubt the results will be worth
anything in SSB.

Signal generators produce also lots of spurious; filtering at the end stage
will be a real challenge.

I still have the intention to use the "inj." output of a Drake R4B, mixed
with the output of an x-tal oscillator (somewhere around 6 MHz, I don't
remember exactly) to send on the frequency the R4B listens on.

With some fiddling, you could find in every receiver a frequency to mix with
a fixed oscillator to get the same effect.

The resulting signal will need filtering before any amplification, so much
for your wish to go broadband!

On the other hand, filtering over a broad band at the end stage is OK only if you intend to use a dummy load at all times (HI). A real antenna will not present the required impedance over the entire frequency range to the output of your filter. The garbage you intended to filter will only be partially taken care of.

So you see, quite a challenge!

4108. PLL troubleshooting experience

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-06 00:01:03 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1d867c09b28d90dd9896e5@news-central.giganews.com>
Source record: 17441
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

This page grew out of the need to keep track of the debugging process on
a synthesizer (sub)project that I recently volunteered to help with.

http://www.speakeasy.org/~jmiles1/ke5fx/ssa/lo1.html

Thought I'd post a link to it in case anyone else runs into similar
problems. At the very least, it shows how easy it is to overlook the
obvious when you're fooling with this stuff.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

4109. Re: PLL troubleshooting experience

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-06 00:25:11 UTC
From: Jim Thompson <thegreatone@example.com>
Message-ID: <o9oph1199hl0bkrhhf913u2986nbpmbcar@4ax.com>
Source record: 17442
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Mon, 5 Sep 2005 17:01:03 -0700, John Miles
<jmiles@pop.removethistomailme.net> wrote:

>This page grew out of the need to keep track of the debugging process on
>a synthesizer (sub)project that I recently volunteered to help with.
>
>http://www.speakeasy.org/~jmiles1/ke5fx/ssa/lo1.html
>
>Thought I'd post a link to it in case anyone else runs into similar
>problems. At the very least, it shows how easy it is to overlook the
>obvious when you're fooling with this stuff.
>
>-- jm
>
>--
>http://www.qsl.net/ke5fx
>Note: My E-mail address has been altered to avoid spam
>--

Fun, isn't it ?:-)

I actually made a hybrid 300MHz IF strip that looked a lot like your
lash-up, with soldered-on barriers between sections. Except with
notches for the screened interconnect feed-throughs.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

4110. WTT Bearcat 155XL Desktop Scanner/FOR Broken Winchester 94 rifle

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-06 00:36:00 UTC
From: Mike Kulyk <mkulyk@optonline.net>
Message-ID: <Vv5Te.35434$U63.30472@fe12.lga>
Source record: 17443

I have a good working Bearcat 16 channel scanner. I have it working on 2 meter and 440 mhz. Great for office or to listen to fire calls ETC..

I am looking for a BROKEN,,, RATTY MESSED up Winchester Lever gun. Model 94 would be great.. PARTS gun.. I am looking for a winter project..

Mike WB2GLW

4111. Old Part Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-06 02:04:27 UTC
From: Peter Barbella <nonobar@verizon.net>
Message-ID: <LO6Te.14512$aG.10577@trndny01>
Source record: 17444

Hello all,

I'm restoring a 50s vintage EICO 720 transmitter. I'm in need of a 50 k potentiometer rated at 4 watts (or above) that is NOT wirewound.

The old part looks like a thin ribbon-like piece of resisitive material bent into a circle and placed inside the pot case. The spring loaded center contact appears to be in good shape, but the ribbon is fractured (microscopically) in two locations along its length.

I have been unable to find a replacement for this part at any of the large parts supply houses.

Does anyone know of a source?

Regards,
Peter Barbella
KB1LZH

4112. Re: Old Part Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-06 02:42:32 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <te0qh15qck1n05a0v59gaf1bi2kkd0i5k9@4ax.com>
Source record: 17445

On Tue, 06 Sep 2005 02:04:27 GMT "Peter Barbella"
<nonobar@verizon.net> wrote:

>I'm restoring a 50s vintage EICO 720 transmitter. I'm in need of a 50 k
>potentiometer rated at 4 watts (or above) that is NOT wirewound.
>
>The old part looks like a thin ribbon-like piece of resisitive material bent
>into a circle and placed inside the pot case. The spring loaded center
>contact appears to be in good shape, but the ribbon is fractured
>(microscopically) in two locations along its length.
>
>I have been unable to find a replacement for this part at any of the large
>parts supply houses.

Is there any hint of who the original maker might have been?

What's the overall diameter of the pot?

-

Jim Adney jadney@vwtype3.org
Madison, WI 53711 USA

4113. Re: Old Fashioned SS QRP CW TX ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-06 09:22:46 UTC
From: SpamHog <n1jpr@hotmail.com>
Message-ID: <1125998566.838478.89660@g49g2000cwa.googlegroups.com>
Source record: 17446

Points taken! Never really looked at quality in a signal generator. U
never stop to learn. Signal level garbage in -> AMPLIFIED garbage
out.

A clean VFO or DDS + a tank circuit ahead of the PA looks like a much
better idea.

I have looked at a number of broadband amp designs, and it seems that
they share a real concern with cleanliness:
- linear amplification
- negative feedback (some even DC coupled)
- sometimes push-pull with matched devices.

As far as antenna matching is concerned, I'd first align the cascaded
tank circuits into a dummy load, and never operate without a tuner.

All this considered it looks like broadbanding requires choices that
together lead to a low power efficiency.

Now, re. filtering output with cascaded LC tank circuits, I have a
question stemming from this being the toroid era.

In the old days, multiple capacitor-tuned LC circuits in series could
be aligned over broad tuning ranges by means of slug adjusted coils and
small capacitive trimmers. It was a bit of an art, but satisfactory
alignment was possible.

But you can't easily trim a toroid.

When handling say up to 5 watts RF, do I already have to fear
saturation in IF-type, ferrite-tunable canned coils?

Or, does anyone ever put a small L of that kind as an indictive trimmer
in series with a toroid?

4114. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-06 09:27:32 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <431D6114.5CB09B27@earthlink.net>
Source record: 17447

Highland Ham wrote:
>
> Surplus people in the USA like 'Surplus of Nebraska ' and 'Peter Dahl' seem
> rather expensive.

'Peter Dahl' makes custom transformers, so you can't expect "Cheap"
if you want it to last.

--
?

Michael A. Terrell
Central Florida

4115. Re: Old Part Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-06 11:22:54 UTC
From: Johnson <jdwalton@comt.net>
Message-ID: <7KqdnSvpLt-q54DeRVn-rA@comcast.com>
Source record: 17248

I would try "Electronic Surplus" in Cleveland -- their number is (216)
441-8500

fwiw -- the manual is available on the BAMA mirror
site --ftp://bama.edebris.com/bama/eico/720/720.djvu
you need DJVU to view the manual -- but it is easy to find on the web.

"Peter Barbella" <nonobar@verizon.net> wrote in message
news:LO6Te.14512$aG.10577@trndny01...
> Hello all,
>
> I'm restoring a 50s vintage EICO 720 transmitter. I'm in need of a 50 k
> potentiometer rated at 4 watts (or above) that is NOT wirewound.
>
> The old part looks like a thin ribbon-like piece of resisitive material
bent
> into a circle and placed inside the pot case. The spring loaded center
> contact appears to be in good shape, but the ribbon is fractured
> (microscopically) in two locations along its length.
>
> I have been unable to find a replacement for this part at any of the large
> parts supply houses.
>
> Does anyone know of a source?
>
> Regards,
> Peter Barbella
> KB1LZH
>
>

4116. Re: Old Part Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-06 12:58:15 UTC
From: wilbur <mr_ed@wilbur.com>
Message-ID: <431D9267.A43F077B@wilbur.com>
Source record: 17249

http://www.surplussales.com/

4117. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-06 12:59:34 UTC
From: wilbur <mr_ed@wilbur.com>
Message-ID: <431D92AF.D5DC237B@wilbur.com>
Source record: 17250

old saying,

you gets what you pay for !

http://www.allelectronics.com (surplus stuff, good quality items, low shipping)

4118. Re: Old Part Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-06 14:23:59 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1126016639.602194.199030@g49g2000cwa.googlegroups.com>
Source record: 17251

> I'm restoring a 50s vintage EICO 720 transmitter.
> I'm in need of a 50 k potentiometer rated at 4
> watts (or above) that is NOT wirewound.

I have an Eico 720 and I'm 99% sure that the drive level pot is wirewound in mine.

It's just part of a DC divider that sets the screen voltage on the 6AQ5 driver/multiplier. There's no AC so wirewound should be fine.

Lotsa radios in the 50's/60's and QST construction articles show drivers with wirewound pots on the DC screen divider.

It has to dissipate a good chunk of heat. The way that Eico built this radio there are all sorts of resistors to drop from the HV to B+ for the oscillator/driver, it gets real toasty due to all those dropping resistors.

Last time I looked 50K 5 or 10W pots were available in wirewound, I think Allied or Mouser had the Ohmite units. I don't think you'll find this sort of dissipation available in a ceramic pot. I'd recommend that you go for something more than 4W if you replace it because it does get warm.

Tim.

4119. F.S. AEA PK-232MBX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-06 16:37:48 UTC
From: John W3AYT <w3ayt@arrl.net>
Message-ID: <wBjTe.195058$5N3.65462@bgtnsc05-news.ops.worldnet.att.net>
Source record: 17252
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

forsale AEA pk-232mbx interface. have all manuals, cables and copy of
software. unit not working and I don't have time
to mess with it. asking $50 here in Phila., Pa. will ship if you pay
shipping. John

--
John Haberkern
w3ayt@arrl.net

4120. Re: Old Part Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-06 17:53:03 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1126029183.813308.290310@g47g2000cwa.googlegroups.com>
Source record: 17253

I know that mine, like Tim's was wirewound, and I can remember hassling with a replacement. The wire was very fine and susceptible to breaking.

These days, if I wasn't too concerned with keeping it exactly as EICO designed it, I'd probably use a power mosfet with a small heatsink, as a source-follower driven by a lower-power higher-resistance pot. I'd include a zener from gate to source, and maybe a 10 meg resistor from gate to source (in case the pot wiper opened) and maybe a 1 meg resistor from pot wiper to gate (to limit max pot wiper current). That would provide a fairly "hard" voltage output at the FET source, which could be "softened" by adding a resistor in series. It may be useful to drop something like 220k ohms/1W to ground from the output, if there isn't already a resistive load to ground in the circuit. The parts would likely be easier to find than an appropriate direct-replacement pot, though maybe not.

Cheers,
Tom

4121. Re: beeswax in an oscillator compartment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-06 20:59:57 UTC
From: Andrew Mitz <arm@nih.gov>
Message-ID: <hrnTe.9$r5.155@mencken.net.nih.gov>
Source record: 17254

Beeswax is exceptionally good for protection from an
ionic environment (salt water, human body).

Rick Karlquist N6RK wrote:

> In 1975, I worked for a marine radio company called Konel.
> I worked on their first synthesized radio, which I inherited
> from another designer. The original design had a VCO that
> was quite microphonic. We didn't even bother with beeswax,
> we potted itin Red Glyptol. Even that wasn't good enough
> for two reasons. The speaker was in the same box and the
> sailors would turn it up so you could hear the radio over
> the engine noise. Also, the 10,000 HP engines on tug boats
> produced a lot of vibration which got into the VCO.
> I designed a VCO with an inductor printed on the PC board,
> and that did the trick. A few months later, Konel went
> out of business and few if any radios were produced.
>
> Rick N6RK
>
>
> "Larry Gagnon" <lagagnon@fakeuniserve.com> wrote in message
> news:pan.2004.12.15.21.21.27.858623@fakeuniserve.com...
> > I posted a few days ago about repairing a VHF marine radio.
> > Thankfully I solved my problem, locating three cold solder joints
> > in the VCO, which entailed removing metal shields and all the
> > beeswax that coated all the components. That was character building
> > work!
> >
> > I gather the beeswax is to ensure rigid components to maintain
> > stability of the oscillator? Any other reasons for it? Is it
> > necessary for me to remelt the old wax and spread it around as
> > before, or can I get away with just reshielding the VCO?
> >
> > Any suggestions appreciated.
> >
> > Larry VE7EA
> >
> > --
> > ********************************
> > to reply via email remove "fake"
> > Microsoft will soon release their newest product: a vacuum cleaner.
> > It will be their only product which doesn't suck.
> >

4122. Re: Old Part Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-06 22:31:24 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <5o-dnWBXmvoshYPeRVnytw@pipex.net>
Source record: 17255

> Last time I looked 50K 5 or 10W pots were available in wirewound, I
> think Allied or Mouser had the Ohmite units. I don't think you'll find
> this sort of dissipation available in a ceramic pot. I'd recommend
> that you go for something more than 4W if you replace it because it
> does get warm.
==========
Unless you want to restore this valve equipment as much as possible to its original state ,you could of course adjust the screen voltage with a carbon track potmeter , using a high voltage transistor ,a high voltage zener diode and a few more passive components.

Frank GM0CSZ / KN6WH

4123. FS: Coax Connectors, Adapters, & Bulk Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-07 04:01:51 UTC
From: AAA RF Products <info@aaarfproducts.com>
Message-ID: <QAtTe.11878$ct5.7024@fed1read04>
Source record: 17256
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

Please email sales@aaarfproducts.com for our new catalog or visit
www.aaarfproducts.com

4124. Re: beeswax in an oscillator compartment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-07 05:16:36 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1126070196.869170.150400@g49g2000cwa.googlegroups.com>
Source record: 17257

Andrew Mitz wrote:
> Beeswax is exceptionally good for protection from an
> ionic environment (salt water, human body).
>
>
> Rick Karlquist N6RK wrote:
>
> > In 1975, I worked for a marine radio company called Konel.
> > I worked on their first synthesized radio, which I inherited
> > from another designer. The original design had a VCO that
> > was quite microphonic. We didn't even bother with beeswax,
> > we potted itin Red Glyptol. Even that wasn't good enough
> > for two reasons. The speaker was in the same box and the
> > sailors would turn it up so you could hear the radio over
> > the engine noise. Also, the 10,000 HP engines on tug boats
> > produced a lot of vibration which got into the VCO.
> > I designed a VCO with an inductor printed on the PC board,
> > and that did the trick. A few months later, Konel went
> > out of business and few if any radios were produced.
> >
> > Rick N6RK
> >
> >
> > "Larry Gagnon" <lagagnon@fakeuniserve.com> wrote in message
> > news:pan.2004.12.15.21.21.27.858623@fakeuniserve.com...
> > > I posted a few days ago about repairing a VHF marine radio.
> > > Thankfully I solved my problem, locating three cold solder joints
> > > in the VCO, which entailed removing metal shields and all the
> > > beeswax that coated all the components. That was character building
> > > work!
> > >
> > > I gather the beeswax is to ensure rigid components to maintain
> > > stability of the oscillator? Any other reasons for it? Is it
> > > necessary for me to remelt the old wax and spread it around as
> > > before, or can I get away with just reshielding the VCO?
> > >
> > > Any suggestions appreciated.
> > >
> > > Larry VE7EA
> > >
> > > --
> > > **********
> > > to reply via email remove "fake"
> > > Microsoft will soon release their newest product: a vacuum cleaner.

> > > It will be their only product which doesn't suck.
> > >

Had a Yaesu FT-470R 2m ssb/fm transceiver in recently for repair - VCO was faulty. The module had been encapsulated in expoxy resin, and took AGES to chip out with a fine wood chisel (and lots of swearing). Broke a few components doing it, but could replace them so did. Pig of a job.

I consider this to be the definitive reason why beeswax is a better potting material for VCO's.

What more do you want? - its cheap, readily available, easy to use, recyclable, easy to get out for equipment maintenance, smells ok when melted (better than modern chemicals) - need I say more?

Andrew VK3BFA

4125. Re: beeswax in an oscillator compartment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-07 07:17:38 UTC
From: Alan Peake <adpeake@killspam.internode.on.net>
Message-ID: <431E9412.10505@killspam.internode.on.net>
Source record: 17258

> I consider this to be the definitive reason why beeswax is a better
> potting material for VCO's.
>
> What more do you want? - its cheap, readily available, easy to use,
> recyclable, easy to get out for equipment maintenance, smells ok when
> melted (better than modern chemicals) - need I say more?
>
> Andrew VK3BFA

Andrew, do you know what the thermal conductivity of beeswax is?

Alan

4126. Re: RF-circuit board

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-07 07:38:49 UTC
From: Fero <def4@pobox.sk>
Message-ID: <1126078729.380780.132680@g49g2000cwa.googlegroups.com>
Source record: 17259

Hi Tom,

I have got one more question : could this RF-4 material be used for
frequency up to 2,4 GHz too ? (blue toot)
Namely, Nordic offers chips for this frequency, too.

Thanks a lot.

Fero

4127. Re: beeswax in an oscillator compartment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-07 08:03:46 UTC
From: "B.Binggeli" <hb9fu@bluewin.ch>
Message-ID: <dfm6t2$134$1@news.hispeed.ch>
Source record: 17260

Alan Peake schrieb:
>
>> I consider this to be the definitive reason why beeswax is a better
>> potting material for VCO's.
>>
>> What more do you want? - its cheap, readily available, easy to use,
>> recyclable, easy to get out for equipment maintenance, smells ok when
>> melted (better than modern chemicals) - need I say more?
>>
>> Andrew VK3BFA
>
> Andrew, do you know what the thermal conductivity of beeswax is?
> Alan
>
http://www.fao.org/docrep/w0076e/w0076e12.htm
Bruno

4128. Re: RF-circuit board

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-07 09:40:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11htdciemstjs69@corp.supernews.com>
Source record: 17261

Fero wrote:
> Hi Tom,
>
> I have got one more question : could this RF-4 material be used for
> frequency up to 2,4 GHz too ? (blue toot)
> Namely, Nordic offers chips for this frequency, too.
>
> Thanks a lot.
>
> Fero

I used ordinary FR-4 for a 6 GHz pulsed oscillator in a commercial product, and the last I heard it was working fine in mass production. But it's used only in a dry environment, and doesn't have any high Q networks or filters. If your design can tolerate relatively high loss and a moderate dielectric constant (about 5) that varies with temperature and humidity, FR-4 is fine. If it can't, you should consider Rogers PTFE board products or something similar.

Roy Lewallen, W7EL

4129. Re: Old Part Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-07 11:52:28 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1126093948.914711.19780@o13g2000cwo.googlegroups.com>
Source record: 17262

> Unless you want to restore this valve equipment as
> much as possible to its original state ,you could of
> course adjust the screen voltage with a
> carbon track potmeter , using a high voltage transistor
> ,a high voltage zener diode and a few more
> passive components.

True. This transmitter only has a single HV winding, so all the B+'s for the non-final stage go through big power dropping resistors, and then there's all the screen bias dropping resistors too.

I haven't added it all up, but this transmitter probably dissipates close to 70W when not key-down in dropping resistors just to avoid a second winding on the power transformer. If I were to re-do anything I'd start by adding another power transformer for screen bias and non-final B+'s.

Tim.

4130. Re: beeswax in an oscillator compartment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-07 14:05:05 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1126101905.227799.109980@g14g2000cwa.googlegroups.com>
Source record: 17263

Alan Peake wrote:
> > I consider this to be the definitive reason why beeswax is a better
> > potting material for VCO's.
> >
> > What more do you want? - its cheap, readily available, easy to use,
> > recyclable, easy to get out for equipment maintenance, smells ok when
> > melted (better than modern chemicals) - need I say more?
> >
> > Andrew VK3BFA
> Andrew, do you know what the thermal conductivity of beeswax is?
> Alan

Nope. Is it remotely relevant to this application?

Andrew VK3BFA

4131. Re: beeswax in an oscillator compartment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-07 15:34:45 UTC
From: Yukio YANO <yano@shaw.ca>
Message-ID: <pMDTe.134898$Hk.51177@pd7tw1no>
Source record: 17264

Andrew Mitz wrote:

>>"Larry Gagnon" <lagagnon@fakeuniserve.com> wrote in message
>>news:pan.2004.12.15.21.21.27.858623@fakeuniserve.com...
>>

>>>I gather the beeswax is to ensure rigid components to maintain
>>>stability of the oscillator? Any other reasons for it? Is it
>>>necessary for me to remelt the old wax and spread it around as
>>>before, or can I get away with just reshielding the VCO?
>>>
>>>Any suggestions appreciated.
>>>
>>>Larry VE7EA

> I have repaired a number of Epoxy Potted VCO modules by simply resoldering ALL of the PCB board connections !
The source of the problem is difference in the Coefficient of Expansion between the Epoxy potting compound and the PCB and the solder connections. Close inspection (under a microscope) will show that the joints in question have been fractured by repeated thermal cycling. Hand resoldering, rather than the original Wave-Soldering will produce a much stronger bond between the component leads and the PC board and reduce the problem.

Yukio YANO VE5YS

4132. Re: beeswax in an oscillator compartment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-07 19:49:46 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrndhuh2q.t10.bit-bucket@shell.config.com>
Source record: 17265

On 6 Sep 2005 22:16:36 -0700, Andrew VK3BFA wrote:
> Andrew Mitz wrote:
>> Beeswax is exceptionally good for protection from an
>> ionic environment (salt water, human body).
>>
>> Rick Karlquist N6RK wrote:
>>
>> > In 1975, I worked for a marine radio company called Konel.
>> > I worked on their first synthesized radio, which I inherited
>> > from another designer. The original design had a VCO that
>> > was quite microphonic. We didn't even bother with beeswax,
>> > we potted itin Red Glyptol. Even that wasn't good enough
>> > for two reasons. The speaker was in the same box and the
>> > sailors would turn it up so you could hear the radio over
>> > the engine noise. Also, the 10,000 HP engines on tug boats
>> > produced a lot of vibration which got into the VCO.
>> > I designed a VCO with an inductor printed on the PC board,
>> > and that did the trick. A few months later, Konel went
>> > out of business and few if any radios were produced.
>> >
>> > "Larry Gagnon" <lagagnon@fakeuniserve.com> wrote in message
>> > news:pan.2004.12.15.21.21.27.858623@fakeuniserve.com...
>> > > I posted a few days ago about repairing a VHF marine radio.
>> > > Thankfully I solved my problem, locating three cold solder joints
>> > > in the VCO, which entailed removing metal shields and all the
>> > > beeswax that coated all the components. That was character building
>> > > work!
>> > >
>> > > I gather the beeswax is to ensure rigid components to maintain
>> > > stability of the oscillator? Any other reasons for it? Is it
>> > > necessary for me to remelt the old wax and spread it around as
>> > > before, or can I get away with just reshielding the VCO?
>
> Had a Yaesu FT-470R 2m ssb/fm transceiver in recently for repair - VCO
> was faulty. The module had been encapsulated in expoxy resin, and took
> AGES to chip out with a fine wood chisel (and lots of swearing). Broke
> a few components doing it, but could replace them so did. Pig of a job.
>
> I consider this to be the definitive reason why beeswax is a better
> potting material for VCO's.
>
> What more do you want? - its cheap, readily available, easy to use,
> recyclable, easy to get out for equipment maintenance, smells ok when
> melted (better than modern chemicals) - need I say more?

I always have used paraffin -- way more 'solid' and takes more heat
to melt than 'normal' candle wax.
Maybe I was violating some law...
YMMV
Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
Pueblo, Colorado | @ | Jonesy | OS/2 __
38.24N 104.55W | config.com | DM78rf | SK

4133. Dayton

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-08 07:20:35 UTC
From: gianfranco <gf.XcanaleX@libero.it>
Message-ID: <7DRTe.52945$HM1.1493597@twister1.libero.it>
Source record: 17266

I live in Italy and for some years I visited Dayton hamvention .
Really impressive for me coming from Europe .
Now I would know if there are in the USA other
similar hamfests and some comments from the american collegues .
My wish is to try to visit some other hamfest .
Thanks for your help
Gianfranco

4134. Re: beeswax in an oscillator compartment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-08 07:46:10 UTC
From: Alan Peake <adpeake@killspam.internode.on.net>
Message-ID: <431FEC42.20101@killspam.internode.on.net>
Source record: 17267

>>Andrew, do you know what the thermal conductivity of beeswax is?
>>Alan
>
>
> Nope. Is it remotely relevant to this application?
>
> Andrew VK3BFA

It could be. One problem with temperature compensation is that the various components of an oscillator have differing thermal masses, thermal conductivities and hence thermal time constants. So it helps to have everything thermally connected so all component values change at the same rate.
If beeswax conducts heat well, then potting the oscillator with it would assist temperature stability.
Alan

4135. Re: beeswax in an oscillator compartment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-08 07:48:18 UTC
From: Alan Peake <adpeake@killspam.internode.on.net>
Message-ID: <431FECC2.1040901@killspam.internode.on.net>
Source record: 17268

>> Andrew, do you know what the thermal conductivity of beeswax is?
>> Alan
>>
> http://www.fao.org/docrep/w0076e/w0076e12.htm
> Bruno
Thanks (or is it Danke)
Very informative.
Alan

4136. Re: beeswax in an oscillator compartment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-08 13:01:03 UTC
From: Al <no.spam@wanted.com>
Message-ID: <no.spam-66A197.09010308092005@news.verizon.net>
Source record: 17269

In article <431FEC42.20101@killspam.internode.on.net>,
Alan Peake <adpeake@killspam.internode.on.net> wrote:

> >>Andrew, do you know what the thermal conductivity of beeswax is?
> >>Alan
> >
> >
> > Nope. Is it remotely relevant to this application?
> >
> > Andrew VK3BFA
>
> It could be. One problem with temperature compensation is that the
> various components of an oscillator have differing thermal masses,
> thermal conductivities and hence thermal time constants. So it helps to
> have everything thermally connected so all component values change at
> the same rate.
> If beeswax conducts heat well, then potting the oscillator with it would
> assist temperature stability.
> Alan
>
>

The beeswax also stabilizes the components so they don't vibrate for
whatever reason. Vibrations can induce changes in values for susceptible
components resulting in modulation of the output frequency.

Al

4137. Re: beeswax in an oscillator compartment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-08 13:53:36 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1126187616.055657.221590@o13g2000cwo.googlegroups.com>
Source record: 17270

Yukio YANO wrote:
> Andrew Mitz wrote:
>
> >>"Larry Gagnon" <lagagnon@fakeuniserve.com> wrote in message
> >>news:pan.2004.12.15.21.21.27.858623@fakeuniserve.com...
> >>
>
> >>>I gather the beeswax is to ensure rigid components to maintain
> >>>stability of the oscillator? Any other reasons for it? Is it
> >>>necessary for me to remelt the old wax and spread it around as
> >>>before, or can I get away with just reshielding the VCO?
> >>>
> >>>Any suggestions appreciated.
> >>>
> >>>Larry VE7EA
>
>
> > I have repaired a number of Epoxy Potted VCO modules by simply resoldering ALL of the
PCB board connections !
> The source of the problem is difference in the Coefficient of Expansion
> between the Epoxy potting compound and the PCB and the solder
> connections. Close inspection (under a microscope) will show that the
> joints in question have been fractured by repeated thermal cycling. Hand
> resoldering, rather than the original Wave-Soldering will produce a
> much stronger bond between the component leads and the PC board and
> reduce the problem.
>
> Yukio YANO VE5YS

Thats a good point, Yukio - BUT..... its usually a major job to get to
the bottom of the vco module anyway - (it was in the 480R I did) - to
just resolder, then re-assemble into the board would have been easier,
but it would also have meant another load of massive thermal stress on
everything if it DIDNT work, or failed again. Thats why I did the
chisel out and replace job.

I did manage to establish (by using a steel probe and poking) it was
one of the epoxy potted on board transistors - I wonder if the two
epoxy mixes were pulling and pushing each other apart?

Interesting speculation - I just fix the things based on 20 years of
stuffing around, burning fingers, and cursing pig ignorant engineers
who design radios without thought of serviceability!

And if you have the right iron (a big one) and can solder well, its not really a problem to do - just tedious, but worth it for a long term fix.

Andrew VK3BFA.

4138. Re: RF-circuit board

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-08 15:29:49 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <11i0m7ls0ks7070@corp.supernews.com>
Source record: 17271

1.5mm just happens to be 0.062" (1 / 16 ") which is the industry standard
board thickness.

Jim

"Jim" <kill-spam@no-spam.org> wrote in message
news:MK2dnaNpbowKL4HeRVn-3Q@comcast.com...
> The application note for the NRF905 does specify FR4 board with 1.54mm
> substrate thickness. FR4 is the board material used for almost all
> printed
> circuit boards, so you can use a regular board and just make sure the
> thickness is 1.544mm.

4139. Re: RF-circuit board

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-08 15:30:38 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <11i0m97l541pk86@corp.supernews.com>
Source record: 17272

I used it at 2.3 Gig in a 5 watt transmitter and it worked just fine.

Jim

"Fero" <def4@pobox.sk> wrote in message
news:1126078729.380780.132680@g49g2000cwa.googlegroups.com...
> Hi Tom,
>
> I have got one more question : could this RF-4 material be used for
> frequency up to 2,4 GHz too ? (blue toot)
> Namely, Nordic offers chips for this frequency, too.
>
> Thanks a lot.
>
> Fero
>

4140. Re: beeswax in an oscillator compartment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-08 18:27:11 UTC
From: dplatt@radagast.org
Message-ID: <11i10jv6kak3l46@corp.supernews.com>
Source record: 17273

>>> Andrew, do you know what the thermal conductivity of beeswax is?

>> http://www.fao.org/docrep/w0076e/w0076e12.htm

>Very informative.

http://www.kayelaby.npl.co.uk/general_physics/2_3/2_3_7.html is also
interesting, especially if you follow the link to the polymers page at
http://www.kayelaby.npl.co.uk/chemistry/3_11/3_11_1.html#3_11_1

It looks as if beeswax and paraffin both have thermal conductivities
of about 0.25 (when measured in W / (m K)), and that epoxy cast
resins are in the range of 0.17 - 0.21.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4141. Re: beeswax in an oscillator compartment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-08 18:28:27 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11i10mgeg8mq87b@corp.supernews.com>
Source record: 17274

Alan Peake wrote:
>
> It could be. One problem with temperature compensation is that the
> various components of an oscillator have differing thermal masses,
> thermal conductivities and hence thermal time constants. . .

This is one of several reasons that the best approach in designing an oscillator -- or any other temperature sensitive circuit -- is to use components that each have as small a temperature coefficient as possible. That is, first minimize the inherent drift. Then, if you must, compensate what drift remains.

Roy Lewallen

4142. Help identify tower manufacturer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-09 12:21:46 UTC
From: Paul P <p.pinyotREMOVE@REMOVEworldnet.attREMOVE.netREMOVE>
Message-ID: <u7fUe.214730$5N3.20608@bgtnsc05-news.ops.worldnet.att.net>
Source record: 17275

Gentlemen,

I am attempting to identify the tower manufacture of the tower pictured at: http://www.ppinyot.com/antenna.htm. I would like to properly design a base for it given the manufacturers specs plus perhaps pick up additional sections.

The tower seems to be of a stamped steel design (not tubular) with stamped steel cross members. It has been well maintained by the silent key's son. I gather it is about 10 to 15 years old. There is an unpainted ladder chained to one side for storage. Please do not confuse this as part of the tower.

Also if you happen to recognize the beam please Identify it too.

Unfortunately some one discarded all the paper work not knowing it's value.

Thanks Paul

paul at ppinyot dot com

KB3LZP

4143. Re: Stable Regen Receiver--Does it Exist??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-09 20:32:08 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dfsrg8$4pm$1@engnntp2.cig.mot.com>
Source record: 17276

Way back when... I listened to the SSB gangs on 40M with my Knight Kit Space Spanner, but then, I'm in my own world.
73, Steve, K9DCI

"SpamHog" <n1jpr@hotmail.com> wrote in message news:1125943289.589816.107320@g47g2000cwa.googlegroups.com...
> I assume you are talking about temperature induced drift, as opposed as
> frequency lability due to hand effect, changes in regen setting etc.
>
> I have experienced such stability over time that SSB pitch would stay
> dead on for days (run on and off) in the shortwave range with the radio
> tuned on a volmet station half a continent away. In this instance, I
> was running a 1-tuber with direct heated filament, battery powered, and
> cap-throttle regen control, but the lessons apply in general.
>
> The main tricks in my book are quite simple:
> - keep oscillator power as close to zero as humanly possible
> - keep voltages stable
> - select LARGE components and hookup wires
> - ensure ventilation!
>
> In a word, make sure the oscillator basically runs at ambient
> temperature.
>
>
> If you were referring to frequency lability caused by other factors, I
> have good news in the hand effect department, and mixed news in the
> regen control area.
>
>
> Hand effect can be more or less got rid of by proper shielding or
> decoupling. You can find an interesting discussion here:
> http://tinyurl.com/dr936 .
>
> In a word: keep your body away from ANY capacitance related to the
> oscillating tank circuit - and that mainly refers to the ANTENNA, not
> the variable capacitor or the coil. If there is a sizeable
> antenna-case capacitance, then a change in body-case capacitance
> affects antenna and inevitably the tank circuit too.
>
> So the oscillating tank circuit must be properly decoupled (usually by
> RF amp/buffer stage ahead of the regen detector)
> OR
> it must be well enclosed + the antenna coax fed

> ... or both.
>
> I would like to experiment with cap-decoupling by putting a
> slitted-shield around the tuning coil, and putting a separate antenna
> coil next to it, but never got around to doing so. Even theoretically,
> the idea of such a trick gives me a headache.
>
>
> In the regen control department, the mixed news is that capacitive
> throttling is considered the "best performing" way to go, but can't
> avoid to affect the tuned frequency.
>
> [In theory you could, of course, what with a small co-shafted VC that
> removes capacitance from the main LC as the throttle cap adds it, but
> it must be a pretty complicated law, and I don't know of anyone who
> tried it :)]
>
> You can instead turn to the gain-control way, DC-controlling one of the
> following:
> - second grid voltage in a pentode
> - plate voltage in a triode
> - base voltage in a transistor
> or some such like.
>
> All of the above minimize frequency change especially in tube designs
> (where varicap effects are basically nonexistent), but can suffer from
> annoying hysteresis, in my experience more than cap throttle. Not sure
> where the "high performance" advantage of cap throttle is though...
>
> Another trick I wish I had tried is changing a *stabilized* voltage, as
> opposed to using a simple throttle pot. That could be done with a
> variable regulator IC and might remediate the hysteresis.
>
> Another trick is to use a couple of effects working in opposite
> directions, such as a resistive throttle that adds gain but shunts more
> RF to ground, such as in the Charles Kitchin "Beginner's Radio".
>
> See www2.arrl.org/tis/info/HTML/regen/
> with many derivatives linked in this article of mine:
> http://www.geocities.com/filippo_cattaneo/desert-ratt.html .
>
> I think the same trick may be in use in the MFJ-8100 regen, but I can't
> tell what's trimmer and what's main control pot.
> (hand drawn schematic may be here:
> www.diagram.com.ua/list/mogik.shtml
> sorry Martin!).
>
> So, there's hope.
>

4144. lf to HF preselector design needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-10 02:01:27 UTC
From: TRABEM <>
Message-ID: <9df4i1546l564jt5uc22lp8gva22v9qdgi@4ax.com>
Source record: 17277
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I need an LF to 30 Khz preselector (passive) for a homebrewed receiver I'm building. I have most of the details worked out, but I am stuck on the preselector design.

I want one band to cover 50 Khz to 500 Khz (or 1 Mhz). The second band would be 1 Mhz to 30 Mhz. 50 ohm input with moderate Q (don't want to have to retune it every 100 Khz. The LF unit can be very high Q, peaking it every few Khz is ok as most of the signals in that range are narrowband signals anyway. Input impedance is standard 50 ohms.

I'd REALLY like to have one assembly do the entire job, but it appears to be a tall order as that's quite a wide range to cover with one tuned circuit.

Google returns to many hits even if I narrow down the search parameters, I tried google.

It appears I need to use some sort of permeability tuned variable inductor in conjunction with a variable cap. Have no idea how to go about this or where to buy permeability tuned inductors.

Any suggestions?

T

4145. Re: If to HF preselector design needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-10 09:16:44 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <8k35i11lmh2sdrn8re7g69gh6d3j8mkqo6@4ax.com>
Source record: 17278
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Fri, 09 Sep 2005 22:01:27 -0400, TRABEM <> wrote:

>I need an LF to 30 Khz preselector (passive) for a homebrewed receiver
>I'm building. I have most of the details worked out, but I am stuck on
>the preselector design.
>
>I want one band to cover 50 Khz to 500 Khz (or 1 Mhz).

That would be 1:10 (or 1:20) frequency range.

>The second band would be 1 Mhz to 30 Mhz.

That would be 1:30 frequency range and would require a 1:900 reactance range, if only one element (inductance or capacitance) is tuned, which would be completely unrealistic. The alternative would be to tune both the inductance _and_ capacitance in the 1:30 range. However, with a 300 pF variable capacitor, the minimum capacitor would be 10 pF _including_ all stray capacitances, not very realistic. I have no idea what a realistic tuning range would be for a permeability tuned inductor. I have only seen those in FM receivers (87..108 MHz), which only about 20 % tuning range.

>50 ohm input with moderate Q (don't want to
>have to retune it every 100 Khz. The LF unit can be very high Q,
>peaking it every few Khz is ok as most of the signals in that range
>are narrowband signals anyway. Input impedance is standard 50 ohms.

Maintaining the constant impedance if both inductance and capacitance is tuned would be a challenge.

While maintaining the power match makes some sense in HF receivers (and also if you are using some small magnetic loops on LF/MF), but otherwise, I would question the idea to maintain the 50 ohm resistive input impedance on LF (and possibly also MF).

On LF, any practical random wire antenna would have a high capacitive reactance. On LF I have simply used a parallel tuned circuit and connected the antenna to the hot end of the circuit with a small (10-100 pF) capacitor. Of course, the tuning scale will not be accurate if you change the antenna, since the antenna stray capacitances will detune the resonant circuit. Use a secondary winding or a source/emitter follower to get the impedance down to feed a 50 ohm receiver input or feed a coaxial cable (if the preselector is just under the antenna).

If you intend to use magnetic loop antennas on LF/MF, which have a low efficiency, I would suggest using a (remotely)tunable loop as the preselector, with possibly a preamplifier at the antenna.

I would strongly suggest splitting the HF bands and switching in various inductors for various bands and use an ordinary variable capacitor.

The situation is quite problematic on LF, since you would need a variable capacitor with a tuning range int several nF to keep the resonant circuit impedances at manageable levels (otherwise, it would be quite "touchy" due to stray capacitances). With practical variable capacitors, you would have to add parallel padding capacitors, with would further reduce the tuning range.

Permeability tuning might be an option. You could try making a coil and slide a ferrite bar (from a medium wave antenna) into it, however, I have no experience with this.

Paul OH3LWR

4146. Re: The FAQ....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-10 13:23:04 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1126358584.224925.205250@g49g2000cwa.googlegroups.com>
Source record: 17279
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Oops - forgot to cross-post to our friends in Yankland.....

11 years of posting under Outlook Express and similar
packages (Turnpike, DIS) mean dissimilar habits!

Polymath wrote:
> What is Ham Radio?
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.
>
> Ham Radio awakens in its aficionados a whole-life
> fascination with all things technical and gives
> an all-abiding curiosity to improve one's scientific
> knowledge. It's a great swimming pool, please dive in!
>
> This excitement causes a wish to share the experience
> with ones fellow man, and shows itself in the
> gentlemanly traditions of Ham Radio.
>
> Radio Hams are in a unique privileged position in that
> they can construct and operate their own equipment! No-one
> else has this privilege. Users, such as broadcasters,
> the po lice and armed farces, CBers and mobile phone
> users have to purchase ready-made gear. Manufacturers
> are not licensed to operate their gear. Radio Hams
> are qualified to design, build and then
> operate their own pieces of equipment. They do this
> with gusto, and also repair and modify their own
> equipment. This is a privilege well worth the effort
> to gain, and one to be jealously guarded.
>
> The excitement that drives a Radio Ham starts with
> relatively simple technologies at first, perhaps making
> his own Wimshurst machine and primary cells. Small pieces
> of test equipment follow, possibly multimeters and signal
> generators. Then comes receivers and transmitters. It is with
> the latter that communication with like-minded technically
> motivated people takes off. The scope for technical
> development grows with the years

> and now encompasses DSP and DDS. There is also a great deal
> of excitement in the areas of computer programming to
> be learnt and applied.
>
> The technical excitement motivates Radio Hams to compete
> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.
>
> -----OOOOO----
>
> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large
> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
> repaired; they are not interested in technical discussion
> and sneer at those who are; they have no idea how
> their radios work inside and have no wish to find out;
> they are free with rather silly personal insults;
> they have not satisfied any technical qualification
> and their licences prevent the use of
> self-designed-and-built equipment.
>
> These CB types engage in the competitive activities
> with their Cheque-Book-purchased off-the-shelf radios
> in a forlorn effort to prove that they are Radio Hams.
>
> No _REAL_ Radio Hams are deceived by such people!

4147. Re: If to HF preselector design needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-10 13:25:39 UTC
From: Bob Bob <bob3bob3@cox.net>
Message-ID: <kf3bv2-f8s.ln1@p400bob.personal.cox.net>
Source record: 17280
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I realise that you are after a passive solution but I wonder if an
op-amp or two in a Q multiplier configuration *for the first band) might
be a better idea? You could then tune the feedback/gain of the device
with a R/C combination rather than large values of L. You could of
course set the gain to 1 if you wanted.

Just an idle thought.

Cheers Bob W5/VK2YQA

TRABEM wrote:
>
> I need an LF to 30 Khz preselector (passive) for a homebrewed receiver
> I'm building. I have most of the details worked out, but I am stuck on
> the preselector design.
>

4148. Re: The FAQ....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-10 14:21:44 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <QdCdnY8ioKtrdr_eRVn-rA@giganews.com>
Source record: 17281
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Polymath wrote:
> Oops - forgot to cross-post to our friends in Yankland.....
>
> 11 years of posting under Outlook Express and similar
> packages (Turnpike, DIS) mean dissimilar habits!

Turnpike and Demon Internet... even then you were bonkers... what was your Demon account name? Oh yes, cemetery.demon.co.uk

What a bizarre choice! Why did you choose this?
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

4149. Re: The FAQ....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-10 14:53:44 UTC
From: zzzpk_pkearn_class_a@its-as-easy-as-they-say-multi_band_cb_is_here.eircom.es.it.net
Message-ID: <4322f335.8873303@news.iol.ie>
Source record: 17282
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"huLLy" <thisainthamradio@aol.com> wrote:

: Polymath wrote:
: > Oops - forgot to cross-post to our friends in Yankland.....
: >
: > 11 years of posting under Outlook Express and similar
: > packages (Turnpike, DIS) mean dissimilar habits!
:
: Turnpike and Demon Internet... even then you were bonkers... what was your
: Demon account name? Oh yes, cemetery.demon.co.uk
:
: What a bizarre choice! Why did you choose this?

so nice of you to change your posting name to something else other than
that of anothers registered callsign.

its a pity you dont have the courage to put your own callsign in, in the
same way that you could abuse anothers callsign.

4150. Re: The FAQ....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-10 15:16:49 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1126365409.100410.255070@g44g2000cwa.googlegroups.com>
Source record: 17283
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

I wonder why I get the impression that
THE INCURABLE CBER is obsessed with me to
a degree that borders on mental derangement?

There's a simpler way for him to deal with
his own deep-seated inadequacy, and that is to
tackle and then pass a 12 WPM Morse Test, and
then to go on and build his own TX!

That way he won't have to keep sucking up to me.

ZZZZPK wrote:
> "huLLy" <thisainthamradio@aol.com> wrote:
>
> : Polymath wrote:
> : > Oops - forgot to cross-post to our friends in Yankland.....
> : >
> : > 11 years of posting under Outlook Express and similar
> : > packages (Turnpike, DIS) mean dissimilar habits!
> :
> : Turnpike and Demon Internet... even then you were bonkers... what was your
> : Demon account name? Oh yes, cemetery.demon.co.uk
> :
> : What a bizarre choice! Why did you choose this?
>
> so nice of you to change your posting name to something else other than
> that of anothers registered callsign.
>
> its a pity you dont have the courage to put your own callsign in, in the
> same way that you could abuse anothers callsign.

4151. Re: The FAQ....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-10 15:18:17 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1126365497.883163.81870@g14g2000cwa.googlegroups.com>
Source record: 17284
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Perhaps THE INCURABLE CBER and MRS.NUGATORY
are one and the same!

Polymath wrote:
> I wonder why I get the impression that
> THE INCURABLE CBER is obsessed with me to
> a degree that borders on mental derangement?

4152. Re: The FAQ....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-10 15:18:34 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <Q7mdneHUWrHWZL_eRVn-tA@giganews.com>
Source record: 17285
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Polymath wrote:

> That way he won't have to keep sucking up to me.
>

You'd like that, wouldn't you?
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

4153. Re: If to HF preselector design needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-10 15:33:57 UTC
From: TRABEM <>
Message-ID: <8mu5i1tmjbj7ukge3ukij7pks785mp222r@4ax.com>
Source record: 17286
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Thanks Paul,

My old Drake C line had a multiple ganged permeability tuned inductor mechanically coupled to a variable cap.

One of the assemblies tuned the front end, one peaked the driver stage, etc.

It covered from 1 Mhz to 30 Mhz with a half turn on the front panel preselector control. Most likely the variable C and L tuned together maintained a desirable Q across all the bands.

I was hoping for something similar, but have no idea where to get permeability tuned inductors today.

Regards,

T

On Sat, 10 Sep 2005 12:16:44 +0300, Paul Keinanen <keinanen@sci.fi> wrote:

>On Fri, 09 Sep 2005 22:01:27 -0400, TRABEM <> wrote:
>
>>I need an LF to 30 Khz preselector (passive) for a homebrewed receiver
>>I'm building. I have most of the details worked out, but I am stuck on
>>the preselector design.
>>
>>I want one band to cover 50 Khz to 500 Khz (or 1 Mhz).
>
>That would be 1:10 (or 1:20) frequency range.
>
>>The second band would be 1 Mhz to 30 Mhz.
>
>That would be 1:30 frequency range and would require a 1:900 reactance
>range, if only one element (inductance or capacitance) is tuned, which
>would be completely unrealistic. The alternative would be to tune both
>the inductance _and_ capacitance in the 1:30 range. However, with a
>300 pF variable capacitor, the minimum capacitor would be 10 pF
>_including_ all stray capacitances, not very realistic. I have no idea
>what a realistic tuning range would be for a permeability tuned
>inductor. I have only seen those in FM receivers (87..108 MHz), which
>only about 20 % tuning range.
>
>>50 ohm input with moderate Q (don't want to
>>have to retune it every 100 Khz. The LF unit can be very high Q,

>>peaking it every few Khz is ok as most of the signals in that range
>>are narrowband signals anyway. Input impedance is standard 50 ohms.
>
>Maintaining the constant impedance if both inductance and capacitance
>is tuned would be a challenge.
>
>While maintaining the power match makes some sense in HF receivers
>(and also if you are using some small magnetic loops on LF/MF), but
>otherwise, I would question the idea to maintain the 50 ohm resistive
>input impedance on LF (and possibly also MF).
>
>On LF, any practical random wire antenna would have a high capacitive
>reactance. On LF I have simply used a parallel tuned circuit and
>connected the antenna to the hot end of the circuit with a small
>(10-100 pF) capacitor. Of course, the tuning scale will not be
>accurate if you change the antenna, since the antenna stray
>capacitances will detune the resonant circuit. Use a secondary winding
>or a source/emitter follower to get the impedance down to feed a 50
>ohm receiver input or feed a coaxial cable (if the preselector is just
>under the antenna).
>
>If you intend to use magnetic loop antennas on LF/MF, which have a low
>efficiency, I would suggest using a (remotely)tunable loop as the
>preselector, with possibly a preamplifier at the antenna.
>
>I would strongly suggest splitting the HF bands and switching in
>various inductors for various bands and use an ordinary variable
>capacitor.
>
>The situation is quite problematic on LF, since you would need a
>variable capacitor with a tuning range int several nF to keep the
>resonant circuit impedances at manageable levels (otherwise, it would
>be quite "touchy" due to stray capacitances). With practical variable
>capacitors, you would have to add parallel padding capacitors, with
>would further reduce the tuning range.
>
>Permeability tuning might be an option. You could try making a coil
>and slide a ferrite bar (from a medium wave antenna) into it, however,
>I have no experience with this.
>
>Paul OH3LWR

4154. Re: The FAQ....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-10 15:51:36 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1126367496.559600.256600@g14g2000cwa.googlegroups.com>
Source record: 17287
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Polymath wrote:
> I wonder why I get the impression that
> THE INCURABLE CBER is obsessed with me to
> a degree that borders on mental derangement?
>
> There's a simpler way for him to deal with
> his own deep-seated inadequacy, and that is to
> tackle and then pass a 12 WPM Morse Test, and
> then to go on and build his own TX!

gee how would help anybody? the tranmitter might

4155. Re: The FAQ....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-10 16:52:11 UTC
From: Steve H <g0lmv@yahoo.co.uk>
Message-ID: <43230f3a$1_1@mk-nntp-2.news.uk.tiscali.com>
Source record: 17288
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1126365409.100410.255070@g44g2000cwa.googlegroups.com...
> There's a simpler way for him to deal with
> his own deep-seated inadequacy, and that is to
> tackle and then pass a 12 WPM Morse Test, and
> then to go on and build his own TX!
>
Gareth, after 10 years of slow learning you passed the Morse test, rumour
has it you once even built a "oner". You suffer from social inadequacy
almost as much as we suffer from your social inadequacy.

Steve H

4156. Re: Help identify tower manufacturer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-10 22:07:59 UTC
From: Rick Frazier <rickf@rickfrazier.com>
Message-ID: <43235959.ADC22795@rickfrazier.com>
Source record: 17289

Paul:

It looks a lot like the one I have (except mine is still in the standard galvanized steel, not painted red).
Mine is a Rohn HBX, though what is there could be a BX, depending upon the sections used at the top.
It was generally available up to 64' in the BX version, and 56' in the HBX version. The big difference is the top section is smaller on the BX version. Each section is 8 feet tall, and the standard footing

http://www.antennasystems.com/towers.html#BXTOWER

has some information about the tower. I have a printed copy of the manual somewhere, but it would take months to find it, as I'm in the process of building a new QTH.. I had also found a copy on the internet somewhere, but it was lost during a hard disk crash, but I imagine you could search for the manual given the model number.

The base in the pictures is a tilt-over mount for the tower. I used the standard (non tilting) mount, and it served me well with a large Cushcraft X-9 beam on it, plus a 2 meter 11 element beam above that, and several wire antennas off in odd directions. It will be going back up at the new QTH. It is the 48 foot HBX version.

Because it is in 8 foot sections, you can take it down or put it up a section at a time, but having done that, I find that it's much much easier, faster and safer to just have a boom truck come out, attach a sling to the top, then disconnect at the bottom and let the boom truck operator just lay it down. Works like a champ, is quick and easy. Needless to say, it's going back up using a boom truck, as I'm not into climbing a tower a dozen times a day any more. Once is quite enough, thank you. I can get the tower up and beam on it with a single climb (sling on top of the tower, boom truck lift into place, climb tower, disconnect sling, boom truck operator connects hook to the antenna, brings it up to me, and I bolt it in place). Connect the coax already in place before the tower went up and viola!, tower up with beam in about an hour. Lots of prep beforehand, but all on the ground where I can take breaks and enjoy a beer or two during assembly.

Good Luck, Be safe!
Rick AH7H

Paul P wrote:

> Gentlemen,
>
> I am attempting to identify the tower manufacture of the tower pictured at:
> http://www.ppinyot.com/antenna.htm. I would like to properly design a

> base for it given the manufacturers specs plus perhaps pick up additional
> sections.
>
> The tower seems to be of a stamped steel design (not tubular) with stamped
> steel cross members. It has been well maintained by the silent key's son.
> I gather it is about 10 to 15 years old. There is an unpainted ladder
> chained to one side for storage. Please do not confuse this as part of the
> tower.
>
> Also if you happen to recognize the beam please Identify it too.
>
> Unfortunately some one discarded all the paper work not knowing it's value.
>
> Thanks Paul
>
> paul at ppinyot dot com
>
> KB3LZP

4157. Re: If to HF preselector design needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-10 23:58:21 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <432372A7.100DD50A@earthlink.net>
Source record: 17290
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

TRABEM wrote:
>
> Thanks Paul,
>
> My old Drake C line had a multiple ganged permeability tuned inductor
> mechanically coupled to a variable cap.
>
> One of the assemblies tuned the front end, one peaked the driver
> stage, etc.
>
> It covered from 1 Mhz to 30 Mhz with a half turn on the front panel
> preselector control. Most likely the variable C and L tuned together
> maintained a desirable Q across all the bands.
>
> I was hoping for something similar, but have no idea where to get
> permeability tuned inductors today.
>
> Regards,
>
> T

Fair Radio used to have some in their catalog, and they were used in
all of the old Delco (and some other brands) car radios of the '60s and
'70s.

--
?

Michael A. Terrell
Central Florida

4158. Re: If to HF preselector design needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-11 01:13:12 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11i715a1qscrc36@corp.supernews.com>
Source record: 17291
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Michael A. Terrell wrote:
>
> Fair Radio used to have some in their catalog, and they were used in
> all of the old Delco (and some other brands) car radios of the '60s and
> '70s.

Just about all the radios I've seen with mechanical pushbuttons for station presets used permeability tuned inductors -- the pushbuttons each just positioned a ferrite core to a preset depth in a coil. It wouldn't be difficult to construct one, unless you're mechanically declined like I am.

Roy Lewallen, W7EL

4159. Re: If to HF preselector design needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-11 02:35:54 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <dg056a$c02$1@theodyn.ncf.ca>
Source record: 17292

"Michael A. Terrell" (mike.terrell@earthlink.net) writes:
> TRABEM wrote:
>>
>> Thanks Paul,
>>
>> My old Drake C line had a multiple ganged permeability tuned inductor
>> mechanically coupled to a variable cap.
>>
>> One of the assemblies tuned the front end, one peaked the driver
>> stage, etc.
>>
>> It covered from 1 Mhz to 30 Mhz with a half turn on the front panel
>> preselector control. Most likely the variable C and L tuned together
>> maintained a desirable Q across all the bands.
>>
>> I was hoping for something similar, but have no idea where to get
>> permeability tuned inductors today.
>>
>> Regards,
>>
>> T
>
>
> Fair Radio used to have some in their catalog, and they were used in
> all of the old Delco (and some other brands) car radios of the '60s and
> '70s.
>
I thought it was the norm for car radios to be permeability tuned, right
up to the time synthesizers came along. No manually tuned car radio
that I've looked at had a variable capacitor, with the exception of
a relatively recent one that had a frequency counter for the readout.

Car radios would be the best source of the mechanics, at least for
front end tuning and not oscillator use. Of course, the issue isn't
changing the permeability of a coil, that's easy with a tuning slug,
but making it easy to do that from a front panel control, ie the knob
doesn't move in and out. The pre-synthesized car radios would proved
the mechanism. But you did see the occasional article in the old
days about making up such a mechanism, though those tended to be
for oscillators where there was more fuss because they wanted/hoped
for linear tuning.

Michael VE2BVW

4160. Re: If to HF preselector design needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-11 04:32:22 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4323B2B0.BD9CE4F8@earthlink.net>
Source record: 17293

Michael Black wrote:
>
> I thought it was the norm for car radios to be permeability tuned, right
> up to the time synthesizers came along. No manually tuned car radio
> that I've looked at had a variable capacitor, with the exception of
> a relatively recent one that had a frequency counter for the readout.
>
> Car radios would be the best source of the mechanics, at least for
> front end tuning and not oscillator use. Of course, the issue isn't
> changing the permeability of a coil, that's easy with a tuning slug,
> but making it easy to do that from a front panel control, ie the knob
> doesn't move in and out. The pre-synthesized car radios would proved
> the mechanism. But you did see the occasional article in the old
> days about making up such a mechanism, though those tended to be
> for oscillators where there was more fuss because they wanted/hoped
> for linear tuning.
>
> Michael VE2BVW

Some of the cheap imported car radios used the same plastic cased
variable capacitor with mylar film between the plates that were used in
a six transistor pocket radio. They didn't have a tuned front end and
amp like the US made car radios. They were ok if you only wanted to
listen to a local station but they were very poor quality radios.

I think I would use a variable capacitor and electronically switch
the inductor for different ranges, like the broadband L-C Based VCO in
the telemetry receivers I worked on. Diodes were used to short segments
of the inductor, at the grounded end and the band segment was controlled
by simple logic. Bias on hard to short a tap to ground, and reverse
bias it to prevent it from clipping the RF when its off. They used
discrete +/- 12 or 15 volt switching , but a decent buffer amp would
work and could be driven by CMOS or TTL compatible logic. If the
receiver has any switched DC signals to show which band its on, you
could make it change bands without touching it. You could even sample
the L.O. with a counter circuit and use the output to control the
tuning. If you want to g to extremes, you could add a microprocessor
with lookup tables to drive a stepper motor that can adjust the variable
capacitor(s) for you as you tune the radio.

--
?

Michael A. Terrell
Central Florida

4161. Re: If to HF preselector design needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-11 04:38:48 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4323B431.1A170211@earthlink.net>
Source record: 17294
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Roy Lewallen wrote:
>
> Michael A. Terrell wrote:
> >
> > Fair Radio used to have some in their catalog, and they were used in
> > all of the old Delco (and some other brands) car radios of the '60s and
> > '70s.
>
> Just about all the radios I've seen with mechanical pushbuttons for
> station presets used permeability tuned inductors

All of the american made radios were, but some cheap imports weren't.

> -- the pushbuttons
> each just positioned a ferrite core to a preset depth in a coil. It
> wouldn't be difficult to construct one, unless you're mechanically
> declined like I am.
>
> Roy Lewallen, W7EL

I once told one of the Vice president of marketing at United Video
Cablevision that he was mechanically declined and my boss freaked out.
;-) The VP yelled at him and told him to shut up because it was true,
and he was happy that whenever he had to launch a new channel in the
Cincinnati system that everything was set up and ready for him when he
arrived.

Of course, you could make them as individually tuned coils with a
stepper motor or servo per coil.

--
?

Michael A. Terrell
Central Florida

4162. Re: phase angle and impedance of resonant circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-11 05:17:14 UTC
From: eternalsquire@comcast.net
Message-ID: <1126415834.424360.81740@g44g2000cwa.googlegroups.com>
Source record: 17295

I GOT IT! I GOT IT! I GOT IT!

Thanks for all your help! I just wrote the exam with a 92% pass.

The Eternal Squire

4163. Re: If to HF preselector design needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-11 15:21:01 UTC
From: TRABEM <>
Message-ID: <8hi8i1h4ihs2sba4jaig5lslt25ck70u0g@4ax.com>
Source record: 17296
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Thanks to all that commented. Although I don't have an answer, the content of the discussion was helpful.

I'm not exactly fond of electronic switching, but it's probably adequate since atmospheric noise dominates in the vlf and lf range anyway.

I'm trying to understand the butterworth filter now, with the hope of designing a bandpass filter over a wide range of frequencies rather than a variable unit.

Regards,

T

4164. Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-11 16:09:16 UTC
From: TRABEM <>
Message-ID: <euj8i1po8dsokkeedfc4ofouqtsh97mihe@4ax.com>
Source record: 17297

I am trying to scale an existing front end receiver (butterworth bandpass) filter to a different frequency range. Unfortunately, it has a transformer in the original design, so I'm stuck. I also don't know how to handle the load presented by the active front end component other than it's probably not significantly reactive.

The existing filter is for a 7 Mhz receiver, I'd like to have a similar filter design for 50 to 200 Khz.

The filter components and transformer winding details are in the document at:

http://www.amqrp.org/kits/softrock40/SoftRock40%20Assy%20v1.pdf

The input chip is an FST3126, spec sheet is at:

http://www.fairchildsemi.com/ds/FS/FST3126.pdf

The spec for the T30-2 transformer core is at:

http://partsandkits.com/T30-2.htm

I have aade filter design software, but it isn't allowing me to plug in the transformer into the design page of the software....so, I need to know it's equivalent circuit I think.

The transformer winding details are on page 4 of the document and the schematic of the front end is page 9. Ultimately, I need new values for L1, L2, C20, C21 and C22.

If someone can give me a reasonable guess as to the equivalent circuit of the transformer and the IC (U5), I can do the rest of the job myself using the aade filter software.

Thanks,

T

4165. Re: phase angle and impedance of resonant circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-11 19:30:13 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <dg20k5mpi1@puck.litech.org>
Source record: 17148

eternalsquire@comcast.net wrote:
> I GOT IT! I GOT IT! I GOT IT!

> Thanks for all your help! I just wrote the exam with a 92% pass.

> The Eternal Squire

Way cool! See you on HF, if this storm will ever go away.

Now go for your white belt -- if we're in the same organization.

--
Mike Andrews / Michael Fenwick Barony of Namron, Ansteorra
mikea@mikea.ath.cx / Amateur Extra radio operator W5EGO
Tired old music Laurel; webBastard; SCAdian since AS XI

4166. Amphenol Microphone Connectors (Heathkit, etc.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-11 19:34:43 UTC
From: hhc314@yahoo.com
Message-ID: <1126467283.868773.248440@g47g2000cwa.googlegroups.com>
Source record: 17149

I'm selling my excess of new Amphenol microphone connectors on eBay. I had to purchase a box of 25, but I only need 3, so I'm selling the balance.

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5808187910&rd=1&sspagename=STRK%3AMESE%3AIT&rd=1

Those of you who would be interested in these items know what they are and how difficult to find today.

Harry C.

4167. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-11 19:41:21 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1d8e282c807f8e939896e9@news-central.giganews.com>
Source record: 17150

In article <euj8i1po8dsokkeedfc4ofouqtsh97mihe@4ax.com>, TRABEM <>
says...
> If someone can give me a reasonable guess as to the equivalent circuit
> of the transformer and the IC (U5), I can do the rest of the job
> myself using the aade filter software.
>
> Thanks,
>
> T
>

You might try FilDes:
ftp://ftp.lehigh.edu/pub/listserv/qrp-l/tools/fds201.zip

It will let you specify different source and load impedances for the
filter being designed, so you can probably get away without the
transformer altogether. The AADE software has a nicer interface but
I've always liked the functionality in FilDes better.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

4168. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-11 20:56:34 UTC
From: Spam_Bin@NO_SPAM.wyenot.servebeer.com
Message-ID: <uv29i11oksvuj2upsbivdbh68ahvm492cc@4ax.com>
Source record: 17151

It looks like the filter is designed for 50 ohms in and out. The transformer inductance is also a part of the filter. It's value should be about the same as L1 so to use it at 50k to 200K, you'll need to rewind for a lot more turns on the primary and both secondaries if you keep the same core material.

Scaling it all and then optimizing for Coil Q of 40 and regular cap and coil values, I get new values like:

L1 680nH -> 100uH
C1 470pF -> .022uF
C21 180pF -> .027uF
L2 1.8uH -> 100uH
C22 470pF -> .022uF
T1 680nH (13:6:6 Turns) -> 100uH (1911:882:882 Turns)

I strongly recommend changing T1 to a much higher mU core material.

This should result in -3dB points at 50 and 200 kHz, flat pass-band and -30dB at 20 and 500 kHz.

Good luck finding a 50 Ohm antenna at these frequncies. An active antenna may be the way to go, otherwise you'll need many acres for all the wire.

On Sun, 11 Sep 2005 12:09:16 -0400, TRABEM <> wrote:

>I am trying to scale an existing front end receiver (butterworth
>bandpass) filter to a different frequency range. Unfortunately, it has
>a transformer in the original design, so I'm stuck. I also don't know
>how to handle the load presented by the active front end component
>other than it's probably not significantly reactive.
>
>The existing filter is for a 7 Mhz receiver, I'd like to have a
>similar filter design for 50 to 200 Khz.
>
>The filter components and transformer winding details are in the
>document at:
>
>http://www.amqrp.org/kits/softrock40/SoftRock40%20Assy%20v1.pdf
>
>The input chip is an FST3126, spec sheet is at:
>
>http://www.fairchildsemi.com/ds/FS/FST3126.pdf
>
>The spec for the T30-2 transformer core is at:
>
>http://partsandkits.com/T30-2.htm

>
>I have aade filter design software, but it isn't allowing me to plug
>in the transformer into the design page of the software....so, I need
>to know it's equivalent circuit I think.
>
>The transformer winding details are on page 4 of the document and the
>schematic of the front end is page 9. Ultimately, I need new values
>for L1, L2, C20, C21 and C22.
>
>If someone can give me a reasonable guess as to the equivalent circuit
>of the transformer and the IC (U5), I can do the rest of the job
>myself using the aade filter software.
>
>Thanks,
>
>T

4169. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-11 22:43:36 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <6vKdnb33bpFiL7neRVnysw@pipex.net>
Source record: 17152

>I am trying to scale an existing front end receiver (butterworth
> bandpass) filter to a different frequency range. Unfortunately, it has
> a transformer in the original design, so I'm stuck. I also don't know
> how to handle the load presented by the active front end component
> other than it's probably not significantly reactive.
>
> The existing filter is for a 7 Mhz receiver, I'd like to have a
> similar filter design for 50 to 200 Khz.
==========
If you are happy with the HF receiver as is, would it not be easier and more effective to build an LF (50 - 200 kHz) to HF converter. This should be an easy project and you can select a quiet "HF band" for the conversion.

I have seen designs with a SBL-1 mixer but also a number with the NE612 osc/mixer. Perhaps others frequenting this NG have built such a converter.

Frank GM&#65533;CSZ / KN6WH

4170. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-12 01:33:18 UTC
From: TRABEM <>
Message-ID: <88l9i1l4ag6eliqqbo4rp83lbi0l6evqtg@4ax.com>
Source record: 17153

On Sun, 11 Sep 2005 20:56:34 GMT,
Spam_Bin@NO_SPAM.wyenot.servebeer.com wrote:

>It looks like the filter is designed for 50 ohms in and out. The transformer
>inductance is also a part of the filter. It's value should be about the same as
>L1 so to use it at 50k to 200K, you'll need to rewind for a lot more turns on
>the primary and both secondaries if you keep the same core material.
>
>Scaling it all and then optimizing for Coil Q of 40 and regular cap and coil
>values, I get new values like:
>
>L1 680nH -> 100uH
>C1 470pF -> .022uF
>C21 180pF -> .027uF
>L2 1.8uH -> 100uH
>C22 470pF -> .022uF
>T1 680nH (13:6:6 Turns) -> 100uH (1911:882:882 Turns)
>
>I strongly recommend changing T1 to a much higher mU core material.
>
>This should result in -3dB points at 50 and 200 kHz, flat pass-band and -30dB at
>20 and 500 kHz.
>
>

OK, thank you very much.

I checked the amidon website, higher mu toroids are available but
looks like they're a little more expensive.

If I want to simulate the filter myself, can I just ignore the series
10 ohm resistors in each side of the transformer secondary? Do the 5
ohm ac series resistance of the switch and the .1 uf capacitor on the
far side of the switch enter into the calculations at all????

I was thinking all those R's and C's get reflected back through the
transformer and should impact the filter values.

If I can ignore the R's and C's on the secondary side of the
transformer, can I simply pretend the primary is a coil with a 50 ohm
shunt (to represent the output impedance)??

When the series 10 ohm resistor, the 5 ohm series ac resistance of the
switch and the .01 cap to ground on the output side of the switch is
factored in, does the output impedance still look like 50 ohms?

>Good luck finding a 50 Ohm antenna at these frequncies. An active antenna may be
>the way to go, otherwise you'll need many acres for all the wire.
>
>

Yep, we can do it. Got 40 acres. But, wasn't planning on using that
many acres:>: My plan was to use a single turn loop, 10 to 15 feet on
each side and step up the impedance with a toroid at the antenna. The
wire is 200 A service entrance insulated aluminum, so it should have a
decent Q if I use some polystyrene caps to resonate it.

>

Regards,

T

>On Sun, 11 Sep 2005 12:09:16 -0400, TRABEM <> wrote:
>
>>I am trying to scale an existing front end receiver (butterworth
>>bandpass) filter to a different frequency range. Unfortunately, it has
>>a transformer in the original design, so I'm stuck. I also don't know
>>how to handle the load presented by the active front end component
>>other than it's probably not significantly reactive.
>>
>>The existing filter is for a 7 Mhz receiver, I'd like to have a
>>similar filter design for 50 to 200 Khz.
>>
>>The filter components and transformer winding details are in the
>>document at:
>>
>>http://www.amqrp.org/kits/softrock40/SoftRock40%20Assy%20v1.pdf
>>
>>The input chip is an FST3126, spec sheet is at:
>>
>>http://www.fairchildsemi.com/ds/FS/FST3126.pdf
>>
>>The spec for the T30-2 transformer core is at:
>>
>>http://partsandkits.com/T30-2.htm
>>
>>I have aade filter design software, but it isn't allowing me to plug
>>in the transformer into the design page of the software....so, I need
>>to know it's equivalent circuit I think.
>>
>>The transformer winding details are on page 4 of the document and the
>>schematic of the front end is page 9. Ultimately, I need new values
>>for L1, L2, C20, C21 and C22.
>>
>>If someone can give me a reasonable guess as to the equivalent circuit
>>of the transformer and the IC (U5), I can do the rest of the job
>>myself using the aade filter software.
>>

>>Thanks,
>>
>>T

4171. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-12 02:07:42 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <6mo9i1tj2uav1tlca9b7imjkbeio89k1me@4ax.com>
Source record: 17154

Hi,

Hi,

>I am trying to scale an existing front end receiver (butterworth
>bandpass) filter to a different frequency range. Unfortunately, it has
>a transformer in the original design, so I'm stuck. I also don't know
>how to handle the load presented by the active front end component
>other than it's probably not significantly reactive.
>
>The existing filter is for a 7 Mhz receiver, I'd like to have a
>similar filter design for 50 to 200 Khz.

Notice that the primary to secondary (total) turns ratio is
almost 1:1, that both shunt capacitors in the band-pass filter are
of the same value and that the path resistance on either side of
the secondary, through the FST3126M to the low-pass filters is
around 20-ohms. So what you are looking at (to a crude
approximation) is a design impedance of 50-ohm all the way
through.

As for the toroid, for optimum Q you might want to look for a
mix more suitable for the frequency range you quoted (maybe 15?)
and increase the diameter to take the extra wire as you will need
to scale the impedances for use at 50kHz. The FT series, I think,
need less turns for the same inductance and so should be easier to
wind.

Finally, a simple low-pass filter would probably be all you
need here as the transformer primary impedance will be a limit the
low end. Filter response is dependant on source as well as load
impedance and most antennas that you would use at those
frequencies will be quite reactive and difficult to design a fixed
input network for. You may be aware that a lot of HF receivers use
a separate hi-Z antenna terminal for LF/MF.

Having said that, if you do want to use a simple low-pass
configuration, remember that a symmetrical 'Pi' filter with source
and load impedances of 1-ohm and a cut-off of 1-rad/sec would use
two 1-Farad capacitors and a 2-Henry inductor. To scale to new
impedances and frequency, divide C (and multiply L) by the design
impedance and then divide both C and L by the new cut-off
frequency in rads/sec.

Cheers - Joe

4172. Re: Amphenol Microphone Connectors (Heathkit, etc.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-12 02:17:16 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4324E54D.1B6CA2C7@earthlink.net>
Source record: 17155

hhc314@yahoo.com wrote:
>
> I'm selling my excess of new Amphenol microphone connectors on eBay. I
> had to purchase a box of 25, but I only need 3, so I'm selling the
> balance.
>
> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5808187910&rd=1&sspagename=STRK%3AMESE%3AIT&rd=1
>
> Those of you who would be interested in these items know what they are
> and how difficult to find today.
>
> Harry C.

Your E-bay ad is very misleading. First of all, the Amphenol logo on
the box is from the '70s, not the '50s.

While it is true that Amphenol no longer makes that connector, its
because they sold that product line to WPI
http://www.wpi-interconnect.com/ several years ago.

Switchcraft http://www.switchcraft.com/ 2501 series is a fully
compatible, and better quality connector line. Then there are still
imported connectors that mate with this old industry standard.

$10 each is an outrageous price. You can find these at a lot of
online surplus dealers and almost any place that deals in older musical
equipment.

BTW, I still have 3 of the 2501F Switchcraft connectors for $3.50
each, and a good supply of the self shorting 2501 MP chassis mount
connector that short circuits the input when you remove the connector
for $2 each. This item is NLA from the OEM. I got a good price from a
surplus dealer who doesn't have any idea what they are, so I bought 25
to replace all of the microphone connectors on my restored antique test
equipment.

http://home.earthlink.net/~mike.terrell/Epcon.html Note: the current
stock on the shorting connector is shown as 3, but I can still get about
1000 additional connectors.
--
?

Michael A. Terrell
Central Florida

4173. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-12 04:26:21 UTC
From: TRABEM <>
Message-ID: <ipv9i1tqprmomklq9a5q2ve2rmcejmidol@4ax.com>
Source record: 17156

> Notice that the primary to secondary (total) turns ratio is
>almost 1:1, that both shunt capacitors in the band-pass filter are
>of the same value and that the path resistance on either side of
>the secondary, through the FST3126M to the low-pass filters is
>around 20-ohms. So what you are looking at (to a crude
>approximation) is a design impedance of 50-ohm all the way
>through.
>

OK, that's about what I thought, but I was estimating closer to 15
ohms for ac resistance between the secondary winding and ground. So, I
was having a hard time believing it could be 50 ohms in and out. It
probably makes little difference though in the filter values or
passband response.

> As for the toroid, for optimum Q you might want to look for a
>mix more suitable for the frequency range you quoted (maybe 15?)
>and increase the diameter to take the extra wire as you will need
>to scale the impedances for use at 50kHz. The FT series, I think,
>need less turns for the same inductance and so should be easier to
>wind.
>

I was looking at the CT series, specifically a CT-50-57, which is a
little bigger, but probably can contain all the wire easily.

> Finally, a simple low-pass filter would probably be all you
>need here as the transformer primary impedance will be a limit the
>low end. Filter response is dependant on source as well as load
>impedance and most antennas that you would use at those
>frequencies will be quite reactive and difficult to design a fixed
>input network for. You may be aware that a lot of HF receivers use
>a separate hi-Z antenna terminal for LF/MF.
>

I'm aware of the separate antenna inputs some LF radios have. The
lowfer group has quite a bit of information on antennas, and it seems
that making a 50 ohm antenna or something approaching 50 ohms from a
large single or multiturn loop isn't that difficult.

Making a 15 or 20 ohm antenna is even easier, perhaps I should think
about 15 ohm input impedance and a 15 ohm output impedance since it's
actually easier to handle the antenna step up.

> Having said that, if you do want to use a simple low-pass
>configuration, remember that a symmetrical 'Pi' filter with source

>and load impedances of 1-ohm and a cut-off of 1-rad/sec would use
>two 1-Farad capacitors and a 2-Henry inductor. To scale to new
>impedances and frequency, divide C (and multiply L) by the design
>impedance and then divide both C and L by the new cut-off
>frequency in rads/sec.
>

Most likely it's probably best to keep it at 50 ohms and not to worry
about the slight mismatch in that frequency range.

Thanks to you and to all who commented, it was just he sort of
information I needed to put me back on track.

Regards,

T

4174. Re: phase angle and impedance of resonant circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-12 05:09:18 UTC
From: eternalsquire@comcast.net
Message-ID: <1126501758.782235.36480@f14g2000cwb.googlegroups.com>
Source record: 17157

Har Har. I actually flunked out of a Okinawan karate class when I was 16, it was taught by ex-marines. I was still a white belt after a year because I was overweight.

The Eternal Squire

4175. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-12 06:53:52 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <2k2ai15p86rraoqt11sgl72fu1cpo7om8o@4ax.com>
Source record: 17158

On Sun, 11 Sep 2005 23:43:36 +0100, "Highland Ham"
<abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:

>> The existing filter is for a 7 Mhz receiver, I'd like to have a
>> similar filter design for 50 to 200 Khz.
>==========================
>If you are happy with the HF receiver as is, would it not be easier and
>more effective to build an LF (50 - 200 kHz) to HF converter. This should
>be an easy project and you can select a quiet "HF band" for the conversion.

What would this solve ? You still need some selectivity in front of
converter.

I would also question the need for a bandpass filter, but a good low
pass filter would definitively required in any case. I would suggest a
low pass filter below 150 kHz in Europe, Africa and Middle-East and
below 500 kHz in the rest of the world to get the very strong LW/MW
broadcast band signals out of the mixer. If 455 kHz IF is used, the
LPF would have to be below 400 kHz in the rest of the world.

>I have seen designs with a SBL-1 mixer

SBL-1 is specified for 1-500 MHz on the RF and LO port, so not really
suitable for this band. However, the SBL-3 goes from 25 kHz to 200
MHz. The SRA-6H goes from 10 kHz to 50 MHz and should be able to
handle up to +10 dBm signals.

>but also a number with the NE612
>osc/mixer.

I have used the Datong LF converter, which uses the Siemens S042
mixer/osc IC similar to the NE602/612 and it definitively needs a
preselector in front of it to get away with spurious responses all
over the LF band from broadcast stations.

Paul OH3LWR

4176. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-12 16:14:11 UTC
From: TRABEM <>
Message-ID: <ai9bi1trpko1jjk6mg75pi6mmur6qb9b81@4ax.com>
Source record: 17162

>
>What would this solve ? You still need some selectivity in front of
>converter.
>
>I would also question the need for a bandpass filter, but a good low
>pass filter would definitively required in any case. I would suggest a
>low pass filter below 150 kHz in Europe, Africa and Middle-East and
>below 500 kHz in the rest of the world to get the very strong LW/MW
>broadcast band signals out of the mixer. If 455 kHz IF is used, the
>LPF would have to be below 400 kHz in the rest of the world.
>
>>I have seen designs with a SBL-1 mixer
>
>SBL-1 is specified for 1-500 MHz on the RF and LO port, so not really
>suitable for this band. However, the SBL-3 goes from 25 kHz to 200
>MHz. The SRA-6H goes from 10 kHz to 50 MHz and should be able to
>handle up to +10 dBm signals.
>
>>but also a number with the NE612
>>osc/mixer.
>
>I have used the Datong LF converter, which uses the Siemens S042
>mixer/osc IC similar to the NE602/612 and it definitively needs a
>preselector in front of it to get away with spurious responses all
>over the LF band from broadcast stations.
>

Thanks Paul, and yes....you're correct. Building a conventional converter would still require a passband filter, so little is to be gained, except that perhaps someone else has already done the design:>:

Also, this receiver design has no mixer, it is simply a detector and a very linear one to boot. No mixing byproducts are present because there is no non-linear mixer. In effect, this design is already a converter....except that it converts to audio directly from the rf frequency input.

The "spurious responses all over the LF band from broadcast stations" probably don't exist in this type of receiver, which is one of the attractions for VLF use of this technology.

Take a look at the link to the design in the original message and you will learn how it operates without mixers and without non-linear detectors.

It's WHY I so interested in this particular method of reception and WHY I want to make a front end for vlf for it. The concept is explained in a QEX article in greater detail, Im happy to send the url to anyone who wants to learn more about these high performance direct conversion receivers.

Regards and again, Thanks,

T

4177. Fire Your Boss..!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-12 16:51:33 UTC
From: cashandprofits <sales@emarketingsecret.com>
Message-ID: <dg3cfbgde5@reader01.singnet.com.sg>
Source record: 17159

FIRE YOUR BOSS!
Get the system that everyone is
talking about (except your boss).
http://www.automaticbuilder.com/20258

MAF Anti-Spam ID: 20050912040711F9f90cD1

4178. More layoffs at your workplace?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-12 17:18:36 UTC
From: myhealthpod <sales@emarketingsecret.com>
Message-ID: <dg3e22$gg3$5@reader01.singnet.com.sg>
Source record: 17160

MORE LAYOFFS AT YOUR JOB? Are you worried? I was..
http://www.automaticbuilder.com/20258

Build you Residual Income today. Wait no more..
Don't wait till the day your employee ID tag is taken away..

http://www.automaticbuilder.com/20258

MAF Anti-Spam ID: 20050912040711F9f90cD1

4179. Free eAudio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-12 17:33:49 UTC
From: cashandprofits <sales@emarketingsecret.com>
Message-ID: <dg3euj$gh2$5@reader01.singnet.com.sg>
Source record: 17161

Free AdGuru Audio ebook giveaway at

http://www.freeadguru.com/cgi-bin/i.pl?c=a&i=30082.

check it out!
http://emarketingsecret.blogspot.com

MAF Anti-Spam ID: 20050912040711F9f9OcD1

4180. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-12 17:39:22 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <dg4ega$io7$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 17163

> The concept is
> explained in a QEX article in greater detail, Im happy to send the
url
> to anyone who wants to learn more about these high performance
direct
> conversion receivers.
==========

How do you know the QEX article is not a load of of old-wives tales.

4181. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-12 21:01:59 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1126557596.768317.288480@g14g2000cwa.googlegroups.com>
Source record: 17164

Actually, the thing you call a detector IS a mixer. You can probably find some references for "H-mode mixer." It's good, to be sure, but it's inaccurate to say that it's _perfectly_ linear. (I'd LOVE to find a practical sampler which had zero distortion...though then I'd need amplifiers with zero distortion, too...)

As someone else pointed out, any practical antenna you have for LF is very unlikely to be a good match to 50 ohms, and is very likely to be quite reactive so that by the time you add components to tune it, the bandwidth will be pretty narrow. So if you have a tuned LF antenna, which is quite usual, the response will be quite narrow, and why would you care about a bandpass filter? I'd recommend a loop with a tuning arrangement at its feedpoint (variable capacitance), and an appropriate preamp to drive a feedline back to the receiver. With that, you won't need any filter, just a transformer going into the mixer (converter-detector-whatever). A while back, I did some work to modify a design you can find at http://www.cpinternet.com/~lyle/bal-pre/bal-pre.htm, so that the control was done as a DC current , which also fed the power to the preamp on the same line that signals come back on. It worked out well. But check out other antenna options from Lyle's website (http://www.cpinternet.com/~lyle/) or others devoted to LF, too.

Cheers,
Tom

4182. Re: Amphenol Microphone Connectors (Heathkit, etc.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-12 22:56:26 UTC
From: hhc314@yahoo.com
Message-ID: <1126565786.017061.212370@o13g2000cwo.googlegroups.com>
Source record: 17166

Mike, I don't know what kind of a hair you have up your ass, but I strongly suspect the motivation for your post is that you have some off-shore made cheap Amphenol imitations to sell.

You posted:

Your E-bay ad is very misleading. First of all, the Amphenol logo
on
the box is from the '70s, not the '50s.

I simply included a photo of the box so people would realize that these are actual Amphenol connectors rather than some cheap, oriental, knock-off. The fact is that identical Amphenol made high impedance microphone connectors of this manufacture and type have been in continuous use since the late 1940s. My first exposure to them was on Sears "Wire Recorders" circa 1949, and years later Pentron tape recorders during the mid-1950s. Sir, you are obviously too young to remember these days, or too ignorant to recognize truth in advertising when you see it!

"While it is true that Amphenol no longer makes that connector, its because they sold that product line to WPI
http://www.wpi-interconnect.com/ several years ago."

...And who produces a cheap, off-shore manufactured imitation of the original Amphenol's. What was sold to WPI was not the tooling, but use of the brand name only. Sheesh...you really have no clue!

"Switchcraft http://www.switchcraft.com/ 2501 series is a fully compatible, and better quality connector line. Then there are still imported connectors that mate with this old industry standard. "

Switchcraft product were never in the same league with those of Amphenol, and most are/were imported crap.

" $10 each is an outrageous price. You can find these at a lot of online surplus dealers and almost any place that deals in older musical

equipment. "

Read my ad again. The starting bid price is $7.50 inclusing packing and shipping. The $10 price is for Buy It Now, and also includeds free shipping.

"BTW, I still have 3 of the 2501F Switchcraft connectors for $3.50 each, and a good supply of the self shorting 2501 MP chassis mount connector that short circuits the input when you remove the connector for $2 each. This item is NLA from the OEM. I got a good price from a

surplus dealer who doesn't have any idea what they are, so I bought 25 to replace all of the microphone connectors on my restored antique test

equipment."

Good for you. Does that $3.50 price include free packing, shipping, eBay and Paypal fees for youur offshore produced crap, or are you going to shaft your buyers with another $3.00 for packing and shipping?

My connectors are real Amphenols and being sold postpaid. Are yours?

Harry C.

4183. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-12 23:08:13 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <xTnVe.828$iB.215@trnddc06>
Source record: 17167

If you read Gerald Youngblood's first QEX article on the SDR-1000 software-defined radio, you will see on page 7 another embodiment of this type of mixer/detector. It was originally popularized and patented by Dan Tayloe, but has recently been reconfigured (for patent purposes as much as anything else I suspect), and renamed 'quadrature sampling detector' (QSD). The original embodiment shown in the QEX article has no transformers.

As a passing comment, one of the writers here said a mixer IS a detector. He's absolutely correct. A detector is just a special case of frequency mixing where the RF is mixed directly down to DC baseband. As another writer said, ALL mixers/detectors, regardless of whether they're the modern switching type or the antique-type based on square-law nonlinearity, have an overload point beyond which they make unacceptable distortion. Switching mixers, which include most double-balanced diode mixer (DBM) modules and most Gilbert-cell IC mixers, just happen to be more linear than many square-law devices up to the overload point, then they go to hell in a handbasket. The QSD is a just special case of switching mixer that can produce quadrature baseband outputs very conveniently, but it is a bit better in the distortion department than many diode DBM's.

Joe
W3JDR

<TRABEM> wrote in message news:ai9bi1trpko1jjk6mg75pi6mmur6qb9b81@4ax.com...
>
>>
>>What would this solve ? You still need some selectivity in front of
>>converter.
>>
>>I would also question the need for a bandpass filter, but a good low
>>pass filter would definitively required in any case. I would suggest a
>>low pass filter below 150 kHz in Europe, Africa and Middle-East and
>>below 500 kHz in the rest of the world to get the very strong LW/MW
>>broadcast band signals out of the mixer. If 455 kHz IF is used, the
>>LPF would have to be below 400 kHz in the rest of the world.
>>
>>>I have seen designs with a SBL-1 mixer
>>
>>SBL-1 is specified for 1-500 MHz on the RF and LO port, so not really
>>suitable for this band. However, the SBL-3 goes from 25 kHz to 200
>>MHz. The SRA-6H goes from 10 kHz to 50 MHz and should be able to
>>handle up to +10 dBm signals.
>>
>>>but also a number with the NE612
>>>osc/mixer.

>>
>>I have used the Datong LF converter, which uses the Siemens S042
>>mixer/osc IC similar to the NE602/612 and it definitively needs a
>>preselector in front of it to get away with spurious responses all
>>over the LF band from broadcast stations.
>>
>
> Thanks Paul, and yes....you're correct. Building a conventional
> converter would still require a passband filter, so little is to be
> gained, except that perhaps someone else has already done the
> design:>:
>
> Also, this receiver design has no mixer, it is simply a detector and a
> very linear one to boot. No mixing byproducts are present because
> there is no non-linear mixer. In effect, this design is already a
> converter....except that it converts to audio directly from the rf
> frequency input.
>
> The "spurious responses all over the LF band from broadcast stations"
> probably don't exist in this type of receiver, which is one of the
> attractions for VLF use of this technology.
>
> Take a look at the link to the design in the original message and you
> will learn how it operates without mixers and without non-linear
> detectors.
>
> It's WHY I so interested in this particular method of reception and
> WHY I want to make a front end for vlf for it. The concept is
> explained in a QEX article in greater detail, Im happy to send the url
> to anyone who wants to learn more about these high performance direct
> conversion receivers.
>
> Regards and again, Thanks,
>
> T

4184. Re: Amphenol Microphone Connectors (Heathkit, etc.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-12 23:13:14 UTC
From: hhc314@yahoo.com
Message-ID: <1126566794.914242.307060@o13g2000cwo.googlegroups.com>
Source record: 17168

Michael, as an afterthought....

I'll immediately send you a Paypal payment for $3.50, if you'll send me one of your "Imitation Amphenol" connectors postpaid (just like I am selling my genuine Amphenols) so that I can examine it and compare the quality of your product with that of Amphenol's (construction, plating, solderability, etc.).

I'll even photograph the two different products side-by-side and email the photo to any newsgroup reader requesting it so they can make up their own minds. Is that fair or not?

Put up or shut-up!

Harry C.

4185. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-12 23:46:03 UTC
From: john jardine <john@jjdesigns.fsnet.co.uk>
Message-ID: <dg4vcg$so1$1@news8.svr.pol.co.uk>
Source record: 17165

<TRABEM> wrote in message news:euj8i1po8dsokkeedfc4ofouqtsh97mihe@4ax.com...
[...]
> Thanks,
>
> T

Heresy maybe but I'd be inclined to just dump the transformer and bandpass coils and caps and 10ohms etc. Use opamps for a low pass and a high pass filter. Then add another inverting opamp to provide the antiphase for the mixer chip. High 'Atmospherics' at these low frequencies mean pretty much any opamp will be OK.
Use a resistor to present any input Z to the Ant'.
The FST3126 (or 74HC4066) works well with opamp drive.
regards
john

4186. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 00:13:12 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1126570392.772936.313960@g47g2000cwa.googlegroups.com>
Source record: 17169

I'd hardly call it heresy, John. In my search for really good op amps to use up to 50 and 100MHz (very low distortion and low noise), I've come across some that would be really outstanding up to a couple hundred kHz.

In fact, since you can get 24bit ADCs that cover up to that range (e.g., AD7760, AD7762) with very good linearity and low noise, you could make the whole LF receiver with just the tuned antenna, the preamp out at the antenna, _maybe_ a bit of gain, and the ADC feeding into a PC. Then the "quadrature mixing" would all be done digitally, with much better accuracy than you'll get with an analog mixer. Yeah, yeah, you have to write some software to get it to work...but a modern PC should have no trouble keeping up with doing all the signal processing. There may even be sound cards out there with response out to 100kHz--that's an area I don't keep up with.

Cheers,
Tom

4187. Re: Amphenol Microphone Connectors (Heathkit, etc.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 00:33:04 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43261E6B.ED5E8398@earthlink.net>
Source record: 17170

hhc314@yahoo.com wrote:
>
> Michael, as an afterthought....
>
> I'll immediately send you a Paypal payment for $3.50, if you'll send
> me one of your "Imitation Amphenol" connectors postpaid (just like I am
> selling my genuine Amphenols) so that I can examine it and compare the
> quality of your product with that of Amphenol's (construction, plating,
> solderability, etc.).
>
> I'll even photograph the two different products side-by-side and email
> the photo to any newsgroup reader requesting it so they can make up
> their own minds. Is that fair or not?
>
> Put up or shut-up!
>
> Harry C.

Switchcraft is not "Imitation Amphenol" It is an american made
product. I can get you a picture of it if you want. Obviously you have
never used anything from Switchcraft, or you wouldn't question the
quality. It was used in a lot of military and industrial grade
equipment, where I have seen more ham gear with Amphenol connectors.

As far as Paypal goes, I do not have an account. I don't buy or sell
on E-bay, so i really don't need one. The parts i have for sale are the
leftovers where I shut down my business due to failing health. I would
rather sell them cheap than have them end up in a landfill. I used to
sell at a half dozen hamfests every year, but I can't make the long
trips anymore. That leaves the Ocala hamfest that is within my driving
range, and the locals already know how to find me. I did commercial
sound, broadcast and industrial work. I only used Switchcraft, because
of their quality and a reasonable delivery time. At the time they were
a division of Raytheon, who was a large defense contractor.

Here is one online photo of the Switchcraft 2501F connector at Allied
Electronics:
<http://www.alliedelec.com/Search/ProductDetail.asp?SKU=932-1045>

<http://www.google.com/search?num=100&hl=en&lr=lang_en&ie=ISO-8859-1&newwindow=1&q=switchc
raft+2501F&btnG=Search>
has 190 pages that sell or mention the Switchcraft 2501 F connector

<http://www.stkcheck.com/evs/mfg2.asp?mfg=SWITCHCRAFT&urlpath=&urltext=&DX=&part=2501F&sty
pe=Search>
is a page of distributors with it in stock.

I can ship you one of the connectors if you want it. $3.50 plus
whatever the postage is for the padded bag. Never a handling charge.
--
?

Michael A. Terrell
Central Florida

4188. Re: Amphenol Microphone Connectors (Heathkit, etc.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 00:45:14 UTC
From: hhc314@yahoo.com
Message-ID: <1126572313.988761.285890@z14g2000cwz.googlegroups.com>
Source record: 17171

Michael responded:

"I can ship you one of the connectors if you want it. $3.50 plus whatever the postage is for the padded bag. Never a handling charge."

But you didn't state what postage is, or address the difference between your Swithcraft products and those of a real Amphenol product. You also didn't specify what the postage charge would be.

I suppose that I'm a little more open and upfront that you. If you purchase one if these connectors from me, they will be original Amphenol products and shipping is FREE.

I take it that you are declining my previous offer. Your connectors are imitations, and their cost is not $3.50 but $3.50 plus whatever you deiced to charge for shipping. My price is at auction $7.50 with no shipping charges, and this is for original Amphenol products in shiny new condition.

What's the bottom line price, including shipping, or your Amphenol look-alike connectors?

Harry C.

4189. Re: Amphenol Microphone Connectors (Heathkit, etc.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 01:08:30 UTC
From: hhc314@yahoo.com
Message-ID: <1126573710.834385.265510@g44g2000cwa.googlegroups.com>
Source record: 17172

Michael posted:

"As far as Paypal goes, I do not have an account. I don't buy or sell on E-bay, so i really don't need one."

So, why are you posting objections to those of us on eBay and Paypal who have earned a credible history of performance over the years. We who use eBay have no knowledge of who you are (because you have no feedback history), so you could equally be a nice guy or a scam artist. If you don't want, or don't have an eBay history, and are selling items on the Internet, chances are that you are some type of scam artist, and put-down those that would otherwise (based on their established history of good dealings) pose a competition for you.

On eBay, before sending any seller money, most of us will look up his/her eBay history. This tells a lot of information, and trust. Not having a history on eBay, were I to send you $3.50 for one of your connectors, I would be taking a risk...but not a large risk since the amount is only $3.50, Were you no a listed and registed seller on eBay, I wouldn't send you anything...except in this test case...because you have no established credibility. Same thing holds true, if you don't have a certified address on Paypal, in which case I can send you nothing.

You have evidenced a very loud mouth, and evidently decline my posted challenge. So....please go away!

Harry C.

4190. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 01:15:19 UTC
From: TRABEM <>
Message-ID: <pu9ci15vaol8csdrm83ktl3h17sbrs9euh@4ax.com>
Source record: 17173

On Mon, 12 Sep 2005 17:39:22 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>> The concept is
>> explained in a QEX article in greater detail, Im happy to send the
>url
>> to anyone who wants to learn more about these high performance
>direct
>> conversion receivers.
>==================================
>
>How do you know the QEX article is not a load of of old-wives tales.
>

Not sure if you're serious or not. But, there are quite a few users
with SDR-1000 HF transceivers that use the technology....and all of
them aren't full of BS.

GL.

T

4191. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 01:31:52 UTC
From: TRABEM <>
Message-ID: <c5aci1daro0irko4srnqlkg8em9ah0a0dv@4ax.com>
Source record: 17174

On 12 Sep 2005 14:01:59 -0700, "K7ITM" <k7itm@aol.com> wrote:

>Actually, the thing you call a detector IS a mixer. You can probably
>find some references for "H-mode mixer." It's good, to be sure, but
>it's inaccurate to say that it's _perfectly_ linear. (I'd LOVE to find
>a practical sampler which had zero distortion...though then I'd need
>amplifiers with zero distortion, too...)
>
>As someone else pointed out, any practical antenna you have for LF is
>very unlikely to be a good match to 50 ohms, and is very likely to be
>quite reactive so that by the time you add components to tune it, the
>bandwidth will be pretty narrow. So if you have a tuned LF antenna,
>which is quite usual, the response will be quite narrow, and why would
>you care about a bandpass filter? I'd recommend a loop with a tuning
>arrangement at its feedpoint (variable capacitance), and an appropriate
>preamp to drive a feedline back to the receiver. With that, you won't
>need any filter, just a transformer going into the mixer
>(converter-detector-whatever). A while back, I did some work to modify
>a design you can find at
>http://www.cpinternet.com/~lyle/bal-pre/bal-pre.htm, so that the
>control was done as a DC current , which also fed the power to the
>preamp on the same line that signals come back on. It worked out well.
> But check out other antenna options from Lyle's website
>(http://www.cpinternet.com/~lyle/) or others devoted to LF, too.
>

Thanks Tom,

I've followed lowfer technical discussions for some time now and
thanks to some recent input from a few of them, I have a much better
idea of what I need to do to get a decent antenna up.

My plan is to have a single turn or 2 turn centertapped loop, each
side being 10 to 12 feet long and the turns spaced 5 inches apart. The
conductor will be 200 A aluminum service entrance cable which I have
laying around.

The impedance of this antenna will be low and the Q should be quite
high, with lots of area, so it should drive the receiver well.

It has occurred to me that the antenna itself has a great deal of
selectivity, yet some loop users still report front end overload from
AM broadcast band and other megawatt LF rf sources.

The QSD is susceptible to harmonics also, so a very high attenuation
low pass filter is the minimum filter necessary to keep these signals

out.

Whether the tuned antenna by itself is adequate, I don't know.

But, I'm considering putting in a bandpass or low pass filter designed to match the lower impedance loop antenna directly, so the filter would have input and output impedances of 5 or 10 ohms.

Anyway, that's a topic for another day I suspect.

Regards and thanks for the input.

T

4192. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 01:39:08 UTC
From: TRABEM <>
Message-ID: <84bci1tnrobr74ju55jdt453rnr9a0hsp9@4ax.com>
Source record: 17175

Hi Joe,

It appeared to me that the transformer was used as a convenient means
to introduce 1/2 of the Vcc to provide DC bias equally to each of the
4 switch inputs.

The 10 ohm series resistors look like a resistive impedance matching
scheme to me, with a built in 6+ db loss associated with them.

I'm thinking of redoing the entire input circuit to take out hte
reistors and to better match the lower impedance of most VLF loop
antnnas.

Thanks for your comments.

T

On Mon, 12 Sep 2005 23:08:13 GMT, "W3JDR" <joe@roccis.com> wrote:

>If you read Gerald Youngblood's first QEX article on the SDR-1000
>software-defined radio, you will see on page 7 another embodiment of this
>type of mixer/detector. It was originally popularized and patented by Dan
>Tayloe, but has recently been reconfigured (for patent purposes as much as
>anything else I suspect), and renamed 'quadrature sampling detector' (QSD).
>The original embodiment shown in the QEX article has no transformers.
>
>As a passing comment, one of the writers here said a mixer IS a detector.
>He's absolutely correct. A detector is just a special case of frequency
>mixing where the RF is mixed directly down to DC baseband. As another writer
>said, ALL mixers/detectors, regardless of whether they're the modern
>switching type or the antique-type based on square-law nonlinearity, have an
>overload point beyond which they make unacceptable distortion. Switching
>mixers, which include most double-balanced diode mixer (DBM) modules and
>most Gilbert-cell IC mixers, just happen to be more linear than many
>square-law devices up to the overload point, then they go to hell in a
>handbasket. The QSD is a just special case of switching mixer that can
>produce quadrature baseband outputs very conveniently, but it is a bit
>better in the distortion department than many diode DBM's.
>
>Joe
>W3JDR
>
>
>
>
><TRABEM> wrote in message news:ai9bi1trpko1jjk6mg75pi6mmur6qb9b81@4ax.com...

>>
>>>
>>>What would this solve ? You still need some selectivity in front of
>>>converter.
>>>
>>>I would also question the need for a bandpass filter, but a good low
>>>pass filter would definitively required in any case. I would suggest a
>>>low pass filter below 150 kHz in Europe, Africa and Middle-East and
>>>below 500 kHz in the rest of the world to get the very strong LW/MW
>>>broadcast band signals out of the mixer. If 455 kHz IF is used, the
>>>LPF would have to be below 400 kHz in the rest of the world.
>>>
>>>>I have seen designs with a SBL-1 mixer
>>>
>>>SBL-1 is specified for 1-500 MHz on the RF and LO port, so not really
>>>suitable for this band. However, the SBL-3 goes from 25 kHz to 200
>>>MHz. The SRA-6H goes from 10 kHz to 50 MHz and should be able to
>>>handle up to +10 dBm signals.
>>>
>>>>but also a number with the NE612
>>>>osc/mixer.
>>>
>>>I have used the Datong LF converter, which uses the Siemens S042
>>>mixer/osc IC similar to the NE602/612 and it definitively needs a
>>>preselector in front of it to get away with spurious responses all
>>>over the LF band from broadcast stations.
>>>
>>
>> Thanks Paul, and yes....you're correct. Building a conventional
>> converter would still require a passband filter, so little is to be
>> gained, except that perhaps someone else has already done the
>> design:>:
>>
>> Also, this receiver design has no mixer, it is simply a detector and a
>> very linear one to boot. No mixing byproducts are present because
>> there is no non-linear mixer. In effect, this design is already a
>> converter....except that it converts to audio directly from the rf
>> frequency input.
>>
>> The "spurious responses all over the LF band from broadcast stations"
>> probably don't exist in this type of receiver, which is one of the
>> attractions for VLF use of this technology.
>>
>> Take a look at the link to the design in the original message and you
>> will learn how it operates without mixers and without non-linear
>> detectors.
>>
>> It's WHY I so interested in this particular method of reception and
>> WHY I want to make a front end for vlf for it. The concept is
>> explained in a QEX article in greater detail, Im happy to send the url

>> to anyone who wants to learn more about these high performance direct
>> conversion receivers.
>>
>> Regards and again, Thanks,
>>
>> T
>

4193. Re: Amphenol Microphone Connectors (Heathkit, etc.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 01:48:42 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43263022.6D72F818@earthlink.net>
Source record: 17176

hhc314@yahoo.com wrote:
>
> Michael posted:
>
> "As far as Paypal goes, I do not have an account. I don't buy or sell
> on E-bay, so i really don't need one."
>
> So, why are you posting objections to those of us on eBay and Paypal
> who have earned a credible history of performance over the years. We
> who use eBay have no knowledge of who you are (because you have no
> feedback history), so you could equally be a nice guy or a scam artist.
> If you don't want, or don't have an eBay history, and are selling items
> on the Internet, chances are that you are some type of scam artist, and
> put-down those that would otherwise (based on their established history
> of good dealings) pose a competition for you.

I am not COMPETING with anyone for sales. I don't care if the parts
I have ever sell. When I die whatever is left will be going to the local
landfill, rather than let them go to someone who will sell them on
E-bay. I don't buy on E-bay because I have more projects and parts
left, that time to finish the projects and use up the parts. Also,
almost all of my spare money is going into a non profit corporation to
help local disabled veterans. I collect and repair old computers for
vets who are too poor to buy a computer. I would rather do this than
put up with the shit I get from hams these days. Why subject myself to
it when I can work when I am well enough, then call the "Vets helping
Vets" to tell them that another free computer system is ready for them
to give away? Do you do anything for your fellow humans?

> On eBay, before sending any seller money, most of us will look up
> his/her eBay history. This tells a lot of information, and trust. Not
> having a history on eBay, were I to send you $3.50 for one of your
> connectors, I would be taking a risk...but not a large risk since the
> amount is only $3.50, Were you no a listed and registed seller on
> eBay, I wouldn't send you anything...except in this test case...because
> you have no established credibility. Same thing holds true, if you
> don't have a certified address on Paypal, in which case I can send you
> nothing.
>
> You have evidenced a very loud mouth, and evidently decline my posted
> challenge. So....please go away!
>
> Harry C.

I have no objections to anyone who buys or sells on E-bay, or uses Paypal. As far as a loud mouth? It is you who refuses to admit that Switchcraft is a quality product. I am 100% disabled, after 40 years of working in electronic repair, Broadcast and CATV engineering. I spent my last four years working at Microdyne building $20,000 to $80,000 telemetry receivers and systems. I really don't care what you think.
--
?

Michael A. Terrell
Central Florida

4194. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 01:52:01 UTC
From: TRABEM <>
Message-ID: <iibci1hckke5aqpj2e6s1bidalq5gl2cp2@4ax.com>
Source record: 17177

Hi Tom,

I think the loop antennas are pretty quiet compared to wire antennas
and you might need some gain.

But, since the antenna is high Q and tuned, it might have enough
voltage output to drive the soundcard more or less directly.

I don't know for sure.

But, if the switch is anywhere near linear, you would not want your
gain stage before the switch, would you?? I can't see using an rf amp
at the antenna that just creates non linearity when you could use a
nice quiet audio amp op amp on the far side of the analog switch.

An all software based receiver shoulnds like a neat idea until you
realize you run out of dynamic range by trying to sample such a wide
bandwidth directly.

I think the analog switch (hardware) is here to stay, at least for
ashile.

GL.

T

On 12 Sep 2005 17:13:12 -0700, "K7ITM" <k7itm@aol.com> wrote:

>I'd hardly call it heresy, John. In my search for really good op amps
>to use up to 50 and 100MHz (very low distortion and low noise), I've
>come across some that would be really outstanding up to a couple
>hundred kHz.
>
>In fact, since you can get 24bit ADCs that cover up to that range
>(e.g., AD7760, AD7762) with very good linearity and low noise, you
>could make the whole LF receiver with just the tuned antenna, the
>preamp out at the antenna, _maybe_ a bit of gain, and the ADC feeding
>into a PC. Then the "quadrature mixing" would all be done digitally,
>with much better accuracy than you'll get with an analog mixer. Yeah,
>yeah, you have to write some software to get it to work...but a modern
>PC should have no trouble keeping up with doing all the signal
>processing. There may even be sound cards out there with response out
>to 100kHz--that's an area I don't keep up with.
>
>Cheers,
>Tom

4195. Re: Amphenol Microphone Connectors (Heathkit, etc.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 02:03:58 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <432633B7.8BE8BDD0@earthlink.net>
Source record: 17178

hhc314@yahoo.com wrote:
>
> Michael responded:
>
> "I can ship you one of the connectors if you want it. $3.50 plus
> whatever the postage is for the padded bag. Never a handling charge."
>
> But you didn't state what postage is, or address the difference between
> your Swithcraft products and those of a real Amphenol product. You
> also didn't specify what the postage charge would be.

How do I know what the shipping will be if I don't know the zip code? I provide the mailer and label, then pass on whatever the post office charges me. No more, or less. I have sold parts to a small number of people online, in different news groups, and to people that found some rare ICs (NEC MC-5800) on my website. I have sold a number of parts to guys on news:rec.antique.radio+phono

> I suppose that I'm a little more open and upfront that you. If you
> purchase one if these connectors from me, they will be original
> Amphenol products and shipping is FREE.

I have a few Amphenol microphone connectors, somewhere. The insulators were soft, and the plating was poor on the center contact so I just don't use them. The springs were easily damaged as well. In fact, I replace them with Switchcraft.

$7.50 and free shipping VS $3.50 and probably $1.50 for shipping. Hard choice.

I used to ship the parts and let people send me a check after they received it, but no more. For years I had no problems being paid, then all of a sudden no one sent a check, unless it bounced.

> I take it that you are declining my previous offer. Your connectors are
> imitations, and their cost is not $3.50 but $3.50 plus whatever you
> deiced to charge for shipping. My price is at auction $7.50 with no
> shipping charges, and this is for original Amphenol products in shiny
> new condition.
>
> What's the bottom line price, including shipping, or your Amphenol
> look-alike connectors?

What is the zip code? I will find out tomorrow what it will cost. Not that it really matters. You will find fault with anything I send, just so you can be right.

BTW did you even look at any of the links I provided with pictures of the connector I have? I doubt it, or you wouldn't have such a pissy attitude.

I doubt that you will respond with your zip code, because you just want to bitch about something. You call me names yet I have NO idea who or for that matter what you are, Harry.

> Harry C.

--
?

Michael A. Terrell
Central Florida

4196. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 02:37:27 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <HXqVe.891$iB.574@trnddc06>
Source record: 17179

There are easier ways to introduce the bias than to add transformers. Personally, I hate transformers and go out of my way to avoid using them but sometimes they're a necessary evil.

I'd venture to say that the transformer in this implementation of Tayloe's detector was introduced to:
1) Improve second-order distortion performance
2) Eliminate the need for differential amplifiers at the output
3) Attempt to skirt some patent issues.

These are just my opinions...I'd like to hear different points of view.

As to your redesign goals, be aware that the input source resistance is an important part of the inherent bandpass response that this detector has. It's based on commutating filter principles.....you can read up on this by doing a web search. The resistors were probably added to stabilize the selectivity performance in the face of variable antenna impedances. The resistors will add a little to the insertion loss and thus the system noise figure, but this will probably not be an issue at LF frequencies where atmospherics and man-made noise dominate.

Overall, I think this is an outstanding detector for an LF receiver. You should be able to get very good quadrature LO phasing using the common & simple Johnson counter approach. Once you get to quadrature detector outputs, an audio frequency DSP should result in a very good receiver. As you probably know, there are several public-domain DSP software packages available for both Windows and Linux that will do a very good job for you.

Joe

<TRABEM> wrote in message news:84bci1tnrobr74ju55jdt453rnr9a0hsp9@4ax.com...
> Hi Joe,
>
> It appeared to me that the transformer was used as a convenient means
> to introduce 1/2 of the Vcc to provide DC bias equally to each of the
> 4 switch inputs.
>
> The 10 ohm series resistors look like a resistive impedance matching
> scheme to me, with a built in 6+ db loss associated with them.
>
> I'm thinking of redoing the entire input circuit to take out hte
> reistors and to better match the lower impedance of most VLF loop
> antnnas.
>
> Thanks for your comments.
>

> T
>
>
>
>
>
> On Mon, 12 Sep 2005 23:08:13 GMT, "W3JDR" <joe@roccis.com> wrote:
>
>>If you read Gerald Youngblood's first QEX article on the SDR-1000
>>software-defined radio, you will see on page 7 another embodiment of this
>>type of mixer/detector. It was originally popularized and patented by Dan
>>Tayloe, but has recently been reconfigured (for patent purposes as much as
>>anything else I suspect), and renamed 'quadrature sampling detector'
>>(QSD).
>>The original embodiment shown in the QEX article has no transformers.
>>
>>As a passing comment, one of the writers here said a mixer IS a detector.
>>He's absolutely correct. A detector is just a special case of frequency
>>mixing where the RF is mixed directly down to DC baseband. As another
>>writer
>>said, ALL mixers/detectors, regardless of whether they're the modern
>>switching type or the antique-type based on square-law nonlinearity, have
>>an
>>overload point beyond which they make unacceptable distortion. Switching
>>mixers, which include most double-balanced diode mixer (DBM) modules and
>>most Gilbert-cell IC mixers, just happen to be more linear than many
>>square-law devices up to the overload point, then they go to hell in a
>>handbasket. The QSD is a just special case of switching mixer that can
>>produce quadrature baseband outputs very conveniently, but it is a bit
>>better in the distortion department than many diode DBM's.
>>
>>Joe
>>W3JDR
>>
>>
>>
>>
>><TRABEM> wrote in message
>>news:ai9bi1trpko1jjk6mg75pi6mmur6qb9b81@4ax.com...
>>>
>>>>
>>>>What would this solve ? You still need some selectivity in front of
>>>>converter.
>>>>
>>>>I would also question the need for a bandpass filter, but a good low
>>>>pass filter would definitively required in any case. I would suggest a
>>>>low pass filter below 150 kHz in Europe, Africa and Middle-East and
>>>>below 500 kHz in the rest of the world to get the very strong LW/MW
>>>>broadcast band signals out of the mixer. If 455 kHz IF is used, the
>>>>LPF would have to be below 400 kHz in the rest of the world.

>>>>
>>>>>I have seen designs with a SBL-1 mixer
>>>>
>>>>SBL-1 is specified for 1-500 MHz on the RF and LO port, so not really
>>>>suitable for this band. However, the SBL-3 goes from 25 kHz to 200
>>>>MHz. The SRA-6H goes from 10 kHz to 50 MHz and should be able to
>>>>handle up to +10 dBm signals.
>>>>
>>>>>but also a number with the NE612
>>>>>osc/mixer.
>>>>
>>>>I have used the Datong LF converter, which uses the Siemens S042
>>>>mixer/osc IC similar to the NE602/612 and it definitively needs a
>>>>preselector in front of it to get away with spurious responses all
>>>>over the LF band from broadcast stations.
>>>>
>>>
>>> Thanks Paul, and yes....you're correct. Building a conventional
>>> converter would still require a passband filter, so little is to be
>>> gained, except that perhaps someone else has already done the
>>> design:>:
>>>
>>> Also, this receiver design has no mixer, it is simply a detector and a
>>> very linear one to boot. No mixing byproducts are present because
>>> there is no non-linear mixer. In effect, this design is already a
>>> converter....except that it converts to audio directly from the rf
>>> frequency input.
>>>
>>> The "spurious responses all over the LF band from broadcast stations"
>>> probably don't exist in this type of receiver, which is one of the
>>> attractions for VLF use of this technology.
>>>
>>> Take a look at the link to the design in the original message and you
>>> will learn how it operates without mixers and without non-linear
>>> detectors.
>>>
>>> It's WHY I so interested in this particular method of reception and
>>> WHY I want to make a front end for vlf for it. The concept is
>>> explained in a QEX article in greater detail, Im happy to send the url
>>> to anyone who wants to learn more about these high performance direct
>>> conversion receivers.
>>>
>>> Regards and again, Thanks,
>>>
>>> T
>>
>

4197. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 02:43:25 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <h1rVe.894$iB.162@trnddc06>
Source record: 17180

> An all software based receiver shoulnds like a neat idea until you
> realize you run out of dynamic range by trying to sample such a wide
> bandwidth directly.

In another reply to this thread, I mentioned commutating filters. At VLF, one of these ahead of a good ADC would probably also yield very good performance without downconverting to audio baseband first. As to speed of the ADC, using undersampling you theoretically only need enough speed to sample at twice the modulation (information) bandwidth. This is just a few kilohertz sampling rate. I've heard of this technique, but don't recall ever seeing it implemented in a real receiver design.

Can anyone comment and shed more light on this??

Joe
W3JDR

4198. Re: Amphenol Microphone Connectors (Heathkit, etc.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 02:47:47 UTC
From: -ex- <exray@coqui.net>
Message-ID: <4548f$43263dd6$4232bd50$30875@COQUI.NET>
Source record: 17181

Michael A. Terrell wrote:

>
> How do I know what the shipping will be if I don't know the zip
> code?

3 or 4 ounces in a first-class mailer is the same cost to all US
destinations. 4oz would be $1.06.

-Bill

4199. Re: Amphenol Microphone Connectors (Heathkit, etc.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 03:34:33 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <432648F0.33AC8128@earthlink.net>
Source record: 17182

-ex- wrote:
>
> Michael A. Terrell wrote:
>
> >
> > How do I know what the shipping will be if I don't know the zip
> > code?
>
> 3 or 4 ounces in a first-class mailer is the same cost to all US
> destinations. 4oz would be $1.06.
>
> -Bill

Thanks, Bill. I haven't shipped anything in about two years, so I had no what the rate was. I don't know for sure what the connector weighs, off hand, but should be about the right range after its packed. My digital postal scale only measures in quarter pounds so its only useful on heavier items.
--
?

Michael A. Terrell
Central Florida

4200. Use microwave oven chassis for a radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 04:01:40 UTC
From: mcalhoun@ksu.edu
Message-ID: <dg5iv4$fgd@unix1.cc.ksu.edu>
Source record: 17183

I recently tore another microwave oven apart for the two really-strong
magnets that are in the tube

(they are fun to stack alternate-polarity on a wooden dowel
so they seem to "float" in the air; kids of all ages just
love to play that that "toy")

(I kept the transformer, diode, capacitor, and misc. microswitches, too),

and as I carried the rather bare chassis out to the garbage-can area,
I wondered if anyone had ever tried built an amplifier in such a chassis
-- maybe even using some of its many interlocks?
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

4201. Re: Help identify tower manufacturer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 05:31:31 UTC
From: Paul P <p.pinyotREMOVE@REMOVEworldnet.attREMOVE.netREMOVE>
Message-ID: <TutVe.237305$5N3.70164@bgtnsc05-news.ops.worldnet.att.net>
Source record: 17184
Body handling: HTML body converted to readable text

Thank you Rick for contributing. I think we have it identified. Lots
of good information was received and it will help prepare to move and
re-erect the tower. Several hams that have look at it commented on its good
condition. It should be an easy move thanks to the guys at my club
http://www.skyviewradio.net/

Any information that was send to me can be found at the page below.

Thanks again,
Paul.

"Paul P" wrote in
message news:v5fUe.214720$5N3.62635@bgtnsc05-news.ops.worldnet.att.net...
> Gentlemen,
>
> I am attempting to identify the tower manufacture of the tower pictured
> at:
> http://www.ppinyot.com/antenna.htm. I would like to properly design a
> base for it given the manufacturers specs plus perhaps pick up additional
> sections.
>
> The tower seems to be of a stamped steel design (not tubular) with stamped
> steel cross members. It has been well maintained by the silent key's son.
> I gather it is about 10 to 15 years old. There is an unpainted ladder
> chained to one side for storage. Please do not confuse this as part of the
> tower.
>
> Also if you happen to recognize the beam please Identify it too.
>
> Unfortunately some one discarded all the paper work not knowing it's
> value.
>
> Thanks Paul
>
> paul at ppinyot dot com
>
> KB3LZP
>

4202. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 10:10:57 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <ei3di1pdg2o686stadfefceashbs7nae8t@4ax.com>
Source record: 17185

On Mon, 12 Sep 2005 21:31:52 -0400, TRABEM <> wrote:

>It has occurred to me that the antenna itself has a great deal of
>selectivity, yet some loop users still report front end overload from
>AM broadcast band and other megawatt LF rf sources.

Look for "antenna effect". Most likely the broadcast signals are
connected directly to the pickup wiring, which works then as an
ordinary "electric" antenna.

One way would be to make the pickup loop of coaxial cable. Bend the
end of the cable back to a convenient place on the cable to form a
loop, solder the end (both centre connector and shield) to the shield
at that point. At the opposite end of the loop cut the shield and now
you have a nice electrostatic shield around the centre conductor.

Paul OH3LWR

4203. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 10:11:00 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <6h4di1tpjl6hs71vl61fgjacgcessaf2s3@4ax.com>
Source record: 17186

On Mon, 12 Sep 2005 21:52:01 -0400, TRABEM <> wrote:

>But, if the switch is anywhere near linear, you would not want your
>gain stage before the switch, would you?? I can't see using an rf amp
>at the antenna that just creates non linearity when you could use a
>nice quiet audio amp op amp on the far side of the analog switch.

If you use a huge amplification on a single frequency, you can end up with stability problems, due to unexpected feedback paths, such as a direct conversion receiver with a lot of audio gain started to oscillate, when the loudspeaker sound vibration was connected back to some front end component that was microphonic.

Putting a (possibly switchable) preamplifier between the selective loop and the mixer would allow some gain to be done at non-audio frequencies, thus, reducing the risk for stability problems.

Paul OH3LWR

4204. Re: Amphenol Microphone Connectors (Heathkit, etc.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 11:50:32 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <gM-dnUL5pbJzIbveRVnyrQ@pipex.net>
Source record: 17187

"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
news:432648F0.33AC8128@earthlink.net...
> -ex- wrote:
>>
>> Michael A. Terrell wrote:
>>
>> >
>> > How do I know what the shipping will be if I don't know the zip
>> > code?
>>
>> 3 or 4 ounces in a first-class mailer is the same cost to all US
>> destinations. 4oz would be $1.06.
>>
>> -Bill
>
> Thanks, Bill. I haven't shipped anything in about two years, so I
> had no what the rate was. I don't know for sure what the connector
> weighs, off hand, but should be about the right range after its packed.
> My digital postal scale only measures in quarter pounds so its only
> useful on heavier items.
> --
> ?
>
> Michael A. Terrell
> Central Florida
==========
What a saga ,ego tripping and a waste of bandwidth.

Please Gents stop this 'cyber duel' using a radio amateur homebrew NG,
There must be other (and better) places to continue your fight.

Frank GM0CSZ / KN6WH

4205. switching power mosfet as RF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 14:38:33 UTC
From: francesco.messineo@gmail.com
Message-ID: <1126622313.323612.14380@g44g2000cwa.googlegroups.com>
Source record: 17188

Hello,
I have lots of power mosfet (IRF640, 740, 840 and similars), I'd like
to try
to build a power amplifier for 50 MHz (even 100W CW is ok), what
parameters
of these mosfet can tell how high they can go in frequency? I've only
seen
some projects for HF bands with these kind of mosfets, so probably
there is
a good reason not to try to go higher. I think fall and rise time give
the
limit, but what else? Also, the datasheet of these devices don't have a
table of Zin and Zout, so how one is supposed to calculate them?
Thanks in advance for any hint.

73 de

IS0FKQ

4206. Re: Amphenol Microphone Connectors (Heathkit, etc.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 16:17:21 UTC
From: hhc314@yahoo.com
Message-ID: <1126628241.659246.60470@z14g2000cwz.googlegroups.com>
Source record: 17189

You wrote:

"Why subject myself to
it when I can work when I am well enough, then call the "Vets helping Vets" to tell them that another free computer system is ready for them to give away? Do you do anything for your fellow humans?"

In short I do but I don't wear my heart on my sleeve and present it as a badge of honor. I'm also partially disabled with Parkinson's and Crohn's diseases and am four weeks out of the hospital after having a foot of my colon removed. Like you I rebuild and restore old computers, but mostly give them to the really poor kids to give them a vision of the worlds that they can aspire to. I also repair surplus geiger counters and donate them to the local fire departments, now that Civil Defense trashed them and sold them at auction. I've also been known to donate to the DAV each time they ask, and was an active participant in our local Civil Defense emergency communications group until that was also disbanded (practically on the eve of when it is most needed). As a Mason, most of my cash contributions go to the Masonic Homes, children's hospitals, and other worthy causes (unfortunately these contributions are now limited to my fixed income from Social Security and my Raytheon pension, plus what little I earn on eBay.

So wish me well on my eBay sales, because the little that I earn from that source goes into worthy causes, not on lavish vacations in Vegas or the Islands!

Harry C.

4207. Re: switching power mosfet as RF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 16:52:48 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <1dvdi1lqodbfnqvsvk7oh34vqgo8offr55@4ax.com>
Source record: 17190

On 13 Sep 2005 07:38:33 -0700, francesco.messineo@gmail.com wrote:

>Hello,
>I have lots of power mosfet (IRF640, 740, 840 and similars), I'd like
>to try
>to build a power amplifier for 50 MHz (even 100W CW is ok), what
>parameters
>of these mosfet can tell how high they can go in frequency? I've only
>seen
>some projects for HF bands with these kind of mosfets, so probably
>there is
>a good reason not to try to go higher. I think fall and rise time give
>the
>limit, but what else? Also, the datasheet of these devices don't have a
>table of Zin and Zout, so how one is supposed to calculate them?
>Thanks in advance for any hint.
>
>73 de
>
>IS0FKQ

Good luck. Most of those devices will exhibit gain to amazing
frequencies due the fact that fets have no real limits like junction
transistors. What they do have that limits them is real world things
like lead inductance, Input capacitance, output capacitance and Drain
to Gate Miller capacitance all of which make it difficult to get power
in and out of them as frequency increases.

The input capacitance for the IRF510 is 135pf, the higher power parts
can easily be upwards of 1275pf for the IFR640 (Xc of around 2ohms).
Output capacitance around 400pf and feedback capacitance of 100PF
also for the 640.

I have driven an IRF510 at 50mhz and gotten 4.5W out of it. To do so
I had to drive it as a 5 to 10ohm very reactive input, use a 24V
supply and load the output to around 10ohms, and bias it for 100ma
minimum. It was unstable thermally(tended to runaway toward device
burnout). The output spectrum (harmonics) and IMD were poor.
At 12V power out was nearly RF power input.

It was more effort than driving a 2SC1307 (old cb final) at 12V, more
gain and the IMD was better. At 12V the 1306 gave 6W carrier power
with good stability. A pair of 2sc1971 driven pushpull easily give
10-11W carrier at 12V and are fairly clean.

There are FETs characterized for RF power but they are not inexpensive
and corosponding bipolar devices are fairly cheap.

Allison
KB1GMX

4208. Re: Amphenol Microphone Connectors (Heathkit, etc.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 16:55:20 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <432704A5.130F1E0A@earthlink.net>
Source record: 17191

hhc314@yahoo.com wrote:
>
> You wrote:
>
> "Why subject myself to
> it when I can work when I am well enough, then call the "Vets helping
> Vets" to tell them that another free computer system is ready for them
> to give away? Do you do anything for your fellow humans?"
>
> In short I do but I don't wear my heart on my sleeve and present it as
> a badge of honor. I'm also partially disabled with Parkinson's and
> Crohn's diseases and am four weeks out of the hospital after having a
> foot of my colon removed. Like you I rebuild and restore old computers,
> but mostly give them to the really poor kids to give them a vision of
> the worlds that they can aspire to. I also repair surplus geiger
> counters and donate them to the local fire departments, now that Civil
> Defense trashed them and sold them at auction. I've also been known to
> donate to the DAV each time they ask, and was an active participant in
> our local Civil Defense emergency communications group until that was
> also disbanded (practically on the eve of when it is most needed). As a
> Mason, most of my cash contributions go to the Masonic Homes,
> children's hospitals, and other worthy causes (unfortunately these
> contributions are now limited to my fixed income from Social Security
> and my Raytheon pension, plus what little I earn on eBay.
>
> So wish me well on my eBay sales, because the little that I earn from
> that source goes into worthy causes, not on lavish vacations in Vegas
> or the Islands!
>
> Harry C.

I haven't been on a vacation in over 20 years because I couldn't
afford to take the time off, and had any money to spend at the same
time. The last few years that I was ale to work I was on the advisory
board for a local school system's vocational electronics course. I would
take vacation days to go into the classroom to help the kids that wanted
to learn, and give the an idea of what to expect in the real world of
electronics. Now, my disability pension is below the poverty level and
I don't get any retirement benefits so I continue to live a very simple
lifestyle. They tell me I am allowed to earn a little money from a
hobby, but no one will give me a dollar amount. Others tell me to take
in boarders. That will not only cost me my pension, it will kick my
property taxes up to more than I could make by renting out the extra
bedrooms.

As far as giving computers to needy kids there are at least a half dozen groups already doing that in my area, so I chose to help another group that was in need. The disabled vets don't care how old a computer is as long as they can do e-mail and some simple browsing. After all, most of them are confined to a wheelchair, or bed and have nothing else to do but watch TV.

The needy kids that I have talked to wanted a better computer than what I use for myself, and to track the project. They also want a printer, a scanner, a cd burner and a DVD drive along with plenty of paper and ink jet cartridges. Several insisted that they had to have a laptop and that a desktop computer was useless to them. So far I have only had one laptop donated. It is an old Compaq that has a failing display and a dead battery. Who wants to spend several hundred dollars to repair a Win 95 laptop? We all have choices to make in life. Since I am a veteran who is disabled, and I chose to help my fellow veterans, and I applied to join the DAV last week.

Have fun selling on E-bay. I can't afford to play the games a lot of people want on E-bay. I see things that ask three times what something is worth for the shipping costs. Add in their minimum bid and I can buy two to four of the same item, brand new for the same price, and have them delivered to my door.

BTW, I guess that you didn't know that Raytheon owned Switchcraft? I don't know if they still do, but it was clearly marked on the cover of the last printed Switchcraft catalog that I have.

--
?

Michael A. Terrell
Central Florida

4209. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-13 21:21:59 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1126646519.766808.254200@f14g2000cwb.googlegroups.com>
Source record: 17192

Hi T,

I think you missed the point. With a tuned antenna, what comes out of the antenna+tuning is NOT broadband! Frequencies not so very far from the one you are tuned to will be greatly attenuated. With that sort of input, you should be able to get by with even a 16-bit converter, if it's linear (such as a decent delta-sigma is).

For example, a square loop antenna one meter on a side, at 150kHz, tuned to resonance with a capacitor, should have a Q around 300. That means it's about 0.5kHz wide at the 3dB points, and will be down about 20dB at 2.5kHz away from center, and 40dB down at 25kHz away.

-- I just read your other reply to my other posting in this thread, where you worried about broadcast band overload. I suspect that if you have that, it's because, as someone else said, the antenna is acting as something other than a loop for that frequency. It's important to keep the loop balanced with respect to ground. I'd strongly recommend against a "shielded" loop unless you understand just why you are doing that. The shield becomes the antenna, and as such, it must be symmetrical... Also, for the antenna you described, about 3 meters on a side and large wire, expect the Q to be even higher and the bandwidth narrower. I think you'll find the resonated impedance to be more like a few kohms for a single such turn. Then, use a good balanced FET amplifier to get to a low impedance to drive your transmission line.

By the way, I would note that the switching detector/mixer/converter in the schematic you showed is not as good as the usual current implementation of the H-mode mixer, because the channels of the FETs doing the switching in the one you gave a link to operate at a voltage which depends on the instantaneous signal amplitude, if I read the schematic right, and since the channel resistance is a non-linear function of that voltage, the detector will not be strictly linear. The H-mode mixers operate one end of the switches at a constant voltage, and of course the other end when the switch is on must be very close to the same voltage. I expect (and I think the practical experience is) that the H-mode mixer will be more linear. Do you know what the third order intercept for your mixer is supposed to be? I'd be pretty surprised if it was better than about +45dBm.

But even so, even if you DID have a broadband antenna, you can find op amps, and you can make amplifiers with discrete parts, that have distortion products more than 120dB below the level of signals in excess of a volt at the amplifier output, in the LF frequency range. In other words, the distortion products will be less than a microvolt, with one volt output signals. You don't need to run that preamp with

any appreciable voltage gain, so you're handling some pretty big input signals. And the best of the 24-bit delta-sigma ADCs shouldn't be far behind that. (I wish I could do that well at 50MHz!--we do make a 23-bit ADC that samples at up to 20MHz, but it's a bit pricey for what you're trying to do.) As others have pointed out in this thread, the atmospheric noise is so bad at LF that the antenna doesn't have to be very efficient to capture enough signal to be useful for receiving. Unless you are practically next door to a transmitter operating on a frequency near the ones you care about listening to, dynamic range isn't likely to be a big issue at LF. [Your other posting suggests that folk DO have troubles with other signals. I'd go looking for answers about WHY before jumping to conclusions about what to do about them.] That's a far cry from the case at HF.

Cheers,
Tom

4210. Big old-fashioned IF transformers for tube-type homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 00:08:48 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1126653515.795787.34880@g43g2000cwa.googlegroups.com>
Source record: 17193
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Are the big old-fashioned IF transformers-in-a-can available
anywhere anymore? I want to make a receiver, probably double
conversion,
which would mean that I'd want several each of the 50kHz and some
higher frequency (455kHz likely).

Are these things that can be made from scratch without a lot of
difficutly? I can wind coils etc. but don't
have any transformer slug-tuned cores.

Tim KA0BTD

4211. Big old-fashioned IF transformers for tube-type homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 00:09:11 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1126653585.459065.41060@g43g2000cwa.googlegroups.com>
Source record: 17194
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Are the big old-fashioned IF transformers-in-a-can available
anywhere anymore? I want to make a receiver, probably double
conversion,
which would mean that I'd want several each of the 50kHz and some
higher frequency (455kHz likely).

Are these things that can be made from scratch without a lot of
difficutly? I can wind coils etc. but don't
have any transformer slug-tuned cores.

Tim KA0BTD

4212. Re: Use microwave oven chassis for a radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 00:20:57 UTC
From: sdeyoreo@hotmail.com
Message-ID: <s4rei1to43u8jf9pqk9lvgjkdofkcfqk9e@4ax.com>
Source record: 17195

On 12 Sep 2005 23:01:40 -0500, mcalhoun@ksu.edu wrote:

>I recently tore another microwave oven apart for the two really-strong
>magnets that are in the tube
>
> (they are fun to stack alternate-polarity on a wooden dowel
> so they seem to "float" in the air; kids of all ages just
> love to play that that "toy")
>
>(I kept the transformer, diode, capacitor, and misc. microswitches, too),
>
>and as I carried the rather bare chassis out to the garbage-can area,
>I wondered if anyone had ever tried built an amplifier in such a chassis
>-- maybe even using some of its many interlocks?
No, but the tube runs at a freq real close to ham Slow Scan TV bands.
They retune them and use them as SSTV transmitters.

4213. Re: Big old-fashioned IF transformers for tube-type homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 00:49:57 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <teednX_nnsZO7rreRVn-hg@comcast.com>
Source record: 17197
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
news:1126653515.795787.34880@g43g2000cwa.googlegroups.com...
> Are the big old-fashioned IF transformers-in-a-can available
> anywhere anymore? I want to make a receiver, probably double
> conversion,
> which would mean that I'd want several each of the 50kHz and some
> higher frequency (455kHz likely).
>
> Are these things that can be made from scratch without a lot of
> difficutly? I can wind coils etc. but don't
> have any transformer slug-tuned cores.
>
> Tim KA0BTD
>

YES. Almost every hamfest that I attend in the Chicago area has a gentleman with 455 kHz IF transformers like we are use to seeing in older tube designs. I also had replacement 10.7 MHz units for the older FM tuners. Check with the surplus houses for units.

gb

4214. Re: Big old-fashioned IF transformers for tube-type homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 00:50:23 UTC
From: Gregg <nospam@unknown.org>
Message-ID: <432773c1$1_1@dowco.com>
Source record: 17196
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Behold, Tim Shoppa scribed on tube chassis:

> Are the big old-fashioned IF transformers-in-a-can available anywhere
> anymore? I want to make a receiver, probably double conversion, which
> would mean that I'd want several each of the 50kHz and some higher
> frequency (455kHz likely).
>
> Are these things that can be made from scratch without a lot of
> difficutly? I can wind coils etc. but don't have any transformer
> slug-tuned cores.
>
> Tim KA0BTD

Hi Tim,

Check out my article here:
http://geek.scorpiorising.ca/455KHz.html

Cheers!

--
Gregg "t3h g33k"
http://geek.scorpiorising.ca
Ratings are for transistors, tubes have guidelines

4215. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 01:02:22 UTC
From: TRABEM <>
Message-ID: <akrei1hv62l2ak0mk7mruran70ldq9btos@4ax.com>
Source record: 17198

On 13 Sep 2005 14:21:59 -0700, "K7ITM" <k7itm@aol.com> wrote:

>Hi T,
>
>I think you missed the point. With a tuned antenna, what comes out of
>the antenna+tuning is NOT broadband! Frequencies not so very far from
>the one you are tuned to will be greatly attenuated. With that sort of
>input, you should be able to get by with even a 16-bit converter, if
>it's linear (such as a decent delta-sigma is).
>
>For example, a square loop antenna one meter on a side, at 150kHz,
>tuned to resonance with a capacitor, should have a Q around 300. That
>means it's about 0.5kHz wide at the 3dB points, and will be down about
>20dB at 2.5kHz away from center, and 40dB down at 25kHz away.
>
>-- I just read your other reply to my other posting in this thread,
>where you worried about broadcast band overload. I suspect that if you
>have that, it's because, as someone else said, the antenna is acting as
>something other than a loop for that frequency. It's important to keep
>the loop balanced with respect to ground. I'd strongly recommend
>against a "shielded" loop unless you understand just why you are doing
>that. The shield becomes the antenna, and as such, it must be
>symmetrical... Also, for the antenna you described, about 3 meters on
>a side and large wire, expect the Q to be even higher and the bandwidth
>narrower. I think you'll find the resonated impedance to be more like
>a few kohms for a single such turn. Then, use a good balanced FET
>amplifier to get to a low impedance to drive your transmission line.
>
>By the way, I would note that the switching detector/mixer/converter in
>the schematic you showed is not as good as the usual current
>implementation of the H-mode mixer, because the channels of the FETs
>doing the switching in the one you gave a link to operate at a voltage
>which depends on the instantaneous signal amplitude, if I read the
>schematic right, and since the channel resistance is a non-linear
>function of that voltage, the detector will not be strictly linear.
>The H-mode mixers operate one end of the switches at a constant
>voltage, and of course the other end when the switch is on must be very
>close to the same voltage. I expect (and I think the practical
>experience is) that the H-mode mixer will be more linear. Do you know
>what the third order intercept for your mixer is supposed to be? I'd
>be pretty surprised if it was better than about +45dBm.
>
>But even so, even if you DID have a broadband antenna, you can find op
>amps, and you can make amplifiers with discrete parts, that have

>distortion products more than 120dB below the level of signals in
>excess of a volt at the amplifier output, in the LF frequency range.
>In other words, the distortion products will be less than a microvolt,
>with one volt output signals. You don't need to run that preamp with
>any appreciable voltage gain, so you're handling some pretty big input
>signals. And the best of the 24-bit delta-sigma ADCs shouldn't be far
>behind that. (I wish I could do that well at 50MHz!--we do make a
>23-bit ADC that samples at up to 20MHz, but it's a bit pricey for what
>you're trying to do.) As others have pointed out in this thread, the
>atmospheric noise is so bad at LF that the antenna doesn't have to be
>very efficient to capture enough signal to be useful for receiving.
>Unless you are practically next door to a transmitter operating on a
>frequency near the ones you care about listening to, dynamic range
>isn't likely to be a big issue at LF. [Your other posting suggests
>that folk DO have troubles with other signals. I'd go looking for
>answers about WHY before jumping to conclusions about what to do about
>them.] That's a far cry from the case at HF.
>

Hi Tom,

I read your message above about 3 times now AND read all the other posts in this thread over again.

After all of this, I must say that I'm very much in agreement with you although I know little about the linearity of the particular analog switch used in this configuration.

When I started this, I was paranoid about out of band signals mixing and creating problems. Read posts from almost anyone using an LF preamp or presenting a design for one and they will almost certainly contain warnings about overload and mixing byproducts.

So, I wanted an almost unattainable filter on the front end, without realizing in fact how much attenuation the antenna I hope to build will have for out of band signals. You are exactly right, there is probably no need at all for a tuned input in the receiver since the antenna tuning will be so sharp.

Maintaining HI-Q in the antenna should be the primary goal I think rather than worrying about the input filter parameters!

I disagree about the rf preamp however, Bill Ashcock says I shouldn't need one at all as long as I keep the Q high in the antenna and feed it into a balanced line to get to the shack. Bill says some of the guys who have single turn loops 40 feet per side or larger have so much signal, they have to attenuate. I'd like to start out without a preamp unless it is really needed.

By the way, the antenna might not be balanced.....but if it's fed through a balun on each, the feedline is balanced. And, the feedline can be simple twisted wire pairs....which goes a long way towards reducing stray rf pickup and makes the feedline cheap and the losses

low.

If I feed the antenna into a balun and run that to another balun at the receiver, isn't that the same as having a traditional center tapped loop in terms of 'balance'?

I'll try to find some software for loop design and see what the loop looks like in terms of impedance and then decide how to couple that directly into the receiver without a front end filter (just simple impedance matching).

Thanks so much to you and everyone who wrote regarding this, and for the nudge in the 'right direction'. I feel a lot better now regarding the plan of attack than I did just 2 or 3 days ago!

Regards,

T

PS:I like your estimate for my loop impedance. If it's 1000 ohms as you think it might be, I can handle that step down just fine with a balun or 2.

I hope it turns out to be true:>

4216. Re: Big old-fashioned IF transformers for tube-type homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 01:34:37 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <4ouei1p7no2gchbhdrscbllq8hvt3ocf6n@4ax.com>
Source record: 17199

On 13 Sep 2005 17:08:48 -0700, "Tim Shoppa" <shoppa@trailing-edge.com>
wrote:

>Are the big old-fashioned IF transformers-in-a-can available
>anywhere anymore? I want to make a receiver, probably double
>conversion,
>which would mean that I'd want several each of the 50kHz and some
>higher frequency (455kHz likely).
>
>Are these things that can be made from scratch without a lot of
>difficutly? I can wind coils etc. but don't
>have any transformer slug-tuned cores.
>
>Tim KA0BTD

Hi Tim,

They are homebrewable. I needed a few 455khz for a tube RX I was
building and basically resused some old "IF like" cans by replacing
the guts with handwound coils and caps. The forms for the coils were
Horz width coils from a few dead monitors, used the slugs too. Used
one of the basic programs for solonoid coils to get a rough number of
turns and then then wound 30% less in scramble form. That gave a
basic coil and then resonated it with a cap to 500khz. Once the slug
was added it easily tuned down to 400 so I cut the slug shorter (1/2)
and it was fine for 455. The distance between the two coils (for
double tuned IFs) determines the coupling factor, or more directly
the selectivity and losses. Once you have the recipie for one winding
you can easily reproduce it.

Theres nothing special about IF cans save for they have to tune the
desired range, have a decent Q and are shielded. The outer can
however is important or that IF amp will become an IF osc. But even
the can can be liberated from salvage or made from copper, tin or
aluminum stock. I made some really nice looking cans using 1"
Copper pipe and pipe caps, heavy but well shielded. Soda straw
was the coil form and holes in the ends supported it and allowed
access to tuning slugs. Leads came out using insulated Teflon
feedthroughs. Looked very industrial.

Allison
KB1GMX

4217. Re: Use microwave oven chassis for a radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 01:52:33 UTC
From: Joel <Joel@cyberbest.com>
Message-ID: <db91d$43278267$943f9237$31933@STARBAND.NET>
Source record: 17200

Huh??? I would think you wouldn't need slow-scan TV in the microwave
portion of the ham bands.. There is more then enough bandwidth available for
many fast scan TV signals.. Or maybe I'm missing something..

Joe AG4QC
<sdeyoreo@hotmail.com> wrote in message
news:s4rei1to43u8jf9pqk9lvgjkdofkcfqk9e@4ax.com...
> On 12 Sep 2005 23:01:40 -0500, mcalhoun@ksu.edu wrote:
>
>>I recently tore another microwave oven apart for the two really-strong
>>magnets that are in the tube
>>
>> (they are fun to stack alternate-polarity on a wooden dowel
>> so they seem to "float" in the air; kids of all ages just
>> love to play that that "toy")
>>
>>(I kept the transformer, diode, capacitor, and misc. microswitches, too),
>>
>>and as I carried the rather bare chassis out to the garbage-can area,
>>I wondered if anyone had ever tried built an amplifier in such a chassis
>>-- maybe even using some of its many interlocks?
> No, but the tube runs at a freq real close to ham Slow Scan TV bands.
> They retune them and use them as SSTV transmitters.

4218. Re: Use microwave oven chassis for a radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 02:29:46 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <dg81uq$o79$1@theodyn.ncf.ca>
Source record: 17201

"Joel" (Joel@cyberbest.com) writes:
> Huh??? I would think you wouldn't need slow-scan TV in the microwave
> portion of the ham bands.. There is more then enough bandwidth available for
> many fast scan TV signals.. Or maybe I'm missing something..
>
> Joe AG4QC

It was a nonsense reply, though I couldn't decide whether he was trolling
or actually didn't hav e a clue.

Michael VE2BVW

> <sdeyoreo@hotmail.com> wrote in message
> news:s4rei1to43u8jf9pqk9lvgjkdofkcfqk9e@4ax.com...
>> On 12 Sep 2005 23:01:40 -0500, mcalhoun@ksu.edu wrote:
>>
>>>I recently tore another microwave oven apart for the two really-strong
>>>magnets that are in the tube
>>>
>>> (they are fun to stack alternate-polarity on a wooden dowel
>>> so they seem to "float" in the air; kids of all ages just
>>> love to play that that "toy")
>>>
>>>(I kept the transformer, diode, capacitor, and misc. microswitches, too),
>>>
>>>and as I carried the rather bare chassis out to the garbage-can area,
>>>I wondered if anyone had ever tried built an amplifier in such a chassis
>>>-- maybe even using some of its many interlocks?
>> No, but the tube runs at a freq real close to ham Slow Scan TV bands.
>> They retune them and use them as SSTV transmitters.
>
>

4219. Re: switching power mosfet as RF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 03:33:11 UTC
From: Jim <kill-spam@no-spam.org>
Message-ID: <QaKdncJLMoqYB7reRVn-pQ@comcast.com>
Source record: 17202

Most power MosFets have a large Gate to Source capacitance which makes it difficult to use them at radio frequencies.

It can be done, but the higher the desired operating frequency the greater effect the parasitic capacitance has, so most designs I have seen were up to 7 MHz and that was about the upper limit.

Jim Pennell
N6BIU

4220. Re: Big old-fashioned IF transformers for tube-type homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 05:05:29 UTC
From: kludge@panix.com
Message-ID: <dg8b2p$hg6$1@panix2.panix.com>
Source record: 17203
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Tim Shoppa <shoppa@trailing-edge.com> wrote:
>Are the big old-fashioned IF transformers-in-a-can available
>anywhere anymore? I want to make a receiver, probably double
>conversion,
>which would mean that I'd want several each of the 50kHz and some
>higher frequency (455kHz likely).

Try a hamfest, or Antique Electronics Supply.

>Are these things that can be made from scratch without a lot of
>difficutly? I can wind coils etc. but don't
>have any transformer slug-tuned cores.

They are a bloody pain. You should try it. If it was easy, it
wouldn't be fun.
--scott
--
"C'est un Nagra. C'est suisse, et tres, tres precis."

4221. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 06:17:20 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <nubfi19aamcbkb8lropfnj2tfr9hdm24iq@4ax.com>
Source record: 17204

On 13 Sep 2005 14:21:59 -0700, "K7ITM" <k7itm@aol.com> wrote:

>But even so, even if you DID have a broadband antenna, you can find op
>amps, and you can make amplifiers with discrete parts, that have
>distortion products more than 120dB below the level of signals in
>excess of a volt at the amplifier output, in the LF frequency range.
>In other words, the distortion products will be less than a microvolt,
>with one volt output signals. You don't need to run that preamp with
>any appreciable voltage gain, so you're handling some pretty big input
>signals.

With some kind of vertical antenna (possibly with some capacitance)
which is small compared to the wavelength on LF, it is going to have a
large capacitive reactance. There will also be some antenna input
capacitance from input to ground, so essentially there is a capacitive
voltage divider formed by the antenna capacitance and input
capacitance and the amplifier is trying to tap off that voltage. So
the amplifier really needs current gain, not voltage gain i.e. a high
input impedance and a manageable (50 ohm etc.) output impedance.

Paul OH3LWR

4222. Re: switching power mosfet as RF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 07:14:26 UTC
From: Markus L <uo9oew@lnubb.pbz>
Message-ID: <j5QVe.126$ea.10961@ns2.gip.net>
Source record: 17205

"Jim" <kill-spam@no-spam.org> wrote in message
news:QaKdncJLMoqYB7reRVn-pQ@comcast.com...
> Most power MosFets have a large Gate to Source capacitance which makes
it
> difficult to use them at radio frequencies.
>
> It can be done, but the higher the desired operating frequency the
> greater effect the parasitic capacitance has, so most designs I have seen
> were up to 7 MHz and that was about the upper limit.

A German ham radio magazine just published a project for a 400W MOSFET PA
covering the 80...20m bands:
http://www.vth.de/FUNK/funk/09_05/28.asp

Markus HB9BRJ

4223. Re: switching power mosfet as RF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 08:24:16 UTC
From: francesco.messineo@gmail.com
Message-ID: <1126686255.980443.67350@g49g2000cwa.googlegroups.com>
Source record: 17206

nospam@nouce.bellatlantic.net ha scritto:

>
> Good luck. Most of those devices will exhibit gain to amazing
> frequencies due the fact that fets have no real limits like junction
> transistors. What they do have that limits them is real world things
> like lead inductance, Input capacitance, output capacitance and Drain
> to Gate Miller capacitance all of which make it difficult to get power
> in and out of them as frequency increases.
>
> The input capacitance for the IRF510 is 135pf, the higher power parts
> can easily be upwards of 1275pf for the IFR640 (Xc of around 2ohms).
> Output capacitance around 400pf and feedback capacitance of 100PF
> also for the 640.

Reading from the ARF488 datasheet (this mosfet is made for RF
amplification
up to 60 MHz or so) I see input capacitance of 1400 pf typical, and
150 pf output capacitance typical.
The IRF840 datasheet reports 1300 pf and 200 pf in/out capacitance
at the same frequency of the ARF488 (1 MHz). So what else affect
high frequency performance of these devices? Is the 50 pf difference
in output capacitance the "big" problem? Reverse transfer capacitance
of the ARF488 is 65 pf against the 18 pf of the IRF840.

>
> I have driven an IRF510 at 50mhz and gotten 4.5W out of it. To do so
> I had to drive it as a 5 to 10ohm very reactive input, use a 24V
> supply and load the output to around 10ohms, and bias it for 100ma
> minimum. It was unstable thermally(tended to runaway toward device
> burnout). The output spectrum (harmonics) and IMD were poor.
> At 12V power out was nearly RF power input.

not so encouraging...

>
> It was more effort than driving a 2SC1307 (old cb final) at 12V, more
> gain and the IMD was better. At 12V the 1306 gave 6W carrier power
> with good stability. A pair of 2sc1971 driven pushpull easily give
> 10-11W carrier at 12V and are fairly clean.
>
> There are FETs characterized for RF power but they are not inexpensive
> and corosponding bipolar devices are fairly cheap.

what do you suggest on the bipolar side to obtain at least 100W CW
on 50 MHz? Monitor line output transistors are any good?

Thanks and 73

Francesco IS0FKQ

4224. Re: switching power mosfet as RF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 12:18:39 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <md4gi11v5pdav6o6748o0n6e1cp5k6op57@4ax.com>
Source record: 17207

On 14 Sep 2005 01:24:16 -0700, francesco.messineo@gmail.com wrote:

>
>nospam@nouce.bellatlantic.net ha scritto:
>
>>
>> Good luck. Most of those devices will exhibit gain to amazing
>> frequencies due the fact that fets have no real limits like junction
>> transistors. What they do have that limits them is real world things
>> like lead inductance, Input capacitance, output capacitance and Drain
>> to Gate Miller capacitance all of which make it difficult to get power
>> in and out of them as frequency increases.
>>
>> The input capacitance for the IRF510 is 135pf, the higher power parts
>> can easily be upwards of 1275pf for the IFR640 (Xc of around 2ohms).
>> Output capacitance around 400pf and feedback capacitance of 100PF
>> also for the 640.
>
>Reading from the ARF488 datasheet (this mosfet is made for RF
>amplification
>up to 60 MHz or so) I see input capacitance of 1400 pf typical, and
>150 pf output capacitance typical.
>The IRF840 datasheet reports 1300 pf and 200 pf in/out capacitance
>at the same frequency of the ARF488 (1 MHz). So what else affect
>high frequency performance of these devices? Is the 50 pf difference
>in output capacitance the "big" problem? Reverse transfer capacitance
>of the ARF488 is 65 pf against the 18 pf of the IRF840.

Yes that is true. However that input capacitance is close to what I'd
use to bypass a 50mhz circuit. It's near RF dead short unless you
try to absorb it into the feed network. Even then it's a very low Z.

>>
>> I have driven an IRF510 at 50mhz and gotten 4.5W out of it. To do so
>> I had to drive it as a 5 to 10ohm very reactive input, use a 24V
>> supply and load the output to around 10ohms, and bias it for 100ma
>> minimum. It was unstable thermally(tended to runaway toward device
>> burnout). The output spectrum (harmonics) and IMD were poor.
>> At 12V power out was nearly RF power input.
>
>not so encouraging...

All I can say it try the most likely candidate. They are designed for
switching power at a few hundred KHZ.

Best results will require a 24V or maybe a 40-50V power source.

>>
>> It was more effort than driving a 2SC1307 (old cb final) at 12V, more
>> gain and the IMD was better. At 12V the 1306 gave 6W carrier power
>> with good stability. A pair of 2sc1971 driven pushpull easily give
>> 10-11W carrier at 12V and are fairly clean.
>>
>> There are FETs characterized for RF power but they are not inexpensive
>> and corosponding bipolar devices are fairly cheap.
>
>what do you suggest on the bipolar side to obtain at least 100W CW
>on 50 MHz? Monitor line output transistors are any good?
>Thanks and 73
>
>Francesco IS0FKQ

MRF492 is a good 70w device I've had good success with. If you can
afford it MRF141 RF power fets or MRF150 but they are expensive.
There are a number of 2SCxxxx part numbers that also would fit the
need but experience with them is limited.

If all else failes a Valve such as a 4cx250 with 800-900V on the plate
would do 100 or more watts out.

Allison

4225. Re: switching power mosfet as RF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 12:21:49 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <ta5gi1hgogs5c0hh0k7tmthc65q3ibtgif@4ax.com>
Source record: 17208

On Tue, 13 Sep 2005 20:33:11 -0700, "Jim" <kill-spam@no-spam.org>
wrote:

> Most power MosFets have a large Gate to Source capacitance which makes it
>difficult to use them at radio frequencies.
>
> It can be done, but the higher the desired operating frequency the
>greater effect the parasitic capacitance has, so most designs I have seen
>were up to 7 MHz and that was about the upper limit.
>
>
>
> Jim Pennell
> N6BIU

7mhz was not the upper limit but around 20m the Gate Xc does makes
them harder to drive.

There are a number of designs that run them as linear amps to 10m but
the drive networks take that into account. A pair of IRF510s will do
35-40W in the FARA design published in QST.

Allison

4226. Re: switching power mosfet as RF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 12:26:31 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <5g5gi15s5cosbuumc47imgeje5j3o0acvd@4ax.com>
Source record: 17209

On Wed, 14 Sep 2005 09:14:26 +0200, "Markus L" <uo9oew@lnubb.pbz>
wrote:

>"Jim" <kill-spam@no-spam.org> wrote in message
>news:QaKdncJLMoqYB7reRVn-pQ@comcast.com...
>> Most power MosFets have a large Gate to Source capacitance which makes
>it
>> difficult to use them at radio frequencies.
>>
>> It can be done, but the higher the desired operating frequency the
>> greater effect the parasitic capacitance has, so most designs I have seen
>> were up to 7 MHz and that was about the upper limit.
>
>A German ham radio magazine just published a project for a 400W MOSFET PA
>covering the 80...20m bands:
>http://www.vth.de/FUNK/funk/09_05/28.asp
>
>Markus HB9BRJ
>

Yes but were they class E or linear? There are a number of AM ops on
160/75/40m running 1kw AM phone using class E FET. However class E
for 6M I havent seen yet. The german design would not run at 6m and
thats what the initial posting asked for.

Those power fets at lower frequencies are a very useful devices but at
VHF their characteristics are difficult to accomodate.

Allison

4227. Re: switching power mosfet as RF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 13:48:38 UTC
From: francesco.messineo@gmail.com
Message-ID: <1126705718.554738.27190@g44g2000cwa.googlegroups.com>
Source record: 17210

Hello,

nospam@nouce.bellatlantic.net ha scritto:

> On 14 Sep 2005 01:24:16 -0700, francesco.messineo@gmail.com wrote:
>
> >
> >nospam@nouce.bellatlantic.net ha scritto:
> >
> >>
> >> Good luck. Most of those devices will exhibit gain to amazing
> >> frequencies due the fact that fets have no real limits like junction
> >> transistors. What they do have that limits them is real world things
> >> like lead inductance, Input capacitance, output capacitance and Drain
> >> to Gate Miller capacitance all of which make it difficult to get power
> >> in and out of them as frequency increases.
> >>
> >> The input capacitance for the IRF510 is 135pf, the higher power parts
> >> can easily be upwards of 1275pf for the IFR640 (Xc of around 2ohms).
> >> Output capacitance around 400pf and feedback capacitance of 100PF
> >> also for the 640.
> >
> >Reading from the ARF488 datasheet (this mosfet is made for RF
> >amplification
> >up to 60 MHz or so) I see input capacitance of 1400 pf typical, and
> >150 pf output capacitance typical.
> >The IRF840 datasheet reports 1300 pf and 200 pf in/out capacitance
> >at the same frequency of the ARF488 (1 MHz). So what else affect
> >high frequency performance of these devices? Is the 50 pf difference
> >in output capacitance the "big" problem? Reverse transfer capacitance
> >of the ARF488 is 65 pf against the 18 pf of the IRF840.
>
> Yes that is true. However that input capacitance is close to what I'd
> use to bypass a 50mhz circuit. It's near RF dead short unless you
> try to absorb it into the feed network. Even then it's a very low Z.

Yes, I understand it. What isn't clear to me is why the ARF488 is
specified
for > 60 MHz and has input capacitance > of the one of an IRF840.
On QEX of may/jun 1999 you can find a 300W 50 MHz amplifier with
ARF488 push-pull.

>
> All I can say it try the most likely candidate. They are designed for
> switching power at a few hundred KHZ.

>
> Best results will require a 24V or maybe a 40-50V power source.

no problem, I can even use 100V or more.

> >
> >what do you suggest on the bipolar side to obtain at least 100W CW
> >on 50 MHz? Monitor line output transistors are any good?
> >Thanks and 73
> >

>
> MRF492 is a good 70w device I've had good success with. If you can
> afford it MRF141 RF power fets or MRF150 but they are expensive.
> There are a number of 2SCxxxx part numbers that also would fit the
> need but experience with them is limited.
>
> If all else failes a Valve such as a 4cx250 with 800-900V on the plate
> would do 100 or more watts out.

I should have a couple of 4cx150 around, but this amplifier should
sit right under the antenna in the same box with a receive
preamplifier.
I was trying to avoid a big tube ampli. And also I was trying to
recycle
"normal" components, which is also a good way to learn something.

73

Francesco IS0FKQ

4228. Re: switching power mosfet as RF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 16:03:15 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <bbhgi1hh0ir4ji5bfk3hsir199sl8j170s@4ax.com>
Source record: 17211

On 14 Sep 2005 06:48:38 -0700, francesco.messineo@gmail.com wrote:

> Hello,
>
>
>nospam@nouce.bellatlantic.net ha scritto:
>
>> On 14 Sep 2005 01:24:16 -0700, francesco.messineo@gmail.com wrote:
>>
>> >
>> >nospam@nouce.bellatlantic.net ha scritto:
>> >
>> >>
>> >> Good luck. Most of those devices will exhibit gain to amazing
>> >> frequencies due the fact that fets have no real limits like junction
>> >> transistors. What they do have that limits them is real world things
>> >> like lead inductance, Input capacitance, output capacitance and Drain
>> >> to Gate Miller capacitance all of which make it difficult to get power
>> >> in and out of them as frequency increases.
>> >>
>> >> The input capacitance for the IRF510 is 135pf, the higher power parts
>> >> can easily be upwards of 1275pf for the IFR640 (Xc of around 2ohms).
>> >> Output capacitance around 400pf and feedback capacitance of 100PF
>> >> also for the 640.
>> >
>> >Reading from the ARF488 datasheet (this mosfet is made for RF
>> >amplification
>> >up to 60 MHz or so) I see input capacitance of 1400 pf typical, and
>> >150 pf output capacitance typical.
>> >The IRF840 datasheet reports 1300 pf and 200 pf in/out capacitance
>> >at the same frequency of the ARF488 (1 MHz). So what else affect
>> >high frequency performance of these devices? Is the 50 pf difference
>> >in output capacitance the "big" problem? Reverse transfer capacitance
>> >of the ARF488 is 65 pf against the 18 pf of the IRF840.
>>
>> Yes that is true. However that input capacitance is close to what I'd
>> use to bypass a 50mhz circuit. It's near RF dead short unless you
>> try to absorb it into the feed network. Even then it's a very low Z.
>
>Yes, I understand it. What isn't clear to me is why the ARF488 is
>specified
>for > 60 MHz and has input capacitance > of the one of an IRF840.
>On QEX of may/jun 1999 you can find a 300W 50 MHz amplifier with
>ARF488 push-pull.

I'll check that one out. I do not have QEX back to '99 so it may take
a while to get it.

I suspect the ARF488 is a RF rated varient of the IRFs and may offer
other characteristice that are more complient at VHF. I cannot find
any data or even a reference to ARF488.

I am a 6m op that love to play on that band so curiousity always wins.

>>
>> All I can say it try the most likely candidate. They are designed for
>> switching power at a few hundred KHZ.
>>
>> Best results will require a 24V or maybe a 40-50V power source.
>
>no problem, I can even use 100V or more.
>
>
>> >
>> >what do you suggest on the bipolar side to obtain at least 100W CW
>> >on 50 MHz? Monitor line output transistors are any good?
>> >Thanks and 73
>> >
>
>>
>> MRF492 is a good 70w device I've had good success with. If you can
>> afford it MRF141 RF power fets or MRF150 but they are expensive.
>> There are a number of 2SCxxxx part numbers that also would fit the
>> need but experience with them is limited.
>>
>> If all else failes a Valve such as a 4cx250 with 800-900V on the plate
>> would do 100 or more watts out.
>
>I should have a couple of 4cx150 around, but this amplifier should
>sit right under the antenna in the same box with a receive
>preamplifier.
>I was trying to avoid a big tube ampli. And also I was trying to
>recycle
>"normal" components, which is also a good way to learn something.
>
>73
>
>Francesco IS0FKQ

One of those 4cx150s will do over 100W CW and the PS for that power
is small. Like you say something different is always a draw.

Allison
KB1GMX

4229. Re: Big old-fashioned IF transformers for tube-type homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 16:23:35 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <b8YVe.830$2J3.240@newssvr21.news.prodigy.com>
Source record: 17212
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Buy a couple of beatup Command sets or other mil surplus and salvage. You
can always get 455Kc IF xfmrs from old tube radios. Making your own is too
much work, so salvage and spend that extra time on making a better radio.
hi hi

--

73
Hank WD5JFR
"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
news:1126653515.795787.34880@g43g2000cwa.googlegroups.com...
> Are the big old-fashioned IF transformers-in-a-can available
> anywhere anymore? I want to make a receiver, probably double
> conversion,
> which would mean that I'd want several each of the 50kHz and some
> higher frequency (455kHz likely).
>
> Are these things that can be made from scratch without a lot of
> difficutly? I can wind coils etc. but don't
> have any transformer slug-tuned cores.
>
> Tim KA0BTD
>

4230. Re: Amphenol Microphone Connectors (Heathkit, etc.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 18:18:50 UTC
From: hhc314@yahoo.com
Message-ID: <1126721930.031801.209330@g44g2000cwa.googlegroups.com>
Source record: 17213

Mike, the computers that I give to kids are equipped with GWBASIC and a
Microft C Compiler, so that they can acquire basic programming skills.
No Internet access, no games, simply things that will help them in
their later life.

Harry C.

4231. Re: Big old-fashioned IF transformers for tube-type homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 19:09:19 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <zz_Ve.97028$Ji4.57022@fed1read03>
Source record: 17214
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Scott Dorsey" <kludge@panix.com> wrote in message
news:dg8b2p$hg6$1@panix2.panix.com...
> Tim Shoppa <shoppa@trailing-edge.com> wrote:
> >Are the big old-fashioned IF transformers-in-a-can available
> >anywhere anymore? I want to make a receiver, probably double
> >conversion,
> >which would mean that I'd want several each of the 50kHz and some
> >higher frequency (455kHz likely).
>
> Try a hamfest, or Antique Electronics Supply.
>
> >Are these things that can be made from scratch without a lot of
> >difficutly? I can wind coils etc. but don't
> >have any transformer slug-tuned cores.
>
> They are a bloody pain. You should try it. If it was easy, it
> wouldn't be fun.
> --scott
> --
> "C'est un Nagra. C'est suisse, et tres, tres precis."

Getting the bandpass right could be a pain; I'd guess the
sweet spot is near critical coupling, where you'd get a
double-humped response curve. Otherwise, undercoupling
would give you a sharper peak, good for CW, or you'd have
to sweep align the strip for the desired BW.

Pete

4232. Re: switching power mosfet as RF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 19:21:04 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11igu18j6chqf4c@corp.supernews.com>
Source record: 17215

One thing I haven't heard mentioned is that the huge capacitances of power FETs are highly variable. They're essentially reverse-biased junction capacitances, so they change dramatically over the period of each cycle as the gate and drain voltages change. This tends to make them lossy, and makes them difficult or impossible to absorb them into a network. People have obviously found ways to live with the variable C, but it's not a trivial problem.

Roy Lewallen, W7EL

4233. DDS and phase noise.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 20:29:09 UTC
From: Mauro <mauro.succi@libero.it>
Message-ID: <pK%Ve.964$9l.18869@twister1.libero.it>
Source record: 17216

I'm not an expert and need some help.
I've build a DDS around an AD9951.
I drive it at 400MHz from a source at 200MHz multiplied by 2. I get an output freq of 20MHz.
I now drive it directly from the same source at 200MHz. I changed the register inside DDS to still get 20MHz on output.
I do not have any possibility to measure the phase noise.
So the question: is it possible to estimate if the phase noise of the 20MHz output is getting better, worst or is it going to remain the same?
Thanks for the support.
73
Mauro

4234. Re: switching power mosfet as RF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 21:29:51 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <d45hi1h7j5hhlbjbplaqhf8h7hsvtga2um@4ax.com>
Source record: 17217

On Wed, 14 Sep 2005 12:21:04 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>One thing I haven't heard mentioned is that the huge capacitances of
>power FETs are highly variable. They're essentially reverse-biased
>junction capacitances, so they change dramatically over the period of
>each cycle as the gate and drain voltages change. This tends to make
>them lossy, and makes them difficult or impossible to absorb them into a
>network. People have obviously found ways to live with the variable C,
>but it's not a trivial problem.
>
>Roy Lewallen, W7EL

Switching power MOSFETS are the current version of the "sweep tube"
amplifier. Looking back those 6DQ5s and 6JS6s werent pretty either.

Roger that, they are no fun to drive. The miller capacitance is also
a similar factor and you have the same effect going on from the Drain
Source path becuase of the avalanche diode. I suspect those
combined effects are why the IMD for those single ended IRF510
amps are so pitiful.

Driving them as pushpull pairs helps somewhat as you can get one
and the other 180 out of phase to help reflect a passable reflection
back to the driver.

Allison
Kb1GMX

4235. Re: DDS and phase noise.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-14 23:27:26 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <BI2We.39536$1g2.2245@fe05.lga>
Source record: 17218

"Mauro" <mauro.succi@libero.it> wrote in message
news:pK%Ve.964$9l.18869@twister1.libero.it...

> So the question: is it possible to estimate if the phase noise of the
> 20MHz
> output is getting better, worst or is it going to remain the same?

Decreasing the frequency at which you clock the DDS will increase the phase noise. It is pretty hard to estimate as it will change quite a bit with small changes in divisor (i.e. output frequency). But as a general rule, you want to clock the DDS at some high multiple of the operating frequency.

Obviously, if your clock has phase noise too, that is a bad thing. I would doubt that your frequency doubler would add phase noise, but I can't say for sure since I haven't got your circuit. But typically doublers introduce other forms of distortion which aren't as problematic for a DDS clock.

So just shooting from the hip, I would expect your phase noise to be a lot worse from a 200 MHz clock than from the 400. It is still 10x the operating frequency, though, so I wouldn't expect it to be horrible.

..

4236. Re: DDS and phase noise.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-15 00:10:09 UTC
From: DRGrok@munged.net
Message-ID: <Z4ednfqqbOwoJ7XenZ2dnUVZ_s2dnZ2d@rcn.net>
Source record: 17219

In article <pK%Ve.964$9l.18869@twister1.libero.it>, "Mauro" <mauro.succi@libero.it> wrote:
>I'm not an expert and need some help.
>I've build a DDS around an AD9951.
>I drive it at 400MHz from a source at 200MHz multiplied by 2. I get an
>output freq of 20MHz.
>I now drive it directly from the same source at 200MHz. I changed the
>register inside DDS to still get 20MHz on output.
>I do not have any possibility to measure the phase noise.
>So the question: is it possible to estimate if the phase noise of the 20MHz
>output is getting better, worst or is it going to remain the same?
>Thanks for the support.
>73
>Mauro
>
>
There are 2 main sources of phase noise in the output of the DDS: The
residual noise of the DDS and the divided down noise of your clock source.

The residual noise is inherent to the DDS and not dependent on the clock. It
is a function of the technology used to build it. This should be specified by
the vendor. It is usually measured by driving 2 identical DDS's from a common
source, measuring the resulting phase noise and subtracting 3 dB to account
for 2 devices.

As for your clock noise: Your 200 MHz clock noise will be increased by 6 dB
by doubling [plus any residual noise of the doubler -- use a Schottkey diode
doubler for best results]. That 6 dB will be subtracted by the extra factor
of 2 in the effective divide factor of the DDS. In short -- its a wash except
for the doubler residual noise reduced by 26 dB [20*log10(20/400)] which
should be insignificant.

Dr. G.

4237. Re: Amphenol Microphone Connectors (Heathkit, etc.)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-15 00:25:58 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4328BFC3.AEB27D2C@earthlink.net>
Source record: 17220

hhc314@yahoo.com wrote:
>
> Mike, the computers that I give to kids are equipped with GWBASIC and a
> Microft C Compiler, so that they can acquire basic programming skills.
> No Internet access, no games, simply things that will help them in
> their later life.
>
> Harry C.

The groups dealing with kids around here tell me that they have to have to have internet access for their school work. They asked for more than I can deliver, so I turned my efforts elsewhere, and left the other groups to help the kids. They already have every computer store in the area giving them everything, leaving nothing for others who need computers. My efforts are limited to an occasional mention in a weekly "Bulletin Board" column in the local news paper, and what Vets helping Vets has dropped off at their office.

My church is trying to raise the money to buy and set up a used double wide portable classroom to teach free computer classes after school. The people giving computers to kids do just that, and walk away. The classes will start with the basics, then cover safe browsing. Classes for the kids will be right after school, and another session for adults in the evenings. Our recent work to help relocate refugees from Mississippi to this area have set the project back quite a bit, but it will happen.

A smaller computer repair course will be offered to selected students who show an interest. It will be four hours a day on Saturday mornings to make sure they really want to take the course. I hope to take most of them to the point that they can pass the A+ certification at the end of the course.

--
?

Michael A. Terrell
Central Florida

4238. Re: Use microwave oven chassis for a radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-15 01:43:17 UTC
From: Justa Lurker <JustaLurker@att.net>
Message-ID: <Vk4We.248546$5N3.117703@bgtnsc05-news.ops.worldnet.att.net>
Source record: 17221

Michael Black wrote:
>
> It was a nonsense reply, though I couldn't decide whether he was trolling
> or actually didn't hav e a clue.
>
> Michael VE2BVW
>

Hardly the case Michael ---- Dr. Calhoun is a distinguished retired professor of Electrical Engineering at KSU. "Trolling and/or doesn't have a clue".....no, I really don't think so. His original post seemed serious, on-topic, and factually correct especially compared to some of the other crap that gets posted here. What made you think it might be otherwise ?

73s

4239. Re: DDS and phase noise.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-15 01:45:19 UTC
From: novatech@eskimo.com
Message-ID: <dgajnfmak1@eskinews.eskimo.com>
Source record: 17222

"Mauro" <mauro.succi@libero.it> writes:

>I'm not an expert and need some help.
>I've build a DDS around an AD9951.
>I drive it at 400MHz from a source at 200MHz multiplied by 2. I get an
>output freq of 20MHz.
>I now drive it directly from the same source at 200MHz. I changed the
>register inside DDS to still get 20MHz on output.
>I do not have any possibility to measure the phase noise.
>So the question: is it possible to estimate if the phase noise of the 20MHz
>output is getting better, worst or is it going to remain the same?
>Thanks for the support.
>73
>Mauro

Assuming your source is not so good as to be below the noise floor of the AD9951, you will get slightly better performance without multiplying by two. The rule-of-thumb for perfect conversion is 6dB for each doubling. But it won't be perfect, so by doubling you'll be a little worse than 6dB and then dividing again you will not get as much back. If the doubling was perfect and the performance of the AD9951 was the same at 200MHz and 400MHz, you get the identical results.

Of course, this might be bogus if there are other artifacts.

Make sense?

If you can build a doubler, then you can measure phase noise. Mix your 20MHz output with a known good 20MHz source in a double-balance mixer. Adjust the phase to get zero DC (quadrature). If you low-pass filter the output, the noise is an indication of phase noise. If you have a low frequency spectrum analyser available, you can get a nice plot. Otherwise you can use an AC voltmeter to get relative performance.

Steve.
--
Steven D. Swift, novatech@eskimo.com, http://www.novatech-instr.com
NOVATECH INSTRUMENTS, INC. P.O. Box 55997
206.301.8986, fax 206.363.4367 Seattle, Washington 98155 USA

4240. Re: Use microwave oven chassis for a radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-15 02:37:21 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <dgamp1$925$1@theodyn.ncf.ca>
Source record: 17223

Justa Lurker (JustaLurker@att.net) writes:
> Michael Black wrote:
>>
>> It was a nonsense reply, though I couldn't decide whether he was trolling
>> or actually didn't hav e a clue.
>>
>> Michael VE2BVW
>>
>
> Hardly the case Michael ---- Dr. Calhoun is a distinguished retired
> professor of Electrical Engineering at KSU. "Trolling and/or doesn't
> have a clue".....no, I really don't think so. His original post seemed
> serious, on-topic, and factually correct especially compared to some of
> the other crap that gets posted here. What made you think it might be
> otherwise ?
>
> 73s

I can't be held responsible for top-posters.

If you'd paid attention, the post I replied to was a top post, and he
was referring to the nonsense reply to the original post.

Note I specifically said "reply", as in
" No, but the tube runs at a freq real close to ham Slow Scan TV bands.
They retune them and use them as SSTV transmitters."
which makes absolutely no sense, since SSTV is commonly used on HF.

Michael VE2BVW

4241. Re: Use microwave oven chassis for a radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-15 03:39:43 UTC
From: mcalhoun@ksu.edu
Message-ID: <dgaqdv$qr1@unix1.cc.ksu.edu>
Source record: 17224

>>I recently tore another microwave oven apart for the two really-strong
>>....[snip]....
>>and as I carried the rather bare chassis out to the garbage-can area,
>>I wondered if anyone had ever tried built an amplifier in such a chassis
>>-- maybe even using some of its many interlocks?

>...[someone mentioned using the microwave tube...snip...]...

I wasn't asking about re-using the microwave TUBE but the CHASSIS and
maybe the interlocks and the cooling fan (I forgot to mention that in
my original posting). If the new RF tube(s) would fit, the shielding
at HF should be superb(!), yet one could still see the warm glow of
the tubes through the grilled door.

--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

4242. Re: switching power mosfet as RF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-15 08:01:40 UTC
From: francesco.messineo@gmail.com
Message-ID: <1126768800.174166.322400@z14g2000cwz.googlegroups.com>
Source record: 17225

nospam@nouce.bellatlantic.net ha scritto:

> On 14 Sep 2005 06:48:38 -0700, francesco.messineo@gmail.com wrote:
>
> > Hello,
> >
> >
> >nospam@nouce.bellatlantic.net ha scritto:
> >
> >> On 14 Sep 2005 01:24:16 -0700, francesco.messineo@gmail.com wrote:
> >>
> >> >

> >> >
> >> >Reading from the ARF488 datasheet (this mosfet is made for RF
> >> >amplification
> >> >up to 60 MHz or so) I see input capacitance of 1400 pf typical, and
> >> >150 pf output capacitance typical.

> >>
> >> Yes that is true. However that input capacitance is close to what I'd
> >> use to bypass a 50mhz circuit. It's near RF dead short unless you
> >> try to absorb it into the feed network. Even then it's a very low Z.
> >
> >Yes, I understand it. What isn't clear to me is why the ARF488 is
> >specified
> >for > 60 MHz and has input capacitance > of the one of an IRF840.
> >On QEX of may/jun 1999 you can find a 300W 50 MHz amplifier with
> >ARF488 push-pull.
>
> I'll check that one out. I do not have QEX back to '99 so it may take
> a while to get it.

I can send you both the QEX article and the ARF488 datasheet (also the
IRF840 one, but this is really easy to find in the internet). Just
drop me an email and I'll send them, my email address is the one I'm
writing from.

>
> I suspect the ARF488 is a RF rated varient of the IRFs and may offer
> other characteristice that are more complient at VHF. I cannot find
> any data or even a reference to ARF488.
>
> I am a 6m op that love to play on that band so curiousity always wins.

same here. I've found that my 10W CW aren't terribly effective even with
the 8m boom yagi lately, so I'm thinking about something more powerful
while the sun is sleeping. Seems like the old days when I could hear
and work VK with a J-pole are gone.

> One of those 4cx150s will do over 100W CW and the PS for that power
> is small. Like you say something different is always a draw.

Also these tubes need forced air cooling and the power supply would need
to live near the amplifier (unless I want to send a cable with a kV up
to the antenna pole), if the mosfet way fails I'll probably go with an expensive
bipolar amplifier or put the amplifier in the shack.

73
Francesco IS0FKQ

4243. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-15 08:14:37 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1126772077.391708.282070@g14g2000cwa.googlegroups.com>
Source record: 17226

You can find a good program to estimate loop inductance and some other parameters on Reg Edwards' web pages. He has a link in many of his postings on this group and the r.r.a.antenna one. The impedance comes from the Q and the fact that you are resonating it--or at least it's presumed that you are resonating it. So if it has a Q of 300 and the inductive reactance is 50 ohms, the resistance when resonated is 300*50=15000 ohms, for example. That's why folk like to use preamps at the antenna: transform that high impedance down to a low impedance that's easy to send along a transmission line. Seems to me that if they are having trouble with intermod distortion in the preamp, the preamp isn't designed properly. It's not terribly difficult to get very low distortion at LF these days. By the way, if you build a really big loop and have so much signal you can attenuate it, that gives you a chance to lower the Q and increase the bandwidth: if what you want to listen to occupies much bandwidth, you don't want your antenna to filter out the information you want to listen to!

I'd suggest you read an antenna book like Johnson and Jasik, or the antennas chapter of King, Mimno and Wing's "Transmission Lines, Antennas and Waveguides." They will make it a lot clearer why you might want a balanced loop. You don't need a grounded center-tap to make it balanced--just make it very symmetrical.

Cheers,
Tom

4244. Re: switching power mosfet as RF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-15 11:04:48 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <08lii15cmpbn0c34mk204u2f3aq4pn82mr@4ax.com>
Source record: 17227

On 15 Sep 2005 01:01:40 -0700, francesco.messineo@gmail.com wrote:

>
>nospam@nouce.bellatlantic.net ha scritto:
>
>> On 14 Sep 2005 06:48:38 -0700, francesco.messineo@gmail.com wrote:
>>
>> > Hello,
>> >
>> >
>> >nospam@nouce.bellatlantic.net ha scritto:
>> >
>> >> On 14 Sep 2005 01:24:16 -0700, francesco.messineo@gmail.com wrote:
>> >>
>> >> >
>>
>> >> >Reading from the ARF488 datasheet (this mosfet is made for RF
>> >> >amplification
>> >> >up to 60 MHz or so) I see input capacitance of 1400 pf typical, and
>> >> >150 pf output capacitance typical.
>>
>> >>
>> >> Yes that is true. However that input capacitance is close to what I'd
>> >> use to bypass a 50mhz circuit. It's near RF dead short unless you
>> >> try to absorb it into the feed network. Even then it's a very low Z.
>> >
>> >Yes, I understand it. What isn't clear to me is why the ARF488 is
>> >specified
>> >for > 60 MHz and has input capacitance > of the one of an IRF840.
>> >On QEX of may/jun 1999 you can find a 300W 50 MHz amplifier with
>> >ARF488 push-pull.
>>
>> I'll check that one out. I do not have QEX back to '99 so it may take
>> a while to get it.
>
>I can send you both the QEX article and the ARF488 datasheet (also the
>IRF840 one, but this is really easy to find in the internet). Just
>drop me an email and I'll send them, my email address is the one I'm
>writing from.

I have the IRF840 datasheet. The ARF488 datasheet is not on the 'net.
Would like to see the QEX article. I have the arrl fowarding service.

KB1GMX at Arrl . net

Allison
>
>>
>> I suspect the ARF488 is a RF rated varient of the IRFs and may offer
>> other characteristice that are more complient at VHF. I cannot find
>> any data or even a reference to ARF488.
>>
>> I am a 6m op that love to play on that band so curiousity always wins.
>
>same here. I've found that my 10W CW aren't terribly effective even
>with
>the 8m boom yagi lately, so I'm thinking about something more powerful
>while the sun is sleeping. Seems like the old days when I could hear
>and work VK with a J-pole are gone.
>
>
>
>> One of those 4cx150s will do over 100W CW and the PS for that power
>> is small. Like you say something different is always a draw.
>
>Also these tubes need forced air cooling and the power supply would
>need
>to live near the amplifier (unless I want to send a cable with a kV up
>to the antenna pole), if the mosfet way fails I'll probably go with an
>expensive
>bipolar amplifier or put the amplifier in the shack.
>
>73
>Francesco IS0FKQ

4245. Re: Use microwave oven chassis for a radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-15 13:37:57 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <0ktii15rk1p71qtf2cu0gij0jjeeu5h30g@4ax.com>
Source record: 17228

There was a fellow in Central Ohio in the late 80's that used a
microwave oven as a fast scan TV transmitter on 2.4Ghz. The details
are very hazy in my mind and I don't recall actually seeing his
signal.

He started with a new unit from a discount store. Feedline losses were
a major problem, he eventually put the thing on top of the tower.
Needless to say, experimenting with a tower mounted transmitter can
bring a whole new set of problems. Especially one that heavy.

I don't want to discourage tower mounting though. About the same time
I had a QRP ATV transmitter at 1296mhz at the tower top that worked
well.

On Tue, 13 Sep 2005 20:20:57 -0400, sdeyoreo@hotmail.com wrote:

>On 12 Sep 2005 23:01:40 -0500, mcalhoun@ksu.edu wrote:
>
>>I recently tore another microwave oven apart for the two really-strong
>>magnets that are in the tube
>>
>> (they are fun to stack alternate-polarity on a wooden dowel
>> so they seem to "float" in the air; kids of all ages just
>> love to play that that "toy")
>>
>>(I kept the transformer, diode, capacitor, and misc. microswitches, too),
>>
>>and as I carried the rather bare chassis out to the garbage-can area,
>>I wondered if anyone had ever tried built an amplifier in such a chassis
>>-- maybe even using some of its many interlocks?
>No, but the tube runs at a freq real close to ham Slow Scan TV bands.
>They retune them and use them as SSTV transmitters.

4246. Re: Big old-fashioned IF transformers for tube-type homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-15 15:39:10 UTC
From: "Mike@Lincoln" <ivan_the.spy@KGB.org>
Message-ID: <dgc4iupmp1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 17229
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
news:1126653515.795787.34880@g43g2000cwa.googlegroups.com...
> Are the big old-fashioned IF transformers-in-a-can available
> anywhere anymore? I want to make a receiver, probably double
> conversion,
> which would mean that I'd want several each of the 50kHz and some
> higher frequency (455kHz likely).
>
> Are these things that can be made from scratch without a lot of
> difficutly? I can wind coils etc. but don't
> have any transformer slug-tuned cores.
>
> Tim KA0BTD
>
J.Birkett,
25, The Strait,
LINCOLN.
LN2 1JF. (Tel: 01522-520767)
He had a few in the shop some months ago, failing that he often has old
portable radios of 1960s vintage and he does not ask a great deal for them.
Great little surplus shop of the old fashioned type....full of all kinds of
junk .
(Closed Sun/Mon/Wed.)
Mike.

4247. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-15 16:09:09 UTC
From: TRABEM <>
Message-ID: <eq3ji11pom35p07l88l3v7tqmdn19dgij7@4ax.com>
Source record: 17230

On 15 Sep 2005 01:14:37 -0700, "K7ITM" <k7itm@aol.com> wrote:

>You can find a good program to estimate loop inductance and some other
>parameters on Reg Edwards' web pages. He has a link in many of his
>postings on this group and the r.r.a.antenna one.

Yes, I found it day before yesterday and was stunned to see the loop impedance change so much as the loop is moved off frequency. I want my antenna to cover 50 Khz to 200 Khz and the antennas impedance will vary from 6K ohms to 1 K ohm, quite a LARGE range.

The software was very helpful and enlightening.

I was hoping to feed the antenna to the house over twisted pair line laying on the ground. This requires a balun to make the low impedance line balanced.

I think the antenna should be balanced as well, which helps in elimination of out of band signals that might overload the preamp. I think, but aren't positive that the balanced antenna is necessary to eliminate the 'antenna effect' which allows the antenna to pick up other signals that it wasn't designed for just because it's a piece of wire hanging in free space.

So, my plan was to build a balanced loop and feed it to the house with a balanced feedline.

>The impedance comes
>from the Q and the fact that you are resonating it--or at least it's
>presumed that you are resonating it. So if it has a Q of 300 and the
>inductive reactance is 50 ohms, the resistance when resonated is
>300*50=15000 ohms, for example. That's why folk like to use preamps at
>the antenna: transform that high impedance down to a low impedance
>that's easy to send along a transmission line. Seems to me that if
>they are having trouble with intermod distortion in the preamp, the
>preamp isn't designed properly. It's not terribly difficult to get
>very low distortion at LF these days. By the way, if you build a
>really big loop and have so much signal you can attenuate it, that
>gives you a chance to lower the Q and increase the bandwidth: if what
>you want to listen to occupies much bandwidth, you don't want your
>antenna to filter out the information you want to listen to!
>

It's not likely that I will ever want to listen to SSB or any other wider band modes, but I did consider putting in a resistor to kill the Q if I ever wanted to do this.

>I'd suggest you read an antenna book like Johnson and Jasik, or the
>antennas chapter of King, Mimno and Wing's "Transmission Lines,
>Antennas and Waveguides." They will make it a lot clearer why you
>might want a balanced loop. You don't need a grounded center-tap to
>make it balanced--just make it very symmetrical.
>

No, it's pretty clear that I want a balanced loop. Several lowfers
made strong suggestions that I should not waste my time building
anything that wasn't balanced, and I couldn't agree more.

>Cheers,
>Tom

Tom, I hope to put up a high Q, but relatively large loop. I expect to
have a very large signal output to the receiver. Signal strength of
received signals will probably NOT be an issue.

Because the signal will be relatively high level, I would like to
resist using a preamp at all.

While I was playing with filters last night, I tried to design a
filter that would also convert impedance from 6 K down to 100 ohms. It
became impractical with a balun BUT, a filter that transforms
impedance seems to kill 2 birds with one stone.

However, performance sucks real bad with filters of higher impedance
and with any filter that attempts to make a large or moderate
impedance transformation.

Is there any other means of converting impedance with out an active
amp (using passive components)? Since I have a big signal, I can
sacrifice some signal strength as long as the losses are not to great.

Maybe I should start another thread?

Regards,

T

4248. Re: DDS and phase noise.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-15 17:27:47 UTC
From: maxfoo <maxfoo@punkass.com>
Message-ID: <3ibji1th4av4j4fhb0sdu6mtet8ctscd9t@4ax.com>
Source record: 17231

On Wed, 14 Sep 2005 20:29:09 GMT, "Mauro" <mauro.succi@libero.it> wrote:

>I'm not an expert and need some help.
>I've build a DDS around an AD9951.
>I drive it at 400MHz from a source at 200MHz multiplied by 2. I get an
>output freq of 20MHz.
>I now drive it directly from the same source at 200MHz. I changed the
>register inside DDS to still get 20MHz on output.
>I do not have any possibility to measure the phase noise.
>So the question: is it possible to estimate if the phase noise of the 20MHz
>output is getting better, worst or is it going to remain the same?
>Thanks for the support.
>73
>Mauro
>

I won't be to concerned with phase noise, with that dds I'd be more worried
about spurs. Those AD dds chips are notorious for them.

4249. Re: switching power mosfet as RF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-15 17:35:44 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <d5aji1h1ajc15sceg3h7upptiqbchnn16f@4ax.com>
Source record: 17232

On 15 Sep 2005 01:01:40 -0700, francesco.messineo@gmail.com wrote:

>I can send you both the QEX article and the ARF488 datasheet (also the
>IRF840 one, but this is really easy to find in the internet). Just

After looking at the data sheets and the apnote it confirms what I've
said.

The APT/ARF488 is a RF device and not close to the IRF parts. One
difference easily noted is the lack of the avalanche diode present
in the IRF parts. It's appearance spec wise is that of a low cost
flavor of currently know RF types without the high cost package.
I may add the ARF488 is unobtainium, apparently they have
discontinued it and gone to newer versions.

The apnote confirms the need for elaborate input match for a rather
low input impedence that is highly reactive. The 50Mhz amplifier
is not broadband and for 6m would be classified as very narrowband
with it's specs covering on the 50-51mhz range. Their use of
striplines to affect input match and output match contribute
to the narrowband behavour. It is a high power amp at 300W with
an IMD3 of -25dbm which is only ok, not great. You also need an
85V supply and have to deal with cooling both the supply and
the amp.

You could try an IRF parts in that circuit but read the apnote well
as it explains the problems and techniques applied to overcome
those problems at 50mhz. However the values required ot match
the IRF vs the ARF parts may vary greater than the design limits
resulting in poor performance.

Allison
KB1GMX

4250. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-15 17:42:04 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1126806124.418910.257510@f14g2000cwb.googlegroups.com>
Source record: 17233

Yes, this might be good for another thread...

Given the limited LF bandwidth you're interested in, I can't imagine that making a transformer would be all that difficult. Not trivial, certainly, but far from impossible. A 5:1 turns ratio will give you a 25:1 impedance ratio. You'll want to use a core material that doesn't introduce distortion. A transformer like that also gives you a way to keep the loop loading balanced. But--are you going to put the tuning capacitor at the loop, or do you have in mind putting it, say, at the receiver end of the feedline? If it's at the loop, how will you adjust it? And just what size signals do you expect to get? One of the nice things about LF/VLF is the predictability of signal strengths. Also, beware of worrying a lot about feedline impedance. How long will your feedline be, in wavelengths? If it's, say, 0.05 wavelengths at 100kHz (and THAT's 150 meters long!), does it really make much difference that it's quite a different impedance than the antenna? And...what IS the impedance of the line, at that frequency? It may well be a bit different from what you calculate for the line at 10MHz. What would happen if you fed your one turn loop with 100 feet of "300 ohm twinlead" or "450 ohm ladder line" and just tuned it at the receiver with a capacitor across that line? Small transmission line wire size would ding the Q some, but would that be an issue? I'm just speculating here, and maybe someone with direct experience with that sort of feed will offer suggestions.

One thing to keep in mind here is that the LOOP construction will almost certainly be the most challenging and expensive part, for a big loop. And--you may really not NEED THAT big a loop! More signal also means more atmospheric noise, and you won't improve signal:noise ratio just by getting more of both signal and noise. Anyway, once you have a well-constructed loop, it's relatively easy to play around with different feed systems--preamp and remote tuning, straight feedline, whatever.

Cheers,
Tom

4251. Re: DDS and phase noise.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-15 19:12:24 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <sIjWe.3280$si2.296@trnddc06>
Source record: 17234

From what I've seen in the data sheets, the closer you operate the RF output to the Nyquist limit (Fref/2), the cleaner the spurs get. I've seen numbers of -90 dB or better on even some of the cheapo Analog Devices parts.

Joe
W3JDR

"maxfoo" <maxfoo@punkass.com> wrote in message news:3ibji1th4av4j4fhb0sdu6mtet8ctscd9t@4ax.com...
> On Wed, 14 Sep 2005 20:29:09 GMT, "Mauro" <mauro.succi@libero.it> wrote:
>
>>I'm not an expert and need some help.
>>I've build a DDS around an AD9951.
>>I drive it at 400MHz from a source at 200MHz multiplied by 2. I get an
>>output freq of 20MHz.
>>I now drive it directly from the same source at 200MHz. I changed the
>>register inside DDS to still get 20MHz on output.
>>I do not have any possibility to measure the phase noise.
>>So the question: is it possible to estimate if the phase noise of the
>>20MHz
>>output is getting better, worst or is it going to remain the same?
>>Thanks for the support.
>>73
>>Mauro
>>
>
> I won't be to concerned with phase noise, with that dds I'd be more
> worried
> about spurs. Those AD dds chips are notorious for them.

4252. Sir Douglas Hall Dec. 1943 article

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-15 19:43:05 UTC
From: Bill <exray@coqui.net>
Message-ID: <bc054$4329cece$4232bd11$13240@COQUI.NET>
Source record: 17235

I'm looking for the complete article by Sir Douglas Hall of his "Battery-operated Communication 3-valver". It appeared in Decemeber 1943 Practical Wireless.

The partial article is copied all over the net but only with the first three pages. Can anyone point me to a complete version?

TIA,
Bill

4253. Re: DDS and phase noise.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-15 20:09:48 UTC
From: Mauro <mauro.succi@libero.it>
Message-ID: <gykWe.3164$Jr.45643@twister2.libero.it>
Source record: 17236

Thanks to all who replied.
I think that the net is that the phase noise should remain about the same.
The source is a low noise quartz oscillator based on J.Stephensen design,
followed by a Schottkey doubler and a MAR5 amplifier.
I was in doubt to use or not the Schottkey doubler. I think i'll keep the
simplest solution: no doubler.
DDS max output will be 39MHz. A reference clock of 200MHz is still about 5
times the max output freq, high enought above the Nyquist limit.
Thanks again.
73
Mauro
i2SUH

"Mauro" <mauro.succi@libero.it> wrote in message
news:pK%Ve.964$9l.18869@twister1.libero.it...
> I'm not an expert and need some help.
> I've build a DDS around an AD9951.
> I drive it at 400MHz from a source at 200MHz multiplied by 2. I get an
> output freq of 20MHz.
> I now drive it directly from the same source at 200MHz. I changed the
> register inside DDS to still get 20MHz on output.
> I do not have any possibility to measure the phase noise.
> So the question: is it possible to estimate if the phase noise of the
20MHz
> output is getting better, worst or is it going to remain the same?
> Thanks for the support.
> 73
> Mauro
>
>

4254. Triggering the HP 3585A spec analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-15 20:19:48 UTC
From: Johnson <jdwalton@comt.net>
Message-ID: <cfGdnUTgXPcaSLTeRVn-pg@comcast.com>
Source record: 17237

what magnitude signal is necessary at the External Trigger Input of an HP3585A. I am trying to get mine to work with my HP 3336B synthesizer.

jack

4255. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-15 21:22:47 UTC
From: TRABEM <>
Message-ID: <8vnji1lrfki7utl5vk0uglloicg0b50ks0@4ax.com>
Source record: 17238

Hi Tom,

>
>Given the limited LF bandwidth you're interested in, I can't imagine
>that making a transformer would be all that difficult. Not trivial,
>certainly, but far from impossible. A 5:1 turns ratio will give you a
>25:1 impedance ratio. You'll want to use a core material that doesn't
>introduce distortion. A transformer like that also gives you a way to
>keep the loop loading balanced. But--are you going to put the tuning
>capacitor at the loop, or do you have in mind putting it, say, at the
>receiver end of the feedline? If it's at the loop, how will you adjust
>it? And just what size signals do you expect to get? One of the nice
>things about LF/VLF is the predictability of signal strengths.

OK, I just ran some numbers for a 6000 ohm to 100 ohm toroid
transformer at 190 Khz. I didn't have to deal with the secondary at
all, because the primary has to be so large...I never made it past the
primary! Perhaps I made an error in the calculations? The transformer
has to present about 6000 ohms of inductive reactance, which is 16.6
millihenrys. Even on a large high mu core, I'd have to wind 400
turns!!!!!!!!!! With that many turns, the losses would be big, and
would still have to wind a secondary (although it would much much
smaller). Did I make a mistake in the calculations?

I don't mind going to the antenna to tune it-lowfer signals don't
change frequency much.

>Also,
>beware of worrying a lot about feedline impedance. How long will your
>feedline be, in wavelengths? If it's, say, 0.05 wavelengths at 100kHz
>(and THAT's 150 meters long!), does it really make much difference that
>it's quite a different impedance than the antenna? And...what IS the
>impedance of the line, at that frequency? It may well be a bit
>different from what you calculate for the line at 10MHz. What would
>happen if you fed your one turn loop with 100 feet of "300 ohm
>twinlead" or "450 ohm ladder line" and just tuned it at the receiver
>with a capacitor across that line? Small transmission line wire size
>would ding the Q some, but would that be an issue? I'm just
>speculating here, and maybe someone with direct experience with that
>sort of feed will offer suggestions.
>

Was hoping to use twisted wire which can be homebrewed or cat 5...it's
cheap and available. I think the twisted wire runs 80 to 90 ohms
impedance. I considered that I might just tolerate the mismatch since
the run was so short....but it's such a big difference, I am not sure

the input filter in the receiver will react as expected.

>One thing to keep in mind here is that the LOOP construction will
>almost certainly be the most challenging and expensive part, for a big
>loop. And--you may really not NEED THAT big a loop! More signal also
>means more atmospheric noise, and you won't improve signal:noise ratio
>just by getting more of both signal and noise. Anyway, once you have a
>well-constructed loop, it's relatively easy to play around with
>different feed systems--preamp and remote tuning, straight feedline,
>whatever.

Are there any other ways to convert the impedance without big losses
or without resorting to an active preamp? I'd like to avoid the preamp
if possible, especially since I expect a good output voltage from the
big and relatively high Q loop.

T

4256. FA:Jennings JCS-250PF fxd caps + more

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-15 23:43:41 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <NGnWe.46724$qY1.9240@bgtnsc04-news.ops.worldnet.att.net>
Source record: 17239
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

4 Jennings JCS-250 PF fixed vac caps + other stuff as well, see at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking, heytubeguy

4257. Online PCB manufacturers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-16 02:59:51 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <432a3527$0$12665$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 17240

Dear all

As a hobbyist I am looking for advice re online PCBs
Have not done any electronics for a couple of years. The board house I used to deal with locally has closed.
They produced V good quality boards, but obviously couldnt compete with cheap Taiwanese/Chinese producers.

I use the old Protel Autotrax circa 1991 - no interest in paying $3K for the latest software.

I want
good quality for SM packages to TQFP
Mask/overlay
Small runs up to 50 or so and prototypes
2-4 layers
will accept Protel Autotrax as a format

What do people use?

Thanks
Richard

4258. Re: DDS and phase noise.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-16 04:13:42 UTC
From: Jim <kill-spam@no-spam.org>
Message-ID: <R-qdnZeKcaXn27feRVn-vw@comcast.com>
Source record: 17241

On Wed, 14 Sep 2005 20:29:09 GMT, "Mauro" <mauro.succi@libero.it> wrote:

>I'm not an expert and need some help.
>I've build a DDS around an AD9951.
>I drive it at 400MHz from a source at 200MHz multiplied by 2. I get an
>output freq of 20MHz.
>I now drive it directly from the same source at 200MHz. I changed the
>register inside DDS to still get 20MHz on output.
>I do not have any possibility to measure the phase noise.
>So the question: is it possible to estimate if the phase noise of the 20MHz
>output is getting better, worst or is it going to remain the same?
>Thanks for the support.
>73
>Mauro
>

The AD9951 has a much better spur performance than earlier DDS chips, and
I have been tempted to use one for an LO in a radio, it looks clean enough
to work nicely.

==========

Generally, I'd say your phase noise will be the same either way, and
perhaps even a little quieter with the 200 MHz clock. The internal
reference multipliers probably add a little phase noise, multipliers usually
do add a little extra noise, not than the normal 20log(N) one might expect
from theory.

Reference multiplers DO allow running the DDS output to a higher
frequency, which is often a major desing goal, but if all you want is 20 MHz
output then you are fine with a 200 MHz reference.

Jim Pennell
N6BIU

4259. Re: Butterworth bandpass filter question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-16 06:01:16 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1126850476.240940.277510@f14g2000cwb.googlegroups.com>
Source record: 17242

Well, the 8:1 turns ratio transformer at
http://www.jensen-transformers.com/datashts/110khpc.pdf would almost do it for you. It falls off a bit at the high end. But with it, you could go down to less than 10Hz. That might be fun. What core material were you using in your calcs?

I really think you're being too cautious about preamps. But again, my point is that you can put the effort into the loop, put it up, and then play around with different feed methods. If you do use a feed line and leave the tuning capacitor at the antenna, you won't notice any significant loss in the line. Reg will try to "sell" you one of his programs for looking at how the line transforms the impedance, but I'd just use a Smith chart program myself. Much more educational, to me, than just seeing numbers. If you want to try tuning at the receiver end, use heavy wires in the line: their resistance adds to the resistance of the loop itself, lowering the Q. But with the capacitor at the loop, the circulating currents stay out there, for the most part. You could add a small variable at the receiver end, to do fine tuning. You may well discover that's an advantage...it's a pain to try to tune the loop without being able to listen to the signal...

Cheers,
Tom
(about to bow out of this...time for you to go try some things.)

4260. Re: switching power mosfet as RF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-16 07:53:59 UTC
From: francesco.messineo@gmail.com
Message-ID: <1126857239.764555.167800@g44g2000cwa.googlegroups.com>
Source record: 17243

Hello,

first of all, I just reread my original post and I've written ARF488
instead
of the correct ARF448, sorry for the mistake.

nospam@nouce.bellatlantic.net ha scritto:

> On 15 Sep 2005 01:01:40 -0700, francesco.messineo@gmail.com wrote:
>

>
> After looking at the data sheets and the apnote it confirms what I've
> said.
>
> The APT/ARF488 is a RF device and not close to the IRF parts. One
> difference easily noted is the lack of the avalanche diode present
> in the IRF parts. It's appearance spec wise is that of a low cost
> flavor of currently know RF types without the high cost package.
> I may add the ARF488 is unobtainium, apparently they have
> discontinued it and gone to newer versions.

yes, indeed it's very difficult to find these mosfet today.

>
> The apnote confirms the need for elaborate input match for a rather
> low input impedence that is highly reactive. The 50Mhz amplifier
> is not broadband and for 6m would be classified as very narrowband
> with it's specs covering on the 50-51mhz range. Their use of
> striplines to affect input match and output match contribute
> to the narrowband behavour. It is a high power amp at 300W with
> an IMD3 of -25dbm which is only ok, not great. You also need an
> 85V supply and have to deal with cooling both the supply and
> the amp.

well, the real problem is difficulty in matching and poor IMD3,
we still are restricted to the 50-51 MHz part of the band and
I don't remember to ever have heard anyone over 50.300 MHz here
in EU.

>
> You could try an IRF parts in that circuit but read the apnote well
> as it explains the problems and techniques applied to overcome
> those problems at 50mhz. However the values required ot match
> the IRF vs the ARF parts may vary greater than the design limits
> resulting in poor performance.

indeed, and the diode in the IRF part could be a problem, right?

I'll probably start to search a good bipolar transistor for this project.

thanks

Francesco IS0FKQ

4261. Re: Triggering the HP 3585A spec analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-16 08:29:26 UTC
From: Per-Åke Andersson <pake@extrafoi.se>
Message-ID: <dgdvp6qut1@mercur.foi.se>
Source record: 17244

Johnson wrote:
> what magnitude signal is necessary at the External Trigger Input of an
> HP3585A. I am trying to get mine to work with my HP 3336B synthesizer.
>
> jack
>
>
Trigger or reference ?

This site:
http://www.mjs-electronics.se/images/Hp/hp3585a.htm

Says:
External trigger input: negative going TTL level or contact closure
required to initiate sweep
External reference input: 10 MHz (or subharmonic to 1 MHz), 0 dBm
minimum level

/Per-Ake
--
Remove "extra" in my e-mail

4262. Re: Triggering the HP 3585A spec analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-16 13:13:40 UTC
From: Johnson <jdwalton@comt.net>
Message-ID: <np-dnfiEEvO6XrfeRVn-iQ@comcast.com>
Source record: 17245

"Per-&#65533;ke Andersson" <pake@extrafoi.se> wrote in message
news:dgdvp6qut1@mercur.foi.se...
> Johnson wrote:
> > what magnitude signal is necessary at the External Trigger Input of an
> > HP3585A. I am trying to get mine to work with my HP 3336B synthesizer.
> External reference input: 10 MHz (or subharmonic to 1 MHz), 0 dBm
> minimum level
>
SNIP

Thanks.

4263. Re: Online PCB manufacturers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-16 13:22:15 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1126876935.814023.284860@g49g2000cwa.googlegroups.com>
Source record: 17246

> What do people use?

I use ExpressPCB. I know that one of your requirements was "accept Protel Autotrax" but they don't take it.

That said, they do have their own free software (very little automatic layout but good control over things that'll matter at VHF/UHF/microwave frequencies) and I've been 100% satisfied by their service. Good prices and very quick turnaround on my hobbyist stuff, and they also do 4-layer and masks and production stuff too.

Most of my boards are a mix of SMD and digital and RF.

Tim.

4264. solid state 6m amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-16 14:16:33 UTC
From: francesco.messineo@gmail.com
Message-ID: <1126880193.099234.286630@f14g2000cwb.googlegroups.com>
Source record: 17247

Hello,

having seen that's really difficult to make a working MOSFET linear amplifier
for 6m, I started looking for a bipolar design and components. The MRF448
transistors seem very expensive. Can anyone suggest an alternate part or
a different approach (not tubes, I wanted to put this amplifier at the antenna)?
thanks

Francesco IS0FKQ

4265. Re: Sir Douglas Hall Dec. 1943 article

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-16 15:21:58 UTC
From: Bill <exray@coqui.net>
Message-ID: <1d32$432ae319$4232bd13$3229@COQUI.NET>
Source record: 17098

Bill wrote:

> I'm looking for the complete article

Found it, thanks.

-Bill

4266. Re: Triggering the HP 3585A spec analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-16 17:04:41 UTC
From: Johnson <jdwalton@comt.net>
Message-ID: <V5adnTTkiPDRZLfeRVn-vA@comcast.com>
Source record: 17099

The "Z-Blanking" output on the back of the HP3336 works when it goes low --
just have to match the scan time for both units and we are off to the races.
Thanks for the input.

Jack

"Per-&#65533;ke Andersson" <pake@extrafoi.se> wrote in message
news:dgdvp6qut1@mercur.foi.se...
> Johnson wrote:
> > what magnitude signal is necessary at the External Trigger Input of an
> > HP3585A. I am trying to get mine to work with my HP 3336B synthesizer.
> >
> > jack
> >
> >
> Trigger or reference ?
>
> This site:
> http://www.mjs-electronics.se/images/Hp/hp3585a.htm
>
> Says:
> External trigger input: negative going TTL level or contact closure
> required to initiate sweep
> External reference input: 10 MHz (or subharmonic to 1 MHz), 0 dBm
> minimum level
>
>
>
> /Per-Ake
> --
> Remove "extra" in my e-mail
>

4267. Re: solid state 6m amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-16 18:08:16 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <jd2mi1hqq5e83lifgoco245os1k0od3ksg@4ax.com>
Source record: 17100

On 16 Sep 2005 07:16:33 -0700, francesco.messineo@gmail.com wrote:

>Hello,
>
>having seen that's really difficult to make a working MOSFET linear
>amplifier
>for 6m, I started looking for a bipolar design and components. The
>MRF448
>transistors seem very expensive. Can anyone suggest an alternate part
>or
>a different approach (not tubes, I wanted to put this amplifier at the
>antenna)?
>thanks
>
>Francesco IS0FKQ

MRF492A usually under 22$US new and good for 70W or more. There are
published designs using it that work well for all modes.

Most of the VHF power mosfets are priced around $1US/Watt it seems
and are dreadfully expensive compared to bipolars.

Allison
KB1GMX

4268. Re: DDS and phase noise.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-16 19:23:52 UTC
From: Mauro <mauro.succi@libero.it>
Message-ID: <cZEWe.5076$Jr.74108@twister2.libero.it>
Source record: 17101

I'm not going to use internal multiplier. I'm driving it at 200MHz directly.
I agree that internal multiplier is adding noise. You can see that from the
datasheet.
Checked with an AOR7030 receiver the output seems to be quite clear and
sharp.
Not a real measurement, but better than some other PLL.
73
Mauro

"Jim" <kill-spam@no-spam.org> wrote in message
news:R-qdnZeKcaXn27feRVn-vw@comcast.com...
> On Wed, 14 Sep 2005 20:29:09 GMT, "Mauro" <mauro.succi@libero.it> wrote:
>
> >I'm not an expert and need some help.
> >I've build a DDS around an AD9951.
> >I drive it at 400MHz from a source at 200MHz multiplied by 2. I get an
> >output freq of 20MHz.
> >I now drive it directly from the same source at 200MHz. I changed the
> >register inside DDS to still get 20MHz on output.
> >I do not have any possibility to measure the phase noise.
> >So the question: is it possible to estimate if the phase noise of the
20MHz
> >output is getting better, worst or is it going to remain the same?
> >Thanks for the support.
> >73
> >Mauro
> >
>
>
> The AD9951 has a much better spur performance than earlier DDS chips,
and
> I have been tempted to use one for an LO in a radio, it looks clean enough
> to work nicely.
>
> ==============
>
> Generally, I'd say your phase noise will be the same either way, and
> perhaps even a little quieter with the 200 MHz clock. The internal
> reference multipliers probably add a little phase noise, multipliers
usually
> do add a little extra noise, not than the normal 20log(N) one might expect
> from theory.
>
> Reference multiplers DO allow running the DDS output to a higher

> frequency, which is often a major desing goal, but if all you want is 20
MHz
> output then you are fine with a 200 MHz reference.
>
>
> Jim Pennell
> N6BIU
>
>

4269. Re: Triggering the HP 3585A spec analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-16 20:57:32 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <rccmi19erdrfkh4mlgpkd54hvlrld37b8s@4ax.com>
Source record: 17102

On Fri, 16 Sep 2005 13:04:41 -0400, "Johnson" <jdwalton@comt.net>
wrote:

>The "Z-Blanking" output on the back of the HP3336 works when it goes low --
>just have to match the scan time for both units and we are off to the races.
>Thanks for the input.

I'm curious. What is it exactly that you're trying to do?

>
>Jack
>
>"Per-ï¿½ke Andersson" <pake@extrafoi.se> wrote in message
>news:dgdvp6qut1@mercur.foi.se...
>> Johnson wrote:
>> > what magnitude signal is necessary at the External Trigger Input of an
>> > HP3585A. I am trying to get mine to work with my HP 3336B synthesizer.
>> >
>> > jack
>> >
>> >
>> Trigger or reference ?
>>
>> This site:
>> http://www.mjs-electronics.se/images/Hp/hp3585a.htm
>>
>> Says:
>> External trigger input: negative going TTL level or contact closure
>> required to initiate sweep
>> External reference input: 10 MHz (or subharmonic to 1 MHz), 0 dBm
>> minimum level
>>
>>
>>
>> /Per-Ake
>> --
>> Remove "extra" in my e-mail
>>
>

4270. Re: DDS and phase noise.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-16 21:11:39 UTC
From: "Harold E. Johnson" <w4zcb@mchsi.com>
Message-ID: <fyGWe.333149$x96.267656@attbi_s72>
Source record: 17103

"Mauro" <mauro.succi@libero.it> wrote in message
news:cZEWe.5076$Jr.74108@twister2.libero.it...
> I'm not going to use internal multiplier. I'm driving it at 200MHz
> directly.
> I agree that internal multiplier is adding noise. You can see that from
> the
> datasheet.
> Checked with an AOR7030 receiver the output seems to be quite clear and
> sharp.
> Not a real measurement, but better than some other PLL.
> 73
> Mauro

The AOR 7030 uses a PLL. It has a dual tank VCO as G3SBI came up with.

W4ZCB

4271. Re: solid state 6m amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-16 23:11:48 UTC
From: Dan/W4NTI <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <UiIWe.12931$_84.11257@newsread1.news.atl.earthlink.net>
Source record: 17104

Where can I find such a design?

Dan/W4NTI

<nospam@nouce.bellatlantic.net> wrote in message
news:jd2mi1hqq5e83lifgoco245os1k0od3ksg@4ax.com...
> On 16 Sep 2005 07:16:33 -0700, francesco.messineo@gmail.com wrote:
>
>>Hello,
>>
>>having seen that's really difficult to make a working MOSFET linear
>>amplifier
>>for 6m, I started looking for a bipolar design and components. The
>>MRF448
>>transistors seem very expensive. Can anyone suggest an alternate part
>>or
>>a different approach (not tubes, I wanted to put this amplifier at the
>>antenna)?
>>thanks
>>
>>Francesco IS0FKQ
>
> MRF492A usually under 22$US new and good for 70W or more. There are
> published designs using it that work well for all modes.
>
> Most of the VHF power mosfets are priced around $1US/Watt it seems
> and are dreadfully expensive compared to bipolars.
>
> Allison
> KB1GMX

4272. Re: Online PCB manufacturers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-16 23:55:50 UTC
From: maxfoo <maxfoo@punkass.com>
Message-ID: <0lmmi1lv104au4o4450f5363nutfqvej0m@4ax.com>
Source record: 17105

On Fri, 16 Sep 2005 10:59:51 +0800, Richard Hosking <richardh@iinet.net.au>
wrote:

>Dear all
>
>As a hobbyist I am looking for advice re online PCBs
>Have not done any electronics for a couple of years. The board house I
>used to deal with locally has closed.
>They produced V good quality boards, but obviously couldnt compete with
>cheap Taiwanese/Chinese producers.
>
>I use the old Protel Autotrax circa 1991 - no interest in paying $3K for
>the latest software.
>
>I want
> good quality for SM packages to TQFP
> Mask/overlay
> Small runs up to 50 or so and prototypes
> 2-4 layers
> will accept Protel Autotrax as a format
>
>What do people use?
>
>Thanks
>Richard

If you convert your files to Gerber 274X any PCB Man can do them.

for a list see the following website...http://www.cadsoftusa.com/Boardhouses/

4273. Re: solid state 6m amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 03:33:01 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <m73ni19se88nienksgj98ku98droklkfmc@4ax.com>
Source record: 17106

Try the ARRL website under TIS. It's called the "Compact 6M brick".
It was published in the OCT 1990 QST.

The circuit is very close to the Motorola test circuit for the device
with bias for linear operation.

FAR Circuits has the board for it. I think they can supply a reprint
as well.

If thats not enough power two of them with 2 port splitter/ combiners
will get you better than anywhere from 150-180W. A Wilkinsen
splitter and combiner is fairly easy to do at 6m either as lumped
elements or maybe even coax.

Allison
KB1GMX

On Fri, 16 Sep 2005 23:11:48 GMT, "Dan/W4NTI"
<w4nti@mindNOSPAMATALLspring.com> wrote:

>Where can I find such a design?
>
>Dan/W4NTI
>
><nospam@nouce.bellatlantic.net> wrote in message
>news:jd2mi1hqq5e83lifgoco245os1k0od3ksg@4ax.com...
>> On 16 Sep 2005 07:16:33 -0700, francesco.messineo@gmail.com wrote:
>>
>>>Hello,
>>>
>>>having seen that's really difficult to make a working MOSFET linear
>>>amplifier
>>>for 6m, I started looking for a bipolar design and components. The
>>>MRF448
>>>transistors seem very expensive. Can anyone suggest an alternate part
>>>or
>>>a different approach (not tubes, I wanted to put this amplifier at the
>>>antenna)?
>>>thanks
>>>
>>>Francesco IS0FKQ
>>
>> MRF492A usually under 22$US new and good for 70W or more. There are
>> published designs using it that work well for all modes.
>>
>> Most of the VHF power mosfets are priced around $1US/Watt it seems

>> and are dreadfully expensive compared to bipolars.
>>
>> Allison
>> KB1GMX
>

4274. Re: The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 04:11:56 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1126930316.733937.251830@f14g2000cwb.googlegroups.com>
Source record: 17107
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Oops - forgot the colonial cousins again....

Polymath wrote:
> What is Ham Radio?
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.
>
> Ham Radio awakens in its aficionados a whole-life
> fascination with all things technical and gives
> an all-abiding curiosity to improve one's scientific
> knowledge. It's a great swimming pool, please dive in!
>
> This excitement causes a wish to share the experience
> with ones fellow man, and shows itself in the
> gentlemanly traditions of Ham Radio.
>
> Radio Hams are in a unique privileged position in that
> they can construct and operate their own equipment! No-one
> else has this privilege. Users, such as broadcasters,
> the po lice and armed farces, CBers and mobile phone
> users have to purchase ready-made gear. Manufacturers
> are not licensed to operate their gear. Radio Hams
> are qualified to design, build and then
> operate their own pieces of equipment. They do this
> with gusto, and also repair and modify their own
> equipment. This is a privilege well worth the effort
> to gain, and one to be jealously guarded.
>
> The excitement that drives a Radio Ham starts with
> relatively simple technologies at first, perhaps making
> his own Wimshurst machine and primary cells. Small pieces
> of test equipment follow, possibly multimeters and signal
> generators. Then comes receivers and transmitters. It is with
> the latter that communication with like-minded technically
> motivated people takes off. The scope for technical
> development grows with the years
> and now encompasses DSP and DDS. There is also a great deal
> of excitement in the areas of computer programming to

> be learnt and applied.
>
> The technical excitement motivates Radio Hams to compete
> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.
>
> -----OOOOO----
>
> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large
> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
> repaired; they are not interested in technical discussion
> and sneer at those who are; they have no idea how
> their radios work inside and have no wish to find out;
> they are free with rather silly personal insults;
> they have not satisfied any technical qualification
> and their licences prevent the use of
> self-designed-and-built equipment.
>
> These CB types engage in the competitive activities
> with their Cheque-Book-purchased off-the-shelf radios
> in a forlorn effort to prove that they are Radio Hams.
>
> No _REAL_ Radio Hams are deceived by such people!

4275. Re: Online PCB manufacturers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 04:43:20 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1d953ec6e7dae78f9896ea@news-central.giganews.com>
Source record: 17108

In article <432a3527$0$12665$5a62ac22@per-qv1-newsreader-
01.iinet.net.au>, richardh@iinet.net.au says...
> Dear all
>
> As a hobbyist I am looking for advice re online PCBs
> Have not done any electronics for a couple of years. The board house I
> used to deal with locally has closed.

You mean Precision Australia? I hope not! I just ordered another batch
of our boards from them in July, and I'm starting to run low again!

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

4276. Re: The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 08:55:17 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1126947317.053310.35850@g47g2000cwa.googlegroups.com>
Source record: 17109
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Polymath wrote:
> Oops - forgot the colonial cousins again....

you certainly are stubborn in diatribes, but can't you at least spew
forth something original from time to time
>
> Polymath wrote:
> > What is Ham Radio?
> >
> > Ham Radio is a technical pursuit for those who
> > are interested in the science of radio wave
> > propagation and who are also interested in the
> > way that their radios function. It has a long-standing
> > tradition of providing a source of engineers who
> > are born naturals.

4277. Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 10:03:38 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1126951418.730335.258350@g14g2000cwa.googlegroups.com>
Source record: 17110
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

ISBN 0-7506-9946-9

"RF Circuit Deign"
By
Chris Bowick

Pub. Newnes.

I've just got a new copy from Ottakar's; it is
still in print (just) £21-99pp for 176 pages packed
full of concise info about RF circuits, LC filters
(especially the bits about use of an L-network to
match ant to TX) together with a good analysis of
the Smiff (That's _TWO_ "f"'s) Chart and how to use it.

This was recommended to me by my current employers (apparently
the book is held in high regard in Japan). I only
wish that I had come across it before.

4278. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 10:28:18 UTC
From: Steve H <g0lmv@yahoo.co.uk>
Message-ID: <432befc1$1_4@mk-nntp-2.news.uk.tiscali.com>
Source record: 17111
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Looks a tad basic,
http://www.amazon.co.uk/gp/reader/0750699469/ref=sib_dp_pt/202-6586683-0234256#reader-page

"Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1126951418.730335.258350@g14g2000cwa.googlegroups.com...
ISBN 0-7506-9946-9

"RF Circuit Deign"
By
Chris Bowick

Pub. Newnes.

I've just got a new copy from Ottakar's; it is
still in print (just) £21-99pp for 176 pages packed
full of concise info about RF circuits, LC filters
(especially the bits about use of an L-network to
match ant to TX) together with a good analysis of
the Smiff (That's _TWO_ "f"'s) Chart and how to use it.

This was recommended to me by my current employers (apparently
the book is held in high regard in Japan). I only
wish that I had come across it before.

4279. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 10:29:21 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <5eSWe.10135$zw1.8300@newsfe2-gui.ntli.net>
Source record: 17112
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Poxy mouth wrote:
> ISBN 0-7506-9946-9
>
> "RF Circuit Deign"
> By
> Chris Bowick
>
> Pub. Newnes.
>
> I've just got a new copy from Ottakar's; it is
> still in print (just) ï¿½21-99pp for 176 pages packed
> full of concise info about RF circuits, LC filters
> (especially the bits about use of an L-network to
> match ant to TX) together with a good analysis of
> the Smiff (That's _TWO_ "f"'s) Chart and how to use it.
>
Looks a better bargain than that ï¿½350 law book of yours.
...(_!_)...

4280. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 10:29:58 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <GeSWe.5841$ws4.3751@newsfe5-win.ntli.net>
Source record: 17113
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Steve H" <g0lmv@yahoo.co.uk> wrote in message
news:432befc1$1_4@mk-nntp-2.news.uk.tiscali.com...
> Looks a tad basic,
>
http://www.amazon.co.uk/gp/reader/0750699469/ref=sib_dp_pt/202-6586683-0234256#reader-page
>
> "Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
> news:1126951418.730335.258350@g14g2000cwa.googlegroups.com...
> ISBN 0-7506-9946-9
>
> "RF Circuit Deign"
> By
> Chris Bowick
>
>
> This was recommended to me by my current employers (apparently
> the book is held in high regard in Japan). I only
> wish that I had come across it before.

I have to agree Steve, a tad basic. Unless, of course, your employer has
spotted you lack the basics.

--
73
Brian, G8OSN
www.g8osn.org.uk

4281. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 10:57:35 UTC
From: Leon <leon_heller@hotmail.com>
Message-ID: <1126954655.108140.84440@f14g2000cwb.googlegroups.com>
Source record: 17114
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

People have reported quite a few errors in it. Can't remember what they are, but you should be able to find them with some Googling.

Leon

4282. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 11:01:04 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1126954864.731710.43720@g47g2000cwa.googlegroups.com>
Source record: 17115
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Now, what was that observation that Walt made?

Ah! Here it is.....

> Oh my.
>
> I've never encountered anyone else who is such a master of the
> thinly-veiled jibe and the "I'm superior to you" innuendo in every
> situation.

Now, Brian, here's that opportunity for you to put your money
where your mouth is.....which particular parts of the book do
you "agree..... are a tad basic". Please reply within 2 minutes so
that you don't have time to consult the book (perhaps for the
very first time?), or else be seen for ever hereafter as a
laughing stock, and a LIAR.

As for employers who spot your deficiencies, who was the "south
coast defence employer" who sacked you and as the result of which
you couldn't get another job and had to go into teaching?
("Those that can, do. Thos that can't, teach, etc etc"?)

Now, Brian, here's that opportunity for you to put your money
where your mouth is.....

Brian Reay wrote:
>
> I have to agree Steve, a tad basic. Unless, of course, your employer has
> spotted you lack the basics.

4283. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 11:02:37 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1126954957.709470.87110@g49g2000cwa.googlegroups.com>
Source record: 17116
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

All books have some errors, but I wonder whether the message
given in the book is destroyed by those errors? Probably not.

Leon wrote:
> People have reported quite a few errors in it. Can't remember what they
> are, but you should be able to find them with some Googling.
>
> Leon

4284. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 11:06:37 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1126955197.353204.259710@g14g2000cwa.googlegroups.com>
Source record: 17117
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

No reply from Brian Reay, who thus may be taken
as a liar and a bullshitter (if he wasn't so taken
already).

All mouth and trousers.

Polymath wrote:
> Now, what was that observation that Walt made?
>
> Ah! Here it is.....
>
> > Oh my.
> >
> > I've never encountered anyone else who is such a master of the
> > thinly-veiled jibe and the "I'm superior to you" innuendo in every
> > situation.
>
> Now, Brian, here's that opportunity for you to put your money
> where your mouth is.....which particular parts of the book do
> you "agree..... are a tad basic". Please reply within 2 minutes so
> that you don't have time to consult the book (perhaps for the
> very first time?), or else be seen for ever hereafter as a
> laughing stock, and a LIAR.
>
> As for employers who spot your deficiencies, who was the "south
> coast defence employer" who sacked you and as the result of which
> you couldn't get another job and had to go into teaching?
> ("Those that can, do. Thos that can't, teach, etc etc"?)
>
> Now, Brian, here's that opportunity for you to put your money
> where your mouth is.....
>
> Brian Reay wrote:
> >
> > I have to agree Steve, a tad basic. Unless, of course, your employer has
> > spotted you lack the basics.

4285. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 11:25:34 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1126956334.407558.33070@g14g2000cwa.googlegroups.com>
Source record: 17118
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

There are a number of rather silly and infantile people
whose first inclination is to sneer. Two such intellectual
failures are quoted below; "Empty vessels make the
most noise". A book whose first page is about
wire, the skin effect thereto, and the inductance of a short
length of wire is not basic by any means.

Brian Reay wrote:
> "Steve H" <g0lmv@yahoo.co.uk> wrote in message
> news:432befc1$1_4@mk-nntp-2.news.uk.tiscali.com...
> > Looks a tad basic,
>
> I have to agree Steve, a tad basic. Unless, of course, your employer has
> spotted you lack the basics.

4286. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 11:29:48 UTC
From: Dlawson <dlawson@nospam.bigfoot.com>
Message-ID: <M6TWe.72728$2n6.5436@fe3.news.blueyonder.co.uk>
Source record: 17119
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1126951418.730335.258350@g14g2000cwa.googlegroups.com...

This was recommended to me by my current employers (apparently
the book is held in high regard in Japan)
Not only are you reduced to working for a shower of murdering Japanese
bastards, but you were recomended to go sit in a corner read a book and
brush up on your maths.

ROTFLMFAO

4287. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 11:41:45 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <ZhTWe.8012$st1.1803@newsfe3-gui.ntli.net>
Source record: 17120
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Poxy mouth wrote:
>
> Now, Brian, here's that opportunity for you to put your money
> where your mouth is.....which particular parts of the book do
> you "agree..... are a tad basic". Please reply within 2 minutes so
> that you don't have time to consult the book (perhaps for the
> very first time?), or else be seen for ever hereafter as a
> laughing stock, and a LIAR.
>
How do you expect him to tell you which particular parts of the book he considers 'a tad basic' without consulting the book to quote chapter, page, paragraph etc.?
Your post of 11:03 today describes it as '...full of concise info...', what does that suggest to you?
...(_!_)...

4288. Re: Recommended reading for Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 11:46:01 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <4YadnUKwtsFgnLHeRVnyiQ@pipex.net>
Source record: 17121
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Frank Turner-Smith G3VKI" <g3vki@turner-smith.co.uk> wrote in message
news:5eSWe.10135$zw1.8300@newsfe2-gui.ntli.net...
> Poxy mouth wrote:
>> ISBN 0-7506-9946-9
>>
>> "RF Circuit Deign"
>> By
>> Chris Bowick
>>
>> Pub. Newnes.
>>
>> I've just got a new copy from Ottakar's; it is
>> still in print (just) £21-99pp for 176 pages packed
>> full of concise info about RF circuits, LC filters
>> (especially the bits about use of an L-network to
>> match ant to TX) together with a good analysis of
>> the Smiff (That's _TWO_ "f"s) Chart and how to use it.
>>
> Looks a better bargain than that £350 law book of yours.
> ...(_!_)...

++

Whatever books people recommend on RF Design , as a non-professional in the
RF Field , I find :
"Experimental Methods in RF Design" by W7ZOI ,KK7B and W7PUA the 'top of
the pops'.
Published by ARRL ,it also seems to be available from RSGB.
It has more than 500 pages and costs US $ 50.-
In my opinion , as an radio amateur home constructor ,you don't need any
other RF design book , although the above book's (much older) predecessor "
Solid State Design for the Radio Amateur " by W7ZOI and W1FB (now sadly SK)
is equally inspiring .

Frank GM£CSZ / KN6WH

4289. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 12:18:53 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1126959533.085217.266940@o13g2000cwo.googlegroups.com>
Source record: 17122
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Does "EL84" know that you are pirating her
Internet Address (82.42.159.143)?

STUPID boy.

Dlawson wrote:
> Not only are you reduced to working for a shower of murdering Japanese
> bastards, but you were recomended to go sit in a corner read a book and
> brush up on your maths.
>
> ROTFLMFAO

4290. Re: Triggering the HP 3585A spec analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 12:43:45 UTC
From: Johnson <jdwalton@comt.net>
Message-ID: <8fudndCBIus4kLHeRVn-pQ@comcast.com>
Source record: 17123

"Wes Stewart" <n7ws*@*yahoo.com> wrote in message
news:rccmi19erdrfkh4mlgpkd54hvlrld37b8s@4ax.com...
> I'm curious. What is it exactly that you're trying to do?

Looking at RF transformers -- I am not happy with the performance of the
tracking generator in my HP3585A.

4291. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 13:05:58 UTC
From: Steve H <g0lmv@yahoo.co.uk>
Message-ID: <432c14b5$1_2@mk-nntp-2.news.uk.tiscali.com>
Source record: 17124
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1126956334.407558.33070@g14g2000cwa.googlegroups.com...
> There are a number of rather silly and infantile people
> whose first inclination is to sneer. Two such intellectual
> failures are quoted below; "Empty vessels make the
> most noise". A book whose first page is about
> wire, the skin effect thereto, and the inductance of a short
> length of wire is not basic by any means.

You should already know all of the above after 30 years of hamming it up.
Basic. Looks like a good book for anyone starting out in radio with a good
basic education or a good crib sheet for the rest of us. Sitting in the sun
with a half full vessel reading Traveling wave antennas by Carlton H Walter,
includes an interesting discussion of the polyrod antenna ;c)

Steve H

4292. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 13:11:15 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <TBUWe.404$bR.291@newsfe7-win.ntli.net>
Source record: 17125
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Poxy mouth wrote:
A book whose first page is about
> wire, the skin effect thereto, and the inductance of a short
> length of wire is not basic by any means.
>
BWAHAHAHAHAHAHAHAHAHAHAHAHAHAHAHAHA!
If that's not basic I'd like to know what is.
Is your knowledge so limited you see these as advanced subjects?
Oh, why did I bother to ask? I know the answer.
...(_!_)...

4293. Re: Triggering the HP 3585A spec analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 14:16:09 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <q29oi1tg12nutlfbqbnlab9purdi1bobav@4ax.com>
Source record: 17126

On Sat, 17 Sep 2005 08:43:45 -0400, "Johnson" <jdwalton@comt.net>
wrote:

>
>"Wes Stewart" <n7ws*@*yahoo.com> wrote in message
>news:rccmi19erdrfkh4mlgpkd54hvlrld37b8s@4ax.com...
>> I'm curious. What is it exactly that you're trying to do?
>
>Looking at RF transformers -- I am not happy with the performance of the
>tracking generator in my HP3585A.

Hmmm. Okay. I confess that I never much used the tracking generator
since I had available an HP3577 for this kind of stuff.

That was when I was employed. In retirement I use an N2PK VNA.

www.n2pk.com

4294. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 14:45:25 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <9_VWe.422$bR.1@newsfe7-win.ntli.net>
Source record: 17127
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Frank Turner-Smith G3VKI" <g3vki@turner-smith.co.uk> wrote in message
news:TBUWe.404$bR.291@newsfe7-win.ntli.net...
> Poxy mouth wrote:
> A book whose first page is about
>> wire, the skin effect thereto, and the inductance of a short
>> length of wire is not basic by any means.
>>
> BWAHAHAHAHAHAHAHAHAHAHAHAHAHAHAHAHA!
> If that's not basic I'd like to know what is.

I have to agree Frank, the fundamental reason why a wire has inductance is a very basic fact, I believe taught at KS3 science.

Makes you wonder about degrees from the UoE, does it not?

--
73
Brian, G8OSN
www.g8osn.org.uk

4295. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 14:57:13 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1126969033.303434.6050@g43g2000cwa.googlegroups.com>
Source record: 17128
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Now we know that you're a L.I.A.R. - the formula
to calculate the inductance of a short and straight
piece of wire simply is not taught in schools.

For someone who _BOASTS_ as much as you do about
your self-perceived importance to the world
of education, you are taking a very peculiar attitude
to the recommendation for a book to take Radio
Hams onwards. This should be an area for you to take
a lead, but your behaviour is suggestive of a loser
and not of a leader.

Sour grapes, perhaps, that you did not make the
recommendation yourself?

Does this appalling mental derangement of yours feature in
your behaviour in the classroom in Strood? Do you
sneer in the same way towards your pupils? What if
members of your school radio club were to read this NG,
what would they think of you? What would they think
of your cowardliness and laziness about the 12 WPM
Morse test and the way in which you opted for a test
aimed at 6-year-olds? Would you become as much
a laughing stock in the school as you are on here?

What would their
parents think of you if they were to peruse the
archives of this NG for the time that you were
under training at a girls' school, of all places, and
when you were publishing repeated offensive materials
about sheep shagging? Would there be an outcry? I have described
your behaviour to 3 people whom I know to be school teachers
and shown them what you published. All, without exception,
said that you are unsuitable to be a school teacher.

Your rather silly and infantile sneering below is a
further illustration of a sick, sick mind. Perhaps
it is time that you resigned from teaching?

Brian Reay wrote:
> "Frank Turner-Smith G3VKI" <g3vki@turner-smith.co.uk> wrote in message
> news:TBUWe.404$bR.291@newsfe7-win.ntli.net...
> > Poxy mouth wrote:
> > A book whose first page is about
> >> wire, the skin effect thereto, and the inductance of a short

> >> length of wire is not basic by any means.
> >>
> > BWAHAHAHAHAHAHAHAHAHAHAHAHAHAHAHAHA!
> > If that's not basic I'd like to know what is.
>
> I have to agree Frank, the fundamental reason why a wire has inductance is a
> very basic fact, I believe taught at KS3 science.
>
> Makes you wonder about degrees from the UoE, does it not?

4296. Re: Triggering the HP 3585A spec analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 15:20:10 UTC
From: Johnson <jdwalton@comt.net>
Message-ID: <Z_Sdnf2YWq_Qr7HeRVn-gw@comcast.com>
Source record: 17129

N2PK VNA -- as this was a RSGB project I never got my arms around it --
there was a nice 100MHz VNA article in QEX July/Aug 04 by N5EG.

"Wes Stewart" <n7ws*@*yahoo.com> wrote in message
news:q29oi1tg12nutlfbqbnlab9purdi1bobav@4ax.com...
> On Sat, 17 Sep 2005 08:43:45 -0400, "Johnson" <jdwalton@comt.net>
> wrote:
>
> >
> >"Wes Stewart" <n7ws*@*yahoo.com> wrote in message
> >news:rccmi19erdrfkh4mlgpkd54hvlrld37b8s@4ax.com...
> >> I'm curious. What is it exactly that you're trying to do?
> >
> >Looking at RF transformers -- I am not happy with the performance of the
> >tracking generator in my HP3585A.
>
> Hmmm. Okay. I confess that I never much used the tracking generator
> since I had available an HP3577 for this kind of stuff.
>
> That was when I was employed. In retirement I use an N2PK VNA.
>
> www.n2pk.com
>

4297. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 15:38:43 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1126971523.139315.3360@g49g2000cwa.googlegroups.com>
Source record: 17130
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

That you sneer at attempts to introduce Radio Hams to
materials for advancement is a very good illustration
of why anybody who holds, or who has ever held, a licence
issued under the gangrenous degeneration that is the M3/CB
Fools' Licence scheme will _NEVER_ make it into the
ranks of _REAL_ Radio Hams.

It is also an indication of by how much you have
prostituted yourself in your crusade to compensate
for your well-deserved inferiority complex - you are
the arse-licker of an irrelevant commercial book publisher
and the book under recommendation was not published by them,
and so you attempt to bad-mouth it.

As it happens, Chris Bowick wrote the book as a condensation
of his experience as a designer of professional RF circuits.
(And, no, he did not get sacked for incompetence from a "South
Coast Defence Manufacturer). He also holds the call WB4UHY (not
one of the dog-turd M3 series such as M3OSN) and lists flying
as one of his pursuits. (Wasn't that something else that you flunked
yourself?)

You are a hypocrite, sir, you have no real interest in the
education of Radio Hams unless you yourself perceive a
personal benefit of some kind.

Brian Reay wrote:
> I have to agree Frank, the fundamental reason why a wire has inductance is a
> very basic fact, I believe taught at KS3 science.
> Makes you wonder about degrees from the UoE, does it not?

4298. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 16:13:13 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1126973592.999298.282640@z14g2000cwz.googlegroups.com>
Source record: 17131
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

In fact Brian, you have blundered _B-I-G_ _T-I-M-E_

Without reading it and without being aware of any
of its contents, you have dismissed, as being worse than
a schoolbook, the concise presentation of a professional
RF engineer.

Are all of your pronouncements into this NG based on
such ignorance? Are you the master of spin-doctoring,
of bull-shitting and of downright lying? Are we to take
any and everything that you say from this point on with
a pinch of salt? How will we be able to tell whether
anything you claim from now on is made up on the spur
of the moment as were your uninformed comments about
Chris Bowick's book or whether based on truth?

You silly, silly fool.

As it happens, I think that you have illustrated so
well Walt's view of you.....

> I've never encountered anyone else who is
> such a master of the thinly-veiled jibe and
> the "I'm superior to you" innuendo in every
> situation

Polymath wrote:
> As it happens, Chris Bowick wrote the book as a condensation
> of his experience as a designer of professional RF circuits.
> (And, no, he did not get sacked for incompetence from a "South
> Coast Defence Manufacturer). He also holds the call WB4UHY (not
> one of the dog-turd M3 series such as M3OSN) and lists flying
> as one of his pursuits. (Wasn't that something else that you flunked
> yourself?)

4299. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 16:14:06 UTC
From: Steve H <g0lmv@yahoo.co.uk>
Message-ID: <432c40cd$1_2@mk-nntp-2.news.uk.tiscali.com>
Source record: 17132
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1126971523.139315.3360@g49g2000cwa.googlegroups.com...
> That you sneer at attempts to introduce Radio Hams to
> materials for advancement is a very good illustration
> of why anybody who holds, or who has ever held, a licence
> issued under the gangrenous degeneration that is the M3/CB
> Fools' Licence scheme will _NEVER_ make it into the
> ranks of _REAL_ Radio Hams.

It looks to be a good book for the newcomer to RF design giving readers a
basic understanding of the fundamentals, but the question is - Why would
someone with your 30+ years of experience as a real radio ham find useful?

Steve H

4300. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 16:40:49 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1126975249.840576.262850@f14g2000cwb.googlegroups.com>
Source record: 17133
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

It is, perhaps, an indication of the degeneration,
gangrenous or otherwise, that has been festered onto
Ham Radio by the RSCB, that an article such as below,
intended to introduce Radio Hams to a useful book
should have resulted in so much negative and
destructive bile.

Leon Heller is the only respondent to have been
at all positive and at all relevant.

Shame on the rest of you, CBers (Childish Broadcasters)
to a man.

Polymath wrote:
> ISBN 0-7506-9946-9
>
> "RF Circuit Deign"
> By
> Chris Bowick
>
> Pub. Newnes.
>
> I've just got a new copy from Ottakar's; it is
> still in print (just) £21-99pp for 176 pages packed
> full of concise info about RF circuits, LC filters
> (especially the bits about use of an L-network to
> match ant to TX) together with a good analysis of
> the Smiff (That's _TWO_ "f"'s) Chart and how to use it.
>
> This was recommended to me by my current employers (apparently
> the book is held in high regard in Japan). I only
> wish that I had come across it before.

4301. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 16:53:19 UTC
From: Conrad Poos <poos@hamsexual.com>
Message-ID: <3SXWe.40151$k22.38019@fe2.news.blueyonder.co.uk>
Source record: 17134
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Bleedin' hell.....talk about typing in Beanies launch code!

Poos

--
vy 73 de Conrad Poos

"Ich bin ein radio amateur"

4302. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 17:34:34 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <KsYWe.14249$yF2.1539@newsfe6-win.ntli.net>
Source record: 17135
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Conrad Poos" <poos@hamsexual.com> wrote in message
news:3SXWe.40151$k22.38019@fe2.news.blueyonder.co.uk...
> Bleedin' hell.....talk about typing in Beanies launch code!
>

Good, "in ' it" ;-)

Next thing you know he'll be standing in a cell with a blanket on his head
or faking chest pains!

--
73
Brian, G8OSN
www.g8osn.org.uk

4303. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 17:42:07 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <PzYWe.10553$zw1.2933@newsfe2-gui.ntli.net>
Source record: 17136
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Steve H" <g0lmv@yahoo.co.uk> wrote in message
news:432c40cd$1_2@mk-nntp-2.news.uk.tiscali.com...
> "Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
> news:1126971523.139315.3360@g49g2000cwa.googlegroups.com...
>> That you sneer at attempts to introduce Radio Hams to
>> materials for advancement is a very good illustration
>> of why anybody who holds, or who has ever held, a licence
>> issued under the gangrenous degeneration that is the M3/CB
>> Fools' Licence scheme will _NEVER_ make it into the
>> ranks of _REAL_ Radio Hams.
>
> It looks to be a good book for the newcomer to RF design giving readers a
> basic understanding of the fundamentals, but the question is - Why would
> someone with your 30+ years of experience as a real radio ham find useful?

Fair comment Steve and a good question.

--
73
Brian, G8OSN
www.g8osn.org.uk

4304. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 18:01:50 UTC
From: EL84 <el84@nospam.aol.com>
Message-ID: <3p340dF8ehfuU1@individual.net>
Source record: 17137
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1126959533.085217.266940@o13g2000cwo.googlegroups.com...
> Does "EL84" know that you are pirating her
> Internet Address (82.42.159.143)?
Oh dear what am I to do ? If you had a clue Beanie you would know how easy
it is to, change, copy, or clone an IP address, don't tell me you don't know
how its done old fruit.

4305. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 18:25:16 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1126981515.975794.11830@z14g2000cwz.googlegroups.com>
Source record: 17138
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

You, as someone who pretends to be something important
in matters of education do not understand the value
of a reference book packed with information?

Brian Reay wrote:
> > It looks to be a good book for the newcomer to RF design giving readers a
> > basic understanding of the fundamentals, but the question is - Why would
> > someone with your 30+ years of experience as a real radio ham find useful?
>
> Fair comment Steve and a good question.

4306. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 18:26:15 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1126981575.264517.174350@f14g2000cwb.googlegroups.com>
Source record: 17139
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

What on earth are you on about now?

Making up more stories?

Brian Reay wrote:
> "Conrad Poos" <poos@hamsexual.com> wrote in message
> news:3SXWe.40151$k22.38019@fe2.news.blueyonder.co.uk...
> > Bleedin' hell.....talk about typing in Beanies launch code!
> >
>
> Good, "in ' it" ;-)
>
> Next thing you know he'll be standing in a cell with a blanket on his head
> or faking chest pains!

4307. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 19:10:19 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <vSZWe.1314$QU3.1106@newsfe1-win.ntli.net>
Source record: 17140
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Brian Reay wrote:
>
>>Good, "in ' it" ;-)
>>
>>Next thing you know he'll be standing in a cell with a blanket on his head
>>or faking chest pains!
>
Poxy mouth scrawled:
> What on earth are you on about now?
>
> Making up more stories?
>
Hmmm...why your interest, Beanie?
...(_!_)...

4308. Recommended Reading for Homebrewing Radio Amateurs

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 19:13:52 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <VM2dnQtfi7Bz97HeRVnytg@pipex.net>
Source record: 17141

"Frank Turner-Smith G3VKI" <g3vki@turner-smith.co.uk> wrote in message
news:5eSWe.10135$zw1.8300@newsfe2-gui.ntli.net...
> Poxy mouth wrote:
>> ISBN 0-7506-9946-9
>>
>> "RF Circuit Deign"
>> By
>> Chris Bowick
>>
>> Pub. Newnes.
>>
>> I've just got a new copy from Ottakar's; it is
>> still in print (just) £21-99pp for 176 pages packed
>> full of concise info about RF circuits, LC filters
>> (especially the bits about use of an L-network to
>> match ant to TX) together with a good analysis of
>> the Smiff (That's _TWO_ "f"s) Chart and how to use it.
>>
> Looks a better bargain than that £350 law book of yours.
> ...(_!_)...

++

Whatever books people recommend on RF Design , as a non-professional in the
RF Field , I find :
"Experimental Methods in RF Design" by W7ZOI ,KK7B and W7PUA the 'top of
the pops'.
Published by ARRL ,it also seems to be available from RSGB.
It has more than 500 pages and costs US $ 50.-
In my opinion , as an radio amateur home constructor ,you don't need any
other RF design book , although the above book's (much older) predecessor "
Solid State Design for the Radio Amateur " by W7ZOI and W1FB (now sadly SK)
is equally inspiring .

Frank GM£CSZ / KN6WH

4309. This Just Released - Science News

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 20:13:00 UTC
From: LenAnderson@ieee.org
Message-ID: <1126987980.763692.291070@o13g2000cwo.googlegroups.com>
Source record: 17142

GOVERNMENTIUM

A major research institution has recently announced the discovery of the heaviest chemical yet known to science. This new element has been tentatively named "Governmentium".

Governmentium has one neutron, 12 assistant neutrons, 75 deputy neutrons, and 224 assistant deputy neutrons, giving it an atomic mass of 312.

These 312 particles are held together by forces called morons, which are surrounded by vast quantities of lepton like particles called peons.

Since Governmentium has no electrons, it is inert. However, it can be detected as it impedes every reaction with which it comes into contact.

A tiny amount of Governmentium causes one reaction to take over four days to complete when it would normally take less than a second.

Governmentium has a normal half-life of four years; it does not decay but instead, it undergoes a reorganization in which a portion of the assistant neutrons and deputy neutrons exchange places.

In fact, Governmentium's mass will actually increase over time since each reorganization will cause more morons to become neutrons, forming isodopes.

This characteristic of moron-promotion leads some scientists to speculate that Governmentium is formed whenever morons reach a certain quantity in concentration. This hypocritical quantity is referred to as "Critical Morass." You will know it when you see it.

When catalyzed with money, Governmentium becomes Administratium, an element which radiates just as much energy since it has half as many peons but twice as many morons.

- from ANS, Anonymous News Service, 17 September

4310. Notice to BRIAN REAY (Was Re: Recommended reading for _REAL_ Radio Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 20:43:53 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1126989833.302183.49430@g14g2000cwa.googlegroups.com>
Source record: 17143
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,uk.education.maths

If that is your admission that it is your intention
to stir things up, then your behaviour is shameful.

Is it not enough for you that you subjected me and my family
to a two-year period of grossly offensive remarks
about sheep-shagging, and then, when you were outed
by the suggestion that such behaviour meant that you
were unsuited to being a school teacher
that you made malicious, misleading and therefore
perjurous complaints to the plods that caused a great
deal of further distress to me and my family?

Is it not enough for you that one plod is now facing a
criminal prosecution for assault and that a further 54
complaints are outstanding against other plods as the
direct result of you inciting them with your lies?

Was this shameful behaviour insufficient for you that
you must now continue with your infantile jibes, with
your stated deliberate intention as quoted below?

There remains no doubt that because of your publicly-expressed
obsession with sheep-shagging that you are a danger to children
and that under no circumstances should you be employed as a
teacher of mathematics in Strood, Kent, or, indeed, in any other place.

For the last and final time, I invite you to publicly and
unconditionally retract and apologise for your scurrilous
remarks about sheep-shagging and your other remarks about
drinking methylated spirit. I urge you to do this whilst
you still have a free choice in the matter.

I will not ask you again, but if you do not retract and
apologise then I will seek redress from you by
means that are legal and decent, concepts that seem
to be quite alien to you.

Brian Reay wrote:
> "Conrad Poos" <poos@hamsexual.com> wrote in message
> news:3SXWe.40151$k22.38019@fe2.news.blueyonder.co.uk...
> > Bleedin' hell.....talk about typing in Beanies launch code!
> >
>
> Good, "in ' it" ;-)

>

4311. Re: Notice to BRIAN REAY (Was Re: Recommended reading for _REAL_ Radio Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 22:32:54 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <qQ0Xe.14943$yF2.3638@newsfe6-win.ntli.net>
Source record: 17144
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,uk.education.maths

Poxy mouth poured herself another drink and scrawled drunkenly:
< retarded crap snipped >
> There remains no doubt that because of your publicly-expressed
> obsession with sheep-shagging that you are a danger to children...
only to lambs, by your 'reasoning'

< more retarded crap snipped >
>
> For the last and final time, I invite you to publicly and
> unconditionally retract and apologise for your scurrilous
> remarks about sheep-shagging and your other remarks about
> drinking methylated spirit. I urge you to do this whilst
> you still have a free choice in the matter.
>
> I will not ask you again, but if you do not retract and
> apologise then I will seek redress from you by
> means that are legal and decent, concepts that seem
> to be quite alien to you.
straight out of your ï¿½350 law book, no doubt.
>
Blimey Beanie, I bet he's scared now!
Are you gonna set the TAFIA onto him?
FOAD, twat.
...(_!_)...

4312. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 23:51:58 UTC
From: Wankel Rotary <no@no.yes.no.yes.no.org>
Message-ID: <y_1Xe.2464$QU3.397@newsfe1-win.ntli.net>
Source record: 17145
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Polymath wrote:
> No reply from Brian Reay, who thus may be taken
> as a liar and a bullshitter (if he wasn't so taken
> already).
>
> All mouth and trousers.

We don't all have empty lives like you that enable us to sit and spout shit on the internet all day.

Seeing Brian is a 'teacher', at least he has a career and not a job.

Stupid Boy!

Have you missed taking all of your lithium today perchance?

WR.

4313. Re: Notice to BRIAN REAY (Was Re: Recommended reading for _REAL_ Radio Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-17 23:56:02 UTC
From: Wankel Rotary <no@no.yes.no.yes.no.org>
Message-ID: <m22Xe.2488$QU3.231@newsfe1-win.ntli.net>
Source record: 17146
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,uk.education.maths

Polymath wrote:

<snip>

> I will not ask you again, but if you do not retract and
> apologise then I will seek redress from you by
> means that are legal and decent, concepts that seem
> to be quite alien to you.

I bet you've really got Brian running scared now Mr Gareth Evans.

Bwahahahahahaaaa!!!

4314. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-18 02:31:10 UTC
From: eternalsquire@comcast.net
Message-ID: <1127010670.606194.110480@g43g2000cwa.googlegroups.com>
Source record: 17147
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Who cares what a real ham is or isn't? Why does this argument even
matter? Why can't we all just be friends and have fun?

The Eternal Squire

4315. Re: Recommended Reading for Homebrewing Radio Amateurs

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-18 04:26:11 UTC
From: eternalsquire@comcast.net
Message-ID: <1127017571.624321.63860@g43g2000cwa.googlegroups.com>
Source record: 17048

I have that one, and I like it a lot, it is a very nice updated rewrite of Solid State Design by W7ZOI.

I could also call your attention to Jeff Carr's "Secrets to RF design", he pays a lot of attention to practical details not immediately obvious in theory. His read is actually a lot of fun.

Finally, there is a book I really want to read, "Voice of the Crystal", about the theory and practice of building RF circuits out of common household items and castoffs.

The Eternal Squire

4316. A lot of good diagrams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-18 08:04:07 UTC
From: SOMMERGIBILE <nientem@ilaspammers.it.invalid>
Message-ID: <432d21f7$1$8486$5fc30a8@news.tiscali.it>
Source record: 17049

on:
http://web.tiscali.it/am2zy/index.html

4317. Re: Notice to BRIAN REAY (Was Re: Recommended reading for _REAL_ Radio Hams)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-18 09:03:37 UTC
From: "jim.gm4dhj" <jim.gm4dhj@ntlworld.com>
Message-ID: <J3aXe.10663$zw1.9337@newsfe2-gui.ntli.net>
Source record: 17050
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,uk.education.maths

"Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1126989833.302183.49430@g14g2000cwa.googlegroups.com...
> If that is your admission that it is your intention
> to stir things up, then your behaviour is shameful.
>
> Is it not enough for you that you subjected me and my family
> to a two-year period of grossly offensive remarks
> about sheep-shagging, and then, when you were outed
> by the suggestion that such behaviour meant that you
> were unsuited to being a school teacher
> that you made malicious, misleading and therefore
> perjurous complaints to the plods that caused a great
> deal of further distress to me and my family?
>
> Is it not enough for you that one plod is now facing a
> criminal prosecution for assault and that a further 54
> complaints are outstanding against other plods as the
> direct result of you inciting them with your lies?
>
> Was this shameful behaviour insufficient for you that
> you must now continue with your infantile jibes, with
> your stated deliberate intention as quoted below?
>
> There remains no doubt that because of your publicly-expressed
> obsession with sheep-shagging that you are a danger to children
> and that under no circumstances should you be employed as a
> teacher of mathematics in Strood, Kent, or, indeed, in any other place.
>
> For the last and final time, I invite you to publicly and
> unconditionally retract and apologise for your scurrilous
> remarks about sheep-shagging and your other remarks about
> drinking methylated spirit. I urge you to do this whilst
> you still have a free choice in the matter.
>
> I will not ask you again, but if you do not retract and
> apologise then I will seek redress from you by
> means that are legal and decent, concepts that seem
> to be quite alien to you.

I know what you mean... you get your boss and top coucilors after you and
before you know it you loose your job ....

4318. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-18 13:02:07 UTC
From: Wankel Rotary <no@no.yes.no.yes.no.org>
Message-ID: <jzdXe.6588$ws4.5694@newsfe5-win.ntli.net>
Source record: 17051
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Polymath wrote:
> ISBN 0-7506-9946-9
>
> "RF Circuit Deign"
> By
> Chris Bowick
>
> Pub. Newnes.
>
> I've just got a new copy from Ottakar's; it is
> still in print (just) ï¿½21-99pp for 176 pages packed
> full of concise info about RF circuits, LC filters
> (especially the bits about use of an L-network to
> match ant to TX) together with a good analysis of
> the Smiff (That's _TWO_ "f"'s) Chart and how to use it.
>
> This was recommended to me by my current employers (apparently
> the book is held in high regard in Japan). I only
> wish that I had come across it before.

So the person who appears to know everything about amateur radio, electronics and life in general, didn't know about such a good book?

If your employers had to recommend it, do you have a lack of knowledge somewhere?

Do they know the manner in which you post and contribute to this newsgroup? Do they also know your track record with the Well-Shite Constabulary? Your stance on Lillibet Windsor and Royalty? People in general? Partakers of the same hobby as you - 'ham'(sic!) radio - which supposedly encourages working together and collaboration - despite you detesting certain classes of the hobby instead of encouraging them to further themselves? I expect, especially if your employers are Japanese, they encourage working together and the value of fellow man?

Also, if your employers are Japanese, surely you must have some stance on working for those you detest - murders, warmongers and out and out torturers in the past?

Double standards Gareth deary.....tut tut....

WR.

4319. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-18 13:13:46 UTC
From: Wankel Rotary <no@no.yes.no.yes.no.org>
Message-ID: <eKdXe.15564$yF2.11198@newsfe6-win.ntli.net>
Source record: 17052
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

eternalsquire@comcast.net wrote:

> Who cares what a real ham is or isn't? Why does this argument even
> matter? Why can't we all just be friends and have fun?

In the real world - yes.

In Gareth's head - never!

4320. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-18 13:24:12 UTC
From: DXer <CW@Rules.OK!>
Message-ID: <432d6ab3$0$12172$cc9e4d1f@news-text.dial.pipex.com>
Source record: 17053
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Conrad Poos" <poos@hamsexual.com> wrote in message
news:3SXWe.40151$k22.38019@fe2.news.blueyonder.co.uk...
> Bleedin' hell.....talk about typing in Beanies launch code!
>

Yep - he's gone Ballistic.

Don't worry he'll be back soon to recommend a book on Basic Rocket Science!

PS Anyone got his Keplerian Elements - if the sky is clear you might even
see him as he goes overhead.

4321. transformer basic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-18 16:54:14 UTC
From: TRABEM <>
Message-ID: <ej6ri154ombo5lcsgjhfcp16spjimj8cb8@4ax.com>
Source record: 17054

Is the value of a capacitor placed in series with the secondary of a transformer multiplied (as viewed from the primary) by the turns ratio or the square of the turns ratio?

Thanks,

T

4322. Re: transformer basic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-18 17:47:09 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <xKhXe.339617$x96.334340@attbi_s72>
Source record: 17055

If the transformer has a step-up turns ratio (from primary to secondary) then the resistance, inductive reactance and capacitive reactance connected to the secondary (as measured at the primary) decrease as the square of the turns ratio. Therefore effective capacitance measured at the primary increases as the square of the turns ratio. For a step-down transformer the effects are the opposite.

Bill W0IYH

<TRABEM> wrote in message news:ej6ri154ombo5lcsgjhfcp16spjimj8cb8@4ax.com...
> Is the value of a capacitor placed in series with the secondary of a
> transformer multiplied (as viewed from the primary) by the turns ratio
> or the square of the turns ratio?
>
> Thanks,
>
> T

4323. Re: transformer basic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-18 18:50:45 UTC
From: TRABEM <>
Message-ID: <b1dri15jugkl3gcsd5n406krn8esah5kn2@4ax.com>
Source record: 17056

On Sun, 18 Sep 2005 17:47:09 GMT, "William E. Sabin"
<w.sabin@mchsi.com> wrote:

>If the transformer has a step-up turns ratio (from primary to secondary)
>then the resistance, inductive reactance and capacitive reactance connected
>to the secondary (as measured at the primary) decrease as the square of the
>turns ratio. Therefore effective capacitance measured at the primary
>increases as the square of the turns ratio. For a step-down transformer the
>effects are the opposite.
>

OK Bill,

I have a series tuned loop that is resonant with 1000 pf and fed into
a 10 to one step up transformer.

If I remove the 1000 pF cap completely, I can resonate the loop at the
same frequency with 10 pF in the secondary?

It almost sounds too good to be true:>:

Regards,

T

4324. Re: transformer basic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-18 19:12:30 UTC
From: hhc314@yahoo.com
Message-ID: <1127070749.981845.122080@f14g2000cwb.googlegroups.com>
Source record: 17057

Since the tranformer now becomes component of the tuned circuit, you would seriously decrease the Q of the tuned circuit when doing so.

Harry C.

4325. Re: transformer basic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-18 22:29:43 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <rTIXe.136409$084.127336@attbi_s22>
Source record: 17058

Your original question suggested an ideal transformer, which the loop
antenna undoubtedly is not, therefore the detailed answer is more
complicated. The loop impedance is an LCR network that would require a more
detailed study, which I am not able to offer right now.

If your 1000 pF gets the job done, that is probably a good solution that
tunes out the net effective inductive reactance.

Bill W0IYH

<TRABEM> wrote in message news:b1dri15jugkl3gcsd5n406krn8esah5kn2@4ax.com...
> On Sun, 18 Sep 2005 17:47:09 GMT, "William E. Sabin"
> <w.sabin@mchsi.com> wrote:
>
>>If the transformer has a step-up turns ratio (from primary to secondary)
>>then the resistance, inductive reactance and capacitive reactance
>>connected
>>to the secondary (as measured at the primary) decrease as the square of
>>the
>>turns ratio. Therefore effective capacitance measured at the primary
>>increases as the square of the turns ratio. For a step-down transformer
>>the
>>effects are the opposite.
>>
>
> OK Bill,
>
> I have a series tuned loop that is resonant with 1000 pf and fed into
> a 10 to one step up transformer.
>
> If I remove the 1000 pF cap completely, I can resonate the loop at the
> same frequency with 10 pF in the secondary?
>
> It almost sounds too good to be true:>:
>
> Regards,
>
> T

4326. Re: transformer basic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-18 23:51:58 UTC
From: TRABEM <>
Message-ID: <10vri1l6gfrnsbvlv9ncg6ekur1bh8dpml@4ax.com>
Source record: 17059

Thanks to both Bill and Harry.

I'm trying to vary the resonant frequency of a loop with an air variable. The loop impedance is under 1 ohm, so it needs a step up transformer anyway, and toroids are commonly used.

Since a 1000 pf varaible is much harder to get than a 10 pF, I was pleased to learn that I could multiply the effective value by multiplication of the actaul value times the square of the turns ratio.

It makes the job much easier, even if the Q of the loop suffers some.

Thanks to you both,

T

4327. Re: If to HF preselector design needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-19 01:58:45 UTC
From: gagnonrchrd@netscape.net
Message-ID: <1127095125.014166.270590@g49g2000cwa.googlegroups.com>
Source record: 17060
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

This site might have some suggestions.

http://www.geocities.com/amdxlog/index.html

and maybe

http://www.qsl.net/wa1ion/

Cheers

Richard

4328. Re: Sir Douglas Hall Dec. 1943 article

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-19 06:02:02 UTC
From: Ro <roland_lemmersN0ZPAEMM@planet.nl>
Message-ID: <432e5446$0$12714$ba620dc5@text.nova.planet.nl>
Source record: 17064

Bill wrote:
> Bill wrote:
>
>> I'm looking for the complete article
>
>
> Found it, thanks.
>
> -Bill
Where did you find it?

Roland

4329. VHF cavity resonator w/ regeneration as IF for HF RX ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-19 11:06:28 UTC
From: SpamHog <n1jpr@hotmail.com>
Message-ID: <1127127988.908809.33310@g43g2000cwa.googlegroups.com>
Source record: 17061

Resonant cavities have such good selectivity that are routinely used to consolidate antennas for concurrent use with multiple transceivers on same-band frequencies.

One can take a few interesting shortcuts to making them, both for ham radio
(http://web.telia.com/~u85920178/use/cavity.htm)
and professional installation (e.g.
http://www.raeng.org.uk/news/publications/ingenia/issue18/David.pdf
= http://tinyurl.com/cenqb - Not a joke, you can really use beer barrels!).

Does anyone have experience in using positive feedback to turn, say, a VHF fixed-frequency resonator into a regenerative IF filter for HF use?

Expected pros
- no images even with a modest front end low-pass filter
- single peak bandpass
- solid floor, possibly with ferocious immunity from strong nearby signals
- may provide direct detection
- for isofrequency transceive operation, a PLL or huff-puff oscillator could be converted back to receive frequency with good spectral purity with little filtering

Expected cons:
- possible thermal frequency instability
- tricky to feed to and pick up from properly, compounded by having to provide path for regeneration

Frequency would be rather unimportant, all tuning would happen in the local oscillator.

Did anyone ever try that? In particular, I am curious about the following:

1) Better a 1/4-wave resonator referred to ground or a ground-insulated loop? (The latter may be easier to fith with multiple mutually decoupled I/Os referred to ground).

2) Better single I/O or perhaps one each for signal path and regen amp? (The former easier to fit on a standard 1/4 lambda resonator worked against ground. Also, this could be done with a preexisting surplus resonator.)

3a) Suggestions for ready made metal containers - such as coffee cans, compressed gas canisters, large movie-type film spool cases, or

gold-flashed gas-inflated caramelized yak rumens?

3b) Is silver flashing a good idea, on either resonator or all over the inside of a cavity

3c) Or, what ready made surplus cavity would you suggest?

73 es tnx de n1jpr/i2

4330. Re: Sir Douglas Hall Dec. 1943 article

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-19 14:00:01 UTC
From: Bill <exray@coqui.net>
Message-ID: <e6de6$432ec461$4232bd38$29879@COQUI.NET>
Source record: 17069

Ro wrote:

> Where did you find it?
>
> Roland

http://freespace.virgin.net/spontaflex.reflex/

4331. Quad 837 Grounded Grid linear amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-19 16:45:51 UTC
From: msg@waste.org
Message-ID: <1127148351.715156.307040@o13g2000cwo.googlegroups.com>
Source record: 17062

Greetings:

We recently acquired materials from the estate of Roger A. Jacobsen, K9KLN, which included a nice Quad 837 tube linear for 80m -> 20m(?). Please look at this amp at:

http://ipx1.cybertheque.net/ham/837_linear/

I would appreciate any recollections about the design, chassis layout, performance and similarities to other 807/1625 grounded-grid designs.

Regards,

Michael Grigoni
Cybertheque Museum

4332. Quad 837 Grounded Grid linear amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-19 16:47:13 UTC
From: msg@waste.org
Message-ID: <1127148433.642315.146000@g49g2000cwa.googlegroups.com>
Source record: 17063

Greetings:

We recently acquired materials from the estate of Roger A. Jacobsen, K9KLN, which included a nice Quad 837 tube linear for 80m -> 20m(?). Please look at this amp at:

http://www.cybertheque.org/ham/837_linear/

I would appreciate any recollections about the design, chassis layout, performance and similarities to other 807/1625 grounded-grid designs.

Regards,

Michael Grigoni
Cybertheque Museum

4333. Re: Quad 837 Grounded Grid linear amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-19 19:48:12 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <fAEXe.1886$3S3.1776@bignews4.bellsouth.net>
Source record: 17070

msg@waste.org wrote:
> Greetings:
>
> We recently acquired materials from the estate of Roger A. Jacobsen,
> K9KLN, which included a nice Quad 837 tube linear for 80m -> 20m(?).
> Please look at this amp at:
>
> http://www.cybertheque.org/ham/837_linear/
>
> I would appreciate any recollections about the design, chassis
> layout, performance and similarities to other 807/1625 grounded-
> grid designs.
>
> Regards,
>
> Michael Grigoni
> Cybertheque Museum
>
As mentioned on the website, the linear is basicly the same as one that
appeared in the 1957 handbook and in early ARRL SSB manuals.
That version used modified 1625 tubes, the 837 is very similar to the
modified 1625 but with lower plate input ratings.

4334. Re: Quad 837 Grounded Grid linear amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-19 21:03:16 UTC
From: msg <msg@waste.org>
Message-ID: <11iu9rupmu2u9fb@corp.supernews.com>
Source record: 17071

Ken Scharf wrote:

I should have been a little bit clearer in my original post; the website
I referred to is our website and the statements on that site are my
statements.

I'm really looking for recollections, comparisons to other chassis layouts,
construction practices, experiences with the design and operation, etc. etc.
I'd like to hear from people who have built, used or are using such a
linear. It would be good to see photos of other examples of this design,
and also of other grounded-grid(s) cathode driven tetrode/pentode designs
which are out there.

Specifically, I'd like to know if our amp was built to a published design
and/or follows a published chassis layout. Does anyone have the '57 handbook,
QST article or version of the SSB manual handy?

Regards,

Michael Grigoni
Cybertheque Museum

>>
> As mentioned on the website, the linear is basicly the same as one that
> appeared in the 1957 handbook and in early ARRL SSB manuals.
> That version used modified 1625 tubes, the 837 is very similar to the
> modified 1625 but with lower plate input ratings.

4335. Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-19 22:07:25 UTC
From: Bob Chilcoat <viewptmd@optonlineREMOVE.net>
Message-ID: <wEGXe.4566$H24.1943@fe11.lga>
Source record: 17065
Cross-posted to: rec.radio.shortwave,rec.radio.amateur,rec.radio.amateur.homebrew

Sorry for the crossposting, but I'm looking for more expertise than I have. I usually hang out in the aviation groups, but am an engineer by training. I have a radio problem:

I have just completed a special rig for our local airport, but it has a problem. I took a rather old but serviceable Sony digital air band receiver (Air 8), boxed it up in a waterproof enclosure and piped the audio out to an FM microwatt transmitter. The idea of this is that visitors to our airport who like to sit in the parking lot and watch the airplanes can listen on their car radios on FM 88.1 to the radio traffic on our Common Traffic Advisory Frequency (CTAF), which at our airport is 123.00 MHz (AM). Unfortunately, while this setup worked perfectly at home well away from the airport, we have an Automatic Weather Observation Station (AWOS) transmitting continuously on 120.60 MHz only 50-60 feet from the place I need to site the receiver. Even though this is only a 5 Watt transmitter, it overloads the front end of the receiver. As soon as anyone keys on 123.00 and the automatic squelch is triggered, all you hear is the AWOS recording.

I've tried quick fix by attenuating the input signal by trimming (shortening) the antenna, but this doesn't really help. This was supposed to be a quick and dirty (gratis) job for the airport, and I've already spent more time and money on it than I wanted to. Any suggestions as to how I might fix this problem? Cheaply? Obviously a better receiver would work (my Yaesu aviation handheld works perfectly at the same location), but I have no other (free) receivers handy. I can move the receiver another 50 feet down the fence, which is my next option, but what if this doesn't work? I can't get it any farther away for several reasons. Anyone have a 120 MHz preselector they can give me? Any really steep (and cheap) 120.6 notch filter designs?

Thanks for any help you can offer.

--
Bob (Chief Pilot, White Knuckle Airways)

4336. Re: Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-19 22:59:57 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11iugnfn1m9s35a@corp.supernews.com>
Source record: 17066
Cross-posted to: rec.radio.shortwave,rec.radio.amateur,rec.radio.amateur.homebrew

Are you absolutely sure the offending signal is coming in via the
antenna? Is it there if you disconnect the antenna or replace it with a
dummy load (termination)? That strongly influences what you need to do
to fix it.

Roy Lewallen, W7EL

Bob Chilcoat wrote:
> Sorry for the crossposting, but I'm looking for more expertise than I have.
> I usually hang out in the aviation groups, but am an engineer by training.
> I have a radio problem:
>
> I have just completed a special rig for our local airport, but it has a
> problem. I took a rather old but serviceable Sony digital air band receiver
> (Air 8), boxed it up in a waterproof enclosure and piped the audio out to an
> FM microwatt transmitter. The idea of this is that visitors to our airport
> who like to sit in the parking lot and watch the airplanes can listen on
> their car radios on FM 88.1 to the radio traffic on our Common Traffic
> Advisory Frequency (CTAF), which at our airport is 123.00 MHz (AM).
> Unfortunately, while this setup worked perfectly at home well away from the
> airport, we have an Automatic Weather Observation Station (AWOS)
> transmitting continuously on 120.60 MHz only 50-60 feet from the place I
> need to site the receiver. Even though this is only a 5 Watt transmitter,
> it overloads the front end of the receiver. As soon as anyone keys on
> 123.00 and the automatic squelch is triggered, all you hear is the AWOS
> recording.
>
> I've tried quick fix by attenuating the input signal by trimming
> (shortening) the antenna, but this doesn't really help. This was supposed
> to be a quick and dirty (gratis) job for the airport, and I've already spent
> more time and money on it than I wanted to. Any suggestions as to how I
> might fix this problem? Cheaply? Obviously a better receiver would work
> (my Yaesu aviation handheld works perfectly at the same location), but I
> have no other (free) receivers handy. I can move the receiver another 50
> feet down the fence, which is my next option, but what if this doesn't work?
> I can't get it any farther away for several reasons. Anyone have a 120 MHz
> preselector they can give me? Any really steep (and cheap) 120.6 notch
> filter designs?
>
> Thanks for any help you can offer.
>

4337. Re: Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-19 23:00:34 UTC
From: Bob <bob@nowhere.nil>
Message-ID: <432F4312.4060903@nowhere.nil>
Source record: 17067
Cross-posted to: rec.radio.shortwave,rec.radio.amateur,rec.radio.amateur.homebrew

Put a tee connector on the receive line coax a length of coax on it with
a short at the far end. It must be cut to be exactly 1/4 wavelength
(including connector spur.) This will appear t be an open circuit at
the resonant frequency, but will severely attenuate your nearby unwanted
signal.

Failing that, a series LC network across the receive line will do a
similar task. Try a 47pf trimmer cap in series with a coil made from 4
to 6 turns around a bic pen. (you can remove the pen after making the
coil... :) Tune your receiver to the unwanted signal and tune the
trimmer until you see the unwanted signal drop out. You may have to
experiment with the coil turns and spacing, but this design will also
help wipe out the unwanted station.

Fortunately your undesired signal is likely a constant-on transmission
so it's always there for you to play with. Secondly, you can make and
tinker with all this at home (provided you live within receiving range
of the airport AWOS) and bring the working product to the airport for
installation.

Good luck.

B.

Bob Chilcoat wrote:
> Sorry for the crossposting, but I'm looking for more expertise than I have.
> I usually hang out in the aviation groups, but am an engineer by training.
> I have a radio problem:
>
> I have just completed a special rig for our local airport, but it has a
> problem. I took a rather old but serviceable Sony digital air band receiver
> (Air 8), boxed it up in a waterproof enclosure and piped the audio out to an
> FM microwatt transmitter. The idea of this is that visitors to our airport
> who like to sit in the parking lot and watch the airplanes can listen on
> their car radios on FM 88.1 to the radio traffic on our Common Traffic
> Advisory Frequency (CTAF), which at our airport is 123.00 MHz (AM).
> Unfortunately, while this setup worked perfectly at home well away from the
> airport, we have an Automatic Weather Observation Station (AWOS)
> transmitting continuously on 120.60 MHz only 50-60 feet from the place I
> need to site the receiver. Even though this is only a 5 Watt transmitter,
> it overloads the front end of the receiver. As soon as anyone keys on
> 123.00 and the automatic squelch is triggered, all you hear is the AWOS
> recording.
>
> I've tried quick fix by attenuating the input signal by trimming

> (shortening) the antenna, but this doesn't really help. This was supposed
> to be a quick and dirty (gratis) job for the airport, and I've already spent
> more time and money on it than I wanted to. Any suggestions as to how I
> might fix this problem? Cheaply? Obviously a better receiver would work
> (my Yaesu aviation handheld works perfectly at the same location), but I
> have no other (free) receivers handy. I can move the receiver another 50
> feet down the fence, which is my next option, but what if this doesn't work?
> I can't get it any farther away for several reasons. Anyone have a 120 MHz
> preselector they can give me? Any really steep (and cheap) 120.6 notch
> filter designs?
>
> Thanks for any help you can offer.
>

4338. Re: Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-19 23:03:04 UTC
From: Bob <bob@atlantis.edu>
Message-ID: <BsHXe.12073$p5.9455@nnrp.ca.mci.com!nnrp1.uunet.ca>
Source record: 17068
Cross-posted to: rec.radio.shortwave,rec.radio.amateur,rec.radio.amateur.homebrew

Put a tee connector on the receive line coax a length of coax on it with
a short at the far end. It must be cut to be exactly 1/4 wavelength
(including connector spur.) This will appear t be an open circuit at
the resonant frequency, but will severely attenuate your nearby unwanted
signal.

Failing that, a series LC network across the receive line will do a
similar task. Try a 47pf trimmer cap in series with a coil made from 4
to 6 turns around a bic pen. (you can remove the pen after making the
coil... :) Tune your receiver to the unwanted signal and tune the
trimmer until you see the unwanted signal drop out. You may have to
experiment with the coil turns and spacing, but this design will also
help wipe out the unwanted station.

Fortunately your undesired signal is likely a constant-on transmission
so it's always there for you to play with. Secondly, you can make and
tinker with all this at home (provided you live within receiving range
of the airport AWOS) and bring the working product to the airport for
installation.

Good luck.

B.

Bob Chilcoat wrote:
> Sorry for the crossposting, but I'm looking for more expertise than I have.
> I usually hang out in the aviation groups, but am an engineer by training.
> I have a radio problem:
>
> I have just completed a special rig for our local airport, but it has a
> problem. I took a rather old but serviceable Sony digital air band receiver
> (Air 8), boxed it up in a waterproof enclosure and piped the audio out to an
> FM microwatt transmitter. The idea of this is that visitors to our airport
> who like to sit in the parking lot and watch the airplanes can listen on
> their car radios on FM 88.1 to the radio traffic on our Common Traffic
> Advisory Frequency (CTAF), which at our airport is 123.00 MHz (AM).
> Unfortunately, while this setup worked perfectly at home well away from the
> airport, we have an Automatic Weather Observation Station (AWOS)
> transmitting continuously on 120.60 MHz only 50-60 feet from the place I
> need to site the receiver. Even though this is only a 5 Watt transmitter,
> it overloads the front end of the receiver. As soon as anyone keys on
> 123.00 and the automatic squelch is triggered, all you hear is the AWOS
> recording.
>
> I've tried quick fix by attenuating the input signal by trimming

> (shortening) the antenna, but this doesn't really help. This was supposed
> to be a quick and dirty (gratis) job for the airport, and I've already spent
> more time and money on it than I wanted to. Any suggestions as to how I
> might fix this problem? Cheaply? Obviously a better receiver would work
> (my Yaesu aviation handheld works perfectly at the same location), but I
> have no other (free) receivers handy. I can move the receiver another 50
> feet down the fence, which is my next option, but what if this doesn't work?
> I can't get it any farther away for several reasons. Anyone have a 120 MHz
> preselector they can give me? Any really steep (and cheap) 120.6 notch
> filter designs?
>
> Thanks for any help you can offer.
>

4339. Re: DDS and phase noise.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-20 00:44:56 UTC
From: novatech@eskimo.com
Message-ID: <dgnm28$lp4$1@eskinews.eskimo.com>
Source record: 17072

"W3JDR" <joe@roccis.com> writes:

>From what I've seen in the data sheets, the closer you operate the RF output
>to the Nyquist limit (Fref/2), the cleaner the spurs get. I've seen numbers
>of -90 dB or better on even some of the cheapo Analog Devices parts.

>Joe
>W3JDR

It has to do with where the spurs end up. If you are close to Fref/2,
lots of the spurs alias down to base band. Worst case is Fref/3. With
the proper choice of filters, and band choice you can find areas where
spurs are almost non-existent. If you have a narrow band application,
your frequency planning can find those holes. Make sure you have your
peak detector turned on.

There are lots of sources of spurs-- phase truncation, amplitude
truncation, noise, etc.

--
Steven D. Swift, novatech@eskimo.com, http://www.novatech-instr.com
NOVATECH INSTRUMENTS, INC. P.O. Box 55997
206.301.8986, fax 206.363.4367 Seattle, Washington 98155 USA

4340. Re: Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-20 01:27:44 UTC
From: Aussie Medic <NOSPAMaussiemedic@hotmail.com>
Message-ID: <kAJXe.200$0E5.15@news-server.bigpond.net.au>
Source record: 17073
Cross-posted to: rec.radio.shortwave,rec.radio.amateur,rec.radio.amateur.homebrew

I am making some assumtions here. You state that you only hear the AWOS
when a transmission occurs on the CTAF freq. I would think this means that
the receiver is NOT receiving the AWOS signal all the time or it would
trigger
the system constantly. If you listen to the receiver output while at the
airport
does it contain the AWOS audio or just the CTAF audio? My inclination is
that the AWOS sig is being picked up by the interface circuitry between
your receiver and the 88.1 transmitter. If this is the case then more
bypassing
and rf filtering is needed on the interface. Then again I could be barking
up the
wrong tree here, only some suggestions, hope it helps.

Cheers

"Bob Chilcoat" <viewptmd@optonlineREMOVE.net> wrote in message
news:wEGXe.4566$H24.1943@fe11.lga...
> Sorry for the crossposting, but I'm looking for more expertise than I
> have. I usually hang out in the aviation groups, but am an engineer by
> training. I have a radio problem:
>
> I have just completed a special rig for our local airport, but it has a
> problem. I took a rather old but serviceable Sony digital air band
> receiver (Air 8), boxed it up in a waterproof enclosure and piped the
> audio out to an FM microwatt transmitter. The idea of this is that
> visitors to our airport who like to sit in the parking lot and watch the
> airplanes can listen on their car radios on FM 88.1 to the radio traffic
> on our Common Traffic Advisory Frequency (CTAF), which at our airport is
> 123.00 MHz (AM). Unfortunately, while this setup worked perfectly at home
> well away from the airport, we have an Automatic Weather Observation
> Station (AWOS) transmitting continuously on 120.60 MHz only 50-60 feet
> from the place I need to site the receiver. Even though this is only a 5
> Watt transmitter, it overloads the front end of the receiver. As soon as
> anyone keys on 123.00 and the automatic squelch is triggered, all you hear
> is the AWOS recording.
>
> I've tried quick fix by attenuating the input signal by trimming
> (shortening) the antenna, but this doesn't really help. This was supposed
> to be a quick and dirty (gratis) job for the airport, and I've already
> spent more time and money on it than I wanted to. Any suggestions as to
> how I might fix this problem? Cheaply? Obviously a better receiver would
> work (my Yaesu aviation handheld works perfectly at the same location),
> but I have no other (free) receivers handy. I can move the receiver

> another 50 feet down the fence, which is my next option, but what if this
> doesn't work? I can't get it any farther away for several reasons. Anyone
> have a 120 MHz preselector they can give me? Any really steep (and cheap)
> 120.6 notch filter designs?
>
> Thanks for any help you can offer.
>
> --
> Bob (Chief Pilot, White Knuckle Airways)
>
>
>

4341. Re: Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-20 02:00:13 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <N2KXe.7845$fb6.4957@trnddc08>
Source record: 17074
Cross-posted to: rec.radio.shortwave,rec.radio.amateur,rec.radio.amateur.homebrew

"Bob" <bob@nowhere.nil> wrote in message
news:432F4312.4060903@nowhere.nil...
> Put a tee connector on the receive line coax a length of coax on it with a
> short at the far end. It must be cut to be exactly 1/4 wavelength
> (including connector spur.) This will appear t be an open circuit at the
> resonant frequency, but will severely attenuate your nearby unwanted
> signal.
>
> Failing that, a series LC network across the receive line will do a
> similar task. Try a 47pf trimmer cap in series with a coil made from 4 to
> 6 turns around a bic pen. (you can remove the pen after making the coil...
> :) Tune your receiver to the unwanted signal and tune the trimmer until
> you see the unwanted signal drop out. You may have to experiment with the
> coil turns and spacing, but this design will also help wipe out the
> unwanted station.
>
> Fortunately your undesired signal is likely a constant-on transmission so
> it's always there for you to play with. Secondly, you can make and tinker
> with all this at home (provided you live within receiving range of the
> airport AWOS) and bring the working product to the airport for
> installation.
>
>
> Good luck.
>
>
> B.

While this approach looks good on paper, it often fails badly when the
desired frequency is so close in to the notch frequency. I just put a
quarter wave stub on our VNA and found that while it does diminish the 123
signal -33dB, it also attenuates the 120.6 signal by a whopping -22dB.
There is also an enormous VSWR upset -120:1 or so- this is perhaps not
important in your receive only application.
Each year we build hundreds of filters for this exact application-
AWOS/UNICOM separation. Typical insertion loss is under 1dB while the notch
is >-40dB. The filter is about the size of a cigarette pack exclusive of the
N connectors.

W4OP

4342. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-20 02:56:28 UTC
From: "H. P. Friedrichs" <noemail@please.com>
Message-ID: <11iuuj1b9ob25a1@corp.supernews.com>
Source record: 17075

ES:

My advice...

a) Start somewhere---with something. It doesn't matter what. Yes there is much to be said for planning and strategizing. On the other hand, too many people spend so much time thinking about doing things that they never actually do them.

b) The "perfect ham store" is the store YOU'd shop at if it existed. If you want to establish the perfect ham store, then create it according to your vision.

c) Whatever you do, make is scaleable. Running out plunking down thousands for shop space, equipment, advertising, and whatever is a risky proposition. Start with a single kit, a single service, a single piece of your own software, and market it on the web.

If it fails, your exposure was small and whatever money lost can be justified as tuition for the lessons you learned. Just try something else.

If it doesn't fail, you will have a small amount of capital with which to leverage the next product or service.

HPF
AC7ZL

eternalsquire@comcast.net wrote:

>
> Problem is, I don't know just where to start.
>
> The Eternal Squire
>

4343. Re: Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-20 03:00:06 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <b4uui15brprovh2js0qv035hmv751rek02@4ax.com>
Source record: 17076

On Mon, 19 Sep 2005 18:07:25 -0400, "Bob Chilcoat"
<viewptmd@optonlineREMOVE.net> wrote:

>
>I've tried quick fix by attenuating the input signal by trimming
>(shortening) the antenna, but this doesn't really help. This was supposed

Bad thing to do and likely didn't reduce the signal as much as you'd
like. Try an attenuator, enough to kill the offending signal. Once
that is known the next step may be easier.

IF the attenuation needed is under 10DB and leving it in is acceptable
your done. Usually local signals are plenty strong enough.

If you need more than 10DB. Try a suckout stub tuned to the awos
at 120.6 as others have suggested. That should be enough as your
listening on 123.

>(my Yaesu aviation handheld works perfectly at the same location), but I
>have no other (free) receivers handy. I can move the receiver another 50
>feet down the fence, which is my next option, but what if this doesn't work?

I'd try that first, distance will always help the problem. Allowing
for a plastic case on the RX distance is more liklely helpful than
filtering. The problem is the case of the RX is plastic and there is
no shielding so any filter will be compromized by back door entry.
A metalic water proof box with filtered ins and outs for RX and fm TX
will be needed then.

It's possible to make a filter with a steep enough curve for that by
using a bandpass section for 123 and a notch section at 120.6 using
sections of UT141 (.141" copper jacket coax).

Allison
KB1GMX

4344. Re: Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-20 03:28:26 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <Xs-dnU6vP9BiHLLeRVn-uw@adelphia.com>
Source record: 17077
Cross-posted to: rec.radio.shortwave,rec.radio.amateur,rec.radio.amateur.homebrew

Dale Parfitt wrote:

> While this approach looks good on paper, it often fails badly when the
> desired frequency is so close in to the notch frequency. I just put a
> quarter wave stub on our VNA and found that while it does diminish the 123
> signal -33dB, it also attenuates the 120.6 signal by a whopping -22dB.
> There is also an enormous VSWR upset -120:1 or so- this is perhaps not
> important in your receive only application.
> Each year we build hundreds of filters for this exact application-
> AWOS/UNICOM separation. Typical insertion loss is under 1dB while the notch
> is >-40dB. The filter is about the size of a cigarette pack exclusive of the
> N connectors.

I think you get narrower selectivity if you use an odd integer
multiple of quarter wavelengths for the stub. The longer the line,
the greater the phase change with frequency. A 1/4 wave shorted stub
goes from open to short in a 1:2 frequency ratio. A 3/4 wavelength
stub goes from open to short in 3:4 ratio of frequency. Etc. I think.

4345. Re: Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-20 03:35:12 UTC
From: Bob Chilcoat <viewptmd@optonlineREMOVE.net>
Message-ID: <PrLXe.29229$TA2.23957@fe09.lga>
Source record: 17078

The receiver is already in a (steel) waterproof box. Tomorrow I will try moving the receiver as far away as I can. If that doesn't fix the problem, I'll try the stub antenna notch filter solution. I have a BNC Tee. Can anyone point me to the 1/4 wave length formula for 120.6 MHz? Does 0.591 meters (23 5/16") sound right?

I'm pretty sure right now that the interference is coming in on the antenna. It's not enough to trip the squelch, but as soon as someone keys on 123 and trips the squelch, the AWOS is on the audio. OTOH, I guess that doesn't prove anything...

I suppose the wiring to the 88.1 MHz transmitter or its wiring could be picking up the 120.6, although all that wiring is shielded (one audio line with shield terminated at only one end, and one 3v power line with its shield as return). The transmitter itself is in an unshielded plastic box, but that's mounted flat against the bottom of a 10" ground plane for the transmitter antenna. The last possibility is the 6v power line going into the receiver box. It's not shielded and starts at a wall wart transformer/psu very near the AWOS xmitter. I could put a few turns through a ferrite toroid just outside the box, I suppose. Couldn't hurt. Gotta find a suitable torroid.

Allison, I'm not experienced enough at this stuff to visualize how to make a bandpass section out of coax. I can follow the stub notch filter, but the bandpass isn't there. Could you explain a bit more?

Thanks to you all for all the help.

--
Bob (Chief Pilot, White Knuckle Airways)

<nospam@nouce.bellatlantic.net> wrote in message
news:b4uui15brprovh2js0qv035hmv751rek02@4ax.com...
> On Mon, 19 Sep 2005 18:07:25 -0400, "Bob Chilcoat"
> <viewptmd@optonlineREMOVE.net> wrote:
>
>>
>>I've tried quick fix by attenuating the input signal by trimming
>>(shortening) the antenna, but this doesn't really help. This was supposed
>
> Bad thing to do and likely didn't reduce the signal as much as you'd
> like. Try an attenuator, enough to kill the offending signal. Once
> that is known the next step may be easier.
>
> IF the attenuation needed is under 10DB and leving it in is acceptable
> your done. Usually local signals are plenty strong enough.

>
> If you need more than 10DB. Try a suckout stub tuned to the awos
> at 120.6 as others have suggested. That should be enough as your
> listening on 123.
>
>>(my Yaesu aviation handheld works perfectly at the same location), but I
>>have no other (free) receivers handy. I can move the receiver another 50
>>feet down the fence, which is my next option, but what if this doesn't
>>work?
>
> I'd try that first, distance will always help the problem. Allowing
> for a plastic case on the RX distance is more liklely helpful than
> filtering. The problem is the case of the RX is plastic and there is
> no shielding so any filter will be compromized by back door entry.
> A metalic water proof box with filtered ins and outs for RX and fm TX
> will be needed then.
>
> It's possible to make a filter with a steep enough curve for that by
> using a bandpass section for 123 and a notch section at 120.6 using
> sections of UT141 (.141" copper jacket coax).
>
> Allison
> KB1GMX
>
>

4346. OT: Motorola R2001x

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-20 05:36:44 UTC
From: Darko <9a3li_makni_@hamradio.hr>
Message-ID: <dgo75ihlo1@ss405.t-com.hr>
Source record: 17079

Hello!

Im looking for anyone who have experience in reparing old
Motorola R2001(2)x test-set.

Thanks !

Darko

4347. Re: Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-20 07:41:27 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <svbvi1tu0ic0cne7elgtt7lh21tple3ass@4ax.com>
Source record: 17080
Cross-posted to: rec.radio.shortwave,rec.radio.amateur,rec.radio.amateur.homebrew

On Mon, 19 Sep 2005 18:07:25 -0400, "Bob Chilcoat"
<viewptmd@optonlineREMOVE.net> wrote:

>Sorry for the crossposting, but I'm looking for more expertise than I have.
>I usually hang out in the aviation groups, but am an engineer by training.
>I have a radio problem:
>
>I have just completed a special rig for our local airport, but it has a
>problem. I took a rather old but serviceable Sony digital air band receiver
>(Air 8),

What is intermediate frequency (IF) of the receiver ? Some offending
signal (or mixing product) could fall on the image frequency and get
through that way.

>boxed it up in a waterproof enclosure and piped the audio out to an
>FM microwatt transmitter. The idea of this is that visitors to our airport
>who like to sit in the parking lot and watch the airplanes can listen on
>their car radios on FM 88.1

Is the interface present when this transmitter is turned off and the
signal is monitored through the speaker ? If the transmitter cables
are disconnected, does this change anything ?

>to the radio traffic on our Common Traffic
>Advisory Frequency (CTAF), which at our airport is 123.00 MHz (AM).
>Unfortunately, while this setup worked perfectly at home well away from the
>airport, we have an Automatic Weather Observation Station (AWOS)
>transmitting continuously on 120.60 MHz only 50-60 feet from the place I
>need to site the receiver. Even though this is only a 5 Watt transmitter,
>it overloads the front end of the receiver.

One thing to try is to rotate the antenna, so that the receiver
antenna is in opposite polarisation than the transmitter position, one
in vertical polarisation, the other horizontal polarisation. This will
attenuate the offending signal by 10-20 dB. The null might be quite
narrow, so you would have to slowly rotate your receiver antenna to
find it.

>As soon as anyone keys on
>123.00 and the automatic squelch is triggered, all you hear is the AWOS
>recording.

If you defeat the squelch, do you constantly hear the AWOS
transmission ? Does it matter if the 88.1 MHz FM transmitter is on or
not ?

Any other VHF transmitters on site (VOR?) that might take part in the mixing process ? Do you hear any other background noises than the AWOS recording ?

Paul OH3LWR

4348. Re: Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-20 11:30:54 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <UYOdnS55sq97b7LeRVnyuA@pipex.net>
Source record: 17081

> The receiver is already in a (steel) waterproof box. Tomorrow I will try
> moving the receiver as far away as I can. If that doesn't fix the
> problem, I'll try the stub antenna notch filter solution. I have a BNC
> Tee. Can anyone point me to the 1/4 wave length formula for 120.6 MHz?
> Does 0.591 meters (23 5/16") sound right?
==========

For the stub to work properly at the intended (notched) frequency , you must take into account the velocity factor of the coax. For a number of common coax types the velocity factor is about 0.67

For a freq of 120.6 MHz a quarter wavelength is 0.62 metres, so with coax having the above velocity factor the physical length is 0.62 * 0.67 equals 0.42 metres equals 16.4 inches.
However ,as mentioned before in this thread you could use odd multiples of this length

When you really want the stub 'as meant for the job' try to find someone with a spectrum analyser (with tracking generator) , cut the coax a bit longer than its calculated length and snip tiny bits off until the spectrum analyser shows the notch at 120.6 MHz.

On a different but related topic ; interference to a UHF TV sig by a nearby 144 MHz tx sig , I made a high pass filter and a downstream quarter wave stub which was subsequently optimised with the aid of a spectrum analyser. As expected there was also a clear notch at 432 MHz ,since the stub is a 3 quarter (odd)wavelength for that frequency. BTW the actual notch was at 144.4xx MHz being the part of the 2m band used for SSB operation in the UK , with SSB (varying RF amplitude) being a 'high risk' mode for interference. This HP filter/stub combination now permits the relevant radio amateur to operate on 2 metres ,be it with moderate power.

Frank GM0CSZ / KN6WH

4349. Re: Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-20 12:32:55 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <ejtvi11io3hjagd3i0sr6fk3ing689vo3t@4ax.com>
Source record: 17082

On Mon, 19 Sep 2005 23:35:12 -0400, "Bob Chilcoat"
<viewptmd@optonlineREMOVE.net> wrote:

>The receiver is already in a (steel) waterproof box. Tomorrow I will try
>moving the receiver as far away as I can. If that doesn't fix the problem,
>I'll try the stub antenna notch filter solution. I have a BNC Tee. Can
>anyone point me to the 1/4 wave length formula for 120.6 MHz? Does 0.591
>meters (23 5/16") sound right?

Wavelength is 300/F in meters. One quarter wave is 75/f in meters.
However your using coax cable and the speed of light (nominally 300 in
the examples cited) is slower depending on the coax used. for foam
types it's about .8 (varies by brand) and for solid types usually
around .66 (still varies some).

So for 120.6 a 1/4 wave section is 75/120.6=.62189M (24.4838").
A section of RG58 (solid dialetric) would be .66 that length or .4104M
(16.159").

To give you an idea of how critical that length is the 1/4Wave of the
same coax for 123mhz is .4024M (15.84").

So even small variations in VF (velocity factor for the coax) or
gutting error can make for big mistuning.

Generally speaking simple stubs work best if the two frequencies
are widely seperated such as 2m band and pagers at 153mhz
(5mhz minimum seperation).

>I'm pretty sure right now that the interference is coming in on the antenna.
>It's not enough to trip the squelch, but as soon as someone keys on 123 and
>trips the squelch, the AWOS is on the audio. OTOH, I guess that doesn't
>prove anything...

Sounds like intermod. The front end of the reciever is being grossly
overloaded.

The average airband radio the difference of 120.6 and 123mhz is so
small to the front end that overload is common.

>I suppose the wiring to the 88.1 MHz transmitter or its wiring could be
>picking up the 120.6, although all that wiring is shielded (one audio line
>with shield terminated at only one end, and one 3v power line with its
>shield as return). The transmitter itself is in an unshielded plastic box,
>but that's mounted flat against the bottom of a 10" ground plane for the
>transmitter antenna. The last possibility is the 6v power line going into
>the receiver box. It's not shielded and starts at a wall wart

>transformer/psu very near the AWOS xmitter. I could put a few turns through
>a ferrite toroid just outside the box, I suppose. Couldn't hurt. Gotta
>find a suitable torroid.

RF will com into the box anyway it can. Via power, antenna, audio and
even a poor connection between the cover and the box.

FYI: I'd bet anything that a few hundred feet of seperation from the
AWOS cures it or substantually improves it.

>Allison, I'm not experienced enough at this stuff to visualize how to make a
>bandpass section out of coax. I can follow the stub notch filter, but the
>bandpass isn't there. Could you explain a bit more?

If I had a way to post a schematic It would help. Suffice to say its
something that you'd need hardware to tune. The idea is that using
coax sections it's possible to get the equivelent of high Q tuned
circuits and couple them loosely for selectivity. Basically a open
ended 1/4 wave section of coax is a similar to a tuned cavity save for
a cavity at 123mhz is nearly 25" tall making coax less bulky.

So using an open stub creates a notch at some frequency, a shorted
stub is a tuned (resonant) pass at the same given the same length.
Visualize a feed from antenna, T with shorted stub(for 123), a 1/4
wave section for 120.6 section, another T with a open stub for 120.6.

Thats the starting point and it may be adaquate at that. However
to really make it work there is more and It's hard for me to describe
here. Sufficient to say VHF filters with that kind of selectivity are
not trivial to design and build.

Also obvious you need some instrumentation to tune the beast
for best results. Which is why there are people that build custom
filters for tasks like this.

Allison
kb1gmx

4350. Re: Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-20 12:54:57 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <ai00j1l3cmoagjh14d6eni8m1ke97drhv0@4ax.com>
Source record: 17083

On Tue, 20 Sep 2005 02:00:13 GMT, "Dale Parfitt"
<par@parelectronics.com> wrote:

>
>"Bob" <bob@nowhere.nil> wrote in message
>news:432F4312.4060903@nowhere.nil...
>> Put a tee connector on the receive line coax a length of coax on it with a
>> short at the far end. It must be cut to be exactly 1/4 wavelength
>> (including connector spur.) This will appear t be an open circuit at the
>> resonant frequency, but will severely attenuate your nearby unwanted
>> signal.
>> B.
>
>
>While this approach looks good on paper, it often fails badly when the
>desired frequency is so close in to the notch frequency. I just put a
>quarter wave stub on our VNA and found that while it does diminish the 123
>signal -33dB, it also attenuates the 120.6 signal by a whopping -22dB.
>There is also an enormous VSWR upset -120:1 or so- this is perhaps not
>important in your receive only application.
>Each year we build hundreds of filters for this exact application-
>AWOS/UNICOM separation. Typical insertion loss is under 1dB while the notch
>is >-40dB. The filter is about the size of a cigarette pack exclusive of the
>N connectors.
>
>W4OP

The 1/4 wave stub works because of huge impedence upset it
introduces. However having a short (or nearly so) on the coax for
transmitting would be deadly for transmitters.

The problem is sections of coax have only moderate Q as resonators
and they are also resonant at harmonics.

I'd approach the problem by pulling the RF amp out of the radio and
loosely coupling to the mixer. Even a RX with 15uV sensitivity is
adequate for miles around an airport.

Allison

4351. Re: Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-20 15:22:14 UTC
From: Bill <exray@coqui.net>
Message-ID: <b669b$43302928$4232bd44$2970@COQUI.NET>
Source record: 17084

nospam@nouce.bellatlantic.net wrote:
> On Mon, 19 Sep 2005 23:35:12 -0400, "Bob Chilcoat"
> <viewptmd@optonlineREMOVE.net> wrote:
>
>
>>The receiver is already in a (steel) waterproof box. Tomorrow I will try
>>moving the receiver as far away as I can. If that doesn't fix the problem,
>>I'll try the stub antenna notch filter solution. I have a BNC Tee. Can
>>anyone point me to the 1/4 wave length formula for 120.6 MHz? Does 0.591
>>meters (23 5/16") sound right?
>
>
> Wavelength is 300/F in meters. One quarter wave is 75/f in meters.
> However your using coax cable and the speed of light (nominally 300 in
> the examples cited) is slower depending on the coax used. for foam
> types it's about .8 (varies by brand) and for solid types usually
> around .66 (still varies some).
>
> So for 120.6 a 1/4 wave section is 75/120.6=.62189M (24.4838").
> A section of RG58 (solid dialetric) would be .66 that length or .4104M
> (16.159").
>
> To give you an idea of how critical that length is the 1/4Wave of the
> same coax for 123mhz is .4024M (15.84").
>
> So even small variations in VF (velocity factor for the coax) or
> gutting error can make for big mistuning.

years ago, many cable pay-tv signals were scrambled simply with an
interfering carrier inserted at 2.25 MHz above the video carrier. The
'decoder' was simply a notch trap that removed the carrier.
It was quite easy to remove this 'scrambling carrier' with a stub of
coax, twinlead or even zip cord. Once you know the approximate length
its a matter of just trimming away in 1/4" intervals. I forget if the
qurater-wave stub remained open and the half-wave stub was shorted, or
vice versa, but you get the drift...it only takes a few minutes to try.
That said, its easy to do sitting on the floor behind the tv with a
steady signal but if you are trying to trap an intermittent signal in
the field it might be rather maddening without a test oscillator and a
means of measuring the signal. Then its placement into the 'system' of
iffy impedance may cause it to shift slightly.

IF you could find an old cable TV "Channel A" or "Channel 14" positive
trap it would be a cinch to retune it. I don't think any of the
commercial vendors would sell them as one-off, though...they only cost

about $6 new. Maybe somebody has one in a junquebox?

-Bill- I'm surprised my junkbox didn't yield one :)

4352. Re: Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-20 15:40:44 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43302D7C.CFEAFC51@earthlink.net>
Source record: 17085
Cross-posted to: rec.radio.shortwave,rec.radio.amateur,rec.radio.amateur.homebrew

Bob Chilcoat wrote:
>
> Sorry for the crossposting, but I'm looking for more expertise than I have.
> I usually hang out in the aviation groups, but am an engineer by training.
> I have a radio problem:
>
> I have just completed a special rig for our local airport, but it has a
> problem. I took a rather old but serviceable Sony digital air band receiver
> (Air 8), boxed it up in a waterproof enclosure and piped the audio out to an
> FM microwatt transmitter. The idea of this is that visitors to our airport
> who like to sit in the parking lot and watch the airplanes can listen on
> their car radios on FM 88.1 to the radio traffic on our Common Traffic
> Advisory Frequency (CTAF), which at our airport is 123.00 MHz (AM).
> Unfortunately, while this setup worked perfectly at home well away from the
> airport, we have an Automatic Weather Observation Station (AWOS)
> transmitting continuously on 120.60 MHz only 50-60 feet from the place I
> need to site the receiver. Even though this is only a 5 Watt transmitter,
> it overloads the front end of the receiver. As soon as anyone keys on
> 123.00 and the automatic squelch is triggered, all you hear is the AWOS
> recording.
>
> I've tried quick fix by attenuating the input signal by trimming
> (shortening) the antenna, but this doesn't really help. This was supposed
> to be a quick and dirty (gratis) job for the airport, and I've already spent
> more time and money on it than I wanted to. Any suggestions as to how I
> might fix this problem? Cheaply? Obviously a better receiver would work
> (my Yaesu aviation handheld works perfectly at the same location), but I
> have no other (free) receivers handy. I can move the receiver another 50
> feet down the fence, which is my next option, but what if this doesn't work?
> I can't get it any farther away for several reasons. Anyone have a 120 MHz
> preselector they can give me? Any really steep (and cheap) 120.6 notch
> filter designs?
>
> Thanks for any help you can offer.
>
> --
> Bob (Chief Pilot, White Knuckle Airways)

Rather than building a trap, why not use a narrow bandpass filter?
Also, if you are that close to both transmitters, try attenuating the
signal from the antenna to prevent overloading the receiver.

One other idea. if the signal is from a transmitter at the airport,
why not see if you can take the audio feed to that transmitter and feed

the FM transmitter.

--
?

Michael A. Terrell
Central Florida

4353. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-20 15:44:01 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <27WXe.15544$mH.850@fed1read07>
Source record: 17086

Gotta remember - Hams are cheap -- they visit the local store -- try out the gear - ask a zillion questions, then go away and mail order off the web to save a measly dollar or two. Then they go back to the local store and ask them to help program the unit.

I had a Ham offer me $7 for a $25 book, I replied -- which Chapter do you want (;-)

--
CL -- I doubt, therefore I might be !

"H. P. Friedrichs" <noemail@please.com> wrote in message news:11iuuj1b9ob25a1@corp.supernews.com...
> ES:
>
> My advice...
>
> a) Start somewhere---with something. It doesn't matter what. Yes there is
> much to be said for planning and strategizing. On the other hand, too many
> people spend so much time thinking about doing things that they never
> actually do them.
>
> b) The "perfect ham store" is the store YOU'd shop at if it existed. If
> you want to establish the perfect ham store, then create it according to
> your vision.
>
> c) Whatever you do, make is scaleable. Running out plunking down thousands
> for shop space, equipment, advertising, and whatever is a risky
> proposition. Start with a single kit, a single service, a single piece of
> your own software, and market it on the web.
>
> If it fails, your exposure was small and whatever money lost can be
> justified as tuition for the lessons you learned. Just try something else.
>
> If it doesn't fail, you will have a small amount of capital with which to
> leverage the next product or service.
>
> HPF
> AC7ZL
>
> eternalsquire@comcast.net wrote:
>
>
>>
>> Problem is, I don't know just where to start.

>>
>> The Eternal Squire
>>

4354. Re: Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-20 18:05:58 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1127239558.553273.78250@g44g2000cwa.googlegroups.com>
Source record: 17087
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

BC,
.
Why not consider a Narrow Band Filter ?
.
READ - Narrow Band Filters
http://www.electronics-tutorials.com/filters/narrow-band-filters.htm
.
iane ~ RHF
.
.
. .

4355. Re: VHF cavity resonator w/ regeneration as IF for HF RX ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-20 18:30:08 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1127241008.806852.8530@g49g2000cwa.googlegroups.com>
Source record: 17088

Additional cons:
- Increased noise from the regeneration
- Potential for distortion introducted by the regeneration
- Non-flattopped response because of the single resonator
(so you need to make the resonance broad enough that
you can do a decent job with another filter, likely at a lower
frequency)
- To get high Q with reasonable regeneration still requires a
BIG resonator (at VHF). High regeneration is difficult to
make stable.

I'd enjoy reading about the results of your experiments with this, but
I honestly don't have high expectations for its being practical.

A long time ago, I worked on a receiver that applied gated regeneration
to the energy introduced into a cavity by an antenna, up in the several
GHz region, and it was a sensitive design for a very specific purpose
that worked well with few parts. But that design was optimized to
accomplish a special task, and the design approach was appropriate for
that task.

Cheers,
Tom

4356. Re: Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-20 21:10:53 UTC
From: D Peter Maus <DPeterMaus@worldnet.att.net>
Message-ID: <43307ADC.3080301@worldnet.att.net>
Source record: 17089
Cross-posted to: rec.radio.shortwave,rec.radio.amateur,rec.radio.amateur.homebrew

Bob Chilcoat wrote:
> Sorry for the crossposting, but I'm looking for more expertise than I have.
> I usually hang out in the aviation groups, but am an engineer by training.
> I have a radio problem:
>
> I have just completed a special rig for our local airport, but it has a
> problem. I took a rather old but serviceable Sony digital air band receiver
> (Air 8), boxed it up in a waterproof enclosure and piped the audio out to an
> FM microwatt transmitter. The idea of this is that visitors to our airport
> who like to sit in the parking lot and watch the airplanes can listen on
> their car radios on FM 88.1 to the radio traffic on our Common Traffic
> Advisory Frequency (CTAF), which at our airport is 123.00 MHz (AM).
> Unfortunately, while this setup worked perfectly at home well away from the
> airport, we have an Automatic Weather Observation Station (AWOS)
> transmitting continuously on 120.60 MHz only 50-60 feet from the place I
> need to site the receiver. Even though this is only a 5 Watt transmitter,
> it overloads the front end of the receiver. As soon as anyone keys on
> 123.00 and the automatic squelch is triggered, all you hear is the AWOS
> recording.
>
> I've tried quick fix by attenuating the input signal by trimming
> (shortening) the antenna, but this doesn't really help. This was supposed
> to be a quick and dirty (gratis) job for the airport, and I've already spent
> more time and money on it than I wanted to. Any suggestions as to how I
> might fix this problem? Cheaply? Obviously a better receiver would work
> (my Yaesu aviation handheld works perfectly at the same location), but I
> have no other (free) receivers handy. I can move the receiver another 50
> feet down the fence, which is my next option, but what if this doesn't work?
> I can't get it any farther away for several reasons. Anyone have a 120 MHz
> preselector they can give me? Any really steep (and cheap) 120.6 notch
> filter designs?
>
> Thanks for any help you can offer.
>
'

The technical solutions, so far presented, are about as good as
you're going to get while still keeping the cost reasonable. However,
you ARE dealing with a consumer grade radio that was simply not designed
to any particular standard of interference rejection. And that you've
packaged this with a transmitter operating within the FM band also
offers the potential for overload artifacts on a broad spectrum of
frequencies. Sony Air 8, however, was known to experience this kind of
problem even off-airport. It would even pass 11 meter CB on a good day

if the signal was close, or large enough. As did some Sony FM broadcast rigs of the period when an aircraft was reasonably nearby.

I lived 2 miles off the approach end of 30L/30R at Lambert, St Louis for years, and I'd get aircraft to tower chatter on my Sony portable at 103.3, 102.5, even 93.7 everytime an aircraft went overhead. The front end was simply not robust enough to withstand a close-in assault of any magnitude. Nor was the chassis shielded well enough to prevent leakage through the IF's. Your real option may to select a different receiver. If you're doing this as a favor to the airport, you may get a decommissioned rig culled from a wrecked aircraft, or one that's been sitting on the shelf at one of the FBO's, donated to the cause. In that case, robust interference rejection is assured for your purpose.

There is, however another, and potentially greater issue at play here.

Rebroadcast of non broadcast radio frequencies may be in violation of several communications acts. Brush up on your regs, and be sure you're in compliance. In today's climate, there is always some asshat who has to make trouble for his jollies bringing the letter of the law down on fairly innocuous activities that may actually benefit someone.
And with overlapping laws written the way they are, today, you may be in compliance with one law, while in violation of another.

One of my colleagues, downstate, got a spanking for a similar type of service involving Air/Water show comms for a small airport near his home. Someone complained. Even though there was no interference was measured, and all hardware was in compliance for license free application. Unauthorized rebroadcast of comm channels was the issue.

So, make sure your ducks are in a row.

4357. Re: Quad 837 Grounded Grid linear amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-20 21:59:48 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <CB%Xe.6066$Ew4.2187@bignews5.bellsouth.net>
Source record: 17090

>
> Specifically, I'd like to know if our amp was built to a published design
> and/or follows a published chassis layout. Does anyone have the '57
> handbook,
> QST article or version of the SSB manual handy?
I have a copy of the '57 HB, but I'm not sure if I can scan it due
to software problems. If I get my flatbed scanner working I'd be happy
to make a copy available. Or, I could just photo copy it and snail mail
it to you.

4358. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-20 23:21:15 UTC
From: Spike <Aero.Spike@Technologies.invalid>
Message-ID: <ra61j15181s4g2kmqna9f5ch5sli8jtj7g@4ax.com>
Source record: 17091
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Brian Reay wrote:

>I have to agree Frank, the fundamental reason why a wire has inductance is a
>very basic fact, I believe taught at KS3 science.

Let's hope that any 'colloquialisms' or 'idiomatic expressions' are
suitably flagged, as some people appear to believe that such
statements count as fundamental science and carry on into a form of
adulthood still using them but without any further thought.

>Makes you wonder about degrees from the UoE, does it not?

I believe it was claimed to be 'avant-garde' at the time - possibly
the sort of environment where lecturers sent off the students to
research things for themselves, after giving a few pointers, rather
than just writing it all on the board.

Some can cope with this, and some can't.....rather in the manner of
those who must wait for the outcome of an inquiry to tell them what
officially happened, rather than working out the various scenaria for
themselves.

from
Aero Spike

4359. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 00:06:16 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11j18vsp8gfsc96@corp.supernews.com>
Source record: 17092

Caveat Lector wrote:
> Gotta remember - Hams are cheap -- they visit the local store -- try out the
> gear - ask a zillion questions, then go away and mail order off the web to
> save a measly dollar or two. Then they go back to the local store and ask
> them to help program the unit.
>
> I had a Ham offer me $7 for a $25 book, I replied -- which Chapter do you
> want (;-)

Years ago, I was in the last real radio store in Portland. They were on their last legs, and that's just what the owner told me -- people would come in, get demos of all the units, try them out, then go home and mail order one. I did, by the way, buy the radio he took so much time to demonstrate and explain. But the store was out of business shortly thereafter.

We get what we collectively deserve. You want low prices, you get low prices. Hello, Wal-Mart; goodbye, service. The modest success of EZNEC, however, does give me hope.

Roy Lewallen, W7EL

4360. Re: OT: Motorola R2001x

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 02:26:45 UTC
From: Bret Ludwig <bretldwig@yahoo.com>
Message-ID: <1127269605.574161.241150@g44g2000cwa.googlegroups.com>
Source record: 17093

Without the manual you have no chance. In fact, even with it it's a challenge.... These sets have value, so if it's in good shape, sending it in and paying the bill is probably your best bet unless you are sure what you are doing.

It's common for MSS's to buy these just to have on the bench, for contract purposes, and actually use IFRs or HP's.

4361. Building the Ed Romney Handbook regen

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 02:34:01 UTC
From: Bret Ludwig <bretldwig@yahoo.com>
Message-ID: <1127270041.376855.205770@z14g2000cwz.googlegroups.com>
Source record: 17094

I bought a pile of books recently and among them was the Ed Romney "Fixing Up Nice Old Radios" book which you may be familiar with. For those not familiar he reprints the ARRL Handbook two-tube regen set which uses plug in coils. There is choke coupling to the audio amp with a 750 Henry choke.

I suppose I could get Sowter or Jensen to wind one, but is there an off the shelf part that will sub for this unobtainable little bugger?

4362. Re: transformer basic question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 02:43:30 UTC
From: Nick Kennedy <wa5bdu@yahoo.com>
Message-ID: <yQ3Ye.3846$P34.1112@okepread07>
Source record: 17095

<TRABEM> wrote in message news:ej6ri154ombo5lcsgjhfcp16spjimj8cb8@4ax.com...
> Is the value of a capacitor placed in series with the secondary of a
> transformer multiplied (as viewed from the primary) by the turns ratio
> or the square of the turns ratio?
>
> Thanks,
>
> T

Since I just started playing with the LMS impedance bridge featured in this months QST (and the current QEX), I thought it would be interesting to try to answer this one by experiment.

I have an old audio matching transformer labeled to transform 20 ohms to 8 ohms, a 2.5 ratio. I took a 10 uF capacitor and measured it at 9 uF, with Z of 14.43/_ -85 degrees at a measurement frequency of 1225 Hz. Hooked it to the low resistance side of the transformer and the meter to the high side. The reading obtained was 1.99 uF or Z = 74.4/_ -62 degrees.

So I got a transformation ratio of 4.5 or 5 in terms of capacitance or impedance, instead of the expected 2.5.

Now, how far is the transformer from ideal? Measuring its high side inductance with the low side open, I get 10.1 mH. This is the magnetizing inductance of the transformer, which appears in parallel with the transformed capacitive reactance. In a transformer that approaches ideal, the inductance is large enough to have a very large reactance compared to the transformed load from the secondary. In this case it's only sort of negligible. The transformed capacitance of 9/2.5 uF = 3.6 uF has a reactance of -j36.1 ohms. The reactance of the transformer's magnetizing inductance is j77.7 ohms. Combining the two in parallel gives a resultant capacitive reactance of -j67.11. And this is equivalent to 1.94 uF at my measurement frequency. Not too far from the measured value of 1.99 uF. I did neglect leakage inductance, assuming that it would be pretty small for this type of transformer.

Another interesting point to note is that the unadorned capacitor had a phase angle of 85 degrees, but the transformed version showed 62 degrees. The equivalent loss resistance of the transformer decreased the quality a fair amount, as one would expect I guess.

So I guess the answer to your question is yes, it will be transformed just like a resistive load would be, providing the transformed capacitive reactance is fairly small with respect to the magnetizing reactance of the transformer.

73--Nick, WA5BDU

4363. Re: Building the Ed Romney Handbook regen

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 03:37:36 UTC
From: Bill <exray@coqui.net>
Message-ID: <15467$4330d583$4232bd2f$11545@COQUI.NET>
Source record: 17096

Bret Ludwig wrote:
> I bought a pile of books recently and among them was the Ed Romney
> "Fixing Up Nice Old Radios" book which you may be familiar with. For
> those not familiar he reprints the ARRL Handbook two-tube regen set
> which uses plug in coils. There is choke coupling to the audio amp with
> a 750 Henry choke.
>
>
> I suppose I could get Sowter or Jensen to wind one, but is there an
> off the shelf part that will sub for this unobtainable little bugger?
>

I don't have that book but you can use the winding of an old audio interstage xfmr in most of the ckts where such a choke is called for. That will be in the 10-30 H range and should work just fine. I've had good luck even using the little 200mw $1.99 transistor interstage xfmrs from Mouser. Don't know how many henries they represent but compared to the coil+resistance in a set of old 1920s phones that served exactly the same function in similar ckts it seems roughly equivalent....on the order of 3-10 H wouldn't be atypical according to the measurements one fellow made.

The National SW-3 uses such a 750H choke and you can also find one of several hundred Henries in the old BC-221 freq meters.

The audio will be down only slightly using a smaller value but quite honestly I don't see why they used such high values.

-Bill

4364. Re: The Perfect Ham Store?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 03:54:55 UTC
From: jm <jm@notrash.com>
Message-ID: <qQ4Ye.36145$Tf5.20766@newsread1.mlpsca01.us.to.verio.net>
Source record: 17097

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:11j18vsp8gfsc96@corp.supernews.com...
> Caveat Lector wrote:
>> Gotta remember - Hams are cheap -- they visit the local store -- try out
>> the gear - ask a zillion questions, then go away and mail order off the
>> web to save a measly dollar or two. Then they go back to the local store
>> and ask them to help program the unit.
>>
>> I had a Ham offer me $7 for a $25 book, I replied -- which Chapter do you
>> want (;-)
>
> Years ago, I was in the last real radio store in Portland. They were on
> their last legs, and that's just what the owner told me -- people would
> come in, get demos of all the units, try them out, then go home and mail
> order one. I did, by the way, buy the radio he took so much time to
> demonstrate and explain. But the store was out of business shortly
> thereafter.
>
> We get what we collectively deserve. You want low prices, you get low
> prices. Hello, Wal-Mart; goodbye, service. The modest success of EZNEC,
> however, does give me hope.
>
> Roy Lewallen, W7EL

Not "all" hams are like that. I for one am not. But, I DO have a friend who is "cheap" and it sometimes embarrasses me to be with him when he tries to deal. "I" try to meet the person's price - if in reason and if I do need the item. IF not in reason, then I shop around - which is my option to do. What I WON'T do - is embarass them or make a smart ass remark about their price - I'll merely walk away. The only time I've ever retorted to anyone selling something was when they tried to get "new" price out of it, stated it was brand new in the box - when my eyes spotted a "modification" which wasn't done by the factory - and called them on it. Liars piss me off.

jm

4365. Ratcheting Crimp Tool Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 05:32:56 UTC
From: fmmck@aol.com
Message-ID: <fmmck-2109050132560001@acaa352a.ipt.aol.com>
Source record: 16998

In my collection of crimp tools I have an Aim tool with a die for RG-58 BNC connectors, the new West Mountain Radio tool with a die for PowerPole connectors and a Tool Aid set with 5 dies for various insulated and uninsulated terminals. I've noticed that the dies for these tools all look somewhat alike with respect to the way they are mounted to their frames. The dies look as if they would fit all three frames.

If the mounting method and dimensions are the same, is there any reason not to use a die with a different frame?

Does anyone know of a cross reference of commonly available crimp tools that lists which dies are interchangeable with which frames?

73, Fred, K4DII

4366. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 06:03:21 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <JI6Ye.166$_56.140@newsfe1-win.ntli.net>
Source record: 16999
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Spike" <Aero.Spike@Technologies.invalid> wrote in message
news:ra61j15181s4g2kmqna9f5ch5sli8jtj7g@4ax.com...

Welcome back Spike.

> Brian Reay wrote:
>
>>I have to agree Frank, the fundamental reason why a wire has inductance is
>>a
>>very basic fact, I believe taught at KS3 science.
>
> Let's hope that any 'colloquialisms' or 'idiomatic expressions' are
> suitably flagged, as some people appear to believe that such
> statements count as fundamental science and carry on into a form of
> adulthood still using them but without any further thought.

Don't worry, kind hearted employers can always recommend a good book ;-)

>>Makes you wonder about degrees from the UoE, does it not?
>
> I believe it was claimed to be 'avant-garde' at the time - possibly
> the sort of environment where lecturers sent off the students to
> research things for themselves,

And someone swapped the signs on the bar and the library as an initiative
test?

--
73
Brian, G8OSN
www.g8osn.org.uk

4367. Re: Ratcheting Crimp Tool Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 06:04:43 UTC
From: Rick Frazier <rickf@rickfrazier.com>
Message-ID: <4330F81B.24264A1C@rickfrazier.com>
Source record: 17000

Fred:

As long as you can determine the closure distance is the same, and the geometry is the same (primarily the way the crimp tool handles the pivot for the jaws), you should be ok. However, if the mounting is only "similar" be very careful of the two things:
1) the width of the crimp tool in regard to the slot in the die. If the slot in the die isn't the same width, it could be mis-registered and cause problems closing.
2) (and most important) be particularly careful that the closure is the same as the original crimp tool. Even a few thousandths of an inch makes a tremendous difference in whether a crimp is performed correctly, too loose (the dies do not close fully and the connection is not crimped with sufficient pressure to make the proper contact) or too tight (the die over-travels relative to the intended distance, which could damage the conductor or terminal used, even to the point where the termination is significantly weaker than intended).

Some crimp tools are adjustable to account for potential wear, and I've seen many a crimped connection that failed from improper setting of the tool, either too loose, which typically causes the joint to fail due to heat, etc., or too tight, which typically over crushes the conductor, making the termination break off at the shoulder of the crimp, or actually fracture the terminal material, causing it to fail and drop off under physical stress. Either way, the connection failed and caused problems later on. This is a particularly bad problem if the crimp is covered with heat shrink, as it "looks ok" until you put it under stress, either electrical or physical...

Good Luck
--Rick AH7H

Fred McKenzie wrote:

> In my collection of crimp tools I have an Aim tool with a die for RG-58
> BNC connectors, the new West Mountain Radio tool with a die for PowerPole
> connectors and a Tool Aid set with 5 dies for various insulated and
> uninsulated terminals. I've noticed that the dies for these tools all
> look somewhat alike with respect to the way they are mounted to their
> frames. The dies look as if they would fit all three frames.
>
> If the mounting method and dimensions are the same, is there any reason
> not to use a die with a different frame?
>
> Does anyone know of a cross reference of commonly available crimp tools
> that lists which dies are interchangeable with which frames?
>

> 73, Fred, K4DII

4368. Sexy Gothic Singles&Photos!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 08:16:32 UTC
From: mary19086@yahoo.com
Message-ID: <1127290592.768429.204390@g49g2000cwa.googlegroups.com>
Source record: 17001

Check out our large photo gallery for gothic and their admirers. Still looking for that special someone?

http://www.aboutme.com/gothicclub/gothicmodelsuck.htm

4369. Re: VHF cavity resonator w/ regeneration as IF for HF RX ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 08:57:18 UTC
From: SpamHog <n1jpr@hotmail.com>
Message-ID: <1127293038.472329.300510@g43g2000cwa.googlegroups.com>
Source record: 17002

Hmmm, all very interesting...

K7ITM wrote:

> Additional cons:
> - Increased noise from the regeneration

As in all regens, it comes with the territory!

> - Potential for distortion introducted by the regeneration

Which may be also a plus, if detection is to be accomplished in the same stage. In normal concentrated-LC circuits up to HF or low VHF rejection of signals at f/2, f/3 (which could be picked up and amplified as a harmonics at f) tends to be good enough. This always looked a bit counterintuitive to me, but it works. In cavities I think one can also expect spurious resonances - no idea if regeneration makes the whole contraption lock on the main resonance (that of the resonator at fundamental) and kill all spurs.

> - Non-flattopped response because of the single resonator

I wouldn't be too surprised if it turned out to be too tight for voice (I can't do the math w/o a lot of additional learning though, any help is welcome) but it would still be OK for CW. Regens are used for SSB as well, and LCs have been used for ultimate selectivity until recently (see Drake R8), but clearly curvy is a distant second best to flat.

> - To get high Q with reasonable regeneration still requires a
> BIG resonator (at VHF).

YESSS! The resonators I've seen were rather thick brass stubs, and even w/o regeneration could kill off a transmitter signal off frequency by <10%. As a first step I'd play with a ground-insulated loop made with either a ~ 0.5-1 in. wide strip or pipe. I/O with coax-fed links worked off ground, and a 50 ohm broadband amp as regen. I feel mired in my deep ignorance - as in antennas, what should be avoided to avoid broad resonances?

> High regeneration is difficult to make stable.

This would definitely be a hands-on radio, like any regen.

> A long time ago, I worked on a receiver that applied gated regeneration to the energy introduced into a cavity
> by an antenna,
> But that design was optimized to accomplish a special task,

By any wild chance was it an ECM? I remember that such a solution was used in radar jamming. Cavity was powered, kept right below oscillation. Pulse comes in, big punch goes out on the same frequency. (You don't have to answer this one! ;-)).

Or was it a self-activating oven klystron for genetically engineered microwave-emitting poultry?

4370. Re: Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 10:09:15 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1127297355.584027.30690@g43g2000cwa.googlegroups.com>
Source record: 17003
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

```
BC - When All Else Fails . . .
.
Relocate the Sony digital air band receiver (Air 8),
boxed it up in a waterproof enclosure and piped
the audio out to an FM microwatt transmitter to
a new location about 100 Feet to 100 Yards away.
.
making the impossible - possible ! ~ RHF
.
.
. .
```

4371. Low power homebrew test equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 10:31:53 UTC
From: David <groups@orbitcoms.com>
Message-ID: <tEaYe.8269$0E5.7799@news-server.bigpond.net.au>
Source record: 17004

Does anyone know where I could get details for making the following items. The problem with books I have and ideas on the web are they seem to require much higher power levels and work at lower frequencies.

I typically want to test antennas and other equipment at 434MHz and 915MHz with power levels of 20mW.

1. Some sort of high impedance preamp to put in front of a Frequency counter and probe RF circuits.
2. High impedance RF millivolt meter
3. SWR meter for forward and reverse readings.
4. Directional coupler.
5. Sinad Meter

Thanks in advance for any info.

Regards

David

4372. Re: OT: Motorola R2001x

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 13:20:00 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1d9a619c530e24df9896a5@192.168.42.131>
Source record: 17005

In article <dgo75ihlo1@ss405.t-com.hr>, 9a3li_makni_@hamradio.hr
says...

> Hello!
>
> Im looking for anyone who have experience in reparing old
> Motorola R2001(2)x test-set.

You should post that same question on http://batboard.batlabs.com.
One of the members works for Motorola's test equipment repair division.

Happy hunting.

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped
with surreal ports?"

4373. Re: Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 14:26:08 UTC
From: "John S." <hjsjms@cs.com>
Message-ID: <1127312768.723010.189780@f14g2000cwb.googlegroups.com>
Source record: 17006
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Bob Chilcoat wrote:
> Sorry for the crossposting, but I'm looking for more expertise than I have.
> I usually hang out in the aviation groups, but am an engineer by training.
> I have a radio problem:
>
> I have just completed a special rig for our local airport, but it has a
> problem. I took a rather old but serviceable Sony digital air band receiver
> (Air 8), boxed it up in a waterproof enclosure and piped the audio out to an
> FM microwatt transmitter. The idea of this is that visitors to our airport
> who like to sit in the parking lot and watch the airplanes can listen on
> their car radios on FM 88.1 to the radio traffic on our Common Traffic
> Advisory Frequency (CTAF), which at our airport is 123.00 MHz (AM).
> Unfortunately, while this setup worked perfectly at home well away from the
> airport, we have an Automatic Weather Observation Station (AWOS)
> transmitting continuously on 120.60 MHz only 50-60 feet from the place I
> need to site the receiver. Even though this is only a 5 Watt transmitter,
> it overloads the front end of the receiver. As soon as anyone keys on
> 123.00 and the automatic squelch is triggered, all you hear is the AWOS
> recording.
>
> I've tried quick fix by attenuating the input signal by trimming
> (shortening) the antenna, but this doesn't really help. This was supposed
> to be a quick and dirty (gratis) job for the airport, and I've already spent
> more time and money on it than I wanted to. Any suggestions as to how I
> might fix this problem? Cheaply? Obviously a better receiver would work
> (my Yaesu aviation handheld works perfectly at the same location), but I
> have no other (free) receivers handy. I can move the receiver another 50
> feet down the fence, which is my next option, but what if this doesn't work?
> I can't get it any farther away for several reasons. Anyone have a 120 MHz
> preselector they can give me? Any really steep (and cheap) 120.6 notch
> filter designs?
>
> Thanks for any help you can offer.
>
> --
> Bob (Chief Pilot, White Knuckle Airways)

Rather than re-broadcasting the signal why not try something simpler.
Just set up an Airport Traffic room within the airport and pipe the
audio in. Hang some old pictures and other memorabilia of the airport
on the walls to make it interesting.

4374. Re: OT: Motorola R2001x

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 14:26:26 UTC
From: jm <jm@notrash.com>
Message-ID: <t4eYe.36151$Tf5.24205@newsread1.mlpsca01.us.to.verio.net>
Source record: 17007

"Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null> wrote in message
news:MPG.1d9a619c530e24df9896a5@192.168.42.131...
> In article <dgo75ihlo1@ss405.t-com.hr>, 9a3li_makni_@hamradio.hr
> says...
>
>> Hello!
>>
>> Im looking for anyone who have experience in reparing old
>> Motorola R2001(2)x test-set.
>
> You should post that same question on http://batboard.batlabs.com.
> One of the members works for Motorola's test equipment repair division.
>
> Happy hunting.
>
>
> --
> Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
> (Known to some as Bruce Lane, ARS KC7GR,
> kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
> "If Salvador Dali had owned a computer, would it have been equipped
> with surreal ports?"

I'm not so sure that "Motorola" is doing tech support on that era of
equipment anymore. There are a few places - very few - that do offer Service
Monitor repair and recalibration. One such place is Cardinal Electronics
Inc. WWW.CARDINALELEC.COM
Another is NS Electronics Service, Inc. WWW.NSELECTRONICS.COM

I can't speak for either except to say I bought one that was just calibrated
a week or two prior to my purchase - by Cardinal. It seems to be ok!

4375. Re: Low power homebrew test equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 17:58:13 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1127325493.734844.4080@g49g2000cwa.googlegroups.com>
Source record: 17008

If you have a directional coupler, you are most of the way to an SWR meter...

Especially if you are willing to make directional couplers for specific narrow bands (say 10% or 20% bandwidth), it's pretty easy to do. If you get the freeware "RFSim99" software, you'll find in it a tool to design several different types of couplers. One thing they don't make clear is that the coupling for the microstrip and stripline versions is for a structure 1/4 wave long. The coupling decreases as the frequency goes up or down from that length. It's certainly useable at half the design frequency, and in fact you can find articles on the web about how the coupling varies with frequency, and for structures that give broader bandwidth. If you only care about ratios (e.g. for SWR calculation), then the exact coupling doesn't matter anyway. For your application, at only 20mW, you'll want fairly high coupling. 20dB coupling would give you 100mV out to a 50 ohm load, for 20mW in.

I've seen articles in "Wireless World" for amplified RF probes. But a simple diode detector probe feeding a high impedance voltmeter will be a high impedance load to the circuit you are probing, so long as the diode has low capacitance. You should be able to find Schottky diodes that have 0.5pF capacitance at very low junction reverse voltage, I think, though they are likely to be pretty delicate. (Don't zap them with static!) With a high-resolution DVM to monitor the output, or with a DC preamp that has high input impedance and extremely low input offset voltage (such as the Harris chopper-stabilized CMOS part), you can see RF voltages down to below a millivolt fairly easily. You need to calibrate the amplitude response, however, and it drifts some with temperature. With a buffer amplifier, you could use one of the RF power monitor ICs from vendors like Analog Devices or Linear Technology and have more stable calibration, reading "linearly in dB". An advantage of diode detection is that it's very cheap, and you can afford to put detectors on your directional coupler outputs and just leave them there--plus they don't require power supplies. That 20dB coupler with diode detectors and high resolution metering would allow you to still "see" the reverse-port coupled power down 40dB below 20mW input with good diode detectors, and it's very unlikely you'll be able to make the coupler with such good directionality anyway.

If you don't already have them, you should add "step attenuators" to your list of equipment. It can be useful for a lot of things. You may be able to pick up a pair of 1dB step and 10dB step attenuators from some place like ebay, maybe even at a reasonable price.

Are you going to be making so many measurements that you need a SINAD meter?? Do you have an RF generator with calibrated output?

Lessee...20mW at 50 ohms is just about 1 Vrms. For that much power, you need sensitive amplifiers and high impedances?? If you really do need that for probing, you'll need an amplifier at the probe tip. 1pF at 1GHz is about 160 ohms reactance. But for that very reason, 1GHz circuits are designed at low impedances, and you shouldn't need a particularly high impedance to probe for frequencies, at least.

Cheers,
Tom

4376. Re: VHF cavity resonator w/ regeneration as IF for HF RX ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 18:19:04 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1127326744.861063.81970@g47g2000cwa.googlegroups.com>
Source record: 17009

Just a couple of thoughts in reply--I'm more interested in getting you to go try the thing and let us know how it works for you! Though I see problems with it and would personally go other directions, I can see it could be quite a bit of fun to play with if you're interested in it.

So, the Q of a 1/4 wave coaxial resonator (and as it turns out, also 1/2 wave and 3/4 wave and...) built from smooth copper conductors, paying attention to making very good electrical contact especially where the current maxima are, and making the structure be about 77 ohms (D/d about 3.6) should allow an unloaded Q of about 107*D*sqrt(f), where D is outer conductor inside diameter in inches and f is the frequency in MHz. So a 6" diameter copper tube with a "1.5-inch" copper pipe center conductor, at 100MHz, should give you a Qu of 6000, roughly. That would be a bandwidth (unloaded) of 1/60th of a MHz, or about 16kHz. Maybe that will help a bit. In general, for moderate to high Q, bandwidth to 3dB points is equal to center frequency divided by Q. But that's loaded Q, which will be less than unloaded. Of course, your regeneration raises the effective Q--it is after all a Q multiplier.

Oh, and don't bother trying to silver-plate the resonator. You're better off just making sure it's smooth, high conductivity copper (probably NOT that hard copper water pipe I mentioned above!) with very good contact everywhere, protected with a thin coating of clear acrylic lacquer to keep it from tarnishing. There have been controlled expreiments about silver plating that show it actually can make things worse, unless you get all the plating parameters just right.

The regenerative cavity thing was/is a receiver for pulsed radar, where the time of the return pulse is known, roughly, and tracked, so the regeneration is gated on at the expected time of the return pulse.

Cheers,
Tom

4377. Re: Building the Ed Romney Handbook regen

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 18:28:20 UTC
From: Bret Ludwig <bretldwig@yahoo.com>
Message-ID: <1127327300.845169.219520@f14g2000cwb.googlegroups.com>
Source record: 17010

Bill wrote:
> Bret Ludwig wrote:
> > I bought a pile of books recently and among them was the Ed Romney
> > "Fixing Up Nice Old Radios" book which you may be familiar with. For
> > those not familiar he reprints the ARRL Handbook two-tube regen set
> > which uses plug in coils. There is choke coupling to the audio amp with
> > a 750 Henry choke.
> >
> >
> > I suppose I could get Sowter or Jensen to wind one, but is there an
> > off the shelf part that will sub for this unobtainable little bugger?
> >
>
>
> I don't have that book but you can use the winding of an old audio
> interstage xfmr in most of the ckts where such a choke is called for.
> That will be in the 10-30 H range and should work just fine. I've had
> good luck even using the little 200mw $1.99 transistor interstage xfmrs
> from Mouser. Don't know how many henries they represent but compared to
> the coil+resistance in a set of old 1920s phones that served exactly the
> same function in similar ckts it seems roughly equivalent....on the
> order of 3-10 H wouldn't be atypical according to the measurements one
> fellow made.
>
> The National SW-3 uses such a 750H choke and you can also find one of
> several hundred Henries in the old BC-221 freq meters.
>
> The audio will be down only slightly using a smaller value but quite
> honestly I don't see why they used such high values.

What I figured I'd do is just tap off a small practice guitar
amplifier for B+ and heater power (it's a homebrew with excess to
spare) and use it for audio too. So I shouldn't need too much audio
output.

The other question I have is, what relatively common miniature tubes
would be good to sub for the 5 and 6 pin ones in this circuit?

4378. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 19:34:38 UTC
From: class-a-pkearn-zjjzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <4331b565.298710@news.iol.ie>
Source record: 17011
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Brian Reay" <see@website.invalid> wrote:

: "Spike" <Aero.Spike@Technologies.invalid> wrote in message
: news:ra61j15181s4g2kmqna9f5ch5sli8jtj7g@4ax.com...
:
: Welcome back Spike.
:

ahhhh isnt that nice.

4379. Re: Building the Ed Romney Handbook regen

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 19:54:15 UTC
From: Bill <exray@coqui.net>
Message-ID: <eabdd$4331ba69$4232bd31$16170@COQUI.NET>
Source record: 17012

Bret Ludwig wrote:

>
> The other question I have is, what relatively common miniature tubes
> would be good to sub for the 5 and 6 pin ones in this circuit?

I don't know that particular ckt, what tubes is it using? Can you post
the schematic or is it on the web somewhere?

-Bill

4380. Buffer Amp IC suggestions plse

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 21:14:55 UTC
From: Jeff <jeff_164@NOSPAMhotmail.com>
Message-ID: <k3kYe.13434$iM2.1134628@news.xtra.co.nz>
Source record: 17013
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Hi,
Ive been trying to locate a suitable unity gain buffer amplifier IC that can drive a 50 load.
Application is to buffer a VCO output at 5Mhz.
Needs to be 8pin DIP and operate on a single-ended supply.
I had found what I wanted in the CLC109, but cant seem to find a supplier.
Any suggestions greatly appreciated regarding type and supplier that is user friendly to international countries.
JEFF
ZL3JK
New Zealand

4381. Re: Buffer Amp IC suggestions plse

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 22:25:09 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <dgsmk501sr9@drn.newsguy.com>
Source record: 17014
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Jeff wrote...
>
> Ive been trying to locate a suitable unity gain buffer amplifier
> IC that can drive a 50 load.
> Application is to buffer a VCO output at 5Mhz.
> Needs to be 8pin DIP

LTC's LT1206 comes in TO220, miniDIP and soic packages,
and Digi-Key has them in stock for $6.25 each...
http://rocky.digikey.com/WebLib/Linear%20Tech/Web%20Data/LT1206.pdf
http://www.digikey.com/scripts/DkSearch/dksus.dll?Detail?Ref=329191

> and operate on a single-ended supply.

Oops, +/-5V supply. What's your signal voltage? And did
you want your output to have a 50-ohm source impedance?

--
Thanks,
- Win

4382. Re: Buffer Amp IC suggestions plse

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 22:56:26 UTC
From: Jeff <jeff_164@NOSPAMhotmail.com>
Message-ID: <wylYe.13454$iM2.1136798@news.xtra.co.nz>
Source record: 17015
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Needs to drive into 50 ohms. input level approx 150mV at 5Mhz

"Winfield Hill" <Winfield_member@newsguy.com> wrote in message
news:dgsmk501sr9@drn.newsguy.com...
> Jeff wrote...
> >
> > Ive been trying to locate a suitable unity gain buffer amplifier
> > IC that can drive a 50 load.
> > Application is to buffer a VCO output at 5Mhz.
> > Needs to be 8pin DIP
>
> LTC's LT1206 comes in TO220, miniDIP and soic packages,
> and Digi-Key has them in stock for $6.25 each...
> http://rocky.digikey.com/WebLib/Linear%20Tech/Web%20Data/LT1206.pdf
> http://www.digikey.com/scripts/DkSearch/dksus.dll?Detail?Ref=329191
>
> > and operate on a single-ended supply.
>
> Oops, +/-5V supply. What's your signal voltage? And did
> you want your output to have a 50-ohm source impedance?
>
>
>
>
> --
> Thanks,
> - Win

4383. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 22:58:44 UTC
From: Spike <Aero.Spike@Technologies.invalid>
Message-ID: <kcp3j11q0r80984hoeqi38hp27ednesm6o@4ax.com>
Source record: 17016
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Brian Reay wrote:

>"Spike" <Aero.Spike@Technologies.invalid> wrote
>
>Welcome back Spike.

Thanks!

It was a bit tedious wading through ~2300 ukra postings......

>> Brian Reay wrote:
>
>Don't worry, kind hearted employers can always recommend a good book ;-)

ROFL!

>>>Makes you wonder about degrees from the UoE, does it not?
>>
>> I believe it was claimed to be 'avant-garde' at the time - possibly
>> the sort of environment where lecturers sent off the students to
>> research things for themselves,
>
>And someone swapped the signs on the bar and the library as an initiative
>test?

ooooh.....you are awful......;-)

from
Aero Spike

4384. Re: Low power homebrew test equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 23:04:09 UTC
From: David <groups@orbitcoms.com>
Message-ID: <JFlYe.9318$0E5.6715@news-server.bigpond.net.au>
Source record: 17017

Tom,

Thanks for the information.

I'll take a look at the coupler design in RFsim99.

The RF voltage probe and amp are not for the output of the transmitter
they are for "looking" at oscillators. I have a frequency counter that
goes to 2.5GHz but need to buffer the oscillator so as not to load it
down while probing. For lower frequency projects (VHF), I have a Tek
300MHz scope but the probes interfere with the circuits when I try to
"see" the waveform of the oscillator.

Thanks.

> If you have a directional coupler, you are most of the way to an SWR
> meter...
>
> Especially if you are willing to make directional couplers for specific
> narrow bands (say 10% or 20% bandwidth), it's pretty easy to do. If
> you get the freeware "RFSim99" software, you'll find in it a tool to
> design several different types of couplers. One thing they don't make
> clear is that the coupling for the microstrip and stripline versions is
> for a structure 1/4 wave long. The coupling decreases as the frequency
> goes up or down from that length. It's certainly useable at half the
> design frequency, and in fact you can find articles on the web about
> how the coupling varies with frequency, and for structures that give
> broader bandwidth. If you only care about ratios (e.g. for SWR
> calculation), then the exact coupling doesn't matter anyway. For your
> application, at only 20mW, you'll want fairly high coupling. 20dB
> coupling would give you 100mV out to a 50 ohm load, for 20mW in.
>
> I've seen articles in "Wireless World" for amplified RF probes. But a
> simple diode detector probe feeding a high impedance voltmeter will be
> a high impedance load to the circuit you are probing, so long as the
> diode has low capacitance. You should be able to find Schottky diodes
> that have 0.5pF capacitance at very low junction reverse voltage, I
> think, though they are likely to be pretty delicate. (Don't zap them
> with static!) With a high-resolution DVM to monitor the output, or
> with a DC preamp that has high input impedance and extremely low input
> offset voltage (such as the Harris chopper-stabilized CMOS part), you
> can see RF voltages down to below a millivolt fairly easily. You need
> to calibrate the amplitude response, however, and it drifts some with
> temperature. With a buffer amplifier, you could use one of the RF
> power monitor ICs from vendors like Analog Devices or Linear Technology
> and have more stable calibration, reading "linearly in dB". An

> advantage of diode detection is that it's very cheap, and you can
> afford to put detectors on your directional coupler outputs and just
> leave them there--plus they don't require power supplies. That 20dB
> coupler with diode detectors and high resolution metering would allow
> you to still "see" the reverse-port coupled power down 40dB below 20mW
> input with good diode detectors, and it's very unlikely you'll be able
> to make the coupler with such good directionality anyway.
>
> If you don't already have them, you should add "step attenuators" to
> your list of equipment. It can be useful for a lot of things. You may
> be able to pick up a pair of 1dB step and 10dB step attenuators from
> some place like ebay, maybe even at a reasonable price.
>
> Are you going to be making so many measurements that you need a SINAD
> meter?? Do you have an RF generator with calibrated output?
>
> Lessee...20mW at 50 ohms is just about 1 Vrms. For that much power,
> you need sensitive amplifiers and high impedances?? If you really do
> need that for probing, you'll need an amplifier at the probe tip. 1pF
> at 1GHz is about 160 ohms reactance. But for that very reason, 1GHz
> circuits are designed at low impedances, and you shouldn't need a
> particularly high impedance to probe for frequencies, at least.
>
> Cheers,
> Tom
>

4385. WTB: Heathkit Circular Dial

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 23:14:25 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <lPlYe.66515$qY1.51156@bgtnsc04-news.ops.worldnet.att.net>
Source record: 17019
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Seeking Heathkit VFO circular dial for a cracked one in a SB-401. State price shipped, tnx Joe

4386. Re: Buffer Amp IC suggestions plse

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-21 23:14:35 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <CYedna5XIIWNdKzeRVn-rA@adelphia.com>
Source record: 17018
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Jeff wrote:
> Hi,
> Ive been trying to locate a suitable unity gain buffer amplifier IC that can
> drive a 50 load.
> Application is to buffer a VCO output at 5Mhz.
> Needs to be 8pin DIP and operate on a single-ended supply.
> I had found what I wanted in the CLC109, but cant seem to find a supplier.
> Any suggestions greatly appreciated regarding type and supplier that is user
> friendly to international countries.
> JEFF
> ZL3JK
> New Zealand
>
>
An AD817 can deliver +-50 mA and has a gain bandwidth product of 50 MHz.
http://www.analog.com/UploadedFiles/Data_Sheets/289066266ad817.pdf
<4$ from Digikey.
Good for either a gain 1 buffer or a gain 2 with series 50 ohm
resistor, 50 ohm source.

4387. Re: Buffer Amp IC suggestions plse

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-22 00:37:28 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <dgsuc802ili@drn.newsguy.com>
Source record: 17021
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Jeff wrote...
>
> Needs to drive into 50 ohms. input level approx 150mV at 5Mhz
>
> Winfield Hill wrote ...
>> Jeff wrote...
>>>
>>> Ive been trying to locate a suitable unity gain buffer amplifier
>>> IC that can drive a 50 load.
>>> Application is to buffer a VCO output at 5Mhz.
>>> Needs to be 8pin DIP
>>
>> LTC's LT1206 comes in TO220, miniDIP and soic packages,
>> and Digi-Key has them in stock for $6.25 each...
>> http://rocky.digikey.com/WebLib/Linear%20Tech/Web%20Data/LT1206.pdf
>> http://www.digikey.com/scripts/DkSearch/dksus.dll?Detail?Ref=329191
>>
>>> and operate on a single-ended supply.
>>
>> Oops, +/-5V supply. What's your signal voltage? And did
>> you want your output to have a 50-ohm source impedance?

Unless you source with 50 ohms (2x signal plus 50-ohm resistor),
and terminate with 50-ohms, the issue becomes how much cable
capacitance? Either the load looks resistive (100 ohms in the
former case) or capacitive.

--
Thanks,
- Win

4388. www.ukradioamateur

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-22 00:38:54 UTC
From: Chris I Townsend <chris@cbnr.net>
Message-ID: <YOjpKSVe0fMDFwkA@holmfirth.demon.co.uk>
Source record: 17020

Hi,

Some of you, hopefully many of you, may be aware of the existence of the "Amateur Radio Course" project which provides a number on-line and downloadable tutorials for the various UK amateur radio examinations.

Due to the sudden, unexpected and unexplained withdrawal of support by the company who up to now have very kindly hosted our web-site free of charge, and their even more unexpected failure to communicate with me regarding how we might transfer or redirect the URL which they registered for us but now will not let us use, our site is no longer available to the clubs and individuals who benefited from it.

Can you therefore help us and please publicise as widely as possible the following information.

The "Amateur Radio Course" which was located at www.ukradioamateur.org is now relocated at www.radioamateur.co.uk

There may be a number of functions that are not working due to the sudden move, but they will be fixed within the next few days.

It remains, as always, a non-profit making activity sponsored and supported entirely by the group of individuals who give up their time and resources free of charge to support and promote interest in the hobby.

I apologise for posting this message in so many newsgroups, but I need the new URL to be publicised as rapidly as possible.

Many thanks to you for your help, best wishes and 73's

Chris
G8PUT

--
Chris I Townsend

(chris@cbnr.net)

4389. www.ukradioamateur 2

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-22 01:00:35 UTC
From: Chris I Townsend <chris@cbnr.net>
Message-ID: <msIGyYhzIgMDFwQs@holmfirth.demon.co.uk>
Source record: 17022

Hi,

2nd post, the first contained an error, the new address should have been given as www.ukradioamateur.co.uk

Some of you, hopefully many of you, may be aware of the existence of the "Amateur Radio Course" project which provides a number on-line and downloadable tutorials for the various UK amateur radio examinations.

Due to the sudden, unexpected and unexplained withdrawal of support by the company who up to now have very kindly hosted our web-site free of charge, and their even more unexpected failure to communicate with me regarding how we might transfer or redirect the URL which they registered for us but now will not let us use, our site is no longer available to the clubs and individuals who benefited from it.

Can you therefore help us and please publicise as widely as possible the following information.

The "Amateur Radio Course" which was located at www.ukradioamateur.org is now relocated at www.ukradioamateur.co.uk

There may be a number of functions that are not working due to the sudden move, but they will be fixed within the next few days.

It remains, as always, a non-profit making activity sponsored and supported entirely by the group of individuals who give up their time and resources free of charge to support and promote interest in the hobby.

I apologise for posting this message in so many newsgroups, but I need the new URL to be publicised as rapidly as possible.

Many thanks to you for your help, best wishes and 73's

Chris
G8PUT

--
Chris I Townsend

(chris@cbnr.net)

4390. Re: Buffer Amp IC suggestions plse

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-22 02:03:51 UTC
From: Jeff <jeff_164@NOSPAMhotmail.com>
Message-ID: <eioYe.13494$iM2.1138677@news.xtra.co.nz>
Source record: 17023
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Thanks. The AD817 looks good, and I can source it locally from Australia.
Thanks all for your help.
JEFF

"John Popelish" <jpopelish@rica.net> wrote in message
news:CYedna5XIIWNdKzeRVn-rA@adelphia.com...
> Jeff wrote:
> > Hi,
> > Ive been trying to locate a suitable unity gain buffer amplifier IC that
can
> > drive a 50 load.
> > Application is to buffer a VCO output at 5Mhz.
> > Needs to be 8pin DIP and operate on a single-ended supply.
> > I had found what I wanted in the CLC109, but cant seem to find a
supplier.
> > Any suggestions greatly appreciated regarding type and supplier that is
user
> > friendly to international countries.
> > JEFF
> > ZL3JK
> > New Zealand
> >
> >
> An AD817 can deliver +-50 mA and has a gain bandwidth product of 50 MHz.
> http://www.analog.com/UploadedFiles/Data_Sheets/289066266ad817.pdf
> <4$ from Digikey.
> Good for either a gain 1 buffer or a gain 2 with series 50 ohm
> resistor, 50 ohm source.

4391. Re: Ratcheting Crimp Tool Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-22 02:47:57 UTC
From: fmmck@aol.com
Message-ID: <fmmck-2109052247570001@ac838384.ipt.aol.com>
Source record: 17024

In article <4330F81B.24264A1C@rickfrazier.com>, Rick Frazier
<rickf@rickfrazier.com> wrote:

> As long as you can determine the closure distance is the same, and the
> geometry is the same (primarily the way the crimp tool handles the pivot for
> the jaws), you should be ok. However, if the mounting is only "similar" be
> very careful of the two things:
> 1) the width of the crimp tool in regard to the slot in the die. If the slot
> in the die isn't the same width, it could be mis-registered and cause
> problems closing.
> 2) (and most important) be particularly careful that the closure is the same
> as the original crimp tool.

Rick-

Thanks for the pointers. I suppose it is common sense, but I wouldn't
have thought about the jaw pivot arrangement making a difference.

Today I found an Ideal Industries "Crimp Master" tool with a die for cable
TV connectors, in a local store. That makes 4 tools for comparison.

Based on your comments, I found that the Tool Aid crimper and the Ideal
Crimp Master appear to have compatible dies. The Aim has a smaller die
slot width. The West Mountain Radio crimp tool for PowerPole connectors
has a similar size die, but the jaw arrangement is different from the
others.

I tried a couple of the Tool Aid dies in the Crimp Master frame and
produced similar crimps with similar pressure compared to using the Tool
Aid frame. My next step is to try interchanging dies with a different
tool a friend has. Between us, we hope to find what kinds of dies are
compatible with our frames.

73, Fred, K4DII

4392. Re: Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-22 03:19:13 UTC
From: fmmck@aol.com
Message-ID: <fmmck-2109052319130001@ac838384.ipt.aol.com>
Source record: 17025
Cross-posted to: rec.radio.shortwave,rec.radio.amateur,rec.radio.amateur.homebrew

In article <wEGXe.4566$H24.1943@fe11.lga>, "Bob Chilcoat"
<viewptmd@optonlineREMOVE.net> wrote:

> Unfortunately, while this setup worked perfectly at home well away from the
> airport, we have an Automatic Weather Observation Station (AWOS)
> transmitting continuously on 120.60 MHz only 50-60 feet from the place I
> need to site the receiver. Even though this is only a 5 Watt transmitter,
> it overloads the front end of the receiver. As soon as anyone keys on
> 123.00 and the automatic squelch is triggered, all you hear is the AWOS
> recording.

Bob-

By now you have probably solved your problem. If not, someone else suggested that you insert attenuation in the Sony's antenna lead. I think that approach is most likely to produce the results you want.

If you were to replace the Sony's antenna with a dummy load, there may still be sufficient signal bleeding into the radio to make your system work. The interfering signal would also bleed into the radio, but at such a low level that the Sony's tuned circuits ought to be able to handle it.

If even this does not solve the interference, you may find the problem to be audio rectification inside the 88.1 equipment, perhaps in the oscillator stage!

Please keep us informed of what it takes to make it work.

73, Fred, K4DII

4393. Re: Buffer Amp IC suggestions plse

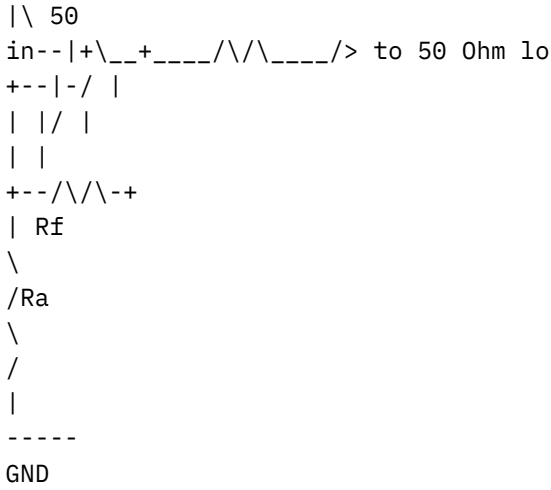
Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-22 05:00:54 UTC
From: Mac <foo@bar.net>
Message-ID: <pan.2005.09.22.04.44.20.615469@bar.net>
Source record: 17026
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Thu, 22 Sep 2005 09:14:55 +1200, Jeff wrote:

> Hi,
> Ive been trying to locate a suitable unity gain buffer amplifier IC that can
> drive a 50 load.
> Application is to buffer a VCO output at 5Mhz.
> Needs to be 8pin DIP and operate on a single-ended supply.
> I had found what I wanted in the CLC109, but cant seem to find a supplier.
> Any suggestions greatly appreciated regarding type and supplier that is user
> friendly to international countries.
> JEFF
> ZL3JK
> New Zealand

What you want is a video buffer or video op-amp. Linear Technologies,
National Semiconductor, and Analog Devices are among the many companies
that make such things.

Note that some of these devices get a bit squirrelly if they see a
capacitive load. So I recommend that you do something like this: (use
courier or other constant-width font for ASCII art schematic)



Rf and Ra would be the same value. Use a value recommended by the
datasheet, or 1k if the datasheet doesn't recommend a specific value.
Follow any other suggestions in the datasheet as well. For example, they
may suggest a small capacitor directly from the op-amp output to inverting
input.

You probably want to terminate the input with a 50 Ohm resistor, too, but
I don't know, so I'll leave it out.

It sounds like you may need AC-coupling, so you can put blocking capacitors on the input and/or output. Oh, if you put a blocking cap on the input, be sure to also provide a DC (resistive) path to GND or to the mid-rail point if you are going single-supply.

Just chose a capacitor big enough so that 1/(2*pi*R*C) is much lower than 5 MHz, your signal of interest. (R in this case is 50 Ohms) There is no problem putting a capacitor like this in the signal path: Since it looks like a short circuit at higher frequencies, it does not capacitively load the amp at frequencies where the amp might be unstable. Also, the series 50 Ohm resistor keeps the overall impedance resistive.

HTH

--Mac

4394. Re: Buffer Amp IC suggestions plse

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-22 05:27:20 UTC
From: Mac <foo@bar.net>
Message-ID: <pan.2005.09.22.05.27.29.526219@bar.net>
Source record: 17027
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Wed, 21 Sep 2005 15:25:09 -0700, Winfield Hill wrote:

> Jeff wrote...
>>
>> Ive been trying to locate a suitable unity gain buffer amplifier
>> IC that can drive a 50 load.
>> Application is to buffer a VCO output at 5Mhz.
>> Needs to be 8pin DIP
>
> LTC's LT1206 comes in TO220, miniDIP and soic packages,
> and Digi-Key has them in stock for $6.25 each...
> http://rocky.digikey.com/WebLib/Linear%20Tech/Web%20Data/LT1206.pdf
> http://www.digikey.com/scripts/DkSearch/dksus.dll?Detail?Ref=329191
>
>> and operate on a single-ended supply.
>
> Oops, +/-5V supply. What's your signal voltage? And did
> you want your output to have a 50-ohm source impedance?

Maybe an LT1191?

digikey #: LT1191CN8-ND (24 in stock at USD 3.25)
http://rocky.digikey.com/WebLib/Linear%20Tech/Web%20Data/LT1191.pdf

--Mac

4395. Re: Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-22 11:09:36 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <jlqdnS44vsVEDa_eRVn-og@bright.net>
Source record: 17028
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

I'm guessing that because of all the new B.S. concerning Homeland Security, the airport probably has a fence around it with a security coded gate control so that non-pilots can't get onto the field...

Scott

John S. wrote:

>
>
> Rather than re-broadcasting the signal why not try something simpler.
> Just set up an Airport Traffic room within the airport and pipe the
> audio in. Hang some old pictures and other memorabilia of the airport
> on the walls to make it interesting.
>

4396. Re: Buffer Amp IC suggestions plse

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-22 11:49:14 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <dgu5nq03ai@drn.newsguy.com>
Source record: 17030
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Mac wrote...
>
> Maybe an LT1191? digikey #: LT1191CN8-ND (24 in stock at USD 3.25)
> http://rocky.digikey.com/WebLib/Linear%20Tech/Web%20Data/LT1191.pdf

Ouch, a 30mA supply current!

--
Thanks,
- Win

4397. Re: Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-22 11:54:41 UTC
From: "John S." <hjsjms@cs.com>
Message-ID: <1127390081.044574.221110@g44g2000cwa.googlegroups.com>
Source record: 17029
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Scott wrote:
> I'm guessing that because of all the new B.S. concerning Homeland
> Security, the airport probably has a fence around it with a security
> coded gate control so that non-pilots can't get onto the field...
>
> Scott
>
>
> John S. wrote:
>
>
> >
> >
> > Rather than re-broadcasting the signal why not try something simpler.
> > Just set up an Airport Traffic room within the airport and pipe the
> > audio in. Hang some old pictures and other memorabilia of the airport
> > on the walls to make it interesting.
> >

Most airports have a lounge of some kind....

4398. Re: Buffer Amp IC suggestions plse

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-22 14:50:33 UTC
From: Fred Bloggs <nospam@nospam.com>
Message-ID: <4332C4B5.3010001@nospam.com>
Source record: 17031
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Winfield Hill wrote:
> Mac wrote...
>
>>Maybe an LT1191? digikey #: LT1191CN8-ND (24 in stock at USD 3.25)
>>http://rocky.digikey.com/WebLib/Linear%20Tech/Web%20Data/LT1191.pdf
>
>
> Ouch, a 30mA supply current!
>
>

Well- why not your super-duper 74HCU04 linear amp or whatever it was?-
is that available in Tiny Logic?

4399. Re: Low power homebrew test equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-22 20:18:16 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1127420296.874837.166970@g14g2000cwa.googlegroups.com>
Source record: 17032

Why not just inductively couple to traces, assuming you have microstrip traces around that you can get to? Then you could use a common MMIC amplifier to get back up to a decent signal level. I'm thinking here of something essentially like the microstrip quadrature coupler I pointed you to, except the coupled line is in a probe, and is quite a bit shorter than a quarter wave. That just reduces the coupling. You adjust the coupling by how close you hold the probe to the trace you want to monitor. (The coupling really is a combination of inductive and capacitive, I guess.) I often probe with a tiny coil of wire at the end of a piece of coax, the other end of the coax terminated in a 50-ohm instrument (spectrum analyzer or scope). The coil might be two or three turns close-wound #32 AWG, a tenth of an inch in diameter. Just hold it close to traces that carry current and you'll pick up signal. (It's the cheap & simple version of the coupler idea.)

Cheers,
Tom

4400. Re: Buffer Amp IC suggestions plse

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-22 20:32:12 UTC
From: Jeff <jeff_164@NOSPAMhotmail.com>
Message-ID: <ixEYe.13616$iM2.1147373@news.xtra.co.nz>
Source record: 17033
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Thanks for those ideas. I was considering putting a low pass filter after
the amp. The 2 shunt caps work out to be 560pF each.
JEFF
"Mac" <foo@bar.net> wrote in message
news:pan.2005.09.22.04.44.20.615469@bar.net...
> On Thu, 22 Sep 2005 09:14:55 +1200, Jeff wrote:
>
> > Hi,
> > Ive been trying to locate a suitable unity gain buffer amplifier IC that
can
> > drive a 50 load.
> > Application is to buffer a VCO output at 5Mhz.
> > Needs to be 8pin DIP and operate on a single-ended supply.
> > I had found what I wanted in the CLC109, but cant seem to find a
supplier.
> > Any suggestions greatly appreciated regarding type and supplier that is
user
> > friendly to international countries.
> > JEFF
> > ZL3JK
> > New Zealand
>
> What you want is a video buffer or video op-amp. Linear Technologies,
> National Semiconductor, and Analog Devices are among the many companies
> that make such things.
>
> Note that some of these devices get a bit squirrelly if they see a
> capacitive load. So I recommend that you do something like this: (use
> courier or other constant-width font for ASCII art schematic)
>
>
>
> |\ 50
> in--|+__+____/\/____/> to 50 Ohm load
> +--|-/ |
> | |/ |
> | |
> +--/\/\-+
> | Rf
> \
> /Ra
> \
> /

> |
> -----
> GND
>
> Rf and Ra would be the same value. Use a value recommended by the
> datasheet, or 1k if the datasheet doesn't recommend a specific value.
> Follow any other suggestions in the datasheet as well. For example, they
> may suggest a small capacitor directly from the op-amp output to inverting
> input.
>
> You probably want to terminate the input with a 50 Ohm resistor, too, but
> I don't know, so I'll leave it out.
>
> It sounds like you may need AC-coupling, so you can put blocking
> capacitors on the input and/or output. Oh, if you put a blocking cap on
> the input, be sure to also provide a DC (resistive) path to GND or to the
> mid-rail point if you are going single-supply.
>
> Just chose a capacitor big enough so that 1/(2*pi*R*C) is much lower than
> 5 MHz, your signal of interest. (R in this case is 50 Ohms) There is no
> problem putting a capacitor like this in the signal path: Since it looks
> like a short circuit at higher frequencies, it does not capacitively load
> the amp at frequencies where the amp might be unstable. Also, the series
> 50 Ohm resistor keeps the overall impedance resistive.
>
> HTH
>
> --Mac
>

4401. Re: Problem of nearby transmitter breakthrough - Solved!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-22 20:58:45 UTC
From: Bob Chilcoat <viewptmd@optonlineREMOVE.net>
Message-ID: <5WEYe.964$dl2.773@fe08.lga>
Source record: 17034
Cross-posted to: rec.radio.shortwave,rec.radio.amateur,rec.radio.amateur.homebrew

All,

Thanks for all the suggestions, advice and information. I learned a lot about VHF that I didn't know. Should have stayed with it way back when I almost finished my "Novice" amateur license (couldn't manage the Morse code part -- I guess that gives away my age).

Fred nailed it, although by the time I saw his note, I'd solved the problem. After relocating the receiver as far away as I could (60 feet, given the limitation of where the units needed to be and sources of power) which didn't really help, I tried some simple filters, etc. During the course of this, someone keyed a mike while I had the antenna disconnected, and it worked fine with no antenna connected! A bit more experimentation indicated that the 120.6 interference dropped out completely while the desired 123 signal could still be picked up from five miles away if I left the short coax jumper inside the box from the receiver to the antenna disconnected at the antenna end. I'm not sure I fully understand why I still get a pretty robust signal this way, but I guess enough 123 MHz RF is leaking in from the bare antenna or all the other wiring. Since the radio traffic of interest is mostly local planes near the airport or in the traffic pattern, a five mile radius is probably more than adequate, and this is certainly the cheapest solution.

I will also look into the regulations about rebroadcasting non-commercial radio signals. The transmitter satisfies the part 15(IIRC?) FCC reg about a 100-foot reception limit, but I thought the rules about rebroadcasting were to prevent <commercial> rebroadcasting. The 100 foot limitation will keep all reception on the airport grounds, but I will do some more research on this. Thanks.

As far as an area inside the building where people can listen to the radio is concerned, we already have that. This project is for the people who sit in their cars in the parking lot and watch the planes on their lunch hour, etc. We get quite a few of these. Anything that improves relations with the general public should help alleviate some of the problems we have with the neighbors. I still can't understand how anyone can buy a house near an airport, and then feel that they have a right to complain about airplane noise. The airport has been there since 1946, but that's another issue.

Again, thanks for all the help.

--
Bob (Chief Pilot, White Knuckle Airways)

"Fred McKenzie" <fmmck@aol.com> wrote in message
news:fmmck-2109052319130001@ac838384.ipt.aol.com...
> In article <wEGXe.4566$H24.1943@fe11.lga>, "Bob Chilcoat"
> <viewptmd@optonlineREMOVE.net> wrote:
>
>> Unfortunately, while this setup worked perfectly at home well away from
>> the
>> airport, we have an Automatic Weather Observation Station (AWOS)
>> transmitting continuously on 120.60 MHz only 50-60 feet from the place I
>> need to site the receiver. Even though this is only a 5 Watt
>> transmitter,
>> it overloads the front end of the receiver. As soon as anyone keys on
>> 123.00 and the automatic squelch is triggered, all you hear is the AWOS
>> recording.
>
> Bob-
>
> By now you have probably solved your problem. If not, someone else
> suggested that you insert attenuation in the Sony's antenna lead. I think
> that approach is most likely to produce the results you want.
>
> If you were to replace the Sony's antenna with a dummy load, there may
> still be sufficient signal bleeding into the radio to make your system
> work. The interfering signal would also bleed into the radio, but at such
> a low level that the Sony's tuned circuits ought to be able to handle it.
>
> If even this does not solve the interference, you may find the problem to
> be audio rectification inside the 88.1 equipment, perhaps in the
> oscillator stage!
>
> Please keep us informed of what it takes to make it work.
>
> 73, Fred, K4DII

4402. Re: Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-22 20:59:52 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dgv608$c0$1@engnntp2.cig.mot.com>
Source record: 17035
Cross-posted to: rec.radio.shortwave,rec.radio.amateur,rec.radio.amateur.homebrew

"Bob Chilcoat" <viewptmd@optonlineREMOVE.net> wrote in message
news:wEGXe.4566$H24.1943@fe11.lga...
> ... a rather old but serviceable Sony digital air band receiver
> ...piped the audio out to an FM microwatt transmitter.
> ... visitors ...can listen on their car radios on
...> Advisory Frequency (CTAF), which at our airport is 123.00 MHz (AM).
> ...5 Watt transmitter,
> it overloads the front end of the receiver. As soon as anyone keys on
> 123.00 and the automatic squelch is triggered, all you hear is the AWOS
> recording.> Bob (Chief Pilot, White Knuckle Airways)

My turn...

Lots of really good ideas here. Make sure it is the Sony antenna that is picking it up...

1- The stub-trap idea may work with some large number of odd-quarter waves. As you stack more odd multiples of quarter waves on (extend the shunt trap length), the dips get closer together and as a result the peak-to-null distance shrinks. A stub that is 21 quarter waves long has peaks and nulls very close together (you could calculate this). Of course the dips will be less deep due to cable loss. This may make it easier to get the desired "Pass / Null" response. You need to make sure the signal is getting into the antenna and not the receiver itself. The 2.4 Mc spacing is quite close.

NEW IDEA:
2- Try tuning it on the image (for your 123 Unicom frequency). You will probably need to do this away from the airport . You should hear the Unicom in two places on the dial spaced _TWICE_ the IF frequency away. These radios usually have pretty wide front ends There may be a schematic inside the radio to help determine this. If the IF is 0.455, the image is 0.910 away. This radio probably uses low side injection meaning the LO is below the 123 by 0.455. Therefore you must tune the radio 0.910 HIGHER than 123. This places the on channel further away from the 120.6 AWOS. Not knowing the IF, you have to hunt.
-Maybe doing this _AT_ the airport will yield a tuning that fixes it. Just try "tuning around".
Related idea, you could also figure out where the RF stage stuff is in the radio and de-tune it upward to get more attenuation at 120.6, but if that works, then just some attenuation in the antenna line may work as well and be easier.

3- Put the radio FAR away, but run the audio in some small coax to the 88.1 closer to the visitors.

4- I like the "cross Polarization" idea. Do a light saber thing with the Sony antenna. There may be a sweat spot that just might get the levels down and fix the IM or whatever is going on..

Mike T. Use the airport receiver...

Sounds good, but they probably don't want you messing with it.... and what about the airport's transmissions...

5- HOWEVER, how about simply a microphone right next to this receiver and within earshot of the airport's microphone---ON the 88.1 Tx ?? You may hear other stuff in the FBO, but it may be ok too...

Related... I have a little thing I plug into my dual band rig speaker output and it transmits the audio to my car FM radio. They're made for listening to battery operated CD players in your car.

73, Steve, K;9.D,C'I

4403. Re: solid state 6m amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-22 22:48:33 UTC
From: Dan/W4NTI <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <5xGYe.2460$vw6.906@newsread1.news.atl.earthlink.net>
Source record: 17036

Thanks, I'll check things out.

Dan/W4NTI

<nospam@nouce.bellatlantic.net> wrote in message
news:m73ni19se88nienksgj98ku98droklkfmc@4ax.com...
> Try the ARRL website under TIS. It's called the "Compact 6M brick".
> It was published in the OCT 1990 QST.
>
> The circuit is very close to the Motorola test circuit for the device
> with bias for linear operation.
>
> FAR Circuits has the board for it. I think they can supply a reprint
> as well.
>
> If thats not enough power two of them with 2 port splitter/ combiners
> will get you better than anywhere from 150-180W. A Wilkinsen
> splitter and combiner is fairly easy to do at 6m either as lumped
> elements or maybe even coax.
>
> Allison
> KB1GMX
>
>
> On Fri, 16 Sep 2005 23:11:48 GMT, "Dan/W4NTI"
> <w4nti@mindNOSPAMATALLspring.com> wrote:
>
>>Where can I find such a design?
>>
>>Dan/W4NTI
>>
>><nospam@nouce.bellatlantic.net> wrote in message
>>news:jd2mi1hqq5e83lifgoco245os1k0od3ksg@4ax.com...
>>> On 16 Sep 2005 07:16:33 -0700, francesco.messineo@gmail.com wrote:
>>>
>>>>Hello,
>>>>
>>>>having seen that's really difficult to make a working MOSFET linear
>>>>amplifier
>>>>for 6m, I started looking for a bipolar design and components. The
>>>>MRF448
>>>>transistors seem very expensive. Can anyone suggest an alternate part
>>>>or
>>>>a different approach (not tubes, I wanted to put this amplifier at the
>>>>antenna)?

>>>>thanks
>>>>
>>>>Francesco IS0FKQ
>>>
>>> MRF492A usually under 22$US new and good for 70W or more. There are
>>> published designs using it that work well for all modes.
>>>
>>> Most of the VHF power mosfets are priced around $1US/Watt it seems
>>> and are dreadfully expensive compared to bipolars.
>>>
>>> Allison
>>> KB1GMX
>>
>

4404. Electronic Component Spare Parts ..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-23 02:46:01 UTC
From: www_MilitaryComponents_Com <www_militarycomponents_com@yahoo.com>
Message-ID: <1127443561.851291.101590@o13g2000cwo.googlegroups.com>
Source record: 17037

Electronic Material Industries,Inc..
10061 Riverside Drive Suite 1023
Toluca Lake,California 91602 USA ...

http://www.militarycomponents.com ...

(818)769-1002 & (818)763-9584 corporate office ..
fax (818)769-1084 ..
efax (310)388-1276 ..

electmatind@earthlink.net ..
sales@militarycomponents.com ..

Military & Industrial & Commerial
Electronic Component Spare Parts ..

Capacitors & Resistors & Semiconductors &
Diodes & Transistors & Connectors &
Integrated Circuits & Relays & Fuses &
Circuit Breakers & Switches & Etc...

Please Fax or Email your requirements &
purchase orders & inquires & questions ..

Price are Negotiable - What is Your Target

New Surplus Condition - PLEASE TAKE NOTICE...
No Trace to the Mfg - PLEASE TAKE NOTICE...
EMI Certs only - PLEASE TAKE NOTICE...
Parts are subject to prior sales...

$10.00 line order $50.00 min order for domestic orders...
$100.00 min order for international orders...
$35.00 charge for wire-tranfers & bank-transfers...
We accept VISA and Mastercard for payment ...
5% FEE for purchase orders paid by credit cards....

4405. Re: Problem of nearby transmitter breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-23 10:45:38 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <n_OdnV4WKZghQa7eRVn-3g@bright.net>
Source record: 17038
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Around here, most "lounges" or "Terminal buildings" are inside the
fence, so the original problem remains that limits non-pilots (or pilots
who happen to be driving by a strange airport) from gaining access to
the field.

Scott

John S. wrote:

> Scott wrote:
>
>>I'm guessing that because of all the new B.S. concerning Homeland
>>Security, the airport probably has a fence around it with a security
>>coded gate control so that non-pilots can't get onto the field...
>>
>>>
>
>
> Most airports have a lounge of some kind....
>

4406. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-23 13:46:45 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1127483205.631008.176790@g43g2000cwa.googlegroups.com>
Source record: 17039
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

How about - anything, and everything, you can lay your hands on, for the rest of your life. There are no "best" books - favourite books, books that made an impact on you, yes. But "best" books - no, not really. Just read everything you can from as many sources as you can.

de VK3BFA Andrew.

PS - and newsgroups, discussions - people post lots of interesting stuff......

4407. Re: Buffer Amp IC suggestions plse

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-23 17:09:45 UTC
From: johan aeq <pe1aeq@amsat.og>
Message-ID: <8836e$4334383d$52ad139c$16908@news.versatel.nl>
Source record: 17040
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Try a SL560

"Jeff" <jeff_164@NOSPAMhotmail.com> schreef in bericht
news:k3kYe.13434$iM2.1134628@news.xtra.co.nz...
> Hi,
> Ive been trying to locate a suitable unity gain buffer amplifier IC that
can
> drive a 50 load.
> Application is to buffer a VCO output at 5Mhz.
> Needs to be 8pin DIP and operate on a single-ended supply.
> I had found what I wanted in the CLC109, but cant seem to find a supplier.
> Any suggestions greatly appreciated regarding type and supplier that is
user
> friendly to international countries.
> JEFF
> ZL3JK
> New Zealand
>
>

4408. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-24 04:28:30 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1127536110.784761.233910@f14g2000cwb.googlegroups.com>
Source record: 17041
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Yes, indeed, but you are arguing against a brick
wall here - those who hold, or who have ever held,
a licence issued under the gangrenous degeneration
that is the M3/CB Fools' Licence scheme, especially
those who were either too lazy or too stupid, or both,
to be able to tackle and then pass an exam aimed
at 14-year-olds and had to go instead for an
exam aimed at 6-year-olds.......reading just isn't
their strong point!

Andrew VK3BFA wrote:
> How about - anything, and everything, you can lay your hands on, for
> the rest of your life. There are no "best" books - favourite books,
> books that made an impact on you, yes. But "best" books - no, not
> really. Just read everything you can from as many sources as you can.
>
> de VK3BFA Andrew.
>
> PS - and newsgroups, discussions - people post lots of interesting
> stuff......

4409. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-24 04:44:44 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <dh2ljs$l3u$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 17042
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Polymath, your fine rhetoric is wasted on this subject.

Reg.

4410. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-24 04:50:43 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1127537443.215833.25250@f14g2000cwb.googlegroups.com>
Source record: 17043
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

It is never a waste to fly the flag (standard?) for
the maintenance of standards.

It is never a waste to protect the status of Ham Radio
against the Mongolian hordes of intellectual ne'er-do-wells,
those who "pride" themselves on achieving a 6-year-old's
exam pass.

Reg Edwards wrote:
> Polymath, your fine rhetoric is wasted on this subject.

4411. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-24 11:10:01 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <bPGdndIQYaDVqajeRVnyug@pipex.net>
Source record: 17044
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

> Polymath, your fine rhetoric is wasted on this subject.
> ---
> Reg.
==========

Reg , Polymath (being Gareth Evans) in on his weekly trolling expedition.
Suggest you just ignore him.

Frank GM&#65533;CSZ / KN6WH

4412. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-24 12:23:24 UTC
From: class-a-pkearn-znnzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <433544dc.321584@news.iol.ie>
Source record: 17045
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Polymath" <aiyr.r.bean@lycos.co.uk> wrote:

[snip]

he who lie down with dogs gets up with fleas.

if you dont want fleas, dont lie down.

4413. For Sale.. OR Swap.. Bearcat 155XL 16 channel scanner.. FOR 2 meter HT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-24 12:38:52 UTC
From: Mike Kulyk <mkulyk@optonline.net>
Message-ID: <zNbZe.2107$dl2.475@fe08.lga>
Source record: 17046
Cross-posted to: rec.radio.swap,rec.radio.amateur.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Nice scanner.. Was used at a towing company. Desktop unit

Looking for a 2 meter HT for general bang around use. OK if it missing
stuff.

Mike WB2GLW

4414. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-24 13:00:40 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1127566840.773374.256800@z14g2000cwz.googlegroups.com>
Source record: 17047
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

znnPK wrote:
> "Polymath" <aiyr.r.bean@lycos.co.uk> wrote:
>
> [snip]
>
>
> he who lie down with dogs gets up with fleas.
>
> if you dont want fleas, dont lie down.

Hey, who cares.....if you want to know more, you will pursue it. If you dont, you wont. leave politics to the politicians. Read some more, build something, enjoy yourself, whatever.

Andrew VK3BFA.

4415. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-24 18:48:53 UTC
From: "Jock." <real_classs_a2003@yahhoooo.fr>
Message-ID: <vr7bj1936k344hi9e8du6rbpf636uuuuun@4ax.com>
Source record: 16948
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

On 24 Sep 2005 06:00:40 -0700, "Andrew VK3BFA" <ablight@alphalink.com.au> wrote:

>
>znnPK wrote:
>> "Polymath" <aiyr.r.bean@lycos.co.uk> wrote:
>>
>> [snip]
>>
>>
>> he who lie down with dogs gets up with fleas.
>>
>> if you dont want fleas, dont lie down.
>
>Hey, who cares.....if you want to know more, you will pursue it. If you
>dont, you wont. leave politics to the politicians. Read some more,
>build something, enjoy yourself, whatever.

How about learning how to punctuate?

73 de Jock.
--

Clouseau: 'Does your dog bite?'
Man: 'No.' Dog savages Clouseau.
Clouseau: 'I thought you said your dog didn't bite.'
Man: 'That wasn't my dog.'

4416. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-25 08:08:28 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1127635708.655103.276410@g14g2000cwa.googlegroups.com>
Source record: 16949
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Jock. wrote:
> On 24 Sep 2005 06:00:40 -0700, "Andrew VK3BFA" <ablight@alphalink.com.au> wrote:
>
> >
> >znnPK wrote:
> >> "Polymath" <aiyr.r.bean@lycos.co.uk> wrote:
> >>
> >> [snip]
> >>
> >>
> >> he who lie down with dogs gets up with fleas.
> >>
> >> if you dont want fleas, dont lie down.
> >
> >Hey, who cares.....if you want to know more, you will pursue it. If you
> >dont, you wont. leave politics to the politicians. Read some more,
> >build something, enjoy yourself, whatever.
>
> How about learning how to punctuate?

>
> 73 de Jock.
> --
>
> Clouseau: 'Does your dog bite?'
> Man: 'No.' Dog savages Clouseau.
> Clouseau: 'I thought you said your dog didn't bite.'
> Man: 'That wasn't my dog.'

Why - cant you understand what I is saying? - or are you just being
picky picky picky - (too much time on your hands, go do something
useful, learn a new skill, read a book, dig your garden......whatever
....)

73 de VK3BFA Andrew.

4417. OT: CQ Serenade

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-25 13:26:45 UTC
From: Johnson <jdwalton@comt.net>
Message-ID: <t_ednc-vNbwuPqveRVn-ow@comcast.com>
Source record: 16950

a link posted on the French usenet group fr.rec.radio.amateur "CQ Serenade"
http://www.von-info.ch/hb9afo/histoire/NON-CQ_cq_serenade_fr.mp3

4418. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-25 13:58:01 UTC
From: "Jock." <real_classs_a2003@yahoo.fr>
Message-ID: <f0bdj11tt33ns0m13d7vmdos5ugud9u897@4ax.com>
Source record: 16951
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

On 25 Sep 2005 01:08:28 -0700, "Andrew VK3BFA" <ablight@alphalink.com.au> wrote:

>> >Hey, who cares.....if you want to know more, you will pursue it. If you
>> >dont, you wont. leave politics to the politicians. Read some more,
>> >build something, enjoy yourself, whatever.
>>
>> How about learning how to punctuate?

>Why - cant you understand what I is saying?

Perfektly cleer what you is trying to say, just looks
quite illiterate.

73 de Jock.
--

Clouseau: 'Does your dog bite?'
Man: 'No.' Dog savages Clouseau.
Clouseau: 'I thought you said your dog didn't bite.'
Man: 'That wasn't my dog.'

4419. Re: OT: Motorola R2001x

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-25 14:00:02 UTC
From: Darko <9a3li_makni_@hamradio.hr>
Message-ID: <dh6ah9sco1@ss405.t-com.hr>
Source record: 16952

Thanks for answers.
Problem here is thet when I turn it ON, can heard tone
(cca 800-1000hz) from speaker and nothing else, no
picture on screen, no change mode or anything.
Any tips ?

4420. Re: OT: Motorola R2001x

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-25 17:29:36 UTC
From: jm <jm@notrash.com>
Message-ID: <78BZe.36316$Tf5.12991@newsread1.mlpsca01.us.to.verio.net>
Source record: 16953

"Darko" <9a3li_makni_@hamradio.hr> wrote in message
news:dh6ah9sco1@ss405.t-com.hr...
> Thanks for answers.
> Problem here is thet when I turn it ON, can heard tone
> (cca 800-1000hz) from speaker and nothing else, no
> picture on screen, no change mode or anything.
> Any tips ?

Just a wild guess - power supply issues, bad connections? No screen - no voltage to the scope section. No change of mode - no voltage to unit controlling said functions. Not having a manual myself, this is all I can say with any degree of certainty. Myself, I have a 2001C.

4421. FA:Uniden BC-350A,MFJ-208+.....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-25 20:59:06 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <ucEZe.79273$qY1.62937@bgtnsc04-news.ops.worldnet.att.net>
Source record: 16954
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Fully working Uniden Bearcat BC-350A scanner and a MFJ-208 VHF antenna analyzer + 6v6's GT and Metal,+ +5Y3 JAN/GE +more Heathkits, more tubes, HEATH NEW AND USED MANUALS soon too; see at :

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking, 73 , heytubeguy

4422. Re: OT: Motorola R2001x

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-25 21:10:37 UTC
From: Darko <9a3li_makni_@hamradio.hr>
Message-ID: <dh73okobm1@ss405.t-com.hr>
Source record: 16955

jm wrote:

>
> Just a wild guess - power supply issues, bad connections? No screen - no
> voltage to the scope section. No change of mode - no voltage to unit
> controlling said functions. Not having a manual myself, this is all I can
> say with any degree of certainty. Myself, I have a 2001C.
>
>
>
Problem, PS is good (more or less) voltages are fine.
When turn it off then I can see some blink/flash on screen, thats all.
CPU unit ?
Why continious tone from speaker ?
Must be some error, but where ? :)

4423. Re: OT: Motorola R2001x

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-25 21:54:26 UTC
From: jm <jm@notrash.com>
Message-ID: <p0FZe.36327$Tf5.27932@newsread1.mlpsca01.us.to.verio.net>
Source record: 16956

"Darko" <9a3li_makni_@hamradio.hr> wrote in message
news:dh73okobm1@ss405.t-com.hr...
> jm wrote:
>
>>
>> Just a wild guess - power supply issues, bad connections? No screen - no
>> voltage to the scope section. No change of mode - no voltage to unit
>> controlling said functions. Not having a manual myself, this is all I can
>> say with any degree of certainty. Myself, I have a 2001C.
>>
>>
>>
> Problem, PS is good (more or less) voltages are fine.
> When turn it off then I can see some blink/flash on screen, thats all.
> CPU unit ?
> Why continious tone from speaker ?
> Must be some error, but where ? :)

Well, without a manual of my own, I can't go any further..... Sorry!
Unless I get one, some day I too will be in the same boat.

jm

4424. sig gen plans

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-26 11:54:12 UTC
From: matt vk3zmw <xiongmao@bigpond.net.au>
Message-ID: <EjRZe.15187$0E5.12544@news-server.bigpond.net.au>
Source record: 16957

Does anyone have a set of plans for a modulated RF generator suitable
for testing receivers in the HF/VHF bands?

TIA

4425. AM-1180/GRC manual/schematic?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-27 01:28:06 UTC
From: theosus <theosus@aol.com>
Message-ID: <1127784486.781716.286620@g43g2000cwa.googlegroups.com>
Source record: 16958
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Can anyone out there help with a slight problem? I have in my posession an AM-1180/GRC 100w FM amp, 50-100mhz. When i purchased it years ago it came with a schematic, which showed what voltages it needed where in order to operate. Anyone have experience with this type of unit? It uses a 4x150a power tube, and one hellacious roller inductor and capacitor.

I would either like to use it or sell it, but in either case i need a schematic.

-m.

4426. Re: Big old-fashioned IF transformers for tube-type homebrewing?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-27 01:43:23 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <ar1_e.1001$8l3.152@bignews5.bellsouth.net>
Source record: 16959
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Tim Shoppa wrote:
> Are the big old-fashioned IF transformers-in-a-can available
> anywhere anymore? I want to make a receiver, probably double
> conversion,
> which would mean that I'd want several each of the 50kHz and some
> higher frequency (455kHz likely).
>
> Are these things that can be made from scratch without a lot of
> difficutly? I can wind coils etc. but don't
> have any transformer slug-tuned cores.
>
> Tim KA0BTD
>
You can still find junk AA5 radios in the trash from time to time and rip out their 455khz if cans. 85khz transformers from arc-5 radios are STILL out there at hamfests, and the bc453 radios they came from show up often on ebay. I think I have a few of these cans in my junk box. You can pad them down to 50khz if you want, but there is nothing wrong with the 85khz if frequency. The arc5 cans have a feature where the spacing between the primary and seconday windings is variable. Remove the top cap and pull up on the fiber rod to increase the spacing, push down on it to move the windings together. With the windings spaced out you get a nice sharp peaked bandwidth, with the windings together they are over-coupled and you get a bandwidth well suited for ssb phone,
A Q multiplier and/or t-notch filter both work well at this frequency.

Some of the ARC-5 85khz cans had tapped windings to get better Q by connecting the grid and plate of the tubes 'below' the high impedance end of the coils by a few percent. If you exchange the hot and cold ends of the coils, the taps might work out well for bipolar transistor impedance matching connections!

4427. Re: DDS and phase noise.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-27 01:48:03 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <yv1_e.1003$8l3.35@bignews5.bellsouth.net>
Source record: 16960

Mauro wrote:
> I'm not an expert and need some help.
> I've build a DDS around an AD9951.
> I drive it at 400MHz from a source at 200MHz multiplied by 2. I get an
> output freq of 20MHz.
> I now drive it directly from the same source at 200MHz. I changed the
> register inside DDS to still get 20MHz on output.
> I do not have any possibility to measure the phase noise.
> So the question: is it possible to estimate if the phase noise of the 20MHz
> output is getting better, worst or is it going to remain the same?
> Thanks for the support.
> 73
> Mauro
>
>
Using the built in frequency multiplier of the 9951 will increase your
phase noise, but so will driving the chip at a lower frequency. I've
been told that the built in multiplier also RAPIDLY increases the power
the chip pulls and the heat it generates, so given a choice between
doubling the frequency with the multiplier and living with 1/2 the
frequency drive, (especially if you already have a 200mhz source)
I'd not use the multiplier.

4428. Vectron pinout ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-27 09:31:28 UTC
From: Alain <alain@no_spam.fr>
Message-ID: <4339115d$0$19276$626a14ce@news.free.fr>
Source record: 16961

Hello,
I have a surplus Vectron model 229-7730-5 Frequency :108Mhz VCXO

I wonder if anyone in this group happens to know where I might
find a specification sheet with pinout information for it ?

Many thanks in advance for any help!

73 & Enjoy!
Alain (F1MDT)

4429. Re: Vectron pinout ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-27 18:56:42 UTC
From: dunnt@its.caltech.edu
Message-ID: <dunnt-2709051156420001@dhcp-40-120.caltech.edu>
Source record: 16962

Pin 1 No connection (NC)
Pin2 Case(0V)
Pin3 Case(0V)
Pin4 B+ 24VDC
Pin5 VCXO Supply For option V models only
Pin6 VCXO Input For option V models only
Pin7 VCXO Return/case For option V models only

Aging CO-229 = 1 X 10-8/day
Output .5Vrms into 50 ohms
Stability +/_ 5 X 10-8

Hope this helps If you need more information I try to find it let me know.

Tom WB6IQD

In article <4339115d$0$19276$626a14ce@news.free.fr>, "Alain"
<alain@no_spam.fr> wrote:

> Hello,
> I have a surplus Vectron model 229-7730-5 Frequency :108Mhz VCXO
>
> I wonder if anyone in this group happens to know where I might
> find a specification sheet with pinout information for it ?
>
> Many thanks in advance for any help!
>
> 73 & Enjoy!
> Alain (F1MDT)

4430. Manual for HP 1707B Oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-27 22:19:33 UTC
From: Zen Navigator <dahall.aefb0@orange.net>
Message-ID: <1127859573.242742.69750@g49g2000cwa.googlegroups.com>
Source record: 16963

Hi,

As anyone a paper or electronic manual for the HP 1707B Hewlett Packard
Oscilloscope. I believe there is an A version, which I think would be
o.k.

Maybe know of a website where it can be downloaded, preferably for free

Will pay for any postage or materials if required.

dahall.aefb0@orange.net

Dave

M0GSM

4431. Re: Vectron pinout ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-27 22:54:09 UTC
From: Alain <alain@no_spam.fr>
Message-ID: <4339cd81$0$4328$626a14ce@news.free.fr>
Source record: 16964

Many Thank Tom, for your informations.
Can you how make to change the frequency of the VCXO by using the pin5/6/7 ?
Alain

"Tom" <dunnt@its.caltech.edu> a crit dans le message de news:
dunnt-2709051156420001@dhcp-40-120.caltech.edu...
>
> Pin 1 No connection (NC)
> Pin2 Case(0V)
> Pin3 Case(0V)
> Pin4 B+ 24VDC
> Pin5 VCXO Supply For option V models only
> Pin6 VCXO Input For option V models only
> Pin7 VCXO Return/case For option V models only
>
> Aging CO-229 = 1 X 10-8/day
> Output .5Vrms into 50 ohms
> Stability +/_ 5 X 10-8
>
>
> Hope this helps If you need more information I try to find it let me know.
>
> Tom WB6IQD
>
>
> In article <4339115d$0$19276$626a14ce@news.free.fr>, "Alain"
> <alain@no_spam.fr> wrote:
>
>> Hello,
>> I have a surplus Vectron model 229-7730-5 Frequency :108Mhz VCXO
>>
>> I wonder if anyone in this group happens to know where I might
>> find a specification sheet with pinout information for it ?
>>
>> Many thanks in advance for any help!
>>
>> 73 & Enjoy!
>> Alain (F1MDT)

4432. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-28 01:25:14 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1127870714.548992.214080@g47g2000cwa.googlegroups.com>
Source record: 16965
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Jock. wrote:
> On 25 Sep 2005 01:08:28 -0700, "Andrew VK3BFA" <ablight@alphalink.com.au> wrote:
>
> >> >Hey, who cares.....if you want to know more, you will pursue it. If you
> >> >dont, you wont. leave politics to the politicians. Read some more,
> >> >build something, enjoy yourself, whatever.
> >>
> >> How about learning how to punctuate?
>
> >Why - cant you understand what I is saying?
>
> Perfektly cleer what you is trying to say, just looks
> quite illiterate.
>
> 73 de Jock.
> --
>
> Clouseau: 'Does your dog bite?'
> Man: 'No.' Dog savages Clouseau.
> Clouseau: 'I thought you said your dog didn't bite.'
> Man: 'That wasn't my dog.'

Well, yes, your probably correct - I am sub literate. Should have been reading English textbooks instead of radio ones. But then, if I had, we wouldnt be having this discussion, because I wouldnt be interested in reading radio related posts as I would be fully occupied arguing about grammar. Just as pointless, really. And not germane to the original post. Gosh, this is exciting! - I DO enjoy talking with people who are clear, concise, and to the point.

73 de VK3BFA Andrew.

4433. Re: solid state 6m amplifier/IRF 510!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-29 02:04:34 UTC
From: WSQT <wsqtradio@ziplip.com>
Message-ID: <1127959474.884834.102440@g43g2000cwa.googlegroups.com>
Source record: 16966

We pirates have made the common, ordinary IRF 510 MOSFET work much higher than the 6M ham band-like at 88MHZ! For several months WSQT Guerilla Radio(The Squat in DC) was on 87.9 at 10W with a single IRF 510 as the final. Details are in an old post to alt.radio.pirate. We later went up to a dual 6146 tube final for more range, and are now relocating because FEMA didn't like our Katrina coverage and whined to the FCC ,who only seem to trouble us around things like Katrina or the Inauguration. Four months of 10W and 3 at 40-50W with no trouble, but 1 1/2 weeks of Katrina coverage and they came running! Well,we'll soon be back, but meanwhile I figured you guys would appreciate some design info. Never have I found any article on the IRF 510 at VHF, so I did all my own research.

Although I understand many hams don't like pirates, we read your newsgroups and manuals to learn how to build decent transmitters that don't pur out spurs and hash, and I figured maybe you guys would enjoy a return of the favor.

Anyway, I've gotten 13 watts from one IRF 510, with a little over 1 watt of drive. This is with tuned input and output circuits, not broadband. I've heard others have broadbanded these things that high, but I can't possibly see how with all that input C! I've never sen an article on how they did it, only a comment to my original research data and article an alt-reaido.pirate.

That 13 watts could in turn be used to apply greater drive to another 4 of these things either in parallel push-pull(possible oscillation problems but I've done this with the 2N2222 for a driver), or with resonant 3 winding combiner transformers. Estimated output: 60 watts if you get it right!

Given that I can make the IRF 510 operate at 88MHZ, it should operate at considerable greater efficiency and gain(better input Q and higher capacitive reactance)at 50-54 MHZ. What I want to know is this: can any of you guys one-up me and get at least 8W from one IRF 510 on 2 meters?

If we pirates can make this device operate at 87.9MHZ, surely one of you can get it to work at 144! Best thing about the IRF 510-it costs less than $2 and is available at any Radio Shack!

4434. Re: Manual for HP 1707B Oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-29 11:55:21 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <433bd62a$0$6539$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 16967

Do a google for it - quite a few hits
E bay usually has a few manuals also

R

Zen Navigator wrote:
> Hi,
>
> As anyone a paper or electronic manual for the HP 1707B Hewlett Packard
> Oscilloscope. I believe there is an A version, which I think would be
> o.k.
>
> Maybe know of a website where it can be downloaded, preferably for free
>
>
> Will pay for any postage or materials if required.
>
> dahall.aefb0@orange.net
>
> Dave
>
> M0GSM
>

4435. Re: solid state 6m amplifier/IRF 510!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-29 12:46:53 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <8pmnj1ln5c8ofksm1l44kvjhg0946hf4h3@4ax.com>
Source record: 16968

On 28 Sep 2005 19:04:34 -0700, "WSQT" <wsqtradio@ziplip.com> wrote:

> We pirates have made the common, ordinary IRF 510 MOSFET work much
>higher than the 6M ham band-like at 88MHZ! For several months WSQT
>Guerilla Radio(The Squat in DC) was on 87.9 at 10W with a single IRF
>510 as the final. Details are in an old post to alt.radio.pirate. We
>later went up to a dual 6146 tube final for more range, and are now

>>>>>>>>snipped>>>>>>>>>>>>>>>>>>

Several questions. Operating mode? Class A, B, C, D, E?
Stage gain?

Answer makes a difference. SSB required at worst class B
and class C would cause way to much distortion. While FM
is typically class C as there are no amplitude variations. This
makes a great difference is operating characteristics and
power out.

Since SSB and most amateur uses are narrow band by nature
any spurious outputs are undesired. Amps using the IRF510 at
HF have been built but their purity (IMD and harmonics) is only
adaquate to barely so and tends to degrade as frequency is
increased.

FYI: to feed an IRF510 as broad band you need to match the
50ohm input to less than 2 ohms reactive at VHF. This is
hard to do for greater than octave frequency ranges as it
is all reactive.

With that I've run an IRF510 at 6m (50mhz) linear (class ab1)
with a stage gain of around 9db and with 24V around 4W.
It was difficult to match, unstable tending to oscillate, and
prone to thermal runaway (case has high termal resistance).

A scrap final from a CB (2SC1307) gave me 7W, clean at 12V
and far less stability and matching issues plus cleaner IMD.
For the same effort a MRF492 at 50mhz easily delivers
90w at 12V and 11db gain as linear. That same 2sc1307
class C will deliver 12w and would drive a MRF492 to
100w class C.

To put it bluntly, for the effort to get 10W out of a IRF510
I can do far better with a 22$ transistor and still be ahead.

Allison
KB1GMX

4436. Re: switching power mosfet as RF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-29 13:35:14 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_43296755@fidonet.org>
Source record: 16969

"nospam@nouce.bellatlantic.net" bravely wrote to "All" (14 Sep 05 12:18:39)
--- on the heady topic of "Re: switching power mosfet as RF amplifiers"

no> From: nospam@nouce.bellatlantic.net
no> Xref: core-easynews rec.radio.amateur.homebrew:87858

no> On 14 Sep 2005 01:24:16 -0700, francesco.messineo@gmail.com wrote:

>
>nospam@nouce.bellatlantic.net ha scritto:
>
>>
>> Good luck. Most of those devices will exhibit gain to amazing
>> frequencies due the fact that fets have no real limits like junction
>> transistors. What they do have that limits them is real world things
>> like lead inductance, Input capacitance, output capacitance and Drain
>> to Gate Miller capacitance all of which make it difficult to get power
>> in and out of them as frequency increases.
>>
>> The input capacitance for the IRF510 is 135pf, the higher power parts
>> can easily be upwards of 1275pf for the IFR640 (Xc of around 2ohms).
>> Output capacitance around 400pf and feedback capacitance of 100PF
>> also for the 640.
>
>Reading from the ARF488 datasheet (this mosfet is made for RF
>amplification
>up to 60 MHz or so) I see input capacitance of 1400 pf typical, and
>150 pf output capacitance typical.
>The IRF840 datasheet reports 1300 pf and 200 pf in/out capacitance
>at the same frequency of the ARF488 (1 MHz). So what else affect
>high frequency performance of these devices? Is the 50 pf difference
>in output capacitance the "big" problem? Reverse transfer capacitance
>of the ARF488 is 65 pf against the 18 pf of the IRF840.

no> Yes that is true. However that input capacitance is close to what I'd
no> use to bypass a 50mhz circuit. It's near RF dead short unless you
no> try to absorb it into the feed network. Even then it's a very low Z.

Can one drive them with a grounded gate using a bipolar transistor at
the source?

A*s*i*m*o*v

... <- Grains Of Salt. Take As Needed With Above Message.

4437. Preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-29 13:35:17 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_43008d1c@fidonet.org>
Source record: 16970

Hi,

Was wondering if a wideband preamp might have a better noise figure if its input impedance is greater than the antenna's. It also has a couple of head to tail 1N4148 diodes across the input for protection. Would removing the diodes extend the bandwidth or is the extra 8 pF stray diode capacitance become lumped in with the coax capacitance? Surely the preamp input has some capacitance too, so how does this affect the voltage delivered? Please, answer at your convenience.

A*s*i*m*o*v

... Ok, I pulled the pin. Now what?.....Hey! Where are you all going?

4438. Re: switching power mosfet as RF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-29 14:11:32 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <egtnj19lki4uoe457i9hcmc2io9ifa8e94@4ax.com>
Source record: 16971

On Thu, 29 Sep 2005 13:35:14 GMT, "Asimov"
<Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote:

> no> Yes that is true. However that input capacitance is close to what I'd
> no> use to bypass a 50mhz circuit. It's near RF dead short unless you
> no> try to absorb it into the feed network. Even then it's a very low Z.
>
>
>Can one drive them with a grounded gate using a bipolar transistor at
>the source?

Yes, but not with any significant power output and the gain would be
poor at high power. This is known as cascode configuration and is
used at low power (milliwatts) with good results.

Allison

4439. Re: Preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-29 14:31:12 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1128004272.403911.85330@g14g2000cwa.googlegroups.com>
Source record: 16972

> It also has a couple of head to
> tail 1N4148 diodes across the input for protection.

What those diodes will do is make horrible intermod if you've got a transmitter anywhere nearby. Especially if it's wideband with no filtering on the input.

> Was wondering if a wideband preamp might have
> a better noise figure if its input impedance is greater than
> the antenna's.

Freaking around with impedance mismatches just to get a better noise figure will only work for marketroids. Has no benefit and only penalties in real life.

To quote H&H: "Big fallacy: don't try to improve things by adding a resistor in series with a signal source to reach a region of minimum NF. All you're doing is making the source noisier to make the amplifier look better!"

Most RF amps spec noise figure for Z_in = 50 ohms and don't even try marketroid stuff anymore.

Tim.

4440. Re: Preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-29 14:34:11 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <nktnj1pn8ao976f73ei6843oaomqdu2m5p@4ax.com>
Source record: 16973

On Thu, 29 Sep 2005 13:35:17 GMT, "Asimov"
<Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote:

>Hi,
>
>Was wondering if a wideband preamp might have a better noise figure if
>its input impedance is greater than the antenna's. It also has a
>couple of head to tail 1N4148 diodes across the input for protection.
>Would removing the diodes extend the bandwidth or is the extra 8 pF
>stray diode capacitance become lumped in with the coax capacitance?
>Surely the preamp input has some capacitance too, so how does this
>affect the voltage delivered? Please, answer at your convenience.
>

The diode capaitance is low and really not a factor in preamp gain or
noise. They are non conducting and the capacitance is easily absorbed
into fees and matching systems.

The exact match for any preamp to antenna is a complex as it depends
on device, circuit topology and frequency. Generally with most fets
the ideal transducer impedence for best gain and low noise is higher
than 50 ohms. For most bipolar transistors it's less than 50 ohms.
Getting a reasonable match and incurring low losses in that matching
network are challenges. Every DB of loss at the input contributes
negatively to system noise figure. This includes feedline [coax]
between the amplifier and the antenna.

With all that... Wide band amps generally are of the feedback type
and unless they are of the Norton topology they are noisy. Added to
that is wideband noise has more total power than a narrow band
segment of noise fro the same source. So it goes to say that narrow
band amplifiers generally have the lowest noise.

For HF this is rarely a real problem as most amps have low enough
noise to be useful as the environment is very noisy. As we
transistion to low VHF and higher this case changes greatly. It's
also at VHF and higher that low noise amplification starts to become
significant and more difficult to achieve. Modern high performance
devices however may make this appear simple. For example a wide
band mimic MAR-6 achieves 20db gain 3db noise figure to upper UHF.
However 3db is only ok, as a good Gasfet at 430mhz will be less than
.8db noise figure and even fair number of cheap bipolars can achive
sub 1db with ease.

So it's really an issue of what noise figure you really need and what
bandwidth you need it to cover. For ham purposes this is an issue

for practical consideration for 10m and above weak signal work or space comms such as EME. For serious weak signal work in the VHF/UHF realm you have to look at the antenna system and feed system as part of that noise figure.

Allison
KB1GMX

4441. FM SCA adapter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-29 23:56:36 UTC
From: mcalhoun@ksu.edu
Message-ID: <dhhuvk$k95@unix1.cc.ksu.edu>
Source record: 16974

I've always wanted to build an SCA adapter for an FM radio so I could see what else is available in the 88-108 MHz band. A web-search found lots of schematics, but I'd appreciate suggestions as to which schematic YOU have built that works.

--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

4442. Re: solid state 6m amplifier/IRF 510!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-30 02:07:13 UTC
From: WSQT <wsqtradio@ziplip.com>
Message-ID: <1128046033.694176.232710@g14g2000cwa.googlegroups.com>
Source record: 16975

I run the IRF 510 essentially at the "class B threshold"(leakage idling current but nowhere near linear range), simply because I could not drive it hard enough to run it without bias like in the AM BC band transmitter(Oct 03-Jan 05). Envelope distortion is not a factor when frequency modulation is in use, of course. Stage gain with 1W drive and 10-13W out is essentially 10 db-not great, but I've seen a hell of a lot of RF transistors speced with gain from 10-13db.

If you want to use the IRF 510 for SSB, I have no idea what the IMD will be,but I've used them at audio as modulators for the old AM rig. If anything, your stage gain will be the same or greater. I used 3V bias, generating leakage current only in the FM rig. For good linearity at audio(and presumably for SSB as well), you need to bias them further forward than threshold(they are NOT like darlingtons at audio for this!), and you will get more heat. I've had them on the scope at audio with sine wave drive, and they needed to go well into AB1, so much so that they made measurabgly more heat than darlington bipolars did for an audio amp.

No way will they be MORE linear at RF than audio, so run them in AB1 if you want AM linear or SSB. CW or FM, just set the bias pot for maximum OUTPUT, and you will get about 3V when running in the VHF range, as turn-off time seems to lower output with more bias. As a result, they like to be "centered" between "on" and "off" for maximum efficiency, which still sucks at VHF.

I would not be entirely suprised if an IRF 510 amp proves a CW and FM only deal at 6M, and I would bet on it at 2!

On the other hand, efficiency at 6M will be better than at 3M, so you should be able to stay within acceptable dissipation, even if AB1 bias is CUTTING output with the same drive as "threshold B" bias. Shit-SSB's a low duty-cycle mode, while at FM the duty cycle is 100%! This should compensate for the extra heat of AB1 operation necessary to make the IRF 510 linear at ANY frequency, even audio.

When I used the IRF 510 in the AM band as a drain-modulated Class C pair, they could make 55W carrier but only sustain 35-40W carrier for 30 minutes operation. Years ago, there was a well-published design for a broadband HF aming this device, accepting as much as 80W pep at 40M!

Spurious outputs, BTW, are as undesired for what we do as they are for amateur work. If you get spurs and they bring the FCC, you can probably resolve the issue. For a pirate, spurs can cause mean MUCH more serious "difficulties!" I have a lot more trouble chasing them out of exciters than amps, but always check out both very carefully.

Voltage used in the FM rig is 30V, the AM rig was 17 volts B+, going
to 34 at 100% mod. With tuned input and output circuits stability is
excellent, and unlike multi-2N222 drivers I've never had to chase hash
or oscillation with the IRF 510. Of course, a big bulky heatsink
serves as a groundplane, with all parts screwed to it.

Glad to hear I'm not the only one to push the IRF 510 above 30MHZ!

> Several questions. Operating mode? Class A, B, C, D, E?
> Stage gain?
>
> Answer makes a difference. SSB required at worst class B
> and class C would cause way to much distortion. While FM
> is typically class C as there are no amplitude variations. This
> makes a great difference is operating characteristics and
> power out.
>
> Since SSB and most amateur uses are narrow band by nature
> any spurious outputs are undesired. Amps using the IRF510 at
> HF have been built but their purity (IMD and harmonics) is only
> adaquate to barely so and tends to degrade as frequency is
> increased.
>
> FYI: to feed an IRF510 as broad band you need to match the
> 50ohm input to less than 2 ohms reactive at VHF. This is
> hard to do for greater than octave frequency ranges as it
> is all reactive.
>
> With that I've run an IRF510 at 6m (50mhz) linear (class ab1)
> with a stage gain of around 9db and with 24V around 4W.
> It was difficult to match, unstable tending to oscillate, and
> prone to thermal runaway (case has high termal resistance).
>
> A scrap final from a CB (2SC1307) gave me 7W, clean at 12V
> and far less stability and matching issues plus cleaner IMD.
> For the same effort a MRF492 at 50mhz easily delivers
> 90w at 12V and 11db gain as linear. That same 2sc1307
> class C will deliver 12w and would drive a MRF492 to
> 100w class C.
>
> To put it bluntly, for the effort to get 10W out of a IRF510
> I can do far better with a 22$ transistor and still be ahead.
>
> Allison
> KB1GMX

4443. Re: switching power mosfet as RF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-30 02:30:00 UTC
From: WSQT <wsqtradio@ziplip.com>
Message-ID: <1128047400.931777.163120@g43g2000cwa.googlegroups.com>
Source record: 16976

Grounded gate? Not too likely with the IRF 510. You will need 5V drive at least, at all full current! Since a grounded gate(base, grid) amp has only voltage gain, you would have a theoretical gain of maybe 3db at 12V, 6db@24V, and so on,but given unity gain from the IRF 510 at 12V grounded source at VHF, maybe unity or worse real world at VHF regardless of supply voltage.

The IRF 510 has a maximum peak voltage of 100, thus a maximum safe supply of around 34. Of course, a tube with several hundred volts supply(or several KV for a big one) is quite another matter, as are those 1KV peak MOSFETS as seen in some Class E 160M/80M rigs. No idea what input C is in the latter, though.

Lastly, at grounded gate you still get the same voltage-variable 135pf gate-source C as your input C, you just get out of the Miller C, which is an estimated 22pf times 2 for an MF/HF rig with 12V supply and 12V drive, or times 3.5 for a 30V supply. Input loss gets damned high in this capacitance, and this is why a device that(grounded-source) at MF has 30dB gain has 10dB gain at VHF.

4444. Re: solid state 6m amplifier/IRF 510!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-30 02:41:47 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <c48pj1ll3slmoifebrv2k4m82n6mklj1j2@4ax.com>
Source record: 16977

Cut to the chase. The only thing the IRF5xx series has going for it is it's dirt cheap. The problem is that coaxing them to deliver is more pain than better devices. Good devices in reasonable circuits have one advantage, repeatability of performance.

As to MW am service, I'd use the heavier devices and run them class E in the several hundred watts to KW range. Even the IRF510 in class E is good for more than 50W for a pair and should run reasonably cool. Even the really big E amps only need a few watts as excitation. This works because they are being used as switches, what they were designed to do. A class E amp can be "plate modulated" in the usual way but a PWM modulator will be far more efficient. There are a number of people running class E Am phone on 160, 75 and 40m and they sound very good.

For decent RF designs that withstand impossible swrs a good RF rated device is hard to beat. The real problem is finding a source that doesn't mark them up 500%. However there are some devices out there that are like the venerable 6146 they do the job and can be had at less than 0.40$/watt. For 6m the MRF492 for example rated power out at 12V of 70W and most deliver 80-90. For the price it's cheap.

For 2m I'd just grab a MRF247, easy 75watts at 2m class C or B and a pair with Wilkerson splitter/combiners deliver a heafty 145watts on the Bird. They work well for 2m SSB service with decent IMD. the last pair(matched) I bought as for a commercial amp repair only cost 70$. For that kind of power that's cheap.

Allison
KB1GMX

4445. Re: FM SCA adapter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-30 15:34:32 UTC
From: osr@uakron.edu
Message-ID: <1128094472.108864.132210@g44g2000cwa.googlegroups.com>
Source record: 16978

The ramsey kit works fairly well.

4446. Re: FM SCA adapter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-30 18:21:47 UTC
From: clifto <clifto@clifto.com>
Message-ID: <sac013-u1s.ln1@remote.clifto.com>
Source record: 16979

mcalhoun@ksu.edu wrote:
> I've always wanted to build an SCA adapter for an FM radio so I
> could see what else is available in the 88-108 MHz band. A web-
> search found lots of schematics, but I'd appreciate suggestions
> as to which schematic YOU have built that works.

I've built various 565-based units over the years. I only used the schematics I found as starting points; the main one I used to start from was the one included in the old, old 565 data sheets.

Make yours tunable, as SCA can range from 57 to 92 KHz and frequently a station will have three different carriers with different material on each. If I were doing one today, I'd use decent op amps as high-pass for the input side and low-pass for the audio output, instead of passive filtering. Especially at the output, I couldn't put in enough stages to de-hash the sound without losing what little high frequency output there is.

I might try a newer PLL as well. There was always something about the 565 that just seemed a little hinky and oversensitive to parameters. I was never entirely satisfied with what I got, though some of them worked pretty well considering all.

Don't be surprised if lots of what you find is digital signal.

--
If John McCain gets the 2008 Republican Presidential nomination,
my vote for President will be a write-in for Jiang Zemin.

4447. Re: Buffer Amp IC suggestions plse

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-09-30 22:36:19 UTC
From: Chris Jones <lugnut808@nospam.yahoo.com>
Message-ID: <11jrbrqcgdttmfa@corp.supernews.com>
Source record: 16980
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Winfield Hill wrote:

> Jeff wrote...
>>
>> Needs to drive into 50 ohms. input level approx 150mV at 5Mhz
>>
>> Winfield Hill wrote ...
>>> Jeff wrote...
>>>>
>>>> Ive been trying to locate a suitable unity gain buffer amplifier
>>>> IC that can drive a 50 load.
>>>> Application is to buffer a VCO output at 5Mhz.
>>>> Needs to be 8pin DIP
>>>
>>> LTC's LT1206 comes in TO220, miniDIP and soic packages,
>>> and Digi-Key has them in stock for $6.25 each...
>>> http://rocky.digikey.com/WebLib/Linear%20Tech/Web%20Data/LT1206.pdf
>>> http://www.digikey.com/scripts/DkSearch/dksus.dll?Detail?Ref=329191
>>>
>>>> and operate on a single-ended supply.
>>>
>>> Oops, +/-5V supply. What's your signal voltage? And did
>>> you want your output to have a 50-ohm source impedance?
>
> Unless you source with 50 ohms (2x signal plus 50-ohm resistor),
> and terminate with 50-ohms, the issue becomes how much cable
> capacitance? Either the load looks resistive (100 ohms in the
> former case) or capacitive.
>
>
I would say it depends on the cable you choose. If there is a 50 Ohm load
and you connect it to your buffer amplifier with 50 Ohm coaxial cable, then
the buffer amplifier will see a 50 Ohm resistive load, not capacitive at
all.

It is probably still wise to use the gain-of-two amplifier and 50 Ohm source
resistor in case the load happens to be a poor match. If you really don't
need this feature then I would be tempted to use an emitter follower with
just one transistor. (Do they make transistors in DIP-8 packages?)

Chris

4448. DSP, DRM and other Mods for the DX-394

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-01 02:07:08 UTC
From: Tom Holden <holden_family@sympatico.ca>
Message-ID: <jbm%e.2914$l03.623218@news20.bellglobal.com>
Source record: 16981
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.shortwave

Robin, G4DVJ, and Chris, G8LVK, have put up on their Monitor Internet website their hardware mod for the Realistic/Radio Shack DX-394 for downconversion to a 12kHz 3rd IF for DRM and other sound card DSP demodulators such as SDRadio. A beautiful piece of work it is, too, both in execution and publication, incorporating the Sat-Schneider module. That prompted me to look over the other mods and I see some added illustrations, if not additional mods, since I last looked. The bhi DSP module installation is especially sweet, albeit pricey.

So if you have not visited their site in a while, do so, and be inspired! Its at
http://www.monitor.co.uk/radio-mods/dx-394/dx-394.htm#mods

Great job, guys!

73, Tom

4449. DX

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-01 07:00:01 UTC
From: Pete Townrow <ptownrow@freenetname.co.uk>
Message-ID: <433E34E6.5080400@freenetname.co.uk>
Source record: 16982

I have worked the world on 27 ssb that is what I did not want to say on air.

Pete

4450. Re: Manual for HP 1707B Oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-01 07:51:44 UTC
From: Zen Navigator <dahall.aefb0@orange.net>
Message-ID: <1128153104.155404.19780@g49g2000cwa.googlegroups.com>
Source record: 16983

googled and can't find a downloadable copy...lots of reference to the manual but no download.

Did find someone selling a 1707b in the states with a manual. Asked if he would send us a copy at my cost....$50 + postage!!!!

4451. WTD: Powerpole 180A Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-01 17:34:57 UTC
From: "Richard W. Solomon, W1KSZ" <w1ksz@earthlink.net>
Message-ID: <s5itj1962toteh05de5dg4ugcibbl92i8b@4ax.com>
Source record: 16984

The Glenayre Power Supply I got with it's companion Amp uses 180A Powerpole Connectors for the 28 vdc output. Anyone got a spare couple of these beasties ?? Even better would be the interconnecting power cable, there are two ~1/4" pins for the +DC and two ~1/4" jacks for the -DC. I found a GR double plug fits the -DC, but the +DC has me stumped. I hate to tack solder a lead on them (too tacky !!).

73, Dick, W1KSZ

4452. Re: sig gen plans

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-02 02:29:40 UTC
From: hhc314@yahoo.com
Message-ID: <1128220180.879138.46200@z14g2000cwz.googlegroups.com>
Source record: 16985

Matt, for many of us building a piece of test equipment that we can inexpensively buy used on eBay is much like wanting to build a pair of pliers or a screwdriver from scratch. It's simply not worth the time and expense.

I use a simple Heatkit r.f. signal generator that I purchased on eBay, and paid something like $12 for it less shipping. It performs every function I need. If I could even find the need components to build it today, they alone would cost me far more than $20.

Take this for whatever it's worth.

Harry C.

4453. Re: WTD: Powerpole 180A Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-02 04:15:31 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1da8fec31b137b079896b2@192.168.42.131>
Source record: 16986

In article <s5itj1962toteh05de5dg4ugcibbl92i8b@4ax.com>,
w1ksz@earthlink.net says...

> The Glenayre Power Supply I got with it's companion Amp uses 180A
> Powerpole Connectors for the 28 vdc output. Anyone got a spare couple
> of these beasties ?? Even better would be the interconnecting power
> cable, there are two ~1/4" pins for the +DC and two ~1/4" jacks for
> the -DC. I found a GR double plug fits the -DC, but the +DC has me
> stumped. I hate to tack solder a lead on them (too tacky !!).

Are you referring to Anderson Power Products, specifically their
'MultiPole' line as shown here?

http://www.andersonpower.com/products/mp/mp.html

The connectors themselves can be had through Allied Electronics.
Take a look at this link.

http://www.alliedelec.com/Search/SearchResults.asp?
SearchQuery=Anderson+Power&Submit=find+it%21

Keep in mind, though, that you'll need a specialized (and
expensive -- $200 at least) heavy-gauge crimping tool to deal with the
heavy-gauge contacts. If you can't get hold of the appropriate tool
(Greenlee makes a very nice hex crimper -- it looks like a big pair of
garden shears, but with crimp dies instead of blades), I can offer
small-scale assembly services at a cheap rate ($40/hour, half-hour
minimum, see my web site, etc.)

Happy hunting.

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped
with surreal ports?"

4454. Re: sig gen plans

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-02 11:02:54 UTC
From: PeteDBNZA <zs5actRemovethis@mweb.co.za>
Message-ID: <dhoeos$82t$1@ctb-nnrp2.saix.net>
Source record: 16987

Hi Guys,
If you are not in continental US or one of it's regions, you will pay MUCH more than $20 for shipping alone!

Build, therfore, becomes an option.

My 2c.

--
Pete . .
ZS5ACT
http://www.electronic-ideas.com/zs5act/

BTW I HATE bottom posters with passion!

------ Reply Separator ------

<hhc314@yahoo.com> wrote in message news:1128220180.879138.46200@z14g2000cwz.googlegroups.com...
> Matt, for many of us building a piece of test equipment that we can
> inexpensively buy used on eBay is much like wanting to build a pair of
> pliers or a screwdriver from scratch. It's simply not worth the time
> and expense.
>
> I use a simple Heatkit r.f. signal generator that I purchased on eBay,
> and paid something like $12 for it less shipping. It performs every
> function I need. If I could even find the need components to build it
> today, they alone would cost me far more than $20.
>
> Take this for whatever it's worth.
>
> Harry C.
>

4455. Re: sig gen plans

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-02 12:32:36 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <ErQ%e.5971$JY6.2567@trnddc02>
Source record: 16988

...the group IS called "rec.radio.amateur.homebrew"..isn't it?. Why would someone be advised to buy when he asks for advice in a group dedicated to building???

Joe

"PeteDBNZA" <zs5actRemovethis@mweb.co.za> wrote in message news:dhoeos$82t$1@ctb-nnrp2.saix.net...
> Hi Guys,
> If you are not in continental US or one of it's regions, you will pay MUCH
> more than $20 for shipping alone!
>
> Build, therfore, becomes an option.
>
> My 2c.
>
> --
> Pete . .
> ZS5ACT
> http://www.electronic-ideas.com/zs5act/
>
> BTW I HATE bottom posters with passion!
>
> ------ Reply Separator ------
>
> <hhc314@yahoo.com> wrote in message
> news:1128220180.879138.46200@z14g2000cwz.googlegroups.com...
>> Matt, for many of us building a piece of test equipment that we can
>> inexpensively buy used on eBay is much like wanting to build a pair of
>> pliers or a screwdriver from scratch. It's simply not worth the time
>> and expense.
>>
>> I use a simple Heatkit r.f. signal generator that I purchased on eBay,
>> and paid something like $12 for it less shipping. It performs every
>> function I need. If I could even find the need components to build it
>> today, they alone would cost me far more than $20.
>>
>> Take this for whatever it's worth.
>>
>> Harry C.
>>
>
>

4456. Re: 1N23E vs. Schottkey?? Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-02 12:50:45 UTC
From: John Martin <John.Martin.1wa62q@news.radiobanter.com>
Message-ID: <John.Martin.1wa62q@news.radiobanter.com>
Source record: 16989

I got a data sheet on 2K25 which is the same as 723.
How do I pass it to you?
dont mind the silly question-I am new to forum and its use.
And while on it may be you can tell me whether 1N23 available in a
glass package and claimed to be Germanium would work just as well as
1N23B available in a ceramic package?
Another confusion-1N23B and with all its various suffixes is claimed to
be Silicon. Could it be that 1N23 is Germanium and the others Silicon?
John
Bill Janssen Wrote:
> hhc314@yahoo.com wrote:
> -
> I'm the youngster -- 1938.
>
> Seems that I'm in the right circle of 'Old Farts' to ask: Has anyone a
> data sheet available on the 723A/B Reflex Klystron? These (along with
> the 1N21 diodes) were used in the AN/APS-3 RADAR and since have found
> use in physics demonstration devices, and to a limited extent ham
> radio
> (with modifications). It is basically a 3-cm or 10-GHZ oscillator.
>
> I have a pin-out, but not a full-blown data sheet. Can anyone help me
> out on this?
>
> Thanks in advance, and 73's.
>
> Harry C.
>
> p.s. Evidently a large number of 723A/Bs were produced by Raytheon,
> but
> in spite of a 15-year employment with the Raytheon Company, I've never
> been able to locate a data sheet. Evidently devices of this type were
> heavily classified during WWII, and consequently most of the
> documentation was classified and eventually, in accordance with
> security instructions, destroyed.
>
>
> -
> Well I might have a Ham Radio Handbook with some data in it but I
> don't
> have a "data sheet".
> I can tell you that about 250 Volts on the shell and minus 75 to 150
> volts on the repeller will work.
> You have to adjust the repeller voltage to get the maximum power. Also

> the repeller voltage changes
> the frequency. And if you adjust the mechanical frequency then the
> repeller voltage must be changed.
>
> Never never never run the Klystron without the minus repeller voltage
>
> Hope that is useful.
>
> Bill K7NOM

--
John Martin

4457. Re: sig gen plans

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-02 16:25:41 UTC
From: novatech@eskimo.com
Message-ID: <dhp1m5fdv1@eskinews.eskimo.com>
Source record: 16990

"W3JDR" <joe@roccis.com> writes:

>...the group IS called "rec.radio.amateur.homebrew"..isn't it?. Why would
>someone be advised to buy when he asks for advice in a group dedicated to
>building???

>Joe

And it is fund to build stuff. The old sig gens were pretty simple, with
most of the hard work on the dial. The Eico 320 was pretty popular and
you can use the manual to build one of your own:
http://www.nostalgiaair.org/References/Manuals/EIC/EIC_8.zip

But you can replace the triodes with fets, lower the voltage to 12 volts and
get the same results.

Steve.
--
Steven D. Swift, novatech@eskimo.com, http://www.novatech-instr.com
NOVATECH INSTRUMENTS, INC. P.O. Box 55997
206.301.8986, fax 206.363.4367 Seattle, Washington 98155 USA

4458. SB-220 Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-02 17:06:54 UTC
From: Win <w0lz@winlyn.us>
Message-ID: <2m40k15o02mrgrkt0hn98qo0vt6aedha5h@4ax.com>
Source record: 16991

Looking for the second wafer, for the band switch of an SB-220, Heath
21 63-562.

Any ideas?

Win, w0lz

4459. Re: sig gen plans

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-02 18:34:36 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <2LV%e.851$Yv6.364@fe06.lga>
Source record: 16992

A lot of the modern signal generator projects are based on the Analog Devices AD9850. Analog Devices actually encourages hams to use their sample service, so the part itself is no problem. It is relatively simple to program, so you may choose the microcontroller of your choice, although most of the projects out there seem to lean toward the PIC.

The challenge could well be the circuit board. The 9850 is only available in TSSOP so you need a good quality circuit board to attach it to. If your PCB skills are good this won't be a problem. But if not, you might need to hunat around for a protoboard or something of that ilk that you can get in your location. Unfortunately, these tend to be kind of pricey.

..

"Steven Swift" <novatech@eskimo.com> wrote in message
news:dhp1m5fdv1@eskinews.eskimo.com...
> "W3JDR" <joe@roccis.com> writes:
>
>>...the group IS called "rec.radio.amateur.homebrew"..isn't it?. Why would
>>someone be advised to buy when he asks for advice in a group dedicated to
>>building???
>
>>Joe
>
> And it is fund to build stuff. The old sig gens were pretty simple, with
> most of the hard work on the dial. The Eico 320 was pretty popular and
> you can use the manual to build one of your own:
> http://www.nostalgiaair.org/References/Manuals/EIC/EIC_8.zip
>
> But you can replace the triodes with fets, lower the voltage to 12 volts
> and
> get the same results.
>
> Steve.
> --
> Steven D. Swift, novatech@eskimo.com, http://www.novatech-instr.com
> NOVATECH INSTRUMENTS, INC. P.O. Box 55997
> 206.301.8986, fax 206.363.4367 Seattle, Washington 98155 USA

4460. solder paste for SMT?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-02 18:57:28 UTC
From: TRABEM <>
Message-ID: <b9b0k1pd7ham6i20iuvhqig67t7qnj9v8l@4ax.com>
Source record: 16993

I had some solder paste that was sent to my employer as a sample. The boss gave each one of us a tube, which was 10 CC of paste in a syringe. On DIP and through hole components, it worked great. But, it was worthless (other stronger words inserted here) beyond belief for SMT.

We use pyropens for rework, which is butane powered hot air. Except it has a twist, the hot air is passed through a catalyst, which consumes the oxygen. The lack of oxygen in the output of the hot air stream makes the solder job clean and wetting is very fast and easy because the part and the solder doesn't oxidize when the heat is applied. The lack of oxygen removes the need to preheat and lets the flux do it's job-there is really no need to preheat if you can get rid of the oxygen in the hot air stream, try it, you'll like it!

If someone would make an inexpensive dispenser for distributing the paste evenly, I think the paste would be viable for soldering and for rework. Without a means to dispense small quantities of paste on demand, the paste method is truly useless (IMHO).

In the end, we used the paste for soldering wires to some thermal switches we were building, a horrible waste of some perfectly good product! But, the company that made the paste wanted $450 for a fancy air dispenser, that should have cost $69. Our opinion was that the boss should save the money and we told him so. Since that time, we had 2 visits from sales people who tried to sell us paste. In each case, the paste was reasonably priced, but the applicator was worthless or cost 5 times what it should have!

We are doing alot more rework with SMT these days, so are still looking for a solder paste with a reasonably priced dispenser.

Does anyone know of a proper dispenser for solder paste, such as an air driven or a fine pitched thread to mechanically drive the syringe in small increments? Or, perhaps a small linear stepping motor can be used?

Regards

T

e-male me durectly ANONXYMOUSONE@THEDOGHXOUSEMAIL.CXOM

Remove all 3 "X" from the above adress

4461. Re: Preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-02 19:30:52 UTC
From: TRABEM <>
Message-ID: <kgb0k19ha0aaml0e1boibhgd5ma8jv39nj@4ax.com>
Source record: 16994

NO NO NO NO NO..............

LISTEN to TIM!!!!!!!!!!!!! Tim is correct, you are WRONG.

While the diodes might be benign in the presence of small and medium sized out of band signals, they do exactly what Tim said in the presence of large input signals like you might find near transmitters. Remember, the 200 KW FM broadcast station at the end of the block, or the 5 KW AM broadcast band transmitter down the road from you. Even though these signals are no where near the frequency you are trying to listen to, the diodes will see them and act as a non linearity and produce IMD all throughout the radio spectrum.

Remember, these diodes are not protected by a frequency selective tuned circuit.....so any big signal that comes down the antenna is gonna make a problem for you , especially if you're trying to listen to a weak signal.

Tim is correct.

Years ago I was working for a tv station as a chief engineer. I had to oversee the installation of the new 900 foot tower and make sure the tower monkeys aligned the dish properly for the STL. So, I spent quite a few days at the site. The guys putting up the antenna had just purchased new ICOM HT's and had them modified for out of band operation so they could use them for communication between the tower people and the ground crew running the wench.

I told them I had the same radio as they did, (which was true). When I showed them my radio, there were no odd audio sounds coming out of the speaker. When they turned on their radios, all they could hear was the overload from the FM station sharing the same tower.

The owner of the tower company was a ham and modified the ICOM's with back to back diodes at the antenna to keep the front ends from blowing out because they often worked within 10 or 20 feet of big powerful antennas. He told me without the diodes he added, he would lose one radio per day to rf overload and he used to carry spare front end transistors. Part of his evening ritual was to sit down and remove the blown front end transistors and replace them. He had done it so many times he could do it in 5 minutes! But, after he put the diodes in, the front end didn't blow anymore....but they always had interference from other transmitters as a result of the diode mod!

He learned the hard way not to introduce non linearities before the front end tuned circuits! I think you need the same lesson Allison.

I took one of his radios home that evening and modified it. I basically removed the gasfet front end transistor and threw his back to back diodes in the trash. I added a 10 db pad to attenuate the incoming signals across the entire spectrum. They spent about 3 weeks doing the tower job, and by the end of the job, I had modified all his radios. They never had another interference problem and they never lost a single front end. The owner was a good guy and offered to pay me dearly for tweaking his radios.

With all due respect, the diode capacitance is IS NOT the problem. It's the non linearities associated with the rectification in the presence of big out of band signals.

Listen to Tim, he's telling you the truth!

T

>The diode capaitance is low and really not a factor in preamp gain or
>noise. They are non conducting and the capacitance is easily absorbed
>into fees and matching systems.
>

4462. Re: solder paste for SMT?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-02 21:14:27 UTC
From: maxfoo <maxfoo@punkass.com>
Message-ID: <j2j0k19absbi139flj6nk70kmr1vglpnsp@4ax.com>
Source record: 16995

On Sun, 02 Oct 2005 14:57:28 -0400, TRABEM <> wrote:

>If someone would make an inexpensive dispenser for distributing the
>paste evenly, I think the paste would be viable for soldering and for
>rework. Without a means to dispense small quantities of paste on
>demand, the paste method is truly useless (IMHO).

This one uses 6" Alpha cartridges.
http://www.contacteast.com/product/group.asp?parent_id=2647

Digi-key use to sell a cheap dispensing gun for $29.95 it had a very small
nozzle. don't now if they still carry it. We bought it 2 years ago...

4463. Re: Preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-03 01:09:33 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <8c01k1tt0g55l5eh49bb1ivv48vdf73s98@4ax.com>
Source record: 16996

I put your tirade on the end of this as it's not relevant to the
orininal question.

First: the question, reread please. The question was a about
bandwidth of a wide band amp and noise figure. Overload performance
was NOT addressed. If it were the first thing would be to rid oneself
of those diodes. A good device will usually withstand more than the
diodes (U310 fet in common base amp I've used for Preamp took 25watts
before expiring as a test!).

However I do not need you lesson on that either. I design and build
both professionally and as a ham VHF op. My experience includes one
idiot that runs a KW onto a M2 7 element 800ft from me to work local
repeaters! On an average day I have between +10-20DBm of rf comming
fown the coax when hes operating. I know more than you suspect or
even checked about working in a RF rich environment, about 35years of
experience in landmobile plus commercial.

Now if you can address the question of amp bandwidth and noise figure
and diodes we can help this person. NOT drag the topic off into the
woods.

Further I happen to have posted at the same time as Tim and was not
contradicting him or addressing him. I was answering the author of
the thread.

Allison

On Sun, 02 Oct 2005 15:30:52 -0400, TRABEM <> wrote:

>NO NO NO NO NO.............
>
>LISTEN to TIM!!!!!!!!!!!!! Tim is correct, you are WRONG.
>
>While the diodes might be benign in the presence of small and medium
>sized out of band signals, they do exactly what Tim said in the
>presence of large input signals like you might find near transmitters.
>Remember, the 200 KW FM broadcast station at the end of the block, or
>the 5 KW AM broadcast band transmitter down the road from you. Even
>though these signals are no where near the frequency you are trying to
>listen to, the diodes will see them and act as a non linearity and
>produce IMD all throughout the radio spectrum.
>
>Remember, these diodes are not protected by a frequency selective
>tuned circuit.....so any big signal that comes down the antenna is
>gonna make a problem for you , especially if you're trying to listen

>to a weak signal.
>
>Tim is correct.
>
>Years ago I was working for a tv station as a chief engineer. I had to
>oversee the installation of the new 900 foot tower and make sure the
>tower monkeys aligned the dish properly for the STL. So, I spent quite
>a few days at the site. The guys putting up the antenna had just
>purchased new ICOM HT's and had them modified for out of band
>operation so they could use them for communication between the tower
>people and the ground crew running the wench.
>
>I told them I had the same radio as they did, (which was true). When I
>showed them my radio, there were no odd audio sounds coming out of the
>speaker. When they turned on their radios, all they could hear was the
>overload from the FM station sharing the same tower.
>
>The owner of the tower company was a ham and modified the ICOM's with
>back to back diodes at the antenna to keep the front ends from blowing
>out because they often worked within 10 or 20 feet of big powerful
>antennas. He told me without the diodes he added, he would lose one
>radio per day to rf overload and he used to carry spare front end
>transistors. Part of his evening ritual was to sit down and remove the
>blown front end transistors and replace them. He had done it so many
>times he could do it in 5 minutes! But, after he put the diodes in,
>the front end didn't blow anymore....but they always had interference
>from other transmitters as a result of the diode mod!
>
>He learned the hard way not to introduce non linearities before the
>front end tuned circuits! I think you need the same lesson Allison.
>
>I took one of his radios home that evening and modified it. I
>basically removed the gasfet front end transistor and threw his back
>to back diodes in the trash. I added a 10 db pad to attenuate the
>incoming signals across the entire spectrum. They spent about 3 weeks
>doing the tower job, and by the end of the job, I had modified all his
>radios. They never had another interference problem and they never
>lost a single front end. The owner was a good guy and offered to pay
>me dearly for tweaking his radios.
>
>With all due respect, the diode capacitance is IS NOT the problem.
>It's the non linearities associated with the rectification in the
>presence of big out of band signals.
>
>Listen to Tim, he's telling you the truth!
>
>T
>
>
>>The diode capaitance is low and really not a factor in preamp gain or

>>noise. They are non conducting and the capacitance is easily absorbed
>>into fees and matching systems.
>>

4464. Re: sig gen plans

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-03 02:23:14 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1daa35dbbac7e0109896ef@news-central.giganews.com>
Source record: 16997

In article <2LV%e.851$Yv6.364@fe06.lga>, xpyttl_NOSPAM@earthling.net
says...
> A lot of the modern signal generator projects are based on the Analog
> Devices AD9850. Analog Devices actually encourages hams to use their sample
> service, so the part itself is no problem. It is relatively simple to
> program, so you may choose the microcontroller of your choice, although most
> of the projects out there seem to lean toward the PIC.

Which is something I can't begin to understand. With the AVRs, you get
a faster chip with an industrial-strength C/C++ compiler that also
happens to be free (as in beer).

I guess some people are just really, really, REALLY into PIC assembly.
There's no other explanation for its popularity in the ham community.

> The challenge could well be the circuit board. The 9850 is only available
> in TSSOP so you need a good quality circuit board to attach it to. If your
> PCB skills are good this won't be a problem. But if not, you might need to
> hunat around for a protoboard or something of that ilk that you can get in
> your location. Unfortunately, these tend to be kind of pricey.

Actually the AD9850 comes in a SOIC package with 20 pins/inch, or half
the spacing of a normal DIP IC, rather than a TSSOP (0.5 mm lead pitch,
or about 50 pins/inch).

It is not hard to work with a SOIC dead-bug style. TSSOPs are a
different story; they really need to be mounted to a PC board,
especially if there are more than 16 pins to deal with.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

4465. How to feed a long half-square?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-03 02:54:27 UTC
From: mcalhoun@ksu.edu
Message-ID: <dhq6h3$b6r@unix1.cc.ksu.edu>
Source record: 16898

I have room to erect a "half square" (aka upside-down phased verticals?)
20-meter antenna to be fed at one corner (low-impedance location; attach
50-ohm coax) or at the bottom (high-impedance; use a matching network):

```
A B
+--------------+ 1/2wave long
| /| 1/4wave high
| / |
/ Matching Network
Coax
```

Unfortunately, I do NOT (because my house is in the way) have room
to make it a more-balanced curtain:

```
A B C
+--------------+--------------+
| /| |
| / | |
/
coax
```

However, if I skip the middle "vertical", I have room for four vertical
sections in a space that should have five:

```
A B C D E
+--------------+--------------+--------------+--------------+
| | this part will be about | |
| | 10 feet above the peak | |
of my house
```

FWIW, line ABCDE will be about 30 feet above ground.

I've never done any antenna modeling, and I've never had any "feel" for
antenna phasing (EE degree notwithstanding), but I suspect feeding it
at the original corner (B) will result in somewhat unbalanced currents
almost everywhere.

QUESTION: Is there any not-too-difficult way to feed it at point C,
especially without a lot of cut-and-try (since a lot of
tree- and ladder-climbing will be involved)?

What about, for example, bringing x-wavelengths of coax BC and CD to a
common point somewhere above ground level (my shack is in the basement)
and connect them with a T to the coax that goes through the wall to
the rig? What lengths?
--
--Myron A. Calhoun.

Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

4466. Re: solder paste for SMT?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-03 03:46:25 UTC
From: TRABEM <>
Message-ID: <gv91k191bso7hm2fca3jdjhkadjjqpsjtv@4ax.com>
Source record: 16899

On Sun, 02 Oct 2005 17:14:27 -0400, maxfoo <maxfoo@punkass.com> wrote:

>On Sun, 02 Oct 2005 14:57:28 -0400, TRABEM <> wrote:
>
>>If someone would make an inexpensive dispenser for distributing the
>>paste evenly, I think the paste would be viable for soldering and for
>>rework. Without a means to dispense small quantities of paste on
>>demand, the paste method is truly useless (IMHO).
>
>This one uses 6" Alpha cartridges.
>http://www.contacteast.com/product/group.asp?parent_id=2647
>

Thanks max,

I sure don't like the looks of that 100 dollar dispenser. It looks big
and heavy and not sure why it needs to be so large. I was hoping
someone had something small and cheap that would be nice and light.

The model 850 looks like it could pump grease into ball joint on cars!
I don't need or want anything heavy and over powered like that.

>
>Digi-key use to sell a cheap dispensing gun for $29.95 it had a very small
>nozzle. don't now if they still carry it. We bought it 2 years ago...

I don't see anything like that in the Digikey or the Mouser catalog.

Can you give me a model number or the manufacturer of the one you
bought 2 years ago? Does it work well for dispensing small amounts for
SMT sized PCB pads?

Thanks,

T

4467. Re: Preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-03 04:13:54 UTC
From: TRABEM <>
Message-ID: <fta1k113ojd1luv5df00q26lkauggkq6a8@4ax.com>
Source record: 16900

On Mon, 03 Oct 2005 01:09:33 GMT, nospam@nouce.bellatlantic.net wrote:

>I put your tirade on the end of this as it's not relevant to the
>orininal question.
>

The original post (by A*s*i*m*o*v) mentioned back to back diodes as protection, so my reply was quite relevant.

Not sure what ruffled your feathers so badly Allison. But, whatever it was, I am sorry if I did something that didn't meet with your approval.

I also worked professionally as an avionics tech, and was in the business when the first Motorola commercial repeaters using synthesizers were put up...and they wondered why the other repeaters on the same tower couldn't hear well. That only took 'em about 10 years to figure out. Then, about 10 years after that, they started using gasfets, and it took them another 10 years to figure out they didn't do well in high rf fields. By then, it was the 1980's.....but at least they got it right eventually.

Maybe you designed some of those early nightmarish radios yourself?

Anyway, I wish you luck. And hope you realize the importance of keeping the front end clean, which sometimes means dumping the gasfet and using a bipolar preamp instead.

Actually, I hope the original poster (A*s*i*m*o*v) got the message about introducing gross non linear back to back diodes across the antenna terminals.

Have fun.

T

4468. Re: sig gen plans

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-03 12:01:42 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <J490f.3047$Yv6.1316@fe06.lga>
Source record: 16901

"John Miles" <jmiles@pop.removethistomailme.net> wrote in message
news:MPG.1daa35dbbac7e0109896ef@news-central.giganews.com...

> Which is something I can't begin to understand. With the AVRs, you get
> a faster chip with an industrial-strength C/C++ compiler that also
> happens to be free (as in beer).

Well, there are a couple of things here.

First of all, Microchip was early to the game. As a result, there is a lot of tutorial information out there. Admittedly, a lot of it is really bad, but it's existence helps people get over the hump. And lets face it, deploying a microcontroller really isn't very hard, but getting over the initial fear is. The huge number of PIC projects out there helps people feel like maybe it isn't so hard.

A second part is the really wonderful simulation capabilities of MPLAB. It makes it pretty darned easy to see what is going on, and when people are starting out, that is a pretty big deal. If you look at the hobbyist project code out there, it looks like 90% or more of them are written by people "just starting out".

Thirdly is the availability of cheap programmers. Yes, I know the AVR is even simpler to program than the PIC, but it hasn't drawn literally hundreds of programmer designs, almost all of which can be built cheaply. This is another consequence of Microchip being early to the game.

And actually, I think an advantage the PIC has is that, at least for the 16F PICs, all the C compilers are truly horrid. When you are going to deploy a microcontroller, any microcontroller, you really need to understand what is happening at a pretty basic level. Once you have a lot of expertise in a particular part, then a compiler can be a big productivity boost. But until you have a lot of expertise, the compiler can really get in the way. Fortunately for the PIC community, most of the compilers are bad enough that you're not real tempted to use them.

> Actually the AD9850 comes in a SOIC package with 20 pins/inch, or half
> the spacing of a normal DIP IC, rather than a TSSOP (0.5 mm lead pitch,
> or about 50 pins/inch).

I've never seen a 9850 in an SOIC. That certainly would be easier to use. Where did you find such a thing? When I check AD's web site, all I see is a choice whether I want my SSOP's on a reel or not.

..

4469. Re: Preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-03 14:46:12 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <pbf2k1l5uk69v634afj1b4g1v02tt0v0si@4ax.com>
Source record: 16902

On Mon, 03 Oct 2005 00:13:54 -0400, TRABEM <> wrote:

>On Mon, 03 Oct 2005 01:09:33 GMT, nospam@nouce.bellatlantic.net wrote:
>
>>I put your tirade on the end of this as it's not relevant to the
>>orininal question.
>>
>
>The original post (by A*s*i*m*o*v) mentioned back to back diodes as
>protection, so my reply was quite relevant.

If it was about overload yes. It was about bandwidth and noise.
>
>Not sure what ruffled your feathers so badly Allison. But, whatever it
>was, I am sorry if I did something that didn't meet with your
>approval.

You really came in with and attitude. but completely missed the real
subject of the question.

>I also worked professionally as an avionics tech, and was in the
>business when the first Motorola commercial repeaters using
>synthesizers were put up...and they wondered why the other repeaters
>on the same tower couldn't hear well. That only took 'em about 10
>years to figure out. Then, about 10 years after that, they started
>using gasfets, and it took them another 10 years to figure out they
>didn't do well in high rf fields. By then, it was the 1980's.....but
>at least they got it right eventually.

We are talking presynth. I had my First Class before that.
My first commercial UHF repeater was built from U44 components then
later Motrac as they were current radios For 1971-2 that was pretty
good. The motrac front ends were 6 cavitys a mixer then IF
selectivity, crunchproof. LO was always a crystal for least phase
noise. Anyone that read papers by Rhode understood this in the
early to mid 70s.

>Maybe you designed some of those early nightmarish radios yourself?

I take that as insult. ;) Gads no, I thought they were crap too.

I'm not all that thrilled with the ARC308C or worse 324 and the put
them in planes. I know that as I have a 308 as backup. Gag, Ick,
ick. but at 1500 to 2k for a new one I'll keep it till it quits.

>Anyway, I wish you luck. And hope you realize the importance of
>keeping the front end clean, which sometimes means dumping the gasfet

>and using a bipolar preamp instead.

Your being pendantic again.

I'm not big on gasfets untill I get above 1GHz. At 6m a u310 bipolar fet in common base gets me about 12db. With a good IP and noise figure. Just enough to get past the image stripping filter before the Level-7 DBM. That makes for a nice crunchproof frontend that with sub 3db noise figure. If I could get that noise figure without the fet I'd not use it but I need the gain. I've tried mrf571 in a norton push pull configuration, hard to overload but the 100ma standing current was hard to take for portable ops!

If your interested, ops here are QRP weak signal 6m SSB and 2M ssb and occasionally CW using solar power and battery. Power consumption is a consideration as well as perfomance. Overload performance with a KW 800ft away and in band is well challenging. The challenge is to get enough gain to ovecome the mixer noise without having a watt of power at the mixer.

>Actually, I hope the original poster (A*s*i*m*o*v) got the message
>about introducing gross non linear back to back diodes across the
>antenna terminals.

That is true. However think about it for more than a second. Diodes or not hes talking about gain, bandwidth and noise so even without the diodes hes already running wide and risking overload at the next stage. Without selectivity you get cascade overload. The classic problem of weak reciever fix of stacking gain before it and watching the input overload threshold wander in to the -40dbm (or worse) region. Bad way to fix the problem.

Allison
KB1GMX

4470. Re: Preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-03 16:11:05 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_43413a52@fidonet.org>
Source record: 16903

"TRABEM" bravely wrote to "All" (03 Oct 05 00:13:54)
--- on the heady topic of "Re: Preamp"

TR> From: TRABEM <>
TR> Xref: core-easynews rec.radio.amateur.homebrew:88137

TR> On Mon, 03 Oct 2005 01:09:33 GMT, nospam@nouce.bellatlantic.net wrote:

>I put your tirade on the end of this as it's not relevant to the
>orininal question.
>

TR> The original post (by A*s*i*m*o*v) mentioned back to back diodes as
TR> protection, so my reply was quite relevant.
[,,,]
TR> Actually, I hope the original poster (A*s*i*m*o*v) got the message
TR> about introducing gross non linear back to back diodes across the
TR> antenna terminals.

TR> Have fun.

I have followed both your points with great interest. My guess is that the diodes are benign in a weak signal area. I expect the original design used them more for static rather than for overload protection because the input was intended to expect microvolt levels.

My choice would be not to use anti-parallel diodes in a design but this is what I found in the circuit so some engineer thought about it enough to use them. I would have preferentially used a reverse biased diode across the active device's junction because it is usually the reverse polarity in a pulse that damages a junction.

In this question I was more interested on the effect of the protection diodes' capacitance because as you know it is greatest at zero bias. This wideband pre-amp's input stage uses feedback to define the input impedance and the diodes' capacitance is at the node point, so I wondered if there was little effect. As you know, in an inverter the node point is ideally a voltage null.

Thank you both for the great debate!

A*s*i*m*o*v

... As I suspected, you're a rank sentimentalist! --Cpt. Louis Renault

4471. Re: sig gen plans

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-03 16:58:21 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1dab02f2cd83be119896f1@news-central.giganews.com>
Source record: 16904

In article <J490f.3047$Yv6.1316@fe06.lga>, xpyttl_NOSPAM@earthling.net
says...
> And actually, I think an advantage the PIC has is that, at least for the 16F
> PICs, all the C compilers are truly horrid. When you are going to deploy a
> microcontroller, any microcontroller, you really need to understand what is
> happening at a pretty basic level. Once you have a lot of expertise in a
> particular part, then a compiler can be a big productivity boost. But until
> you have a lot of expertise, the compiler can really get in the way.
> Fortunately for the PIC community, most of the compilers are bad enough that
> you're not real tempted to use them.

That's the cool thing about AVR-GCC, though... you really *don't* need
to understand what is happening at a fundamental level. It just plain
works. I've used AVR-GCC chips in a half-dozen projects, some of them
very non-trivial, but I wouldn't know a line of AVR assembly if it bit
me.

It certainly doesn't hurt to master your platform's assembly language,
especially if you need every bit of performance the chip can deliver.
But as long as we're talking about hobby applications, I think most of
us can agree that life at the bench is too short to spend it learning
various proprietary assembly languages for no good reason.

> > Actually the AD9850 comes in a SOIC package with 20 pins/inch, or half
> > the spacing of a normal DIP IC, rather than a TSSOP (0.5 mm lead pitch,
> > or about 50 pins/inch).
>
> I've never seen a 9850 in an SOIC. That certainly would be easier to use.
> Where did you find such a thing? When I check AD's web site, all I see is a
> choice whether I want my SSOP's on a reel or not.

Sorry; you're totally right -- it's not a SOIC, but an SSOP with 0.65 mm
pitch (39 pins/inch).

I've only used the AD9850 in one project, and I've never actually
ordered one -- I lifted mine off an old PC-VFO ISA card from 1998 or so.
Seemed to remember it being a SOIC, but the photos at archive.org show
that it definitely was not. There are other SOICs on the PC-VFO board,
and they have a coarser lead pitch than the DDS chip.

The AD9852/4 chips have the same 0.65 mm pin spacing for the record, but
a heck of a lot more pins. :)

-- jm

---
http://www.qsl.net/ke5fx

Note: My E-mail address has been altered to avoid spam

4472. Re: solder paste for SMT?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-03 17:02:30 UTC
From: nomail@spam.me.not.org
Message-ID: <Xns96E467FB7hatchdavidticom@157.170.133.60>
Source record: 16905

TRABEM <> wrote in <gv91k191bso7hm2fca3jdjhkadjjqpsjtv@4ax.com>:

>On Sun, 02 Oct 2005 17:14:27 -0400, maxfoo <maxfoo@punkass.com> wrote:
>
>>On Sun, 02 Oct 2005 14:57:28 -0400, TRABEM <> wrote:
>>
>>>If someone would make an inexpensive dispenser for distributing the
>>>paste evenly, I think the paste would be viable for soldering and for
>>>rework. Without a means to dispense small quantities of paste on
>>>demand, the paste method is truly useless (IMHO).
>>

I use DigiKey #K439-ND dispenser tips with 0.016" hole. They screw
onto the end of the paste syringe. Works great. I don't hot-air refow,
but it allows for a small-volume dispense.

My technique is to run a bead down the center of the row of pins, and then
heat each pin briefly, or all at once if I have a proper tip for my Metcal
station. The solder wicks up to the pins, and there's maybe one bridge on
a 48-pin TSSOP.

Done it for years this way.

--
David Hatch
KR7DH

4473. Re: Preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-03 17:50:39 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <bnq2k1126p0t5s6hk23h9bj672uj8bcn4q@4ax.com>
Source record: 16906

On Mon, 03 Oct 2005 16:11:05 GMT, "Asimov"
<Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote:

>My choice would be not to use anti-parallel diodes in a design but this
>is what I found in the circuit so some engineer thought about it enough
>to use them. I would have preferentially used a reverse biased diode
>across the active device's junction because it is usually the reverse
>polarity in a pulse that damages a junction.

Generally a good design and a robust device will be tougher than the
diodes frequenty used.

For example I've found JFETS will easily stand 40+volts on the gate
before failing, MOSFETS (dual gate 3n200 types and BFR998) 60-80V
were needed to kill them. Even a lowly 2n5176 bipolar will be grossly
overloaded in a wide band amp before possibility of destruction.

Remember .5V PP (I'll assume silicon diodes) is at or around -1 to
0DBm. Thats one milliwatt of RF. the real issue is with wide band
signals you can have multiple signals within the bandwidth that at
some point in the cycle are additive and as we've all said those
diodes will do bad things under those conditions.

>In this question I was more interested on the effect of the protection
>diodes' capacitance because as you know it is greatest at zero bias.
>This wideband pre-amp's input stage uses feedback to define the input
>impedance and the diodes' capacitance is at the node point, so I
>wondered if there was little effect. As you know, in an inverter the
>node point is ideally a voltage null.

The capacitance if of limited significance. Its' effects will be
tempered by topology and impedences at the point of use.
As pointed out, they must not see conduction or "bad things happen".

_IF_ you really must protect the input with diodes put a healthy
(6-12V) of reverse bias on them. That should adequately protect
the first device but still absorb transients.

For instrumentation applications (high impedence) they are a
commonplace thing as the source could be anything or known.

For RF use I tend to leave them out as most devices once in circuit
are robust as is. And usually uf there is an event big enough to fry
the device then protection diodes are just two more fried devices.

One exception: series diodes on the supply for reverse polarity
protection and Zeners(or transzorbs) on the supply for overvoltage

protection. Often destruction didn't come down the antenna but in the back door via the power or other control lines.

>Thank you both for the great debate!

As in most electronics there are subtle and gross effects. Being aware of both are of importance. Hope it helps.

Allison
KB1GMX

4474. Re: sig gen plans

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-04 13:42:06 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1128433326.338777.83790@g44g2000cwa.googlegroups.com>
Source record: 16907

matt vk3zmw wrote:
> Does anyone have a set of plans for a modulated RF generator suitable
> for testing receivers in the HF/VHF bands?
>
> TIA

Drew Diamond, VK3XU, has published a few things in this line - in his books "Radio Projects for Amateurs" now up to Vol 3. Available from TTS Systems (one that I know of..) - excellent books, can recommend them to anyone interested in home brewing.

If you want something with calibrated output, there has NEVER been a better time to get a good used one - so much high quality test gear is being sold off, as most telcos etc no longer maintain expensive gear and trained staff to run it - cheaper to replace the equipment with a new one.

73 de VK3BFA Andrew.

4475. Re: How to feed a long half-square?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-05 14:04:31 UTC
From: Straydog <asdf@panix.com>
Message-ID: <Pine.NEB.4.63.0510051001140.13176@panix3.panix.com>
Source record: 16908

Its pretty hard to make recommendations without knowing, besides your driven element conductor and proposed feedline, what other conducting elements are nearby (housewiring, power lines, metal fences, metal plumbing, etc.). The simplest and fastest approach would be to hook up whatever you have, match it with an antenna tuner to your rig, and get on the air and see if you can make contacts and ask what your signal report is. Usually, if you can hear stations and the S meter is somewhere in the middle of the scale, then they should hear you. You can tweak, adjust, improve from that point on (and assess your TVI, BCI, and other interference problems, too).

===== no change to below, included for reference and context =====

On Sun, 2 Oct 2005, mcalhoun@ksu.edu wrote:

> I have room to erect a "half square" (aka upside-down phased verticals?)
> 20-meter antenna to be fed at one corner (low-impedance location; attach
> 50-ohm coax) or at the bottom (high-impedance; use a matching network):
>
> A B
> +--------------+ 1/2wave long
> | /| 1/4wave high
> | / |
> / Matching Network
> Coax
>
> Unfortunately, I do NOT (because my house is in the way) have room
> to make it a more-balanced curtain:
>
> A B C
> +--------------+--------------+
> | /| |
> | / | |
> /
> coax
>
> However, if I skip the middle "vertical", I have room for four vertical
> sections in a space that should have five:
>
> A B C D E
> +--------------+--------------+--------------+--------------+
> | | this part will be about | |
> | | 10 feet above the peak | |
> of my house
>

> FWIW, line ABCDE will be about 30 feet above ground.
>
> I've never done any antenna modeling, and I've never had any "feel" for
> antenna phasing (EE degree notwithstanding), but I suspect feeding it
> at the original corner (B) will result in somewhat unbalanced currents
> almost everywhere.
>
> QUESTION: Is there any not-too-difficult way to feed it at point C,
> especially without a lot of cut-and-try (since a lot of
> tree- and ladder-climbing will be involved)?
>
> What about, for example, bringing x-wavelengths of coax BC and CD to a
> common point somewhere above ground level (my shack is in the basement)
> and connect them with a T to the coax that goes through the wall to
> the rig? What lengths?
> --
> --Myron A. Calhoun.
> Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
> PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
> NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)
>

4476. wtb 8122 matched set

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-05 18:20:53 UTC
From: James Skalski <jskalski@yahoo.com>
Message-ID: <9QU0f.1629$OL5.946@trndny05>
Source record: 16909

I need a pair of the above tubes. Good used ok. Burle or Eimac preferred.

Jim n2go

4477. epoxy instead of solder?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-05 20:10:40 UTC
From: TRABEM <>
Message-ID: <jlc8k15onbl8um0sefs3aus3tsb4c63p1s@4ax.com>
Source record: 16910
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Has anyone tried Masterbonds conductive epoxy for attaching SMT
components to a printed circuit board?

Seems like a great idea, especially if it works well:>:

T

4478. Re: epoxy instead of solder?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-05 21:00:49 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <haf8k1hs7u06ru7lgp10dpa81s1mdm37t3@4ax.com>
Source record: 16911
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Wed, 05 Oct 2005 16:10:40 -0400, TRABEM <> wrote:

>Has anyone tried Masterbonds conductive epoxy for attaching SMT
>components to a printed circuit board?
>
>Seems like a great idea, especially if it works well:>:

Aside from the resistivity of the epoxy, the largest problem I see
is throughput. That is, where are you going to store all those
boards while the epoxy is curing?

Plus, it makes it really messy for the salvagers/recyclers.

--
John Fields
Professional Circuit Designer

4479. Re: epoxy instead of solder?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-05 21:45:16 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <MPX0f.4145$Zs3.1296@newssvr25.news.prodigy.net>
Source record: 16912
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Hello John,

> Aside from the resistivity of the epoxy, the largest problem I see
> is throughput. That is, where are you going to store all those
> boards while the epoxy is curing?
>
Then there is the stench that most epoxies let off. Mostly of the not so
healthy kind.

Regards, Joerg

http://www.analogconsultants.com

4480. Re: epoxy instead of solder?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-06 04:18:13 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1dae45604ba41b189896b4@192.168.42.131>
Source record: 16913
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

In article <jlc8k15onbl8um0sefs3aus3tsb4c63p1s@4ax.com>, TRABEM <>
says...

> Has anyone tried Masterbonds conductive epoxy for attaching SMT
> components to a printed circuit board?
>
> Seems like a great idea, especially if it works well:>:

Not really. Consider the angle of serviceability. It's easy enough
to use a 'HoTweezer' station to replace a bad chip component secured
with solder. It's darn near impossible to replace the same component if
secured with Epoxy.

Also, I'm not convinced that "conductive" Epoxy really is. I'd
want to see some real numbers on resistance per cm/squared on the stuff
before I even consider it for any sort of repair work.

Any job worth doing is worth doing right. If you're trying to
attach surface-mount components, invest in the proper
soldering/desoldering equipment instead of looking for impractical
shortcuts. It may cost more at the get-go, but it'll cost a lot less in
the long run.

Keep the peace(es).

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped
with surreal ports?"

4481. Re: epoxy instead of solder?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-06 08:44:32 UTC
From: Robert Baer <robertbaer@earthlink.net>
Message-ID: <Qt51f.3735$4h2.1337@newsread3.news.pas.earthlink.net>
Source record: 16914
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

John Fields wrote:

> On Wed, 05 Oct 2005 16:10:40 -0400, TRABEM <> wrote:
>
>
>>Has anyone tried Masterbonds conductive epoxy for attaching SMT
>>components to a printed circuit board?
>>
>>Seems like a great idea, especially if it works well:>:
>
>
> ---
> Aside from the resistivity of the epoxy, the largest problem I see
> is throughput. That is, where are you going to store all those
> boards while the epoxy is curing?
>
> Plus, it makes it really messy for the salvagers/recyclers.
>
I do not know about Masterbonds conductive epoxy(ies), but i have
used silver conductive epoxy.
1) EXPENSIVE, 2) good for short-term and medium-term repair, but no
where as reliable as a solder connection.

4482. Re: epoxy instead of solder?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-06 08:46:31 UTC
From: Robert Baer <robertbaer@earthlink.net>
Message-ID: <Hv51f.3736$4h2.756@newsread3.news.pas.earthlink.net>
Source record: 16915
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Dr. Anton T. Squeegee wrote:

> In article <jlc8k15onbl8um0sefs3aus3tsb4c63p1s@4ax.com>, TRABEM <>
> says...
>
>
>>Has anyone tried Masterbonds conductive epoxy for attaching SMT
>>components to a printed circuit board?
>>
>>Seems like a great idea, especially if it works well:>:
>
>
> Not really. Consider the angle of serviceability. It's easy enough
> to use a 'HoTweezer' station to replace a bad chip component secured
> with solder. It's darn near impossible to replace the same component if
> secured with Epoxy.
>
> Also, I'm not convinced that "conductive" Epoxy really is. I'd
> want to see some real numbers on resistance per cm/squared on the stuff
> before I even consider it for any sort of repair work.
>
> Any job worth doing is worth doing right. If you're trying to
> attach surface-mount components, invest in the proper
> soldering/desoldering equipment instead of looking for impractical
> shortcuts. It may cost more at the get-go, but it'll cost a lot less in
> the long run.
>
> Keep the peace(es).
>
>
The silver conductive epoxy is extremely conductive, and even tho i
never measuresd the resistivity, i would wager that it is better than
copper if used properly.

4483. Re: epoxy instead of solder?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-06 14:44:05 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <ec-dnQIp1MVJqtjenZ2dnUVZ_tGdnZ2d@adelphia.com>
Source record: 16916
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Robert Baer wrote:

> The silver conductive epoxy is extremely conductive, and even tho i
> never measuresd the resistivity, i would wager that it is better than
> copper if used properly.

Here are some examples of silver epoxies:
http://news.thomasnet.com/fullstory/460221
10^-3 ohm cm

http://www.mgchemicals.com/products/8331.html
2*10^-2 ohm cm

http://bondline.net/datasheets/2072.pdf
4*10^-4 ohm cm

http://bondline.net/datasheets/2080.pdf
5*10^-3 ohm cm

http://bondline.net/datasheets/2111.pdf
2*10^-4 ohm cm

http://bondline.net/datasheets/2120.pdf
5*10^-3 ohm cm

Copper:
http://www.lehighton.com/AppNotes/CuMetallization/cumetallization.html
1.68*10^-6 ohm cm

According to these sources, copper is about 100 to 10,000 times as
conductive as silver filled epoxy.

4484. Re: epoxy instead of solder?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-06 14:47:17 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1128610037.278474.321240@g49g2000cwa.googlegroups.com>
Source record: 16917
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

> Has anyone tried Masterbonds conductive epoxy for
> attaching SMT components to a printed circuit board?
> Seems like a great idea, especially if it works well:>:

Sounds like a terrible idea. The surface tension of solder and the solder mask/PCB landing on the circuit board interact very nicely to make sure that a blob of solder and the part itself stays on exactly the right spot when you solder on a SMT component (either hand soldering or toaster-oven style). None of that is working to your advantage when you use epoxy.

Hand-soldering even fine-pitch (0.5mm) SMT stuff is not a big deal to do by hand with even primitive (e.g. just a weller soldering iron and a fine-tip point and some solder wick) tools. BGA's will require a toaster oven though :-).

Tim.

4485. Re: epoxy instead of solder?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-06 16:59:53 UTC
From: w2aew <w2aew@yahoo.com>
Message-ID: <1128617993.936210.242550@g14g2000cwa.googlegroups.com>
Source record: 16918
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

It is done in special circumstances, but not that often. SMT passives are available with different termination platings/coatings for such an application, but they are harder to come by. It won't work as well if you use devices with terminations intended for soldering.

4486. Re: epoxy instead of solder? TRY ADHESIVE

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-07 00:35:36 UTC
From: Ron H <rnharsh@attbi.com>
Message-ID: <4345bdb6_16@Output.100ProofNews.com>
Source record: 16919
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

The 3M conductive adhesives like the 9703 work well. Not sure how they do it but it conducts in the Z axis (thru the adhesive) but not accross the surface direction (X & Y axis). It's a pressure sensitive transfer adhesive (tape that you stick on then peel off the paper carrier leaving the adhesive behind)

X-Y axis Insulation Resistance = 3.4 x 10 to the 14th Ohms/square
Z axis Contact Resistance = 1.25 milliOhm-in2

Pretty neat stuff!

Ron H.

x-- 100 Proof News - http://www.100ProofNews.com
x-- 30+ Days Binary Retention with High Completion
x-- Access to over 1.9 Terabytes per Day - $8.95/Month
x-- UNLIMITED DOWNLOAD

4487. Re: epoxy instead of solder?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-07 00:53:12 UTC
From: jpopelish@rica.net
Message-ID: <1128646392.685462.152870@g47g2000cwa.googlegroups.com>
Source record: 16920
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Robert Baer wrote:

> The silver conductive epoxy is extremely conductive, and even tho i
> never measuresd the resistivity, i would wager that it is better than
> copper if used properly.

Just another point of reference. From:
http://www.efunda.com/materials/solders/tin_lead.cfm
Eutectic tin lead solder has a conductivity of about 1.44*10^-5 ohm cm,
or 8.5 times that of copper.

4488. Re: epoxy instead of solder? TRY ADHESIVE

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-07 01:00:09 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <Ce-dneB-gOGkVdjeRVn-hw@adelphia.com>
Source record: 16921
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Ron H wrote:
> The 3M conductive adhesives like the 9703 work well. Not sure how they do it
> but it conducts in the Z axis (thru the adhesive) but not accross the
> surface direction (X & Y axis). It's a pressure sensitive transfer
> adhesive (tape that you stick on then peel off the paper carrier leaving
> the adhesive behind)
I have a roll of that. Very pricey. It contains lots of short bits
of very fine copper wire precisely aligned through the thickness of
the adhesive gel. The wires do not contact each other, so there is no
conductive path along the gel.

> X-Y axis Insulation Resistance = 3.4 x 10 to the 14th Ohms/square
> Z axis Contact Resistance = 1.25 milliOhm-in2
>
> Pretty neat stuff!

Definitely. Sort of the dual of enameled wire. Conducts only at
right angles to the length.

4489. Re: epoxy instead of solder? TRY ADHESIVE

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-07 02:28:54 UTC
From: Jim Thompson <thegreatone@example.com>
Message-ID: <o7nbk1pnnqu85udf6bgd3vtjs1aruo5b80@4ax.com>
Source record: 16922
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Thu, 6 Oct 2005 19:35:36 -0500, "Ron H" <rnharsh@attbi.com> wrote:

>The 3M conductive adhesives like the 9703 work well. Not sure how they do it
>but it conducts in the Z axis (thru the adhesive) but not accross the
>surface direction (X & Y axis). It's a pressure sensitive transfer
>adhesive (tape that you stick on then peel off the paper carrier leaving
>the adhesive behind)
>
>X-Y axis Insulation Resistance = 3.4 x 10 to the 14th Ohms/square
>Z axis Contact Resistance = 1.25 milliOhm-in2
>
>Pretty neat stuff!
>
>Ron H.
>

Sounds VERY interesting! I have some clients that need to mount
components that can't stand the heat of soldering. The only problem
might be "tenacity"... how much "shake, rattle and roll" can it take?

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

4490. Re: epoxy instead of solder? TRY ADHESIVE

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-07 03:20:47 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <bfSdnZHC_4OydNjenZ2dnUVZ_s-dnZ2d@adelphia.com>
Source record: 16923
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Jim Thompson wrote:
> On Thu, 6 Oct 2005 19:35:36 -0500, "Ron H" <rnharsh@attbi.com> wrote:
>
>
>>The 3M conductive adhesives like the 9703 work well. Not sure how they do it
>>but it conducts in the Z axis (thru the adhesive) but not accross the
>>surface direction (X & Y axis). It's a pressure sensitive transfer
>>adhesive (tape that you stick on then peel off the paper carrier leaving
>>the adhesive behind)
>>
>>X-Y axis Insulation Resistance = 3.4 x 10 to the 14th Ohms/square
>>Z axis Contact Resistance = 1.25 milliOhm-in2
>>
>>Pretty neat stuff!
>>
>>Ron H.
>>
>
>
> Sounds VERY interesting! I have some clients that need to mount
> components that can't stand the heat of soldering. The only problem
> might be "tenacity"... how much "shake, rattle and roll" can it take?

Its glorifies scotch tape:
http://multimedia.mmm.com/mws/mediawebserver.dyn?444444VTd894fPm4zPm444spSxgrOkFW-

4491. Re: epoxy instead of solder?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-07 08:14:09 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <5RNEDhHR5iRDFw41@jmwa.demon.co.uk>
Source record: 16924
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

I read in sci.electronics.design that jpopelish@rica.net wrote (in
<1128646392.685462.152870@g47g2000cwa.googlegroups.com>) about 'epoxy
instead of solder?', on Thu, 6 Oct 2005:
>
>Robert Baer wrote:
>
>> The silver conductive epoxy is extremely conductive, and even tho i
>> never measuresd the resistivity, i would wager that it is better than
>> copper if used properly.
>
>Just another point of reference. From:
>http://www.efunda.com/materials/solders/tin_lead.cfm
>Eutectic tin lead solder has a conductivity of about 1.44*10^-5 ohm cm,
>or 8.5 times that of copper.
>
resistivity, not conductivity.
--
Regards, John Woodgate, OOO - Own Opinions Only.
If everything has been designed, a god designed evolution by natural selection.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

4492. Re: epoxy instead of solder? TRY ADHESIVE

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-07 12:11:41 UTC
From: Jeff B <jb@nospan.net>
Message-ID: <434660db$1_9@Output.100ProofNews.com>
Source record: 16925
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Just go to 3m.com and search for "conductive adhesive" or "9703"

"Jim Thompson" <thegreatone@example.com> wrote in message
news:o7nbk1pnnqu85udf6bgd3vtjs1aruo5b80@4ax.com...
> On Thu, 6 Oct 2005 19:35:36 -0500, "Ron H" <rnharsh@attbi.com> wrote:
>
> >The 3M conductive adhesives like the 9703 work well. Not sure how they do
it
> >but it conducts in the Z axis (thru the adhesive) but not accross the
> >surface direction (X & Y axis). It's a pressure sensitive transfer
> >adhesive (tape that you stick on then peel off the paper carrier leaving
> >the adhesive behind)
> >
> >X-Y axis Insulation Resistance = 3.4 x 10 to the 14th Ohms/square
> >Z axis Contact Resistance = 1.25 milliOhm-in2
> >
> >Pretty neat stuff!
> >
> >Ron H.
> >
>
> Sounds VERY interesting! I have some clients that need to mount
> components that can't stand the heat of soldering. The only problem
> might be "tenacity"... how much "shake, rattle and roll" can it take?
>
> ...Jim Thompson
> --
> | James E.Thompson, P.E. | mens |
> | Analog Innovations, Inc. | et |
> | Analog/Mixed-Signal ASIC's and Discrete Systems | manus |
> | Phoenix, Arizona Voice:(480)460-2350 | |
> | E-mail Address at Website Fax:(480)460-2142 | Brass Rat |
> | http://www.analog-innovations.com | 1962 |
>
> I love to cook with wine. Sometimes I even put it in the food.

x-- 100 Proof News - http://www.100ProofNews.com
x-- 30+ Days Binary Retention with High Completion
x-- Access to over 1.9 Terabytes per Day - $8.95/Month
x-- UNLIMITED DOWNLOAD

4493. Re: epoxy instead of solder? TRY ADHESIVE

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-07 13:29:23 UTC
From: Glen Walpert <gwalpert@notaxs.com>
Message-ID: <h6tck1pra23nt72iv00aq2b0oq6ja0s9md@4ax.com>
Source record: 16926
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Thu, 06 Oct 2005 19:28:54 -0700, Jim Thompson
<thegreatone@example.com> wrote:

>On Thu, 6 Oct 2005 19:35:36 -0500, "Ron H" <rnharsh@attbi.com> wrote:
>
>>The 3M conductive adhesives like the 9703 work well. Not sure how they do it
>>but it conducts in the Z axis (thru the adhesive) but not accross the
>>surface direction (X & Y axis). It's a pressure sensitive transfer
>>adhesive (tape that you stick on then peel off the paper carrier leaving
>>the adhesive behind)
>>
>>X-Y axis Insulation Resistance = 3.4 x 10 to the 14th Ohms/square
>>Z axis Contact Resistance = 1.25 milliOhm-in2
>>
>>Pretty neat stuff!
>>
>>Ron H.
>>
>
>Sounds VERY interesting! I have some clients that need to mount
>components that can't stand the heat of soldering. The only problem
>might be "tenacity"... how much "shake, rattle and roll" can it take?
>
> ...Jim Thompson

Conductive adhesives have been discussed in Advanced Packaging
magazine (IIRC, might have been another trade mag) and the main
problems preventing widespread replacement of solder are not adhesion
but high initial resistance (not suitable for the current required by
large processors etc), and worse, gradual increase in resistance over
time especially at higher temperatures and humidities due to slow
oxidation of the conductors as water vapor and oxygen diffuse through
the adhesive polymers. Not ready for prime time now, and might not be
for a long time due to the lack of candidate impermeable adhesive
polymers. Suitable now for low power apps in benign envireonments
where long life is not important.

4494. Re: 1N23E vs. Schottkey?? Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-07 13:50:56 UTC
From: John Martin <John.Martin.1wjfey@news.radiobanter.com>
Message-ID: <John.Martin.1wjfey@news.radiobanter.com>
Source record: 16927

Well this isnt a reply but extended question.
are DMJ4747 diodes from Alpha Industries and SEL DS332 Diodes from
bomac Labs the same as 1N23--they look mechanically identical and are
said to be microwave diodes. I am asking as I need them as detectors in
X Band but the seller does not know.
John

Murray Wrote:
> Youngster - 1936 here
> vk4aok
>
> Peter wrote:
> -
> On Mon, 07 Mar 2005 22:16:01 -0500, Ken Scharf
> wa2mzeNOTTHIS@bellsouth.net wrote:
>
> -
> wow, those 1N21/23 diodes are stone age!-
>
> -
> BTW those diodes a dated from the
> 1940's!-
>
>
>
> So am I (1937 actually) but I still work fine!! Just 'coz it's old
> doesn't mean it's had it! :-)
>
> Peter, G3PHO-

--
John Martin

4495. Re: epoxy instead of solder?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-07 16:58:24 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <0oSdnTfH7cxQNdveRVn-uA@adelphia.com>
Source record: 16928
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

John Woodgate wrote:
> I read in sci.electronics.design that jpopelish@rica.net wrote:

>> Just another point of reference. From:
>> http://www.efunda.com/materials/solders/tin_lead.cfm
>> Eutectic tin lead solder has a conductivity of about 1.44*10^-5 ohm cm,
>> or 8.5 times that of copper.

> resistivity, not conductivity.

Thank you.

4496. Re: 1N23E vs. Schottkey?? Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-07 17:34:13 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <v4cdk1pqsd0t4dsq4d2e8ad0k1on3vd0dc@4ax.com>
Source record: 16929

On Sun, 2 Oct 2005 12:50:45 +0000, John Martin
<John.Martin.1wa62q@news.radiobanter.com> wrote:

>
>I got a data sheet on 2K25 which is the same as 723.
>How do I pass it to you?
>dont mind the silly question-I am new to forum and its use.
>And while on it may be you can tell me whether 1N23 available in a
>glass package and claimed to be Germanium would work just as well as
>1N23B available in a ceramic package?
>Another confusion-1N23B and with all its various suffixes is claimed to
>be Silicon. Could it be that 1N23 is Germanium and the others Silicon?
>John
>Bill Janssen Wrote:

1N23B is a point contact silicon diode. For the ages that was the
closest thing to Shottkey and the diode for microwave. In a lot of
old hardware the newer shottkey diodes will easily replace the
1N23 series assuming no mechanical limitations.

FYI: the suffix specificied specific sorting of 1n23 for noise,
working frequency and threshold voltage.

Allison

>> hhc314@yahoo.com wrote:
>> -
>> I'm the youngster -- 1938.
>>
>> Seems that I'm in the right circle of 'Old Farts' to ask: Has anyone a
>> data sheet available on the 723A/B Reflex Klystron? These (along with
>> the 1N21 diodes) were used in the AN/APS-3 RADAR and since have found
>> use in physics demonstration devices, and to a limited extent ham
>> radio
>> (with modifications). It is basically a 3-cm or 10-GHZ oscillator.
>>
>> I have a pin-out, but not a full-blown data sheet. Can anyone help me
>> out on this?
>>
>> Thanks in advance, and 73's.
>>
>> Harry C.
>>
>> p.s. Evidently a large number of 723A/Bs were produced by Raytheon,
>> but
>> in spite of a 15-year employment with the Raytheon Company, I've never

>> been able to locate a data sheet. Evidently devices of this type were
>> heavily classified during WWII, and consequently most of the
>> documentation was classified and eventually, in accordance with
>> security instructions, destroyed.
>>
>>
>> -
>> Well I might have a Ham Radio Handbook with some data in it but I
>> don't
>> have a "data sheet".
>> I can tell you that about 250 Volts on the shell and minus 75 to 150
>> volts on the repeller will work.
>> You have to adjust the repeller voltage to get the maximum power. Also
>> the repeller voltage changes
>> the frequency. And if you adjust the mechanical frequency then the
>> repeller voltage must be changed.
>>
>> Never never never run the Klystron without the minus repeller voltage
>>
>> Hope that is useful.
>>
>> Bill K7NOM

4497. wtb 400v rms transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-07 18:51:53 UTC
From: James Skalski <jskalski@yahoo.com>
Message-ID: <dtz1f.68$lq3.55@trndny01>
Source record: 16930

I need a transformer that has 117vac primary and 400v RMS secondary.

Jim n2go

4498. Re: sig gen plans (FREE offer below)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-07 20:26:24 UTC
From: novatech@eskimo.com
Message-ID: <di6llg$9vj$1@eskinews.eskimo.com>
Source record: 16932

"xpyttl" <xpyttl_NOSPAM@earthling.net> writes:

>A lot of the modern signal generator projects are based on the Analog
>Devices AD9850. Analog Devices actually encourages hams to use their sample
>service, so the part itself is no problem. It is relatively simple to
>program, so you may choose the microcontroller of your choice, although most
>of the projects out there seem to lean toward the PIC.

>The challenge could well be the circuit board. The 9850 is only available
>in TSSOP so you need a good quality circuit board to attach it to. If your
>PCB skills are good this won't be a problem. But if not, you might need to
>hunat around for a protoboard or something of that ilk that you can get in
>your location. Unfortunately, these tend to be kind of pricey.

Back in 1996, one of Novatech's early products was a small DDS board based
upon the AD9850. It was later upgraded to the AD9851 to allow higher
output frequency. We no longer build this item, but I looked in the back
stock area and found that there were hundreds of blank boards left. You
can see the schematic at: http://www.novatech-instr.com/Fun/dds6m_sch.pdf
and a photo at: http://novatech-instr.com/images/dds6mf.jpg

If you want one of these blank boards FREE, send a self-address, stamped
($0.60) envelope to:

Novatech Instruments, Inc.
attn: DDS6m board
P.O. Box 55997
Seattle, WA 98155-0997

and I'll get one out to you. The price is right and might get you
over the soldering hump. The discrete parts are 1206, 0805 and 3216.
We have a bunch of the key parts (micros, AD9851BRS, etc), but we'd
have to come up with a price for that.

Steve.

--
Steven D. Swift, novatech@eskimo.com, http://www.novatech-instr.com
NOVATECH INSTRUMENTS, INC. P.O. Box 55997
206.301.8986, fax 206.363.4367 Seattle, Washington 98155 USA

4499. need millen bandswitch

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-07 21:01:26 UTC
From: James Skalski <jskalski@yahoo.com>
Message-ID: <GmB1f.54$KR1.2@trndny06>
Source record: 16933

I have a millen 51001 one pole 6 position bandswitch but I need an extra pole. Anyone have one of these switches that I can gang together? It is a 60 degrees. If you have any other 2 gang bandswitch that would also work. Something like a radio switch 86 or 88.

4500. Re: wtb 400v rms transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-08 02:04:44 UTC
From: amdxjunk <nojunk@knology>
Message-ID: <7109f$43472936$18d64e3c$22669@KNOLOGY.NET>
Source record: 16934

Don't know your application, but a couple of 120v to 240v transformers, with
the primaries paralleled and secondaries in series would be close.
Mike K.
"James Skalski" <jskalski@yahoo.com> wrote in message
news:dtz1f.68$Iq3.55@trndny01...
> I need a transformer that has 117vac primary and 400v RMS secondary.
>
> Jim n2go

4501. Re: wtb 400v rms transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-08 02:24:53 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <CtudnVEL38YOsNreRVn-jQ@adelphia.com>
Source record: 16935

James Skalski wrote:
> I need a transformer that has 117vac primary and 400v RMS secondary.
>
> Jim n2go
I have no idea if you need milliamperes or megamperes, but you might
take a look at these auctions:
http://cgi.ebay.com/uTC-S-52-Bias-transformer-75-400-volts-200ma_W0QQitemZ5815897385QQ
http://cgi.ebay.com/Stancor-High-Voltage-Transformer-P-4004_W0QQitemZ581525773OQQ
http://cgi.ebay.com/STANCOR-POWER-TRANSFORMER-RP-400-NEW-IN-BOX-L-K_W0QQitemZ5816026608QQ
http://cgi.ebay.com/NOS-110-400v-Autotransformer-transformer-not-variac_W0QQitemZ3836685392QQ
http://cgi.ebay.com/800-Volt-Power-Transformer-Transmitter-or-Tube-Audio_W0QQitemZ5815910555QQ
http://cgi.ebay.com/Thordarson-800vct-100ma-plate-transformer_W0QQitemZ580000824 6QQ
Drive this one with 120 volts on the 240 volt winding for 400 volts
out, and a very cool core :-)
http://cgi.ebay.com/800V-6-3V-at-700VA-Toroid-Tube-Power-Amp-Transformer_W0QQitemZ7509374156QQ

4502. need 73's article from '98

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-08 06:40:35 UTC
From: Jim <jbasi@cfw.com>
Message-ID: <c2c1f$4346ce22$d80c3a27$9255@NAXS.COM>
Source record: 16931

I need to get 'hold of a copy of an article from the November 1998 issue of 73's magazine.

The article is entitled "Build the Fox TTL Foxhunt transmitter".
I thought I might be able to find it in a library somewhere, but no luck there. It appears libraries generally don't keep these back issues very long.

Does someone have a copy I could get photo copied or scanned and emailed?

Thanks
Jim
jbasi@cfw.com

4503. www.liveboard.8my.com

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-08 10:47:47 UTC
From: thegreat_lover2003@yahoo.com
Message-ID: <1128768467.827837.160290@g14g2000cwa.googlegroups.com>
Source record: 16936

Hello Friend

You are invited to join www.liveboard.8my.com

There you can discuss / port on various topics like Poems, Love,
Romance, Flirting, Quotes, Shayris Movies, Music Personal Problem
Discussions,, Computers & Internet (Hacking at security end),
Animations, Business Employment and lots more.

Register at www.liveboard.8my.com which is absolutely free.

See you there

Note: This is not SPAM

4504. The weekly F.AQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-08 15:03:58 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1128783838.470837.91170@f14g2000cwb.googlegroups.com>
Source record: 16937
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,

competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B
licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

4505. Re: epoxy instead of solder?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-08 16:53:20 UTC
From: TRABEM <>
Message-ID: <qutfk11t776t59eftn0h97a58b90hpkicv@4ax.com>
Source record: 16938
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On 6 Oct 2005 09:59:53 -0700, "w2aew" <w2aew@yahoo.com> wrote:
Wow,

Despite the less than stellar support for the concept, I'm going to go ahead and try it anyway. I found a company in CA that makes 2 different types of epoxy, just for this purpose. The guy says it will work and the curing time is short and not temperature sensitive (unlike solder paste).

He's sensing me samples of both types although the spec's aren't available due to translation problems (the stuff is imported, and no English translation of the spec sheets exists).

I'm going to give it a try on through hole components first, then will play with some smt once I get some experience under my belt.

I'll post a message with the results back here is there is any interest.

Regards,

T

4506. 4cx800a hf amplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-08 16:58:54 UTC
From: James Skalski <jskalski@yahoo.com>
Message-ID: <iVS1f.1717$lq3.246@trndny01>
Source record: 16939

anyone used a pair of these for an hf amplifier? did you run them at
2500Vdc? I saw one site that ran them at 4000V.
Any links or articles describing the tank circuit? or parameters that
were sucessfully used in your amplifier? anyone know what capacitors and
inductors are used in the qro 2500 amplifier?

Jim n2go

4507. Re: The weekly F.AQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-08 17:42:20 UTC
From: Conrad Poos <poos.conrad@gmail.com>
Message-ID: <0yT1f.94968$RW.65052@fe2.news.blueyonder.co.uk>
Source record: 16940
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Polymath wrote:
> What is Ham Radio?

Aha....the CBer returns. Welcome back good buddy!

The following posts are by Gareth Alun Evans, aka 'Airy R Bean', aka 'Polymath':

Sep 6 1997, 8:00 am

As the result of holding a CB licence, I have recently received a consultative document about the future of CB Radio in this country, which suggests that serious consideration is being given to legalising AM and SSB on 27 Mhz.
--
72's etc

Sep 6 1998, 8:00 am

A group of us in Wiltshire have just equipped from Tandy, standard Midland 40 channel rigs. All work fairly well, range about 1/2 mile, less if in trees. Get your aerials somewhere else, the Tandy ones are too rigid and break easily. Most farmer's wholesalers have them.
New rig about ï¿½60, second hand about ï¿½20.

Don't forget your CB licence @ ï¿½15 pa.

As a radio ham, I was very sceptical at first (CB=Children's Broadcasting, etc) But once we got them, they are indispensable. With all the backchat besides the useful conversations, it makes it seem as though everybody in the convoy is in one vehicle and makes for a much more enjoyable day out.

Sep 19 1998, 8:00 am

73 de Gareth G4SDW (Also licensed CB),

Google is your friend :)

Poos

--
vy 73 de Conrad Poos

"Ich bin ein radio amateur"

4508. Re: The weekly F.AQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-08 17:51:12 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <kGT1f.13262$4Q.10048@newsfe4-gui.ntli.net>
Source record: 16941
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Poxy mouth wrote:
> What is Ham Radio?
>
Staying long Beanie? I hope not.
Don't let us make you late back to the nut house.
...(_!_)...

4509. Re: epoxy instead of solder?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-08 18:16:06 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <1GD3m6TmzASDFwAT@jmwa.demon.co.uk>
Source record: 16942
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

I read in sci.electronics.design that TRABEM <?@?.?.invalid> wrote (in
<qutfk11t776t59eftn0h97a58b90hpkicv@4ax.com>) about 'epoxy instead of
solder?', on Sat, 8 Oct 2005:
>He's sensing me samples of both types although the spec's aren't
>available due to translation problems (the stuff is imported, and no
>English translation of the spec sheets exists).

What language(s) is it in?
--
Regards, John Woodgate, OOO - Own Opinions Only.
If everything has been designed, a god designed evolution by natural selection.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

4510. Ceramic filters and IF transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-08 21:58:47 UTC
From: John Wilkinson <johnwilkinson@clara.co.uk>
Message-ID: <1d5lb2htukmhs.19vdy8t2sdukq$.dlg@40tude.net>
Source record: 16943

Hi,
I am trying to design a 455KHz IF stage. I would like to use a 455KHz 7KHz
BW ceramic filter. Looking at the Murata data, they suggest that an
additional IFT is used to reduce the spurious responses.
Has anyone used such a scheme?
Does it mean connecting the IFT directly to the output of the filter?

Do I really need to worry about the spurious resonses?
Collins mechanical filters seem to have the same problem, but do these also
usually have an IFT as well?

Thanks,
John.

4511. Re: The weekly F.AQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-08 23:02:59 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1128810295.662760.233000@o13g2000cwo.googlegroups.com>
Source record: 16944
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Polymath wrote:
> What is Ham Radio?
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.
still peddling the same hate filled bile?

4512. Re: epoxy instead of solder?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-09 04:50:25 UTC
From: "Richard H." <rh86@no.spam>
Message-ID: <bk12f.2327$MN6.720@fed1read04>
Source record: 16945
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

TRABEM wrote:
> He's sensing me samples of both types although the spec's aren't
> available due to translation problems (the stuff is imported, and no
> English translation of the spec sheets exists).

Hopefully they've taken the time to write / translate / send you an MSDS
for it...

Richard

4513. "What is Ham Radio?" - The Daily F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-09 09:37:29 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1128850649.830901.238850@g14g2000cwa.googlegroups.com>
Source record: 16946
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,

competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B

licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

4514. Re: "What is Ham Radio?" - The Daily F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-09 10:48:12 UTC
From: deBaser <Not_Telling@someisp.com>
Message-ID: <1128854784.10243.0@echo.uk.clara.net>
Source record: 16947
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1128850649.830901.238850@g14g2000cwa.googlegroups.com...
> What is Ham Radio?
>
<snip>

Why do you always repeat this stuff Gareth? You need to move on. You are living in the past.

deBaser

4515. Re: "What is Ham Radio?" - The Daily F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-09 11:23:49 UTC
From: Spike <Aero.Spike@Technologies.invalid>
Message-ID: <i6vhk1t4sqktu8h6o84k5v9tv8gos518l3@4ax.com>
Source record: 16798
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew

deBaser wrote:

>
>"Polymouth" wrote:
>
>> What is Ham Radio?
>>
><snip>
>
>Why do you always repeat this stuff?
>You need to move on. You are living in the past.
>

Many questions have been raised by the technical and other postings made in the past by Polymouth and other - similar-sounding, probably sock-puppets - proponents of 'ham radio'. They have meant that the errors so made have had to be corrected, sometimes in a long thread, or spread over several threads, or merely involving a considerable spread in time. Should anyone require enlightenment, a Frequently Posed Responses (FPR) is appended.

New items added. This is Version V. It replaces all other Versions.

[ ] In the UK, no repeat no licence of any kind is necessary to specify, design, construct, modify, repair, own, or (under some circumstances) test an Amateur transmitter.

[ ] A pass in a current examination for a UK Amateur Licence qualifies the successful candidate for the issue of a UK Licence. Holders of the appropriate levels of licence are permitted to operate transmitting equipment that is not subject to a formal approvals procedure, and to carry out technical investigations. A qualification for a Licence, or the Licence itself, is not, repeat not, a qualification to specify, design, construct, modify, repair, or own transmitting equipment. See above.

[ ] Before sunrise on Friday, September 1st, 1939, Germany attacked Poland at 4:45am, when the Battleship "Schleswig-Holstein", on a so-called goodwill visit, opened fire on the Polish naval depot and garrison at Westeplatte. World War II had begun. An hour later, first German units crossed the Polish border. Britain entered the war two days later. She did not repeat not start WWII.

[ ] Because the 'dimensions' of both sides of the Radar Range Equation need a term having the units of square metres in order to

balance, references to ratios of these terms expressed in terms of decibels does not repeat not imply that they are in themselves a ratio of powers.

[ ] FM can be demodulated by an AM receiver using the 'Slope Detection' method. Placing an NBFM signal entirely within a channel in a channelised AM receiver is not repeat not Slope Detection.

[ ] A company's Returns Policy is not repeat not an admission that it deliberately produces shoddy goods, no matter how well wrapped at the time of purchase.

[ ] An IP Address in the headers of one's posts is not repeat not Secret Information.

[ ] An exemplary driver is not repeat not one who makes an obscene gesture to show that the other driver is an idiot.

[ ] An exemplary driver is not repeat not one who repeats an obscene gesture to confirm that the other driver is an idiot.

[ ] XRC is not repeat not a suitable method of differentiating between the 80 percent of metals that have FCC crystal structure.

[ ] Millimetre-waves are not repeat not generated by 'nuclear emissions'.

[ ] The length of the day on this planet is not repeat not 23H20.

[ ] A spring/damper model is not repeat not a mechanical analogue of a capacitor/inductor.

[ ] Dehumidifiers do not repeat not work by absorbing heat.

[ ] Gas Company piping is not repeat not blue in colour.

[ ] 1 deciBel is not repeat not equal to 10 Bels.

from
Aero Spike

4516. Re: Ceramic filters and IF transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-09 11:52:46 UTC
From: "Joe L." <joe@falseaddress2004.net>
Message-ID: <joe-CC8D6C.06524609102005@comcast.dca.giganews.com>
Source record: 16799

In article <1d5lb2htukmhs.19vdy8t2sdukq$.dlg@40tude.net>,
John Wilkinson <johnwilkinson@clara.co.uk> wrote:

> I am trying to design a 455KHz IF stage. I would like to use a 455KHz 7KHz
> BW ceramic filter. Looking at the Murata data, they suggest that an
> additional IFT is used to reduce the spurious responses.
> Has anyone used such a scheme?
> Does it mean connecting the IFT directly to the output of the filter?
>
> Do I really need to worry about the spurious resonses?
> Collins mechanical filters seem to have the same problem, but do these also
> usually have an IFT as well?
>

Depends on how much rejection you want/need to have away from the
passband. Those little 455 kHz ceramic filters inherently have "flyback"
or spurious responses in the region 100~200 kHz above the passband,
IIRC. The attenuation at those peaks may be as little as ~15 dB. So it
is common to have more than one such filter in the IF to achieve the
desired overall selectivity and IF image rejection. Usually cascaded
filters/IFTs are separated by an amplifier stage to set the correct
termination impedance for each filter. Please tell us more about the
application and maybe we can assist further.

Regards,
Joe

4517. Re: 4cx800a hf amplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-09 17:21:22 UTC
From: Paul Jaeger <p.jaeger@softhome.net>
Message-ID: <43495192.1B02D2E0@softhome.net>
Source record: 16800

Here's one example:

http://images.tentec.com/radio/pdf/417_manual.pdf

Paul

James Skalski wrote:
>
> anyone used a pair of these for an hf amplifier? did you run them at
> 2500Vdc? I saw one site that ran them at 4000V.
> Any links or articles describing the tank circuit? or parameters that
> were sucessfully used in your amplifier? anyone know what capacitors and
> inductors are used in the qro 2500 amplifier?
>
> Jim n2go

4518. Re: OT: CQ Serenade

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-09 19:02:19 UTC
From: fmmck@aol.com
Message-ID: <fmmck-0910051502190001@ac9c09e5.ipt.aol.com>
Source record: 16801

In article <t_ednc-vNbwuPqveRVn-ow@comcast.com>, "Johnson"
<jdwalton@comt.net> wrote:

> a link posted on the French usenet group fr.rec.radio.amateur "CQ Serenade"
> http://www.von-info.ch/hb9afo/histoire/NON-CQ_cq_serenade_fr.mp3

You may also enjoy
http://www.von-info.ch/hb9afo/histoire/cw-rythm.mp3

73, Fred, K4DII

4519. Re: "What is Ham Radio?" - The Daily F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-09 21:05:39 UTC
From: scotland_glasgow@yahoo.co.uk
Message-ID: <1128891939.372259.220890@g44g2000cwa.googlegroups.com>
Source record: 16802
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Polymath pressed Control + V on the keyboard and pasted this crap >

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B
licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

Gareth, Get a grip, you really want to move on.....

4520. Re: "What is Ham Radio?" - The Daily F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-10 01:47:12 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <cqhjk1lkjfpsahpd4quf5t9skq2agdre7s@4ax.com>
Source record: 16803
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

On 9 Oct 2005 14:05:39 -0700, scotland_glasgow@yahoo.co.uk wrote:

>Polymath pressed Control + V on the keyboard and pasted this crap >
>

And you copied the WHOLE message to (top) post a one line reply. Grow
up and stop bitching about what the polymouth spends his time posting.
What, are you paying your ISP by the electron? If you stop feeding
the trolls, they will go away.

R

4521. EMTECH Kit Users...Opinions? Ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-10 09:42:00 UTC
From: k4yz@aol.com
Message-ID: <1128937320.824585.306480@g44g2000cwa.googlegroups.com>
Source record: 16804

Greetings One and All,

I am considering the EMTECH single band QRP kits, especially the
40 and 15 meter kits, with perhaps the 30m too.

Was wondering...

(1) Are there any kind of "users" groups for the rigs?

(2) Do the rigs have any popular "mods" published?

Direct replies to k4yz@aol.com would be appreciated, but will
check back here also.

73 es TNX in advance

Steve, K4YZ

4522. Re: EMTECH Kit Users...Opinions? Ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-10 18:55:09 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <hOy2f.24605$HM1.17046@trnddc04>
Source record: 16805

<k4yz@aol.com> wrote in message
news:1128937320.824585.306480@g44g2000cwa.googlegroups.com...
> Greetings One and All,
>
> I am considering the EMTECH single band QRP kits, especially the
> 40 and 15 meter kits, with perhaps the 30m too.
>
> Was wondering...
>
> (1) Are there any kind of "users" groups for the rigs?
>
> (2) Do the rigs have any popular "mods" published?
>
> Direct replies to k4yz@aol.com would be appreciated, but will
> check back here also.
>
> 73 es TNX in advance
>
> Steve, K4YZ
>
Hi Steve,

I got frustrated with their site (dial up here). All I could find was the boards for the rigs at $80 each. They show them in a cabinet, but darned if I could find the cabinets.
Anyway, I would really consider the Elecraft K-1 or KX-1 kits as an alternative with lots more features/perfomance than these rigs.

Dale W4OP

4523. Re: "What is Ham Radio?" - The Daily F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-10 19:11:12 UTC
From: scotland_glasgow@yahoo.co.uk
Message-ID: <1128971472.663722.111860@g44g2000cwa.googlegroups.com>
Source record: 16806
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Russ, If you cannot see the point I am making to Gareth, you should
just stay away !

4524. Receiver bandwidth

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-10 19:48:51 UTC
From: John Wilkinson <johnwilkinson@clara.co.uk>
Message-ID: <18f19hicdgfnd$.7gnt1gih8f2b$.dlg@40tude.net>
Source record: 16807

Hi,
I have bought a 45MHz crystal filter with a bandwidth of +/-10KHz,
according to the spec.
Now does this mean a real bandwidth of 20KHz?

If so when a receiver states a bandwidth of 7KHz, is that +/-7KHz, ie
14KHz?

If I am designing a good communications receiver from 6KHz-30MHz to receive
AM, SSB and CW and want 2 good filters, what are the bandwidths I should
consider?

Thanks,
John.

4525. Re: EMTECH Kit Users...Opinions? Ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-10 20:46:47 UTC
From: k4yz@aol.com
Message-ID: <1128977207.030986.117310@g47g2000cwa.googlegroups.com>
Source record: 16808

Dale Parfitt wrote:
> <k4yz@aol.com> wrote in message
> news:1128937320.824585.306480@g44g2000cwa.googlegroups.com...
> > Greetings One and All,
> >
> > I am considering the EMTECH single band QRP kits, especially the
> > 40 and 15 meter kits, with perhaps the 30m too.
> >
> > Was wondering...
> >
> > (1) Are there any kind of "users" groups for the rigs?
> >
> > (2) Do the rigs have any popular "mods" published?
> >
> > Direct replies to k4yz@aol.com would be appreciated, but will
> > check back here also.
> >
> > 73 es TNX in advance
> >
> > Steve, K4YZ
> >
> Hi Steve,
>
> I got frustrated with their site (dial up here). All I could find was the
> boards for the rigs at $80 each. They show them in a cabinet, but darned if
> I could find the cabinets.
> Anyway, I would really consider the Elecraft K-1 or KX-1 kits as an
> alternative with lots more features/perfomance than these rigs.

Hey Dale....

I e-mailed them some time ago and they said they weren't going to
market the cabinets any longer...You'd think they could at least change
the site to day so, eh?

And in researching it a bit more, I see they once offered that
add-in AF filter, but now only make reference to it as a "Handbook"
project.

I was leaning to the EMTECH kits from reviews I read in HAMBREW in
the 90's (96? 97?) It's on the website too... But in any case, I
liked the appearance of the rig and the extra power was nice too...

I'd love the Elecraft kits myself too...especially the K2, however
justifying the almost $400 expenditure to Mrs K4YZ would be a bit
problematic!

73

Steve, K4YZ

4526. Re: EMTECH Kit Users...Opinions? Ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-10 21:04:17 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <lHA2f.13522$wm3.6305@trnddc01>
Source record: 16809

> Hey Dale....
>
> I e-mailed them some time ago and they said they weren't going to
> market the cabinets any longer...You'd think they could at least change
> the site to day so, eh?
>
> And in researching it a bit more, I see they once offered that
> add-in AF filter, but now only make reference to it as a "Handbook"
> project.
>
> I was leaning to the EMTECH kits from reviews I read in HAMBREW in
> the 90's (96? 97?) It's on the website too... But in any case, I
> liked the appearance of the rig and the extra power was nice too...
>
> I'd love the Elecraft kits myself too...especially the K2, however
> justifying the almost $400 expenditure to Mrs K4YZ would be a bit
> problematic!
>
> 73
>
> Steve, K4YZ

Hi Steve,

Current pricing on the K1 is $289 for the 2 band rig and $359 for the 4
bander. I have built the K2 7 or 8 years back- worked right off and a
fabulous rig. You won't be disappointed with a K1.
The Sierra is also a contender- but can get pricey.
Another great radio is the Dave Benson's Small Wonder Labs line:
http://www.eham.net/reviews/detail/187
Talented designer and great support.

73,

Dale W4OP

>

4527. Re: Receiver bandwidth

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-10 21:36:04 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <13nlk1pum427n8anfbgm1eualjkfvpcque@4ax.com>
Source record: 16810

On Mon, 10 Oct 2005 20:48:51 +0100, John Wilkinson
<johnwilkinson@clara.co.uk> wrote:

>Hi,
>I have bought a 45MHz crystal filter with a bandwidth of +/-10KHz,
>according to the spec.
>Now does this mean a real bandwidth of 20KHz?

Likely the case. Some spec total bandwidth other specify 6db edge
as distance from the filter center frequency.

>If so when a receiver states a bandwidth of 7KHz, is that +/-7KHz, ie
>14KHz?

If they didn't put the +/- there then its 7khz total.

>If I am designing a good communications receiver from 6KHz-30MHz to receive
>AM, SSB and CW and want 2 good filters, what are the bandwidths I should
>consider?

AM wide 12-16khz
Am narrow 6-10khz

SSB anywhere from 2-3khz with many around 2.4khz wide Any wider
than 3khz will be poor in crowded bands. I happen to prefer 2.1 to
2.3khz.

CW I've seen 1.4khz all the way down to 200hz most consider
400-600hz adaquate.

In all cases the skirt selectivity usually bandwitdth measured from
the 6 to 60db points are important indicators of filter quality and
any value of 2 or less is good enough and 1.4 would be excellent.
The idea is you'd ike to be able to put the offending signal outside
the bandpass and well attenuated.

What some builders do for CW is use the CW filter and use an peaked
audio filter to narrow the audio band pass. Not quite as effective
but often cheaper.

Allison
KB1GMX

4528. Re: Receiver bandwidth

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-10 23:39:47 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <7ZC2f.28413$q81.1812@trnddc06>
Source record: 16811

<nospam@nouce.bellatlantic.net> wrote in message
news:13nlk1pum427n8anfbgm1eualjkfvpcque@4ax.com...
> On Mon, 10 Oct 2005 20:48:51 +0100, John Wilkinson
> <johnwilkinson@clara.co.uk> wrote:
>
>>Hi,
>>I have bought a 45MHz crystal filter with a bandwidth of +/-10KHz,
>>according to the spec.
>>Now does this mean a real bandwidth of 20KHz?
>
> Likely the case. Some spec total bandwidth other specify 6db edge
> as distance from the filter center frequency.
>
>>If so when a receiver states a bandwidth of 7KHz, is that +/-7KHz, ie
>>14KHz?
>
> If they didn't put the +/- there then its 7khz total.
>
>>If I am designing a good communications receiver from 6KHz-30MHz to
>>receive
>>AM, SSB and CW and want 2 good filters, what are the bandwidths I should
>>consider?
>
> AM wide 12-16khz
> Am narrow 6-10khz
>
> SSB anywhere from 2-3khz with many around 2.4khz wide Any wider
> than 3khz will be poor in crowded bands. I happen to prefer 2.1 to
> 2.3khz.
>
> CW I've seen 1.4khz all the way down to 200hz most consider
> 400-600hz adaquate.
>
> In all cases the skirt selectivity usually bandwitdth measured from
> the 6 to 60db points are important indicators of filter quality and
> any value of 2 or less is good enough and 1.4 would be excellent.
> The idea is you'd ike to be able to put the offending signal outside
> the bandpass and well attenuated.
>
> What some builders do for CW is use the CW filter and use an peaked
> audio filter to narrow the audio band pass. Not quite as effective
> but often cheaper.
>
>

> Allison
> KB1GMX
>
Allison's advice is right on the mark.
I recently built an amateur only band HF receiver and chose 6/2.5/0.5 for the three modes.
I think what Allison meant to say about the peaked audio filter was to use it in conjunction with the SSB filter for CW selectivity.

73,
Dale W4OP

4529. Re: Receiver bandwidth .. dayton filter find!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-11 00:20:05 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <ZwD2f.6634$5l.808@bignews1.bellsouth.net>
Source record: 16812

nospam@nouce.bellatlantic.net wrote:
> On Mon, 10 Oct 2005 20:48:51 +0100, John Wilkinson
> <johnwilkinson@clara.co.uk> wrote:
>
>
>>Hi,
>>I have bought a 45MHz crystal filter with a bandwidth of +/-10KHz,
>>according to the spec.
>>Now does this mean a real bandwidth of 20KHz?
>
>
> Likely the case. Some spec total bandwidth other specify 6db edge
> as distance from the filter center frequency.
>
>
>>If so when a receiver states a bandwidth of 7KHz, is that +/-7KHz, ie
>>14KHz?
>
>
> If they didn't put the +/- there then its 7khz total.
>
>
>>If I am designing a good communications receiver from 6KHz-30MHz to receive
>>AM, SSB and CW and want 2 good filters, what are the bandwidths I should
>>consider?
>
>
> AM wide 12-16khz
> Am narrow 6-10khz
>
> SSB anywhere from 2-3khz with many around 2.4khz wide Any wider
> than 3khz will be poor in crowded bands. I happen to prefer 2.1 to
> 2.3khz.
>
> CW I've seen 1.4khz all the way down to 200hz most consider
> 400-600hz adaquate.
>
> In all cases the skirt selectivity usually bandwitdth measured from
> the 6 to 60db points are important indicators of filter quality and
> any value of 2 or less is good enough and 1.4 would be excellent.
> The idea is you'd ike to be able to put the offending signal outside
> the bandpass and well attenuated.
>
> What some builders do for CW is use the CW filter and use an peaked

> audio filter to narrow the audio band pass. Not quite as effective
> but often cheaper.
>
>
> Allison
> KB1GMX
>
That 45mhz would make a good 'roofing' filter to use ahead of a 455khz if filter. Normally using a first if of 45mhz and a second if of 455khz would result in 'second order' images leaking in, but with a good roofing filter ahead of the second mixer the problem is solved.

Some years ago, I bought a bunch of 9mhz if filters at the Dayton Hamvention. They are 3.2khz BW (at the 6db points) filters made by CF Networks for the Gonset Sidewinder transciever. I think this was a vhf rig, which would account for the wider bandwidth. However, these are 8 pole filters, with a shape factor of 1.08 @ 15db down (rises to 1.23 @ 45db down). With this shape factor, these filters probably have similar rejection of off frequency qrm as would a 2.4khz filter with a 2.0 shape factor. Since I have a bunch of them, I could use 2 or even 3 of them in the IF stage (one after the mixer, one before the detector, and one between stages). This would decrease the apparent shape factor even more. The nominal carier frequencies for these filters were 8998.0 khz and 9001.7 khz. With the 3.2khz bandwidth this put the cariers 250hz outside the stated bandwidth (-15db point for these filters).

I wonder just how these filters would actually work out in a rig today. That 3.2khz bandwidth DOES seem a bit wide, but the crazy shape factor seems to make it worthwhile to try.

4530. Wanted: KAM All-Mode EPROM

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-11 04:10:40 UTC
From: Bill <bcrann1@hotmail.com>
Message-ID: <QWG2f.4013$S43.355253@news20.bellglobal.com>
Source record: 16813

I recently was given an older KAM All-Mode TNC. It only has version 3.06 firmware. I was hoping to find a version 5 or later EPROM. Does anyone have an EPROM to sell me or can tell me where to get the bin file to burn my own EPROM. I have talked to Kantronics and they told me they no longer support this TNC. Thanks.

Bill

4531. Re: Receiver bandwidth .. dayton filter find!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-11 11:56:14 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <3g9nk15317t4fkiobq0h8i36vvg9s6arre@4ax.com>
Source record: 16814

For VHF 3.2 would likely work well enough except if there is a
sporatic E opening and people tend to pile up. Then it's really wide!

For filters I use microprocessor crystals in the ladder configuration.
With the correct shunt C and 4-8 crystals you can make a very fine
crystal filter with bandwisths from 2-400hz to as wide as you may
want. The design process is documented elsewhere (see EMRFD
and the handbook as well as internet). I build for 6 and 2m and have
built very nice ladder filters this way. Also since microprocessor
crystals in the range of 4-20mhz are dirt cheap it's also a help.
Also the higher the frequency the less likely dual conversion is
required to avoid images and allows the selectivity to be closer
to the antenna (better overload performance).

My latest 6m rig uses 12mhz crystals, 8 of them for a 2.3khz
bandwidth at 6db and 3.9khz at 60db with symetrical skirts.

Allison
KB!GMX

On Mon, 10 Oct 2005 20:20:05 -0400, Ken Scharf
<wa2mzeNOTTHIS@bellsouth.net> wrote:

>nospam@nouce.bellatlantic.net wrote:
>> On Mon, 10 Oct 2005 20:48:51 +0100, John Wilkinson
>> <johnwilkinson@clara.co.uk> wrote:
>>
>>
>>>Hi,
>>>I have bought a 45MHz crystal filter with a bandwidth of +/-10KHz,
>>>according to the spec.
>>>Now does this mean a real bandwidth of 20KHz?
>>
>>
>> Likely the case. Some spec total bandwidth other specify 6db edge
>> as distance from the filter center frequency.
>>
>>
>>>If so when a receiver states a bandwidth of 7KHz, is that +/-7KHz, ie
>>>14KHz?
>>
>>
>> If they didn't put the +/- there then its 7khz total.
>>
>>
>>>If I am designing a good communications receiver from 6KHz-30MHz to receive

>>>AM, SSB and CW and want 2 good filters, what are the bandwidths I should
>>>consider?
>>
>>
>> AM wide 12-16khz
>> Am narrow 6-10khz
>>
>> SSB anywhere from 2-3khz with many around 2.4khz wide Any wider
>> than 3khz will be poor in crowded bands. I happen to prefer 2.1 to
>> 2.3khz.
>>
>> CW I've seen 1.4khz all the way down to 200hz most consider
>> 400-600hz adaquate.
>>
>> In all cases the skirt selectivity usually bandwitdth measured from
>> the 6 to 60db points are important indicators of filter quality and
>> any value of 2 or less is good enough and 1.4 would be excellent.
>> The idea is you'd ike to be able to put the offending signal outside
>> the bandpass and well attenuated.
>>
>> What some builders do for CW is use the CW filter and use an peaked
>> audio filter to narrow the audio band pass. Not quite as effective
>> but often cheaper.
>>
>>
>> Allison
>> KB1GMX
>>
>That 45mhz would make a good 'roofing' filter to use ahead of a 455khz
>if filter. Normally using a first if of 45mhz and a second if of 455khz
>would result in 'second order' images leaking in, but with a
>good roofing filter ahead of the second mixer the problem is solved.
>
>Some years ago, I bought a bunch of 9mhz if filters at the Dayton
>Hamvention. They are 3.2khz BW (at the 6db points) filters made by
>CF Networks for the Gonset Sidewinder transciever. I think this was
>a vhf rig, which would account for the wider bandwidth. However, these
>are 8 pole filters, with a shape factor of 1.08 @ 15db down (rises
>to 1.23 @ 45db down). With this shape factor, these filters probably
>have similar rejection of off frequency qrm as would a 2.4khz filter
>with a 2.0 shape factor. Since I have a bunch of them, I could use
>2 or even 3 of them in the IF stage (one after the mixer, one before
>the detector, and one between stages). This would decrease the
>apparent shape factor even more. The nominal carier frequencies for
>these filters were 8998.0 khz and 9001.7 khz. With the 3.2khz
>bandwidth this put the cariers 250hz outside the stated bandwidth
>(-15db point for these filters).
>
>I wonder just how these filters would actually work out in a rig
>today. That 3.2khz bandwidth DOES seem a bit wide, but the crazy

>shape factor seems to make it worthwhile to try.

4532. Re: Receiver bandwidth

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-11 13:00:50 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1129035650.566963.227640@f14g2000cwb.googlegroups.com>
Source record: 16815

> AM wide 12-16khz
> Am narrow 6-10khz

Maybe it's my aging male ears but I've never heard an AM transmission where a >10kHz filter was needed or even desirable. Whenever I switch on the wider filter I just hear more hiss and static, and no more fidelity.

I can hear a small difference between 6kHz, 8kHz, and 10kHz with local AM BCB stations. My preference has always been to abhor hiss so I tend to go towards the narrower side. I don't think my ears are as sensitive to hiss as when I was younger but it still bothers me especially with extended listening.

I am told that the 16kc wide filter on my R-390A was used largely for when multiple channels were being multiplexed (e.g. multi-RTTY or multi-voice channels).

Tim.

4533. Re: Receiver bandwidth

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-11 13:28:02 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <C5P2f.475776$xm3.363378@attbi_s21>
Source record: 16816

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
news:1129035650.566963.227640@f14g2000cwb.googlegroups.com...
>> AM wide 12-16khz
>> Am narrow 6-10khz
>
> Maybe it's my aging male ears but I've never heard an AM transmission
> where a >10kHz filter was needed or even desirable. Whenever I switch
> on the wider filter I just hear more hiss and static, and no more
> fidelity.

In my homebrew receiver (see QRZ.COM), for SSB reception using headphones, I toggle-switch in a modified audio response increase in the upper range of speech frequencies, 3 dB at 3000 Hz. This greatly improves speech intelligibility at low audio volume, and this saves my aging ears from overload, especially when listening to weak signals. It is important to protect hearing, at any age.

Bill W0IYH

4534. Re: Receiver bandwidth

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-11 13:39:10 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <bsfnk19iaicmtqo3i40mm5fhu7ruo00fn8@4ax.com>
Source record: 16817

On 11 Oct 2005 06:00:50 -0700, "Tim Shoppa" <shoppa@trailing-edge.com>
wrote:

>> AM wide 12-16khz
>> Am narrow 6-10khz
>
>Maybe it's my aging male ears but I've never heard an AM transmission
>where a >10kHz filter was needed or even desirable. Whenever I switch
>on the wider filter I just hear more hiss and static, and no more
>fidelity.
>
>I can hear a small difference between 6kHz, 8kHz, and 10kHz with local
>AM BCB stations. My preference has always been to abhor hiss so I tend
>to go towards the narrower side. I don't think my ears are as
>sensitive to hiss as when I was younger but it still bothers me
>especially with extended listening.

That is because most AM broadcast station use brick wall filters at
around 4-5khz. Use to be a time back in the analog days the roll off
was both higher and gentler. Of course the Beach Boys surf music
was current then.

I also listed two AM filters for that reason. Completeness only.
Though some of the 75M AM window folks (3885khz) insist that
a wide filter is useful.

>I am told that the 16kc wide filter on my R-390A was used largely for
>when multiple channels were being multiplexed (e.g. multi-RTTY or
>multi-voice channels).

That may be but AM used ot be much better fidelity at one time.

Allison
KB!GMX

4535. FA: JENNINGS FixVac Caps 250,2000pf + mo

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-11 18:59:27 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <jYT2f.412953$5N3.99722@bgtnsc05-news.ops.worldnet.att.net>
Source record: 16818
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Jennings 250 pf & 2000 pf fixed vacuum capacitors + more 'stuff' too: see at :

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx and check back often, heytubeguy

4536. Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-11 21:47:56 UTC
From: Jeff <jeff_164@NOSPAMhotmail.com>
Message-ID: <drW2f.17270$iM2.1412876@news.xtra.co.nz>
Source record: 16819
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Hi,
Im confused regarding the choice of iron powder toroid for a 7Mhz high pass filter. I need to use a small size (T68) toroid. For the freq range, some reference texts say T68-2 is the one, others say T68-6" grade. I see differing "best Q range" specs for the 6 grade.....2-30Mhz......10-50Mhz...etc.
Have similar need for 20Mhz LPF, but assume "6" is really the choice there.
Any suggestions as to the relative differences and reasons to choose between grades 2 and 6 for the HPF in T68 size?
Thanks,
JEFF

4537. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-11 22:45:09 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <e8SdnTV8Rdj33dHeRVn-tg@web-ster.com>
Source record: 16820
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Jeff wrote:

> Hi,
> Im confused regarding the choice of iron powder toroid for a 7Mhz high pass
> filter. I need to use a small size (T68) toroid. For the freq range, some
> reference texts say T68-2 is the one, others say T68-6" grade. I see
> differing "best Q range" specs for the 6
> grade.....2-30Mhz......10-50Mhz...etc.
> Have similar need for 20Mhz LPF, but assume "6" is really the choice there.
> Any suggestions as to the relative differences and reasons to choose between
> grades 2 and 6 for the HPF in T68 size?
> Thanks,
> JEFF
>
>
As far as I know, 7MHz is on the border between using one mix or the
other. You'll see different Q's because details of winding, wire choice
and mounting will affect Q, as would use of a core from another
manufacturer (I don't know if anyone other than MicroMetals uses that
system, but if they did I wouldn't count on it being standardized).

If you're not going to be hitting it with really high power and if you
don't need it to be highly resonant I wouldn't worry too much. If
you're going for an engineered solution then you should make a number of
"identical" coils and test them; just make sure that the coils you make
are representative of what you'll be manufacturing.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

4538. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-11 22:50:17 UTC
From: "Joe L." <joe@falseaddress2004.net>
Message-ID: <joe-8955F8.17501511102005@news.covad.net>
Source record: 16821

In article <drW2f.17270$iM2.1412876@news.xtra.co.nz>,
"Jeff" <jeff_164@NOSPAMhotmail.com> wrote:

> Im confused regarding the choice of iron powder toroid for a 7Mhz high pass
> filter. I need to use a small size (T68) toroid. For the freq range, some
> reference texts say T68-2 is the one, others say T68-6" grade. I see
> differing "best Q range" specs for the 6
> grade.....2-30Mhz......10-50Mhz...etc.
> Have similar need for 20Mhz LPF, but assume "6" is really the choice there.
> Any suggestions as to the relative differences and reasons to choose between
> grades 2 and 6 for the HPF in T68 size?
>

Either grade 2 or 6 should work fine at 7 and 14 MHz. The Al values
differ somewhat, so the number of turns to get a given inductance will
be a little higher for grade 6 than grade 2. You only need to confirm
that the number of turns required will actually fit on your T68-size
core.

For a given number of turns, the unloaded Q does peak at one frequency
but is still quite good on either side of that frequency. Unless you
have some real need to achieve the highest possible Q for a given
inductance at the frequency of interest, I wouldn't worry too much about
it. Wind the toroids, build the filter, and see how it works out!

--
Joe

4539. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-11 23:10:58 UTC
From: Pooh Bear <rabbitsfriendsandrelations@hotmail.com>
Message-ID: <434C4682.57DE7D69@hotmail.com>
Source record: 16822
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Jeff wrote:

> Hi,
> Im confused regarding the choice of iron powder toroid for a 7Mhz high pass
> filter. I need to use a small size (T68) toroid. For the freq range, some
> reference texts say T68-2 is the one, others say T68-6" grade. I see
> differing "best Q range" specs for the 6
> grade.....2-30Mhz......10-50Mhz...etc.
> Have similar need for 20Mhz LPF, but assume "6" is really the choice there.
> Any suggestions as to the relative differences and reasons to choose between
> grades 2 and 6 for the HPF in T68 size?

Having just been playing with Micrometals cores myself, I gather that -2 is indeed the 'best' for higher frequencies.

The local distributor says it's stocked in greater depth too.

Have you also looked at Magnetics Inc and Arnold ?

Graham

4540. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-11 23:35:31 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <7%X2f.873$Zv5.374@newssvr25.news.prodigy.net>
Source record: 16823
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Hello Jeff, wrote:

> Hi,
> Im confused regarding the choice of iron powder toroid for a 7Mhz high pass
> filter. I need to use a small size (T68) toroid. For the freq range, some
> reference texts say T68-2 is the one, others say T68-6" grade. I see
> differing "best Q range" specs for the 6
> grade.....2-30Mhz......10-50Mhz...etc.
> Have similar need for 20Mhz LPF, but assume "6" is really the choice there.
> Any suggestions as to the relative differences and reasons to choose between
> grades 2 and 6 for the HPF in T68 size?

Not that this is an exact science but typically I switch from #2 to #6
around 10MHz. But I never design with high Q because that can be a pain
in production.

Regards, Joerg

http://www.analogconsultants.com

4541. Re: Receiver bandwidth

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-12 01:45:36 UTC
From: bg998@FreeNet.Carleton.CA
Message-ID: <dihps0kco1@theodyn.ncf.ca>
Source record: 16824

John Wilkinson (johnwilkinson@clara.co.uk) writes:
>
> If I am designing a good communications receiver from 6KHz-30MHz to receive
> AM, SSB and CW and want 2 good filters, what are the bandwidths I should
> consider?
>

John, if you really want to listen to CW and FSK signals in the VLF
band (8-30 kHz) then you will find a 100 Hz filter very useful.

... Martin VE3OAT

4542. For Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-12 07:29:10 UTC
From: Carl Domanico <vze2686b@verizon.net>
Message-ID: <aX23f.1866$KR1.1088@trndny06>
Source record: 16825

Hi I have for sale two Comet/NCG Meters :

1) NCG-3000 118 mHz-530 MHz SWR / Wattmeter 5-20-200 Watts
Bought New in Box for $ 110.00...Item is in mint condition.
Make offer

1) Comet CMX-3 140 mHz - 525 MHz SWR / Wattmeter 20-50-200 watt
Is remotable...Paid $ 170.00 New In Box Item is in Mint condition.
Make offer...

Thanks
Carl
N2MFW

4543. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-12 12:22:51 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <ve73f.431088$_o.170171@attbi_s71>
Source record: 16826
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Get a copy of Amidon's catalog which gives detailed suggestions for powdered iron and ferrite materials, based on many years of experience.
www.amidoncorp.com

Bill W0IYH

"Jeff" <jeff_164@NOSPAMhotmail.com> wrote in message news:drW2f.17270$iM2.1412876@news.xtra.co.nz...
> Hi,
> Im confused regarding the choice of iron powder toroid for a 7Mhz high
> pass
> filter. I need to use a small size (T68) toroid. For the freq range, some
> reference texts say T68-2 is the one, others say T68-6" grade. I see
> differing "best Q range" specs for the 6
> grade.....2-30Mhz......10-50Mhz...etc.
> Have similar need for 20Mhz LPF, but assume "6" is really the choice
> there.
> Any suggestions as to the relative differences and reasons to choose
> between
> grades 2 and 6 for the HPF in T68 size?
> Thanks,
> JEFF
>
>

4544. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-12 12:40:53 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <1t0qk19upp28smb17rh0c1a9g3doatqvk0@4ax.com>
Source record: 16827
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

On Wed, 12 Oct 2005 10:47:56 +1300, "Jeff"
<jeff_164@NOSPAMhotmail.com> wrote:

>Hi,
>Im confused regarding the choice of iron powder toroid for a 7Mhz high pass
>filter. I need to use a small size (T68) toroid. For the freq range, some
>reference texts say T68-2 is the one, others say T68-6" grade. I see
>differing "best Q range" specs for the 6
>grade.....2-30Mhz......10-50Mhz...etc.
>Have similar need for 20Mhz LPF, but assume "6" is really the choice there.
>Any suggestions as to the relative differences and reasons to choose between
>grades 2 and 6 for the HPF in T68 size?
>Thanks,

http://www.micrometals.com/

4545. Wanted PL519 valves

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-12 16:52:48 UTC
From: Paul M0EME <m0eme432@tiscali.co.uk>
Message-ID: <434d3f61_1@mk-nntp-2.news.uk.tiscali.com>
Source record: 16828

I need 4 PL519 valves for a 400w HF amp, has anyone got any for sale??????
Also 4 valve bases....

--

Thanks and 73's de Paul M0EME
432MHz EME 4 times FO19,
FT847,
MGF1302,
100 Watts at feed,
Spectran.
Initials 432MHz #2 CW #4 JT65

http://myweb.tiscali.co.uk/m0eme

4546. Re: Wanted PL519 valves

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-12 18:17:45 UTC
From: Clint Sharp <clint@clintsmc.demon.co.uk>
Message-ID: <8RsiW2CJNVTDFwZE@clintsmc.demon.co.uk>
Source record: 16829

In message <434d3f61_1@mk-nntp-2.news.uk.tiscali.com>, Paul M0EME
<m0eme432@tiscali.co.uk> writes
>I need 4 PL519 valves for a 400w HF amp, has anyone got any for sale??????
>Also 4 valve bases....
>
You might want to try JPG electronics in Chesterfield? They might be
able to help, alternatively drive around and watch out for the
scruffiest looking TV repair shops you can find and ask in there.
--
Clint Sharp

4547. Re: Receiver bandwidth

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-12 19:55:20 UTC
From: LenAnderson@ieee.org
Message-ID: <1129146920.702029.122590@g44g2000cwa.googlegroups.com>
Source record: 16830

From: "Tim Shoppa" on Tues 11 Oct 2005 06:00

>> AM wide 12-16khz
>> Am narrow 6-10khz
>
>Maybe it's my aging male ears but I've never heard an AM transmission
>where a >10kHz filter was needed or even desirable. Whenever I switch
>on the wider filter I just hear more hiss and static, and no more
>fidelity.
>
>I can hear a small difference between 6kHz, 8kHz, and 10kHz with local
>AM BCB stations. My preference has always been to abhor hiss so I tend
>to go towards the narrower side. I don't think my ears are as
>sensitive to hiss as when I was younger but it still bothers me
>especially with extended listening.
>
>I am told that the 16kc wide filter on my R-390A was used largely for
>when multiple channels were being multiplexed (e.g. multi-RTTY or
>multi-voice channels).

As a point of historical reference, the "390" series was intended for fixed-point to fixed-point communications reception as well as in the land-forces' AN/GRC-26 truck-mobile HF hut. The wide bandwidth was intended to be used with "commercial-government" SSB that had a 12 KHz wide bandwidth to accomodate four 3 KHz "voice grade" channels frequency multiplexed. Each voice channel could handle 4 to 8 TTY circuits, each using tone-pairs (one for Mark, another for Space) via auxilliary "carrier" equipment. A common arrangement was to have one voice channel as the "order wire" or command channel, a second voice channel as an "overseas radiotelephone" circuit, the remaining two voice channels used for TTY circuits. Depending on the carrier and auxilliary equipment, TTY tone pairs could be doubled to take care of selective fading effects common on HF long paths.

For some illustration of actual use of R-390s at a large receiver site, go to http://kauko.hallikainen.org/history/equipment and look down the page at "stations." Click on the 1962 communications station link for a repro of a booklet produced by the Japan Signal Service Battalion about Army station ADA in Tokyo. ADA shared the receiver site with the USAF and the antenna field was over dozens of acres of small farms northwest of Tokyo. PDF is about 10 MB.
I was assigned to the transmitter and control sites at ADA.

The "commercial" 12 KHz wide SSB was standard practice on HF from the 1930s. Not many left in service now although there are a few unmistakable continuous-roaring-multi-tone commercial SSB signals to be heard outside of ham bands. The "roaring" sound comes from the TTY tone pairs (at least 8 circuits per station).

LenAnderson@ieee.org

4548. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-12 21:01:05 UTC
From: Jeff <jeff_164@NOSPAMhotmail.com>
Message-ID: <mQe3f.76$S24.9081@news.xtra.co.nz>
Source record: 16831
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Thanks for all the suggestions. Ive got some Amidon T68-6 toroids to wind up, and will test the completed filter on a spectrum analyser next week.
JEFF

"Jeff" <jeff_164@NOSPAMhotmail.com> wrote in message news:drW2f.17270$iM2.1412876@news.xtra.co.nz...
> Hi,
> Im confused regarding the choice of iron powder toroid for a 7Mhz high pass
> filter. I need to use a small size (T68) toroid. For the freq range, some
> reference texts say T68-2 is the one, others say T68-6" grade. I see
> differing "best Q range" specs for the 6
> grade.....2-30Mhz......10-50Mhz...etc.
> Have similar need for 20Mhz LPF, but assume "6" is really the choice there.
> Any suggestions as to the relative differences and reasons to choose between
> grades 2 and 6 for the HPF in T68 size?
> Thanks,
> JEFF
>
>

4549. Pulsing LEDs for higher efficiency

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-12 23:28:03 UTC
From: Tom Coates <tecoatesHatesSpam@comcast.net>
Message-ID: <2-idnQXJaNeGAdDeRVn-rg@comcast.com>
Source record: 16832

I want to build some emergency lighting equipment using LEDs and 12V. A friend told me that it is possible to get more light per Watt by pulsing the LED to instantaneous levels well above its average ratings.

Is this true, if you include power consumed in the pulsing circuit?

If it is, can anyone suggest a simple and cheap circuit and the appropriate operating values?

The reason for the 12V requirement is that I'm also working on a solar charger for my transceiver batteries and want to use the same charger for the lighting batteries.

Suggestions would be appreciated.

Tom, N3IJ

4550. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-13 04:01:48 UTC
From: LenAnderson@ieee.org
Message-ID: <1129176108.172543.243630@g43g2000cwa.googlegroups.com>
Source record: 16833
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

From: "Jeff" <jeff_...@NOSPAMhotmail.com> on Tues, Oct 11 2005 2:47 pm

>Im confused regarding the choice of iron powder toroid for a 7Mhz high pass
>filter. I need to use a small size (T68) toroid. For the freq range, some
>reference texts say T68-2 is the one, others say T68-6" grade. I see
>differing "best Q range" specs for the 6
>grade.....2-30Mhz......10-50Mhz...etc.
>Have similar need for 20Mhz LPF, but assume "6" is really the choice there.
>Any suggestions as to the relative differences and reasons to choose between
>grades 2 and 6 for the HPF in T68 size?

Been there, done that. In the practical case, what you can expect
is a very slight change in insertion loss in the passband, perhaps
a less sharp transition of attenuation at cutoff, depending on the
type of highpass. It can be modeled in any SPICE analysis program
with accuracy if you make a special model that adds a series R
element computed from reactance divided by Q.

For a highpass filter, the usual filter type has the inductor in
shunt. In that configuration the inductor has a reactance
directly proportional to frequency and will have little effect on
the insertion loss in the passband. The equivalent series R due to
Q won't matter much at 1/3 to 1/4 the cutoff frequency. It might
matter on attenuation in the stopband region but the analysis on
that is more difficult and a practical build-and-measure is the
quicker way to go.

For a lowpass filter, the usual configuration has inductors in
series and there the Q of the inductors will affect insertion loss
more. Those would use the lower frequency range for powder mix.

In a highpass filter it is important that the capacitors have a
minimum series inductance so that the 5x to 10x cutoff frequency
isn't disturbed. Since capacitors are usually in series, their
Q will effect the insertion loss. Fortunately, most capacitors
will have a good Q up around 500+ and won't be a factor.

Use what you have and measure the results (you've got a spectrum
analyzer handy so that's taken care of).

I made a fairly good, practical Synthesis-Analysis program for
L-C filters that includes automatic modeling of (separately) all
capacitor Qs and inductor Qs. I can attach that to private mail
if you want it. Freeware. Proven by practical test comparison.

LenAnderson@ieee.org

4551. Pulsing LEDs for higher efficiency

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-13 04:11:04 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_434dd796@fidonet.org>
Source record: 16834

"Tom Coates" bravely wrote to "All" (12 Oct 05 19:28:03)
--- on the heady topic of "Pulsing LEDs for higher efficiency"

TC> From: "Tom Coates" <tecoatesHatesSpam@comcast.net>
TC> Xref: core-easynews rec.radio.amateur.homebrew:88233

TC> I want to build some emergency lighting equipment using LEDs and 12V.
TC> A friend told me that it is possible to get more light per Watt by
TC> pulsing the LED to instantaneous levels well above its average ratings.

TC> Is this true, if you include power consumed in the pulsing circuit?

TC> If it is, can anyone suggest a simple and cheap circuit and the
TC> appropriate operating values?

TC> The reason for the 12V requirement is that I'm also working on a solar
TC> charger for my transceiver batteries and want to use the same charger
TC> for the lighting batteries.

TC> Suggestions would be appreciated.

TC> Tom, N3IJ

This pulsed drive technique is supposed to take advantage of the human
vision's persistance. If the led is driven brighter for a long enough
time the eye will perceive it as being brighter than if using the
equivalent average continuous current. Visual persistance is
approximately 10 milli-seconds, and if the repetition rate is faster
than this then the led will seem to be on all the time. The same
technique is used with multiplexed digital displays.

One problem with pulsed led drive is that it generates rfi due to the
rapidly switching voltage levels. Unless care is taken with risetime,
wire lengths, decoupling, and shielding, then the gain in efficiency
is a doubtful tradeoff for the simplicity of direct dc drive. It
depends on the application. If you want really bright flashes then use
a xenon strobe tube.

A*s*i*m*o*v

... Neurotoxin Lite! Tastes great... Less drooling...

4552. Re: Pulsing LEDs for higher efficiency

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-13 11:09:06 UTC
From: Johnson <jdwalton@comt.net>
Message-ID: <1KOdnRBxsZj0o9PenZ2dnUVZ_sudnZ2d@comcast.com>
Source record: 16835

RFI isn't going to be a problem if the switch is close to the application.
You can use an LM3524, NE555 etc. to drive the gate of a MOSFET.

The tradeoff is between LED life and pulse current. See www.agilent.com for
pulsed LED application notes.

"Asimov" <Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote in message
news:MSGID_1=3a167=2f133.0_434dd796@fidonet.org...
"Tom Coates" bravely wrote to "All" (12 Oct 05 19:28:03)
--- on the heady topic of "Pulsing LEDs for higher efficiency"

TC> From: "Tom Coates" <tecoatesHatesSpam@comcast.net>
TC> Xref: core-easynews rec.radio.amateur.homebrew:88233

TC> I want to build some emergency lighting equipment using LEDs and 12V.
TC> A friend told me that it is possible to get more light per Watt by
TC> pulsing the LED to instantaneous levels well above its average ratings.

TC> Is this true, if you include power consumed in the pulsing circuit?

TC> If it is, can anyone suggest a simple and cheap circuit and the
TC> appropriate operating values?

TC> The reason for the 12V requirement is that I'm also working on a solar
TC> charger for my transceiver batteries and want to use the same charger
TC> for the lighting batteries.

TC> Suggestions would be appreciated.

TC> Tom, N3IJ

This pulsed drive technique is supposed to take advantage of the human
vision's persistance. If the led is driven brighter for a long enough
time the eye will perceive it as being brighter than if using the
equivalent average continuous current. Visual persistance is
approximately 10 milli-seconds, and if the repetition rate is faster
than this then the led will seem to be on all the time. The same
technique is used with multiplexed digital displays.

One problem with pulsed led drive is that it generates rfi due to the
rapidly switching voltage levels. Unless care is taken with risetime,
wire lengths, decoupling, and shielding, then the gain in efficiency
is a doubtful tradeoff for the simplicity of direct dc drive. It
depends on the application. If you want really bright flashes then use
a xenon strobe tube.

A*s*i*m*o*v

... Neurotoxin Lite! Tastes great... Less drooling...

4553. uk.radio.amateur et al, a FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-13 17:15:03 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1129223703.817784.78650@f14g2000cwb.googlegroups.com>
Source record: 16836
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,

competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B

licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

4554. Re: "What is Ham Radio?" - The Daily F.A.Q.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-13 17:27:12 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1129224432.030850.209010@g47g2000cwa.googlegroups.com>
Source record: 16837
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

If your grasp of the subject matter is such that you
regard it as a troll, then it is unlikely that you
yourself are a _REAL_ Radio Ham.

Russ wrote:
> On 9 Oct 2005 14:05:39 -0700, scotland_glasgow@yahoo.co.uk wrote:
> >Polymath pressed Control + V on the keyboard and pasted this crap >
> And you copied the WHOLE message to (top) post a one line reply. Grow
> up and stop bitching about what the polymouth spends his time posting.
> What, are you paying your ISP by the electron? If you stop feeding
> the trolls, they will go away.

4555. Re: Wanted PL519 valves

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-13 20:02:40 UTC
From: Paul M0EME <m0eme432@tiscali.co.uk>
Message-ID: <434ebd63$1_3@mk-nntp-2.news.uk.tiscali.com>
Source record: 16838

Thanks Clint, I have just got hold of 2 PL519's but no bases. I live in Chesterfield but didn't think to try JPG. I shall have a drive around, I know a TV repair shop local to try.

"Clint Sharp" <clint@clintsmc.demon.co.uk> wrote in message news:8RsiW2CJNVTDFwZE@clintsmc.demon.co.uk...
> In message <434d3f61_1@mk-nntp-2.news.uk.tiscali.com>, Paul M0EME
> <m0eme432@tiscali.co.uk> writes
>>I need 4 PL519 valves for a 400w HF amp, has anyone got any for sale??????
>>Also 4 valve bases....
>>
> You might want to try JPG electronics in Chesterfield? They might be able
> to help, alternatively drive around and watch out for the scruffiest
> looking TV repair shops you can find and ask in there.
> --
> Clint Sharp

4556. Re: Pulsing LEDs for higher efficiency

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-13 20:23:36 UTC
From: Wim Lewis <wiml@hhhh.org>
Message-ID: <dimfo8$29t$1@underhill.hhhh.org>
Source record: 16839

In article <2-idnQXJaNeGAdDeRVn-rg@comcast.com>,
Tom Coates <tecoatesHatesSpam@comcast.net> wrote:
>I want to build some emergency lighting equipment using LEDs and 12V. A
>friend told me that it is possible to get more light per Watt by pulsing the
>LED to instantaneous levels well above its average ratings.

As I understand it, this is not true --- it was true in a way for older
LEDs, but isn't true for modern LEDs. Pulsing a diode above its rated
current could get it to emit some of its light at shorter wavelengths, which
were closer to the middle of the visible spectrum and so seemed brighter.

But if you're not taking advantage of that effect, then I don't
think pulsing gets you anything. The instantaneous output of the LED is
proportional to the instantaneous current, and the percieved brightness
of the pulsed light source is the same as the average brightness, if it's
pulsing fast enough (> 10 Hz or so). So it works out that the percieved
brightness is the same as it would be if you'd driven the LEDs with
a constant current.

If resistive losses are significant, then pulsing will actually reduce the
overall efficiency, since resistive losses are proportional to the
average of I^2.

On the other hand, if your battery is at a higher voltage than you want
to drive the LEDs, then pulsing them might be more efficient than using
a linear regulator --- that has more to do with the inefficiency of the
linear regulator than anything to do with the LEDs, though :-)

I did some googling to refresh my memory about pulsed LEDs and found
a short article on the subject:
http://www.caves.org.uk/led/foot4.pdf

On the other hand, I also found some articles on pulsed LEDs saying
the opposite --- that the percieved brightness of a pulsed source
is closer to the peak brightness than to the average brightness.
It might be worthwhile tracking down some actual experimental data,
or doing an experiment yourself...

--
Wim Lewis <wiml@hhhh.org>, Seattle, WA, USA. PGP keyID 27F772C1

4557. Homebrew repair of Standard C110 Help!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-14 06:51:33 UTC
From: Dave Bullock <DaveB@ihr.mrc.ac.uk>
Message-ID: <dinkhlptq2@oyez.ccc.nottingham.ac.uk>
Source record: 16841

Has anyone got a copy of (or know where to download) a service
handbook/schematic for the Standard C110 2m handie.
Alternatively has anyone encountered a fault where it transmits &
receives, 10MHz above the indicated frequency on the thumbwheels?
I would imagine there's a down mixer and the synth is not running at
signal frequency for this age of rig?
Are there jumpers/links inside that someone might have messed up as it
will still transmit (out of band) with this fault?
Please help.....thanks in anticipation...
Dave

4558. Re: Pulsing LEDs for higher efficiency

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-14 07:06:17 UTC
From: Roger Conroy <rogerconroy@nospam.hotmail.com>
Message-ID: <dinmgq$434$1@ctb-nnrp2.saix.net>
Source record: 16842

"Wim Lewis" <wiml@hhhh.org> wrote in message
news:dimfo8$29t$1@underhill.hhhh.org...
> In article <2-idnQXJaNeGAdDeRVn-rg@comcast.com>,
> Tom Coates <tecoatesHatesSpam@comcast.net> wrote:
>>I want to build some emergency lighting equipment using LEDs and 12V. A
>>friend told me that it is possible to get more light per Watt by pulsing
>>the
>>LED to instantaneous levels well above its average ratings.
>
> As I understand it, this is not true --- it was true in a way for older
> LEDs, but isn't true for modern LEDs. Pulsing a diode above its rated
> current could get it to emit some of its light at shorter wavelengths,
> which
> were closer to the middle of the visible spectrum and so seemed brighter.
>
> But if you're not taking advantage of that effect, then I don't
> think pulsing gets you anything. The instantaneous output of the LED is
> proportional to the instantaneous current, and the percieved brightness
> of the pulsed light source is the same as the average brightness, if it's
> pulsing fast enough (> 10 Hz or so). So it works out that the percieved
> brightness is the same as it would be if you'd driven the LEDs with
> a constant current.
>
> If resistive losses are significant, then pulsing will actually reduce the
> overall efficiency, since resistive losses are proportional to the
> average of I^2.
>
> On the other hand, if your battery is at a higher voltage than you want
> to drive the LEDs, then pulsing them might be more efficient than using
> a linear regulator --- that has more to do with the inefficiency of the
> linear regulator than anything to do with the LEDs, though :-)
>
>
> I did some googling to refresh my memory about pulsed LEDs and found
> a short article on the subject:
> http://www.caves.org.uk/led/foot4.pdf
>
> On the other hand, I also found some articles on pulsed LEDs saying
> the opposite --- that the percieved brightness of a pulsed source
> is closer to the peak brightness than to the average brightness.
> It might be worthwhile tracking down some actual experimental data,
> or doing an experiment yourself...
>
> --

> Wim Lewis <wiml@hhhh.org>, Seattle, WA, USA. PGP keyID 27F772C1

If the brightness of an LED is a 1:1 linear relationship with the power supplied, that suggests that perceived brightness of a pulsed LED would be neither at the arithmetic mean (average) nor at the peak but rather at rms (root mean square). Comments?

4559. High Voltage Caps for Plate Supply ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-14 07:08:21 UTC
From: Rick Frazier <rickf@rickfrazier.com>
Message-ID: <434F598A.C6C9F482@rickfrazier.com>
Source record: 16840

I have an Ameritron AL-1200 amplifier, and it came (used) with a capacitor problem. Upon inspection, 4 of the caps and 3 of the resistors in the Plate supply have been replaced, and some of the caps are in pretty sad shape (not to mention half of them are 220uf and the other half 270uf...).

Upon a closer examination of the unit and schematics, I find the plate voltage is expected to be at 3600 volts (more or less), the manual has a warning about avoiding transformer taps that produce over 3700 volts, and the total of the capacitor bank rating is 3600 volts. (8 caps in series, 450volt rating. Each cap is 220 uf, so the entire pack is 3600 volts, 26.25 uf)

I was in high tech engineering (computers and peripherals) for 20 years, and we never ran electrolytics at anywhere near their rated voltage. Permissible margins for low voltage DC circuits were 50% or more margin. Typical rule of thumb was 100% margin (a 10 volt cap running on nominal 5 volt line, etc.). Even in an industry where every penny of component cost was significant, submitting a design with electrolytics running with as little 25% margin typically got a less than stellar response during design reviews, to say the least.

So, I was very surprised to find the capacitor bank in the AL-1200 running at or slightly above the rating of the capacitors. It just looks like a problem waiting to happen to me. Judging by the components replaced by a previous owner, I think that at least some of the capacitors failed in the past, possibly catastrophically... As I wish to prevent (or at least reduce the likelihood of) this happening in the future, I'm looking for capacitors that can replace the existing ones with higher voltage units. Unfortunately, there just aren't many manufacturers that have 500 volt electrolytics in their product line, and probably few stocking distributors that would have any in stock (or order them for a small order quantity).

The part numbers I have found that will work for me (in order of preference) are listed here:

Cornell Dubilier (CDE)
520C271T500AB2B 270uf 500 volts
500C311T500AB2B 31o uf 500 volts
520C341T500AJ2B
550C361T500AJ2B
500C381T500AJ2B
520C401T500AC2B
DCMC321T500AB2B
DCMC401T500AJ2B

ALS30/40 series BHC Aerovox
ALS334H331D3L500
ALS30A331DE500

All of these are "computer grade" with screw terminals, and range from inverter duty down (in order, from the best are 550C, 520C, 500C, DCMC).

Do you know of any distributor that currently stocks these? Price would be good too...

I need 10 of any one part number. I am in process on gathering supplies to make my own PCB to use 10 caps (instead of 8) so if I can get the 500 volt capacitors, the rated capacitor bank will be 5000 volts and 27 to 39 uf, which should provide a decent margin for a 3600 volt supply (and not blow up if my line voltage rises and I see 3900 volts, which happened to me at a former QTH). There's _just_ enough room for the larger PCB for the 10 caps (and resistors) in place of the existing board with 8 of each.

I know where to get CDE DCMC271T450AA2B (450 volt, 270uf) which would give me a 4500 volt 27uf pack, but really would prefer to have the extra margin of the 500 volt capacitors. I can wait a bit for reasonable lead times, as the amplifier doesn't need to be in operation next week, but I don't want to still be looking 3 or 4 months from now.

I'd appreciate any leads to suppliers of any of the above capacitors (or their equivalents). I can't say that price is no object, or I'd just buy a big QRO amp and sit back, but that's not the way I do things... I should expect these caps are going to be somewhere north of $20 each, even at Qty 10.

Thanks
--Rick AH7H

4560. Re: uk.radio.amateur et al, a FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-14 07:28:58 UTC
From: "jim.gm4dhj" <jim.gm4dhj@ntlworld.com>
Message-ID: <_6J3f.110$sm1.36@newsfe5-win.ntli.net>
Source record: 16843
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Billy Bean built a machine to see what it could do.
He made it out of sticks and stones, and nuts and bolts and glue.
The motor sang chuggle-a-rang, chuggle-a-ruggle-a-rator,
And all of a sudden a picture appeared on the funny old cartoonerator
Billy Bean built a machine to see what it would do,
It did the funniest things he'd seen,
So he called it his fun machine, machine,
Billy Bean and his fun machine.

4561. Re: Powerpole 180A Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-14 11:53:25 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <XNmdnZ1CVrXUAdLeRVn-hA@comcast.com>
Source record: 16844

"Richard W. Solomon, W1KSZ" <w1ksz@earthlink.net> wrote in message
news:9hnpg15mc8el1keek6gfnbkvbu2in37bgs@4ax.com...
> No, they are the SINGLEPOLE Connectors.
>
> http://www.andersonpower.com/products/pp/sp.html
>
> 73, Dick, W1KSZ
>

Powerx sells the entire line - give them a call or send an e-mail to their
sales department.
Powerwerz web page
http://www.powerwerx.com

4562. FA:GONSET 201 Amp Huge Diagram+ mo parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-14 13:21:47 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <LhO3f.429878$5N3.83236@bgtnsc05-news.ops.worldnet.att.net>
Source record: 16845
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Huge Gonset fold out schmetic diagram + other parts too; see at

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

73 heytubeguy

4563. High Voltage Caps for Plate Supply ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-14 16:11:02 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_434fc152@fidonet.org>
Source record: 16846

"Rick Frazier" bravely wrote to "All" (14 Oct 05 07:08:21)
--- on the heady topic of "High Voltage Caps for Plate Supply ??"

RF> From: Rick Frazier <rickf@rickfrazier.com>
RF> Xref: core-easynews rec.radio.amateur.homebrew:88241

RF> I have an Ameritron AL-1200 amplifier, and it came (used) with a
RF> capacitor problem.
[,,,]
RF> I was in high tech engineering (computers and peripherals) for 20
RF> years, and we never ran electrolytics at anywhere near their rated
RF> voltage. Permissible margins for low voltage DC circuits were 50% or
RF> more margin. Typical rule of thumb was 100% margin (a 10 volt cap
RF> running on nominal 5 volt line, etc.). Even in an industry where every
RF> penny of component cost was significant, submitting a design with
RF> electrolytics running with as little 25% margin typically got a less
RF> than stellar response during design reviews, to say the least.
[,,,]
RF> Thanks
RF> --Rick AH7H

Rick, it is okay to run electro's at about 80% of their voltage spec.
Electro's are formed at up to 140% of their final spec and can thus
tolerate turn on surges. It is the turn-on surge spec that one should
worry about because that is when the electro is vulnerable. At turn on
an electro re-forms a little bit which draws a larger current than
usual. If that current doesn't fall off rapidly enough the electro can
become damaged and leak permanently. In the old days electros used to
be stamped with both surge and working voltage ratings.

Isn't using an electro at 50% of spec rather conserative? I might
understand being this prudent with semiconductors. An electro also has
a leakage current spec at the rated working voltage. There isn't a
direct linear relation between voltage and leakage. The relation is
more like a reverse exponential and the leakage current drops off a
lot more at a lower percent of rated voltage.

A*s*i*m*o*v

... Paul's Law: You can't fall off the floor.

4564. Re: Pulsing LEDs for higher efficiency

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-14 16:11:05 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_434fc153@fidonet.org>
Source record: 16847

"Roger Conroy" bravely wrote to "All" (14 Oct 05 09:06:17)
--- on the heady topic of "Re: Pulsing LEDs for higher efficiency"

RC> From: "Roger Conroy" <rogerconroy@nospam.hotmail.com>
RC> Xref: core-easynews rec.radio.amateur.homebrew:88243

RC> If the brightness of an LED is a 1:1 linear relationship with the
RC> power supplied, that suggests that perceived brightness of a pulsed
RC> LED would be neither at the arithmetic mean (average) nor at the peak
RC> but rather at rms (root mean square). Comments?

I'm pretty certain it is not a simple rms function because the
duration of the visual persistance effect must be taken into account.
If the peak brightness duration is long enough it will be perceived as
brighter than the average. Consider that the eye's retina cone signal
fades off say to 80% in 10 milliseconds after exposure to light. As
long as the light pulse repetition rate is high enough such that it
results in a drop of optic nerve signal less than the minimum light
change that can be perceived then the light will be seen as
continuously bright. You can always run a subjective experiment on
your workbench with an led and a 555 timer used as an astable.

A*s*i*m*o*v

... Forcast for tonight: Dark.

4565. Re: Pulsing LEDs for higher efficiency

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-14 17:09:21 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrndkvpi1.6k6.bit-bucket@shell.config.com>
Source record: 16848

```
On Fri, 14 Oct 2005 16:11:05 GMT, Asimov wrote:
> "Roger Conroy" bravely wrote to "All" (14 Oct 05 09:06:17)
> --- on the heady topic of "Re: Pulsing LEDs for higher efficiency"
>
> RC> From: "Roger Conroy" <rogerconroy@nospam.hotmail.com>
> RC> Xref: core-easynews rec.radio.amateur.homebrew:88243
>
> RC> If the brightness of an LED is a 1:1 linear relationship with the
> RC> power supplied, that suggests that perceived brightness of a pulsed
> RC> LED would be neither at the arithmetic mean (average) nor at the peak
> RC> but rather at rms (root mean square). Comments?
>
> I'm pretty certain it is not a simple rms function because the
> duration of the visual persistance effect must be taken into account.
> If the peak brightness duration is long enough it will be perceived as
> brighter than the average.

Perhaps. But, will it _illuminate_ any better?
The OP wasn't interested in _staring_ at a bank of leds. :-)

Maybe better discussed in rec.bio-tronics HI!HI!

Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
Pueblo, Colorado | @ | Jonesy | OS/2 __
38.24N 104.55W | config.com | DM78rf | SK
```

4566. Re: epoxy instead of solder? TRY ADHESIVE

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-14 18:48:07 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <diouh7$44o$1@engnntp2.cig.mot.com>
Source record: 16850
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

About 10 years ago there was considerable attention to this is the press. We looked into it and didn't find anything which looked promising and neither did the industry. For non critical circuitry, I suspect there is possibilities

My idea (which was chuckeled at) was " conductive Velcro" Make parts with the loops and boards with the hooks. Easy repair, eh? Zip off the old, stuff on the new... No heat, no time to cure...

Imagine a demo of this compared to solder in the early days...

Let's look at the options for electronics assembly. Well you have two choices:
1- Dip everything in molten lead.
2- stuff 'n go.

Which do you pick...Hmmm difficult chioce, eh?

Ther ewas also something called "particle interface". Many small sharp conductive points on the PCB, but how to anchor the parts. This was intended for test fixtures.

73, Steve, K9DCI

4567. Re: Powerpole 180A Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-14 18:55:17 UTC
From: "Richard W. Solomon, W1KSZ" <w1ksz@earthlink.net>
Message-ID: <qnvvk1hjrg9v901kmibohkctbs80hde4n1@4ax.com>
Source record: 16849

Not really, they stop at 75 Amps.

73, Dick, W1KSZ

On Fri, 14 Oct 2005 06:53:25 -0500, "gb" <onw9mapsgb@no.arrl.spam.net>
wrote:

>"Richard W. Solomon, W1KSZ" <w1ksz@earthlink.net> wrote in message
>news:9hnpg15mc8el1keek6gfnbkvbu2in37bgs@4ax.com...
>> No, they are the SINGLEPOLE Connectors.
>>
>> http://www.andersonpower.com/products/pp/sp.html
>>
>> 73, Dick, W1KSZ
>>
>
>Powerx sells the entire line - give them a call or send an e-mail to their
>sales department.
>Powerwerz web page
>http://www.powerwerx.com
>
>

4568. Re: Pulsing LEDs for higher efficiency

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-14 19:16:50 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dip072$5dg$1@engnntp2.cig.mot.com>
Source record: 16851

While I understand the Persistance comment, I don't think this is it. A couple of things. The eye has to convert the light energy to chemical reaction/change and this takes energy. The perception, therefore, would also be a factor of energy and a short pulse has less energy than a long pulse, so this would bring you back into the average vs, RMS discussion and favor the RMS idea. In other words, One would think power is what is being received, just like our ears, so the RMS idea seems to have merrit. However, I recall reading that the eye is a "somewhat" peak detecting device (my paraphrasing of part peak / part RMS) and that was the reason (or part of the reason) that the pulsed LEDs looked brighter.

BTW, shining the LED onto a surface would have the same argument, so "_staring_ at a bank of leds" isn't a factor.

73, Steve, K,9.D;C'I

"Allodoxaphobia" <bit-bucket@config.com> wrote in message news:slrndkvpi1.6k6.bit-bucket@shell.config.com...
> On Fri, 14 Oct 2005 16:11:05 GMT, Asimov wrote:
> > "Roger Conroy" bravely wrote to "All" (14 Oct 05 09:06:17)
> > --- on the heady topic of "Re: Pulsing LEDs for higher efficiency"
> >
> > RC> From: "Roger Conroy" <rogerconroy@nospam.hotmail.com>
> > RC> Xref: core-easynews rec.radio.amateur.homebrew:88243
> >
> > RC> If the brightness of an LED is a 1:1 linear relationship with the
> > RC> power supplied, that suggests that perceived brightness of a pulsed
> > RC> LED would be neither at the arithmetic mean (average) nor at the peak
> > RC> but rather at rms (root mean square). Comments?
> >
> > I'm pretty certain it is not a simple rms function because the
> > duration of the visual persistance effect must be taken into account.
> > If the peak brightness duration is long enough it will be perceived as
> > brighter than the average.
>
> Perhaps. But, will it _illuminate_ any better?
> The OP wasn't interested in _staring_ at a bank of leds. :-)
>
> Maybe better discussed in rec.bio-tronics HI!HI!
>
> Jonesy
> --
> Marvin L Jones | jonz | W3DHJ | linux

> Pueblo, Colorado | @ | Jonesy | OS/2 __
> 38.24N 104.55W | config.com | DM78rf | SK

4569. Re: High Voltage Caps for Plate Supply ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-14 19:36:58 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dip1cr$69e$1@engnntp2.cig.mot.com>
Source record: 16852

"Asimov" <Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote in message
news:MSGID_1=3a167=2f133.0_434fc152@fidonet.org...
"Rick Frazier" bravely wrote to "All" (14 Oct 05 07:08:21)
--- on the heady topic of "High Voltage Caps for Plate Supply ??"

RF> From: Rick Frazier <rickf@rickfrazier.com>
RF> [snip]
RF> e never ran electrolytics at anywhere near their rated
RF> voltage. Permissible margins for low voltage DC circuits were 50% or
RF> more margin. Typical rule of thumb was 100% margin (a 10 volt cap
RF> running on nominal 5 volt line, etc.).

Rick, it is okay to run electro's at about 80% of their voltage spec.
Electro's are formed at up to 140% of their final spec and can thus
tolerate turn on surges. ...

Isn't using an electro at 50% of spec rather conserative? ...
A*s*i*m*o*v

In Motorola, our practice on lytics (& resistors) was 50% of rated Voltage
(power), but that was in the 12 v. area. I don't know where this came from,
but they had extensive accelerated test capability and field data said our
stuff is known to keep on ticking...

I seem to recall that in tube days you were much closer and 80% seems
reasonable.

73, Steve, K9DCI

4570. Re: Receiver bandwidth .. dayton filter find!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-14 21:16:21 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <IcV3f.3190$BF5.65@bignews7.bellsouth.net>
Source record: 16853

nospam@nouce.bellatlantic.net wrote:
> For VHF 3.2 would likely work well enough except if there is a
> sporatic E opening and people tend to pile up. Then it's really wide!
>
> For filters I use microprocessor crystals in the ladder configuration.
> With the correct shunt C and 4-8 crystals you can make a very fine
> crystal filter with bandwisths from 2-400hz to as wide as you may
> want. The design process is documented elsewhere (see EMRFD
> and the handbook as well as internet). I build for 6 and 2m and have
> built very nice ladder filters this way. Also since microprocessor
> crystals in the range of 4-20mhz are dirt cheap it's also a help.
> Also the higher the frequency the less likely dual conversion is
> required to avoid images and allows the selectivity to be closer
> to the antenna (better overload performance).
>
> My latest 6m rig uses 12mhz crystals, 8 of them for a 2.3khz
> bandwidth at 6db and 3.9khz at 60db with symetrical skirts.
>
>
> Allison
> KB!GMX
I managed to buy over 400 pcs of 8.3886mhz crystals on ebay, for
just pennies each. I am planning on trying to build ladder filters
with them. These crystals are in the larger HC6/u size holders which
are supposed to work better than the miniature size used in the micro-
processor crystals.

First step would be to build the DDS vfo for
the radio since I can program the DDS to function as a sweep generator
for aligning the filter. With the DDS sweeping the output frequency
while providing a sawtooth ramp to drive the scope sweep in step
with the frequency sweep I could see the actual bandwith plotted on
the scope.

4571. Re: FA:GONSET 201 Amp Huge Diagram+ mo parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-14 22:05:11 UTC
From: hhc314@yahoo.com
Message-ID: <1129327511.444917.126810@g43g2000cwa.googlegroups.com>
Source record: 16854
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I have two 6M Gooney Boxes that I will soon be putting up for auction on eBay, before I put them out into the trash. I consider both of them to be in restorable condition with a little work. I even have 2 sprare 2E26 tubes that will go with them.

I really don't want to pack and ship them, so if you are interested and live in the greater Boston area, contact me my email at hhc3141@yahoo.com. Small bucks will take both!

Harry C.

4572. Re: Receiver bandwidth .. dayton filter find!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-14 22:14:13 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <17b0l1loe0r4184uar1jkd6pits85gkdfe@4ax.com>
Source record: 16855

On Fri, 14 Oct 2005 17:16:21 -0400, Ken Scharf
<wa2mzeNOTTHIS@bellsouth.net> wrote:

>nospam@nouce.bellatlantic.net wrote:
>> For filters I use microprocessor crystals in the ladder configuration.
>> With the correct shunt C and 4-8 crystals you can make a very fine
>> Allison
>> KB!GMX
>I managed to buy over 400 pcs of 8.3886mhz crystals on ebay, for
>just pennies each. I am planning on trying to build ladder filters
>with them. These crystals are in the larger HC6/u size holders which
>are supposed to work better than the miniature size used in the micro-
>processor crystals.

The HC6 parts work fine as do the HC18, 49 and so on. The real trick
is doing the work to measure and check the crystals for use and then
calculate the capacitors and termination impedence based on that.
For a little work you get fine filters dirt cheap.

>First step would be to build the DDS vfo for
>the radio since I can program the DDS to function as a sweep generator
>for aligning the filter. With the DDS sweeping the output frequency
>while providing a sawtooth ramp to drive the scope sweep in step
>with the frequency sweep I could see the actual bandwith plotted on
>the scope.

While I have a DDS to do that with I found that using the first "high"
crystal in a VXO that gets calibrated worked as well with a lot less
fuss. Then I can use the same osc to sweep the filter later to test
it by adding a varicap doide.

Allison

4573. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-14 23:12:27 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <vXW3f.1513$D13.478@newssvr11.news.prodigy.com>
Source record: 16856
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Hello William,

> Get a copy of Amidon's catalog which gives detailed suggestions for powdered
> iron and ferrite materials, based on many years of experience.
> www.amidoncorp.com
>

Absolutely. I literally wore one of those catalogs to the point where
you could see through several pages.

Then there are the ARRL Handbook and their Antenna Book. Both well worth
every penny.

Regards, Joerg

http://www.analogconsultants.com

4574. Re: Receiver bandwidth .. dayton filter find!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-14 23:38:37 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <4iX3f.24439$5l.10934@bignews1.bellsouth.net>
Source record: 16857

nospam@nouce.bellatlantic.net wrote:
> On Fri, 14 Oct 2005 17:16:21 -0400, Ken Scharf
> <wa2mzeNOTTHIS@bellsouth.net> wrote:
>
>
>>nospam@nouce.bellatlantic.net wrote:
>>
>>>For filters I use microprocessor crystals in the ladder configuration.
>>>With the correct shunt C and 4-8 crystals you can make a very fine
>>>Allison
>>>KB!GMX
>>
>>I managed to buy over 400 pcs of 8.3886mhz crystals on ebay, for
>>just pennies each. I am planning on trying to build ladder filters
>>with them. These crystals are in the larger HC6/u size holders which
>>are supposed to work better than the miniature size used in the micro-
>>processor crystals.
>
>
> The HC6 parts work fine as do the HC18, 49 and so on. The real trick
> is doing the work to measure and check the crystals for use and then
> calculate the capacitors and termination impedence based on that.
> For a little work you get fine filters dirt cheap.
>
>
>>First step would be to build the DDS vfo for
>>the radio since I can program the DDS to function as a sweep generator
>>for aligning the filter. With the DDS sweeping the output frequency
>>while providing a sawtooth ramp to drive the scope sweep in step
>>with the frequency sweep I could see the actual bandwith plotted on
>>the scope.
>
>
> While I have a DDS to do that with I found that using the first "high"
> crystal in a VXO that gets calibrated worked as well with a lot less
> fuss. Then I can use the same osc to sweep the filter later to test
> it by adding a varicap doide.
>
That would work fine, but with the DDS, I can program the actual
frequency range to be swept and probably be able to calibrate the
scope face to read the actual frequency 'break' points on the filter.
Using the vxo method will get you a working filter quickly no
doubt, but I will still need the DDS vfo for the finished rig, so
I just figured I'd do that first.

How many 'rocks' did you use in an SSB filter? I've seen some designs on the web with 6 crystals, would the shape factor be any better with 8 or more? (with over 400 crystals in the junk box I can go crazy, but I'd still have to find the capacitors :-).

4575. Re: Receiver bandwidth .. dayton filter find!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-15 00:24:39 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <b%X3f.301$W32.225@trnddc06>
Source record: 16858

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
news:4iX3f.24439$5l.10934@bignews1.bellsouth.net...
> nospam@nouce.bellatlantic.net wrote:
>> On Fri, 14 Oct 2005 17:16:21 -0400, Ken Scharf
>> <wa2mzeNOTTHIS@bellsouth.net> wrote:
>>
>>
>>>>>nospam@nouce.bellatlantic.net wrote:
>>>
>>>>>>For filters I use microprocessor crystals in the ladder configuration.
>>>>>>With the correct shunt C and 4-8 crystals you can make a very fine
>>>>>>Allison
>>>>>>KB!GMX
>>>
>>>>>I managed to buy over 400 pcs of 8.3886mhz crystals on ebay, for
>>>>>just pennies each. I am planning on trying to build ladder filters
>>>>>with them. These crystals are in the larger HC6/u size holders which
>>>>>are supposed to work better than the miniature size used in the micro-
>>>>>processor crystals.
>>>
>>>
>>> The HC6 parts work fine as do the HC18, 49 and so on. The real trick
>>> is doing the work to measure and check the crystals for use and then
>>> calculate the capacitors and termination impedence based on that.
>>> For a little work you get fine filters dirt cheap.
>>>
>>>
>>>>>First step would be to build the DDS vfo for
>>>>>the radio since I can program the DDS to function as a sweep generator
>>>>>for aligning the filter. With the DDS sweeping the output frequency
>>>>>while providing a sawtooth ramp to drive the scope sweep in step
>>>>>with the frequency sweep I could see the actual bandwith plotted on
>>>>>the scope.
>>>
>>>
Just sweeping a filter designed for SSB would be fine I suppose. I recently
had an opportunity to hear the difference between a stock FT-1000 CW filter
and one homebrewed with attention paid to group delay- the difference was
very clear to hear- in favor of the homebrew filter.
\
Dale

4576. Re: Receiver bandwidth .. dayton filter find!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-15 01:50:08 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <fmn0l1lo2q6rlb2fd3m3ncl24nnaore6p2@4ax.com>
Source record: 16859

On Fri, 14 Oct 2005 19:38:37 -0400, Ken Scharf
<wa2mzeNOTTHIS@bellsouth.net> wrote:

>>
>That would work fine, but with the DDS, I can program the actual
>frequency range to be swept and probably be able to calibrate the
>scope face to read the actual frequency 'break' points on the filter.
>Using the vxo method will get you a working filter quickly no
>doubt, but I will still need the DDS vfo for the finished rig, so
>I just figured I'd do that first.

Makes sense. I found the other way easy when DDS chips were 55$ each!
The varicap sweep is calabrated to the scope so that was not an issue
for sweeping the filter. I found that using wideband noise and a
sound card was better.

>How many 'rocks' did you use in an SSB filter? I've seen some designs
>on the web with 6 crystals, would the shape factor be any better with
>8 or more? (with over 400 crystals in the junk box I can go crazy,
>but I'd still have to find the capacitors :-).

I'd say 4 is a useable minimum. With that I'll add the skirts at 40db
down are not very good though. I've used 6-8 to get a good 6-60db
shape (under 2:1). There is a problem if you go for too many. The
filter can have enough group delay that while it's shape is good, the
sound has a hollowness.

The caps, once you figured the qalues you will likely end up using
parallel values. IE: 232pf may be a 220+12pf or a 220 and a 4-20pf
trimmer.

Allison

4577. Re: Receiver bandwidth .. dayton filter find!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-15 01:55:41 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <h4o0l1h0cg5munqp5o4nno13vk7dpvdvir@4ax.com>
Source record: 16860

On Sat, 15 Oct 2005 00:24:39 GMT, "Dale Parfitt"
<par@parelectronics.com> wrote:

>Just sweeping a filter designed for SSB would be fine I suppose. I recently
>had an opportunity to hear the difference between a stock FT-1000 CW filter
>and one homebrewed with attention paid to group delay- the difference was
>very clear to hear- in favor of the homebrew filter.
>\
>Dale

My prefered filter has a gausian to 6db shape for less ringing and
group delay. I work for that goal.

However, try the KK7B Phasing rigs for sound. They are direct
conversion SSB (image rejecting) so all the selectivity is in the
audio bandpass. I use a miniR2 and T2 pair on 6m and filter
artifacts like group delay aren't there. Transparentcy is a good
word to describe it.

Allison
KB1GMX

4578. Re: uk.radio.amateur et al, a FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-15 05:59:43 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1129355983.364224.303280@o13g2000cwo.googlegroups.com>
Source record: 16861
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Cross-posts seem to have got lost somewhere.

Polymath wrote:
> Unless you get sacked and have to take up teaching
> because no one else will employ you.....
>
> Brian Reay wrote:
> >
> > I'm of the view that there is always work if you want it.

4579. Re: High Voltage Caps for Plate Supply ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-15 07:21:02 UTC
From: Rick Frazier <rickf@rickfrazier.com>
Message-ID: <4350AE03.B6CE0065@rickfrazier.com>
Source record: 16862

Asimov and Steve:

I would agree, designs for lower voltage operations (at 50% of spec) tend to be much more conservative, particularly when the actual cost differential isn't that great, but it really does seem to cut down the failure rate. Also agree on the 80% figure, and that's what I'm trying to achieve (at minimum) with the change to higher voltage caps, (and relayout of the pcb to use 10 caps). Even if I can't get the higher voltage 500V caps, I can still get nearly 20% margin at the nominal 3600volt DC level, leaving some extra capacity for an occasional surge... I remember testing 50 caps at a time in my "blast box" to see how long they would withstand their surge rating. Yep, more than a few disintegrated during the testing, and many bulged without actually coming apart, all within as little as a few hours at the rated surge voltage. If I remember correctly, I also saw about a 5% failure rating at rated voltage within a few hundred hours, though the particular units tested at that time weren't computer grade or inverter grade caps like the part numbers I'm currently looking for. Of course, testing with a higher ripple content always broke the caps down faster than nearly pure DC, but you'd expect that just from the heating effect of the ripple current alone. Sometimes I don't even want to think about the hours that were dedicated to finding caps with both a low leakage figure that had a decent margin, and a long life so they could be used on part of a product that spent about a third of it's time on (lithium) battery power.

Most caps are no longer marked for surge, but the datasheets typically show the surge rating. Unfortunately, you have to be very careful with surge figures, because some manufacturers seem to provide "absolute maximum" ratings instead of safe "momentary" surge ratings. Of course, it's up to the purchaser to determine whether the published ratings are satisfactory for the intended use (as I was quoted on many an occasion when inquiring of the manufacturer in years past. Just try to get a manufacturer to state in writing what they mean by "momentary"...

Having performed "accelerated aging" tests to help determine the failure rate of stressed components, and compared it to actual field failures, I know that it isn't an exact science by any means. At least this is only a capacitor. Just try to get decent information on a battery (numerous experiments with lithium thionyl chloride types comes immediately to mind...) is like searching for chickens with teeth. If capacitor manufacturers treat their products like some battery manufacturers did 10 years ago, it's a wonder they even stamp a rating on them... Of course, a tolerance rating of -10%, +50% on a capacitor should be a telling item to begin with...
[sigh]

Thanks for the response.
--Rick

Asimov wrote:

> "Rick Frazier" bravely wrote to "All" (14 Oct 05 07:08:21)
> --- on the heady topic of "High Voltage Caps for Plate Supply ??"
>
> RF> From: Rick Frazier <rickf@rickfrazier.com>
> RF> Xref: core-easynews rec.radio.amateur.homebrew:88241
>
> RF> I have an Ameritron AL-1200 amplifier, and it came (used) with a
> RF> capacitor problem.
> [,,,]
> RF> I was in high tech engineering (computers and peripherals) for 20
> RF> years, and we never ran electrolytics at anywhere near their rated
> RF> voltage. Permissible margins for low voltage DC circuits were 50% or
> RF> more margin. Typical rule of thumb was 100% margin (a 10 volt cap
> RF> running on nominal 5 volt line, etc.). Even in an industry where every
> RF> penny of component cost was significant, submitting a design with
> RF> electrolytics running with as little 25% margin typically got a less
> RF> than stellar response during design reviews, to say the least.
> [,,,]
> RF> Thanks
> RF> --Rick AH7H
>
> Rick, it is okay to run electro's at about 80% of their voltage spec.
> Electro's are formed at up to 140% of their final spec and can thus
> tolerate turn on surges. It is the turn-on surge spec that one should
> worry about because that is when the electro is vulnerable. At turn on
> an electro re-forms a little bit which draws a larger current than
> usual. If that current doesn't fall off rapidly enough the electro can
> become damaged and leak permanently. In the old days electros used to
> be stamped with both surge and working voltage ratings.
>
> Isn't using an electro at 50% of spec rather conserative? I might
> understand being this prudent with semiconductors. An electro also has
> a leakage current spec at the rated working voltage. There isn't a
> direct linear relation between voltage and leakage. The relation is
> more like a reverse exponential and the leakage current drops off a
> lot more at a lower percent of rated voltage.
>
> A*s*i*m*o*v
>
> ... Paul's Law: You can't fall off the floor.

4580. Prompted by Leigh Preece M5GWH - The weekly FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-15 12:16:55 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1129378615.875533.71890@f14g2000cwb.googlegroups.com>
Source record: 16863
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

What is Ham Radio?

(Nothing whatsoever to do with Leigh Preece M5GWH
and his infantile Childish Broadcasts (CB), that's
for sure!)

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of Radio Hams but who are in reality nothing more than an apology for the failure of a CBer are those class B licensees who falsely proclaimed that they were against the use of a Morse Test to control access to the HF bands, until, that is, a test was introduced at their intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to enable them to handle even the simplest algebraic manipulation for Ohm's Law and thus, the disgraceful Class Ber's in the aforementioned category are not Radio Hams by any stretch of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds, or has ever held, a licence issued under the gangrenous degeneration that is the M3/CB Fools' Licence scheme!

4581. Re: Prompted by Leigh Preece M5GWH - The weekly FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-15 13:09:54 UTC
From: tox <tox@eternal-flames.gov>
Message-ID: <Cc74f.1041$cA4.529@newsfe3-gui.ntli.net>
Source record: 16864
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1129378615.875533.71890@f14g2000cwb.googlegroups.com...

Coming to Llandudno, Gareth? Will you be eavesdropping in, on my private
conversations again?

You really are a stupid boy!

tox

4582. Re: Prompted by Leigh Preece M5GWH - The weekly FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-15 13:19:42 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1129382382.232309.107480@o13g2000cwo.googlegroups.com>
Source record: 16865
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Cross-posted groups somehow lost.

Must pay better attention!

Polymath wrote:
> Au contraire!.....
>
> "simply leaving the newsgroup to you and your
> silly 'Weekly FAQ' "
>
> "Maybe you should look up the structure and convention of an internet
> FAQ"
>
> If you think that you are a normal person (I have my doubts
> thereto) then, yes, do put it on your website.
>
> Leigh Preece wrote:
> > > (Nothing whatsoever to do with Leigh Preece M5GWH
> > > and his infantile Childish Broadcasts (CB), that's
> > > for sure!)
> >
> > Not prompted by me at all.
> >
> > Seems it's now becoming twice weekly.
> >
> > Most normal people would put this onto their own website by now.
> >
> > Take anything it contains at face value.
> >
> > Make up your own mind as to what is fact and what is not.
> >
> > Only then will you understand.

4583. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-15 13:35:59 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <3B74f.437160$x96.227112@attbi_s72>
Source record: 16866
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Hello Joerg, nice to meet you for the first time.

Bill W0IYH

"Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
news:vXW3f.1513$D13.478@newssvr11.news.prodigy.com...
> Hello William,
>
>> Get a copy of Amidon's catalog which gives detailed suggestions for
>> powdered iron and ferrite materials, based on many years of experience.
>> www.amidoncorp.com
>>
>
> Absolutely. I literally wore one of those catalogs to the point where you
> could see through several pages.
>
> Then there are the ARRL Handbook and their Antenna Book. Both well worth
> every penny.
>
> Regards, Joerg
>
> http://www.analogconsultants.com

4584. MFJ homebrew parts?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-15 14:38:57 UTC
From: Denton <denton@oregontrail.net>
Message-ID: <11l25489e7d33f3@corp.supernews.com>
Source record: 16867

I notice in the new 2006 MFJ catalog there is listed several roller inductors, turns counter and crank, among various sundry parts for homebrewing. Their prices seem to be most resonable....wonder how good their quality?
I am looking to procure a roller inductor, turns counter plus crank for a homebrew ant tuner.

4585. Re: Receiver bandwidth .. dayton filter find!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-15 14:52:50 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <6J84f.437250$x96.418250@attbi_s72>
Source record: 16868

A common mistake in years past was to try to put all of the selectivity into a single super-deluxe crystal, mechanical or digital filter. These filters quite often have "raspy" noise interference at the edges of the passband (especially in CW mode) due to the enhancements of spectral noise peaks at the very sharp band edges, caused by the conversion of the phase statistics of noise to amplitude statistics (each edge of the filter acts like a phase disciminator). This raspy noise interferes with weak signals.

The filter can be equalized for group delay, as mentioned, with improvement in the problem. The band edges can be softened, with good results. A much better way is to use two or more intermediate-performance filters in cascade. This method softens the edges so that the effect is greatly reduced. It also improves overall shape factor. A cascade in this manner of identical bandpass or audio lowpass filters tends in the limit toward the Bessel or even the Gaussian response. Digital filters can also use a method called Transition Band Sampling (see Oppenheim and Schafer 1975 or Oppenheim and Willsky 1983). All of these results are related in principle to the Central Limit Theorem of statistics.

The cascaded filter approach is also very beneficial in other respects, in particular the reduction of wideband noise in high-gain IF amplifiers. This noise degrades AGC performance and adds audio frequency noise to the product detector output.

Bill W0IYH

"Dale Parfitt" <par@parelectronics.com> wrote in message
news:b%X3f.301$W32.225@trnddc06...

> Just sweeping a filter designed for SSB would be fine I suppose. I
> recently had an opportunity to hear the difference between a stock FT-1000
> CW filter and one homebrewed with attention paid to group delay- the
> difference was very clear to hear- in favor of the homebrew filter.
> \
> Dale
>

4586. Re: High Voltage Caps for Plate Supply ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-15 15:50:49 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <s882l1tbgglfjoq37thmocf3jp8lfsboic@4ax.com>
Source record: 16869

On Fri, 14 Oct 2005 07:08:21 GMT Rick Frazier <rickf@rickfrazier.com>
wrote:

>I was in high tech engineering (computers and peripherals) for 20 years,
>and we never ran electrolytics at anywhere near their rated voltage.
>Permissible margins for low voltage DC circuits were 50% or more
>margin. Typical rule of thumb was 100% margin (a 10 volt cap running on
>nominal 5 volt line, etc.). Even in an industry where every penny of
>component cost was significant, submitting a design with electrolytics
>running with as little 25% margin typically got a less than stellar
>response during design reviews, to say the least.

Your margin would be determined by your tolerance for failure. If
you're making 10,000 units per year, each with 10 caps in them and
want to keep your cap related failures to less than, say, 10 per year,
then you need to be a lot more conservative than if you have a single
device with 10 caps in it that you want to keep your odds for failure
under 1% per year.

For most of the items I fix around here, I like to approach the
problem in a way that I can think of the solution as permanent, but
when you have a sample of just one, a 1% annual failure rate is about
as close to perfect as you'll ever get,

I'd say that for 450V caps, you're being much too conservative. We
have banks of 450V caps at work, each bank with about 200 caps in it.
They are used for energy storage and charged slowly and discharged
rapidly about every 5 minutes all day long. We have about 10 such
banks. We have occasional failures, maybe 1 cap every 3-4 years. We
don't think that's too bad.

I'm currently working on some upgrade banks which will have about 90
16,000 uF, 450V caps per bank. These will be run at 450V, and we'll
have 16 such banks in the second phase of the project. United
Chemi-Con doesn't seem to have any problem with this. We expect
occasional failures, but we also realize that anything else is just
being unrealistic.

C-D lists computer grade caps rated at 500 and 550 V, each with surge
ratings higher than that. United C-C does, too, but they admit that
their etched alum foil for those voltages is not as advanced as at
450V, so the energy density is not as high. This does not sound like
it would be a problem for you.

Another thing we noted with interest was that the C-D catalog said
that grading resistors were not necessary when installing caps in

series for higher voltages, especially if all the caps were from the same batch.

If I were you, I would just buy the caps you need/want at 450V, and then buy a couple of spares from the same batch. You would want to reform these if you ever needed them, but they would give you the necessary assurance that you'd be set for life.

-

Jim Adney jadney@vwtype3.org
Madison, WI 53711 USA

4587. Complete Heathkit Station

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-15 17:46:02 UTC
From: n5tde@earthlink.net
Message-ID: <ufb4f.15274$QE1.5719@newsread2.news.atl.earthlink.net>
Source record: 16870

SB 630, SB 200, SB 101 autopatch/swr/powersupply/speaker, untested, estate sale, needs power cable Octal plug/jack and wire-missing. No mic, I am keeping. Email direct to N5TDE@gardcircuits.com leave message for Ross or Kassey I will send JPGS back.
73s, N5TDE

4588. Re: Prompted by Leigh Preece M5GWH - The weekly FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-15 17:56:48 UTC
From: "Mr. E" <E@somewhere.invalid>
Message-ID: <dirft7$o2b$0@pita.alt.net>
Source record: 16871
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1129378615.875533.71890@f14g2000cwb.googlegroups.com...
> What is Ham Radio?

Please enlighten us as to who frequently asks this question?

Is it one of the voices in your head, because I see absolutely NO-ONE else asking it in the groups that you choose to post your weakly (spelling intentional) rant!

You complain about the lack of gentlemanly conduct, yet you incessantly post this insulting garbage, which you KNOW is unwelcome in all of the groups you inflict it upon. You really are a sociopathic imbecile, aren't you? Do grow up and learn how to behave youself properly, you pathetic little man.

4589. Re: Prompted by Leigh Preece M5GWH - The weekly FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-15 20:43:32 UTC
From: Conrad Poos <poos.conrad@gmail.com>
Message-ID: <URd4f.124262$RW.58167@fe2.news.blueyonder.co.uk>
Source record: 16872
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Mr. E wrote:
> You really are a sociopathic imbecile, aren't you? Do grow
> up and learn how to behave youself properly, you pathetic little man.

Polymathazine (Eggy 2,4-Dimethyl Beanoxide) should be taken with extreme caution by patients with cardiovascular disease and high blood pressure. Polymathazine is a potent psychobabble agent and increased pulse rate and transient hypotension have both been reported in some patients exposed to this toxic and irritating substance. Use Polymathazine cautiously in patients with a history of seizures since the substance tends to lower the seizure threshold and frequently leads to the red mist. In general, Polymathazine does not produce psychic dependence; however, gastritis, extreme nausea and vomiting, dizziness, and tremulousness have been reported. CHECK WITH YOUR DOCTOR AS SOON AS POSSIBLE if you experience changes in vision; Tourettes fucking syndrome, changes in breasts and nips; changes in menstrual cycle or moped; deep throat; hysterical laughing, genital rash, muscle spasms of face, neck, or arse; difficulty swallowing his crap; spunk gurning and bubbling; mask-like face; tremors of hands; restlessness; tension in legs or weakness of arms or legs; sonic diarrhoea and frequent nightmares.

Dr Poos

--
vy 73 de Conrad Poos

"Ich bin ein radio amateur"

4590. Re: Pulsing LEDs for higher efficiency

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-16 01:25:56 UTC
From: Tom Coates <tecoatesHatesSpam@comcast.net>
Message-ID: <YMmdnU7sTKSmMczeRVn-2Q@comcast.com>
Source record: 16873

Thanks, everyone, for the insights. I think I'll get it working without the pulsing and then reconsider.

It appears that what was described to me as a standard technique is much more experimental.

Tom, N3IJ

"Tom Coates" <tecoatesHatesSpam@comcast.net> wrote in message news:2-idnQXJaNeGAdDeRVn-rg@comcast.com...
> I want to build some emergency lighting equipment using LEDs and 12V. A
> friend told me that it is possible to get more light per Watt by pulsing the
> LED to instantaneous levels well above its average ratings.
>
> Is this true, if you include power consumed in the pulsing circuit?
>
> If it is, can anyone suggest a simple and cheap circuit and the appropriate
> operating values?
>
> The reason for the 12V requirement is that I'm also working on a solar
> charger for my transceiver batteries and want to use the same charger for
> the lighting batteries.
>
> Suggestions would be appreciated.
>
> Tom, N3IJ
>
>

4591. Re: High Voltage Caps for Plate Supply ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-16 02:19:32 UTC
From: Rick Frazier <rickf@rickfrazier.com>
Message-ID: <4351B8D6.5BB4C82B@rickfrazier.com>
Source record: 16874

Jim:

Thanks for the response.

Wow, with cap banks like you describe, there's some significant energy there... What are you working on, a pulsed cyclotron?

Let's see, given your 10 banks with 200 caps each, that's 2000 caps and only 1 failure every three years, your failure rate is nearly insignificant. With a failure rate that low and a cycle rate you described, I'm supposing you are charging them with nearly pure DC, but without knowing the application, it's hard to guess... Of course, 200 caps in parallel mean leakage of about 800ma, so you've got to have a pretty good supply charging those caps.

A bank of 90 caps at 16000uf each looks like 1.4 farads. That's an incredible amount of storage at first look. The leakage alone on a bank like that would be about 400ma. To charge them slowly, I'd be interested in knowing the charge time, and what is being used to limit the charge current. Is it an active supply with a ramped current, or as simple as really high wattage limiting resistors?

In the linear amplifier, there are really a couple of things that tend to kill the caps. First, the ripple current tends to heat the caps, which are in a relatively warm location to begin with, sitting right next to a fairly large transformer, and a full wave bridge just above them. The transmitting tube is on the "other side of the wall" so to speak, but I'm sure it does contribute to some heat in the area. I haven't had this particular amplifier up and running yet, so can't instrument it to find out what the temperatures are, but I wouldn't be surprised to find it at 50C or higher, as the cooling air is all directed into the tube chimney and no particular attention has been made to cooling the capacitor bank. Given the ripple current, I wouldn't be surprised to see 80C, which is dangerously near the rated temperature rating (at least for me). Next, we have the typical cycle service an amateur amplifier puts these through, with a nearly uncontrolled charge (limited somewhat by a series resistor in the primary supply for the first second or so on an initial power up), and the demands as the amplifier is used. Now, given that the capacitor bank is never fully discharged, and the voltage across the bank is 3600 volts, the transformer rated at only 0.8 amperes, and the amount of current required during typical transmission, the heating from ripple current is probably the biggest concern for the initial design.

However, given that I live in an area with less than perfect regulation of the incoming AC line, I tend to be a bit gun-shy about what I see personally as a "marginal" design. At my last QTH, the line voltage per our local Hawaiian Electric Light Company (HELCO) should have been between 230 and 240

volts. I was the last house on the end of a 1 mile run of utility poles, and the transformer, which was over 300 feet from the building, served only my house and workshop at the time. In my workshop, I ran a single phase to 3 phase solid state inverter for a 3 horsepower wood lathe. During a period of two years, even with rather sporadic use after the first year, I had four inverters fail, and the failure was always the input diode bridge. After the first failure, I instrumented the AC line and kept graphs on it. The line voltage ranged from 235 to 243 volts over the typical 24 hour period, and tended to be around 239 volts much of the time, which I see as the nominal voltage for that location. Unfortunately, there were times when the voltage would rise to as much as 255 volts for brief periods of time (usually only a few seconds, but one prolonged instance went over 15 seconds). I didn't actually catch any high line spikes during operation of my lathe, but there were times I forgot to turn off the inverter and would come back and find it dead in the water a couple of days later. I finally eliminated the problem by putting a buck/boost transformer in the circuit, reducing the nominal voltage to 227 volts. Now there is a definite possibility the particular inverter input bridge wasn't properly rated, or wasn't up to spec, but all problems went away once I got the line voltage down (and the observed spikes at or below 243 volts).

Now thinking about the amplifier, which is supposed to produce 3600 volts with a nominal 240 volt input. Given some likelihood of seeing spikes to 255 volts, I could easily imagine the capacitor bank seeing 3825 volts for as much as 15 seconds. OK, not a long time, considering the really big picture, but looking inside the amplifier and seeing that three of the bridging resistors (50K ohm, 7 watts) and 4 of the capacitors were replaced at some time in its history, I am tending towards getting more margin into the design.

My tolerance for failure is low. I would prefer to get this amplifier up to snuff, put it into service, and never have to open the case again. I know that's a fairly high goal, but the AL-1200 uses one of the longest lived tubes in this type of service, and I'm unlikely to overdrive it so long as I load it properly, as it can withstand 130 watts and both of my transceivers only put out 100 watts..

I can purchase the 450 volt capacitors for about $10 each, so the 10pc bank will cost me about a hundred dollars. Add another $25 for new resistors and $20 for the supplies to layout the PCB for 10 caps, I'm looking at $145 to have a 4500 volt capacitor bank. If I can get the 500 volt capacitors, they will likely cost $25 to $30 each (lower volume, fewer dealers, etc.) and I would have a 5000Volt capacitor bank for $295 to $345 out of pocket. If I just replaced the caps and resistors on the original PCB, I'd be out $125, but have a 3600 volt bank. With 500 volt capacitors I'd be at 4000 volts. Given the circumstances of apparent previous failure(s) and my low tolerance for failure 'on my watch', I would feel better having the extra headroom, even with a price premium well over double. (Funny how it comes around to the warm fuzzy feelings isn't it?) Of course, f I don't find a supplier for the 500 volt capacitors fairly soon, impatience will take over and I'll end up buying the 450 volt ones anyway!

Of course, in the back of my mind (and not previously mentioned) is the possibility of running the amplifier from the 220 volt tap on the transformer, which would give me 3925 volts nominal on the bank at 240 volts, and 4010 volts on the bank at 245 volts, and 4175 if I see the same sort of 255 volt spike at the new QTH. I've done dumber things in my life and could see a possibility of it happening in a moment of weakness, so I'm also buying some insurance by going to the higher voltage capacitors and the new PCB. The biggest reason to run a higher voltage would be to allow getting full legal output with a lower drive from the transceiver. I would prefer to run with less than 100 watts out from the transceiver, but thinking about it, it would likely only be about 10% or so less drive, so perhaps it isn't worth all the work for that reason alone.

Thanks
--Rick

Jim Adney wrote:

> On Fri, 14 Oct 2005 07:08:21 GMT Rick Frazier <rickf@rickfrazier.com>
> wrote:
>
> >I was in high tech engineering (computers and peripherals) for 20 years,
> >and we never ran electrolytics at anywhere near their rated voltage.
> >Permissible margins for low voltage DC circuits were 50% or more
> >margin. Typical rule of thumb was 100% margin (a 10 volt cap running on
> >nominal 5 volt line, etc.). Even in an industry where every penny of
> >component cost was significant, submitting a design with electrolytics
> >running with as little 25% margin typically got a less than stellar
> >response during design reviews, to say the least.
>
> Your margin would be determined by your tolerance for failure. If
> you're making 10,000 units per year, each with 10 caps in them and
> want to keep your cap related failures to less than, say, 10 per year,
> then you need to be a lot more conservative than if you have a single
> device with 10 caps in it that you want to keep your odds for failure
> under 1% per year.
>
> For most of the items I fix around here, I like to approach the
> problem in a way that I can think of the solution as permanent, but
> when you have a sample of just one, a 1% annual failure rate is about
> as close to perfect as you'll ever get,
>
> I'd say that for 450V caps, you're being much too conservative. We
> have banks of 450V caps at work, each bank with about 200 caps in it.
> They are used for energy storage and charged slowly and discharged
> rapidly about every 5 minutes all day long. We have about 10 such
> banks. We have occasional failures, maybe 1 cap every 3-4 years. We
> don't think that's too bad.
>
> I'm currently working on some upgrade banks which will have about 90
> 16,000 uF, 450V caps per bank. These will be run at 450V, and we'll
> have 16 such banks in the second phase of the project. United

> Chemi-Con doesn't seem to have any problem with this. We expect
> occasional failures, but we also realize that anything else is just
> being unrealistic.
>
> C-D lists computer grade caps rated at 500 and 550 V, each with surge
> ratings higher than that. United C-C does, too, but they admit that
> their etched alum foil for those voltages is not as advanced as at
> 450V, so the energy density is not as high. This does not sound like
> it would be a problem for you.
>
> Another thing we noted with interest was that the C-D catalog said
> that grading resistors were not necessary when installing caps in
> series for higher voltages, especially if all the caps were from the
> same batch.
>
> If I were you, I would just buy the caps you need/want at 450V, and
> then buy a couple of spares from the same batch. You would want to
> reform these if you ever needed them, but they would give you the
> necessary assurance that you'd be set for life.
>
> -
> ---
> Jim Adney jadney@vwtype3.org
> Madison, WI 53711 USA
> ---

4592. ** FLEA at MIT ** Sunday October 16th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-16 05:00:41 UTC
From: w1gsl@mit.edu
Message-ID: <4351de79$0$556$b45e6eb0@senator-bedfellow.mit.edu>
Source record: 16875
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

This Sunday.... The seasons last...

+++ Now even more Buyers Parking !!!
Thanks to TKT we have use of their new parking lot
across Albany St from the SWAPFEST !!!

!! ** More Buyers PARKING is available ** for details see
http://web.mit.edu/w1gsl/Public/flyer

*** !!!! In our Traditional GARAGE and the adjacent lot !!!! ****
so come rain or shine or super heat the Flea is on !!!

********* $1 buyers discount with hardcopy of this notice ********

COMPUTERS - ELECTRONICS - HAM RADIO - COMPUTERS - ELECTRONICS - HAM RADIO

FLEA all SUMMER at MIT
Sunday October 16th 2005
9AM-2PM

Come to the city for a great flea - plenty of free parking.

MIT's electronics and ham radio flea will take
place on the third Sunday of each month this summer,
April thru October.

There is tailgate space for over 600 sellers and
free, off-street parking for >2000 cars!

Buyers admission is $5 (you get $1 off if
you're lucky enough to have a copy of our ad)
and sellers spaces are $20 for the first and
$15 for each additional at the gate.

The flea will be held at the corner of Albany and
Main streets in Cambridge; right in the Kendall
Square area from 9AM to 2PM, with sellers set-up
time starting at 7AM.

SEASON PASS + Advance Seller Discount

A sellers discount season pass is available which
offers a 30% discount. By prepaying you get a
discount and earlier admission. See the registration form.

*** Attention Sellers ***
Prepaid vendors.. Season Pass or monthly,

will be admitted FIRST.
Separate lines will form prior to gate opening
for prepaid and nonprepaid vendors

!! RAIN or SHINE !! Have no fear of rain, a covered
well illuminated tailgate area is available for all
sellers (6'8" clearance).

Talk-in: 145.23- (PL 88.5) W1BOS/R and
W1XM/R-449.725/444.725 (PL 114.8/2A).

Sponsors: MIT Electronics Research Society
MIT UHF Repeater Association (W1XM)
MIT Radio Society (W1MX)
Harvard Wireless Club (W1AF)

For more info / advanced reservations 617 253 3776

********** $1 buyers discount with hard copy of this notice ***********

<<<<<<<<<<<<<<<<<<<<<<< cut here >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

Mail the coupon below by the 5th of the month to be a Prepaid Vendor.

FLEA at MIT 2005 Rates

SELLERS

To use your prepaid spaces the named vendor MUST be present.
Rates include one admission per space.

Advance $17 First space - includes $10 Cambridge Vendor License
$12 Additional Spaces
Must be received by the 5th of the month.

Gate Admission $20 First Space - includes $10 Cambridge Vendor License
$15 Additional Spaces
Admission is after the prepaid vendors

Early Bird Buyer -Admission after the prepaid vendor line is admitted. ~ 7:15AM
** You may not sell. **
$15 per person at the gate.

****************************** cut here ******************************

FLEA at MIT 2005 Advance Space Application

____April ____May ____June ____ July ____Aug ___Sept ____Oct
@ $17 for the first each month + $12 each additional

Name _____ Call _____ $ Included_____

Address _____ Phone _____ Make Check to
The MIT Radio Society
City _____ State _____ Zip _____ PO Box 397082
Cambridge MA 02139

E-mail _____

****
Steve Finberg W1GSL w1gsl@mit.edu
PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754
****

4593. Re: MFJ homebrew parts?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-16 05:30:03 UTC
From: Joe LeKostaj <joe@falseaddress2004.net>
Message-ID: <joe-BBB6EF.00300316102005@comcast.dca.giganews.com>
Source record: 16876

In article <11l25489e7d33f3@corp.supernews.com>,
"Denton" <denton@oregontrail.net> wrote:

> I notice in the new 2006 MFJ catalog there is listed several roller
> inductors, turns counter and crank, among various sundry parts for
> homebrewing. Their prices seem to be most resonable....wonder how good their
> quality?
>

Haven't seen that catalog so I don't know what quality of parts MFJ
offers these days. But I can tell you that I've had to repair my
MFJ-949B tuner a couple of times over the years. The rotor of one of the
variable capacitors was making intermittent contact with the wiping
contact and needed fixing. The inductor switch is a cheap-looking pot
metal thing that had a couple of intermittent positions and I wound up
replacing it with a better switch. I wasn't impressed with the quality
of those components. I hope they're using better parts these days.

--
Joe

4594. Re: OT: CQ Serenade

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-16 07:39:35 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <WBybpbG3OgUDFwVi@g3ohx.demon.co.uk>
Source record: 16877

In message <fmmck-0910051502190001@ac9c09e5.ipt.aol.com>, Fred McKenzie
<fmmck@aol.com> writes
>In article <t_ednc-vNbwuPqveRVn-ow@comcast.com>, "Johnson"
><jdwalton@comt.net> wrote:
>
>> a link posted on the French usenet group fr.rec.radio.amateur "CQ Serenade"
>> http://www.von-info.ch/hb9afo/histoire/NON-CQ_cq_serenade_fr.mp3
>
>You may also enjoy
>http://www.von-info.ch/hb9afo/histoire/cw-rythm.mp3
>
>73, Fred, K4DII

Interesting! Could be useful for anyone learning morse.
But the letters do sound a bit ragged. I hope nobody copies them
exactly.
Ian.
--

4595. Re: Receiver bandwidth .. dayton filter find!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-16 12:19:37 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <tzr4f.442399$_o.258073@attbi_s71>
Source record: 16878

"William E. Sabin" <w.sabin@mchsi.com> wrote in message
news:6J84f.437250$x96.418250@attbi_s72...

A couple of improvements in the following paragraph:

> The filter can be equalized for group delay, as mentioned, with
> improvement in the problem. The band edges can be softened, with good
> results. A much better way is to use two or more intermediate-performance
> filters in cascade. This method softens the edges so that the effect is
> greatly reduced. It also improves overall shape factor. A cascade in
> this manner of identical bandpass or audio lowpass filters tends in the
> limit toward the Bessel or even the Gaussian response. Digital filters
> can also use a method called Transition Band Sampling (see Oppenheim and
> Schafer 1975)

Delete the incorrect second Reference to Oppenheim and Willsky 1983.

> All of these results are related in principle to the Central Limit
> Theorem of statistics.

See http://mathworld.wolfram.com/CentralLimitTheorem.html for this
interesting topic. The general idea that the theorem alludes to in this
example is that as sharp-cornered filters are cascaded the passband response
becomes noticeably more rounded at the corners, similar to Bessel and
Gaussian filters.

Smoothing and Windowing methods can be used to reduce sharp corners in
discrete sequences such as digital filters (see Oppenheim and Schafer 1975
and many other sources).

Bill W0IYH

4596. I seem to have forgotten the weekly FAQ, don't panic, here it is!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-16 17:48:57 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1129484937.573780.64550@g44g2000cwa.googlegroups.com>
Source record: 16879
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,

competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B

licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

4597. Re: I seem to have forgotten the weakly FAQ, don't panic, here it is!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-16 17:50:52 UTC
From: Walter Raleigh <walterraleigh69@hotmail.com>
Message-ID: <1qw4f.17239$R5.1675@news.indigo.ie>
Source record: 16880
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1129484937.573780.64550@g44g2000cwa.googlegroups.com...
> What is Ham Radio?

Oh thank you Gareth, we were all getting so worried...

--
73s de Walter R.

4598. Re: I seem to have forgotten the weekly FAQ, don't panic, here it is!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-16 18:39:11 UTC
From: "Mr. E" <E@somewhere.invalid>
Message-ID: <diu6oissc0@pita.alt.net>
Source record: 16881
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

So far in the last 7 days you have posted this three times.
13 October 2005 18:15:03
15 October 2005 13:16:55
16 October 2005 18:48:57
You appear to have short term memory loss.

Also, please answer my earlier question - exactly who is asking this supposedly frequently asked question that makes you post your diatribe? The voices in your head do NOT count, and I have not seen anybody else ask what ham radio is.

You really are a pathetic little man.

4599. Re: I seem to have forgotten the weekly FAQ, don't panic, here it is!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-16 19:06:13 UTC
From: "G1LVN (for it is he)" <gareth.paley@gmail.com>
Message-ID: <diu8b5rvv1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 16882
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Mr. E" <E@somewhere.invalid> wrote in message
news:diu6oissc0@pita.alt.net...
> So far in the last 7 days you have posted this three times.
> 13 October 2005 18:15:03
> 15 October 2005 13:16:55
> 16 October 2005 18:48:57
> You appear to have short term memory loss.
>
> Also, please answer my earlier question - exactly who is asking this
> supposedly frequently asked question that makes you post your diatribe?
> The voices in your head do NOT count, and I have not seen anybody else ask
> what ham radio is.
>
> You really are a pathetic little man.
>

Coast is clear he'll have falling into a stupor by now.

--
73deG1LVN
Join t eh Campaign now for MB7IHW!!
http://www.g1lvn.org.uk/unattended/

4600. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-16 19:51:59 UTC
From: Jeff <jeff_164@NOSPAMhotmail.com>
Message-ID: <Cby4f.795$S24.49570@news.xtra.co.nz>
Source record: 16883
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Hi Guys,
Results of the build and test were that the 7Mhz HPF worked very well with the "6" grade cores, but the 20Mhz LPF was crap (it used #6 as well). It started to roll off at 20Mhz as expected, dropped smoothly to -10dB by the time it got to 40Mhz, then stayed at 10dB at all frequencies above 40Mhz. I suppose the core should be a grade #10 or #12 instead of #6? or perhaps just a normal air core?
JEFF

"Jeff" <jeff_164@NOSPAMhotmail.com> wrote in message
news:mQe3f.76$S24.9081@news.xtra.co.nz...
> Thanks for all the suggestions. Ive got some Amidon T68-6 toroids to wind
> up, and will test the completed filter on a spectrum analyser next week.
> JEFF
>
> "Jeff" <jeff_164@NOSPAMhotmail.com> wrote in message
> news:drW2f.17270$iM2.1412876@news.xtra.co.nz...
> > Hi,
> > Im confused regarding the choice of iron powder toroid for a 7Mhz high
> pass
> > filter. I need to use a small size (T68) toroid. For the freq range,
some
> > reference texts say T68-2 is the one, others say T68-6" grade. I see
> > differing "best Q range" specs for the 6
> > grade.....2-30Mhz......10-50Mhz...etc.
> > Have similar need for 20Mhz LPF, but assume "6" is really the choice
> there.
> > Any suggestions as to the relative differences and reasons to choose
> between
> > grades 2 and 6 for the HPF in T68 size?
> > Thanks,
> > JEFF
> >
> >
>
>

4601. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-16 21:11:37 UTC
From: "Harold E. Johnson" <w4zcb@mchsi.com>
Message-ID: <dmz4f.443212$_o.59199@attbi_s71>
Source record: 16884
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

"Jeff" <jeff_164@NOSPAMhotmail.com> wrote in message
news:Cby4f.795$S24.49570@news.xtra.co.nz...
> Hi Guys,
> Results of the build and test were that the 7Mhz HPF worked very well with
> the "6" grade cores, but the 20Mhz LPF was crap (it used #6 as well). It
> started to roll off at 20Mhz as expected, dropped smoothly to -10dB by the
> time it got to 40Mhz, then stayed at 10dB at all frequencies above 40Mhz.
> I suppose the core should be a grade #10 or #12 instead of #6? or perhaps
> just a normal air core?
> JEFF

Then you haven't built the filter that you designed. The choice of core material will not affect the blow-by. If you measured the inductors at a low frequency, I would be pretty certain that you have way too much inductance at 20-40 MHz.

W4ZCB

4602. Re: High Voltage Caps for Plate Supply ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-16 21:34:51 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <d485l1p6d4i7uq944ie0ukncrquc05pdtr@4ax.com>
Source record: 16885

On Sun, 16 Oct 2005 02:19:32 GMT Rick Frazier <rickf@rickfrazier.com>
wrote:

>Wow, with cap banks like you describe, there's some significant energy
>there... What are you working on, a pulsed cyclotron?

Plasma physics research facility. 2-4 minute charge cycle, 70 mSec
discharge. These banks supply the crowbar, or "follow-on," current
once the big 5 kV banks have discharged down. Yes the charging
supplies are large, and the future ones will have to be even larger.
We tend to go for some kind of constant current scheme, up to the
preset voltage limit.

I don't think our leakage current is nearly as high as you suggest.
The caps tend to form nicely after awhile and the leakage current
ramps down with use. Until one fails, of course. ;-)

>A bank of 90 caps at 16000uf each looks like 1.4 farads. That's an
>incredible amount of storage at first look. The leakage alone on a bank like
>that would be about 400ma.

I rounded. We're actually shooting for individual banks of .3F at
900V, so that takes 1.2F of 450V caps, times 16 of these banks.
Charge/discharge is as above, leakage should be less that what you
suggest, but I could be wrong about that.

>In the linear amplifier, there are really a couple of things that tend to
>kill the caps. First, the ripple current tends to heat the caps, which are
>in a relatively warm location to begin with, sitting right next to a fairly
>large transformer, and a full wave bridge just above them.

I don't know how much internal heating you'll get, but temp is
certainly something to be concerned with. Our application stays pretty
much at room temp.

>However, given that I live in an area with less than perfect regulation of
>the incoming AC line, I tend to be a bit gun-shy about what I see personally
>as a "marginal" design. At my last QTH, the line voltage per our local
>Hawaiian Electric Light Company (HELCO) should have been between 230 and 240
>volts. I was the last house on the end of a 1 mile run of utility poles, and
>the transformer, which was over 300 feet from the building, served only my
>house and workshop at the time. In my workshop, I ran a single phase to 3
>phase solid state inverter for a 3 horsepower wood lathe. During a period of
>two years, even with rather sporadic use after the first year, I had four
>inverters fail, and the failure was always the input diode bridge.

Did you consider upgrading the input bridge? I agree that excessive
line voltage is a problem, but the bridge was clearly your weak link.

>After the
>first failure, I instrumented the AC line and kept graphs on it. The line
>voltage ranged from 235 to 243 volts over the typical 24 hour period, and
>tended to be around 239 volts much of the time, which I see as the nominal
>voltage for that location. Unfortunately, there were times when the voltage
>would rise to as much as 255 volts for brief periods of time (usually only a
>few seconds, but one prolonged instance went over 15 seconds).

I think the surge ratings for Al caps are for a 30 second surge.

>OK, not a long time, considering the really big picture,
>but looking inside the amplifier and seeing that three of the bridging
>resistors (50K ohm, 7 watts) and 4 of the capacitors were replaced at some
>time in its history, I am tending towards getting more margin into the
>design.

I agree that there's often room for improvement in amateur gear.
Upping the resistor power ratings might be useful, too. If they run in
the same ambient, then they should also be derated.

>My tolerance for failure is low. I would prefer to get this amplifier up to
>snuff, put it into service, and never have to open the case again.

I agree with your goal, and I don't think running 450V caps at 450V
will come back to haunt you. Just make sure that the 30 second surge
rating is above the highest voltage you think you'll ever see.

>Of course, in the back of my mind (and not previously mentioned) is the
>possibility of running the amplifier from the 220 volt tap on the
>transformer, which would give me 3925 volts nominal on the bank at 240 volts,
>and 4010 volts on the bank at 245 volts, and 4175 if I see the same sort of
>255 volt spike at the new QTH.

With 10 caps, that's still less than 420 V/cap. I don't think that's
any problem at all.

-

Jim Adney jadney@vwtype3.org
Madison, WI 53711 USA

4603. 40/50 Mix toroid specs?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-17 00:24:44 UTC
From: TRABEM <>
Message-ID: <rnr5l1dk0qce2ngf62nqa20fs5f676td5u@4ax.com>
Source record: 16886

I have an old bag of toroids, I've had them for 25 years and I have no idea how long the previous owner had them before me.

The label on the bag says:

40/50 mix

They are about 15/16" OD, 9/16" and are 5/16" thick. They are green (ID/OD and one side) and yellow on the remaining surface.

I would like to use them in a frequency sensitive application, so I really need to know what a '40/50 mix' means.

I've googled, got nothing. When I included "toroid", got nothing even close when I left it out I got things like recipes, motor oil spec's etc.

I think the 40/50 mix is the old method of grading the material, but I can't seem to find anything about it on the web.

Any idea what this mix is good for?

Thanks,

T

4604. Re: 40/50 Mix toroid specs?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-17 01:00:23 UTC
From: Bill <exray@coqui.net>
Message-ID: <8e0a6$4352f7ab$4232bd7b$17075@COQUI.NET>
Source record: 16887

TRABEM wrote:

> Any idea what this mix is good for?
>
> Thanks,

Nope. Wind and test a few examples and you can probably get into a ballpark.

If they are power supply toroids vs rf toroids, or ferrite vs powdered iron, that will quickly become obvious. The way the surplus market goes, most "found" toroids are power supply types and only good for that application.

-Bill

4605. Re: Pulsing LEDs for higher efficiency

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-17 01:23:54 UTC
From: novatech@eskimo.com
Message-ID: <diuufa$e25$1@eskinews.eskimo.com>
Source record: 16888

Wim Lewis <wiml@hhhh.org> writes:

>On the other hand, I also found some articles on pulsed LEDs saying
>the opposite --- that the percieved brightness of a pulsed source
>is closer to the peak brightness than to the average brightness.
>It might be worthwhile tracking down some actual experimental data,
>or doing an experiment yourself...

>--
> Wim Lewis <wiml@hhhh.org>, Seattle, WA, USA. PGP keyID 27F772C1

HP used to have a nice app note on this. The main trick is that the eye responds most nearly to intensity, which is close to being proportional to the square of the brightness (analogous to power vs voltage). Just like "pulsey" currents have higher RMS values, "pulsey" light can have a higher intensity. The eye acts as a smoothing filter. This is a well known trick in lots of lighting and display areas. If you really care, you can use LEDs as "catch" diodes in switching regulator circuits to get some pretty amazing "lumens per watt."

Steve.
--
Steven D. Swift, novatech@eskimo.com, http://www.novatech-instr.com
NOVATECH INSTRUMENTS, INC. P.O. Box 55997
206.301.8986, fax 206.363.4367 Seattle, Washington 98155 USA

4606. Free: Radiotron Designer's Handbook, 4th Edition

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-17 07:34:38 UTC
From: Me <me@myisp.net>
Message-ID: <1129534498.bb01b1e635972b5cd17b9a3805016cb8@teranews>
Source record: 16889

http://thepiratebay.org/details.php?id=3397758

4607. Spectrum analyser adaptor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-17 14:34:58 UTC
From: John Livingston <john.livingston@REMOVETHISbtinternet.com>
Message-ID: <MPG.1dbdc6dd88e03cc989682@news.btinternet.com>
Source record: 16890
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,uk.tech.broadcast

Can anyone point me at a source for a servicing and calibration manual
for a TTI TSA250 spectrum analyser adaptor ? Emails to TTi get no reply
...
I've got the user manual, but that's no help.
Failing a manual - info on which preset does what would be useful.

John L
York, UK

4608. Re: MFJ homebrew parts?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-17 18:14:58 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dj0pn5$f4v$1@engnntp2.cig.mot.com>
Source record: 16891

MFJ has a dubious quality reputation from comments around these parts. They make Ham quality stuff and you must expect that. I'm not saying it's bad, just not gold plated and super high quality. Remember quality = $$. (thought he converse isn't always true) My roller inductor developed an intermittent after a few years and I had to solder one of the contacts - hard to get to, but the thing works ok as far as I can tell.
I have an older one, I think 986, two knob "T". It has matched my 40M dipole on 75!

73, Steve, K9DCI

"Denton" <denton@oregontrail.net> wrote in message news:11l25489e7d33f3@corp.supernews.com...
> I notice in the new 2006 MFJ catalog there is listed several roller
> inductors, turns counter and crank, among various sundry parts for
> homebrewing. Their prices seem to be most resonable....wonder how good their
> quality?
> I am looking to procure a roller inductor, turns counter plus crank for a
> homebrew ant tuner.
>
>

4609. Re: Pulsing LEDs for higher efficiency

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-17 18:23:49 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dj0q7lfhp1@engnntp2.cig.mot.com>
Source record: 16892

"Tom Coates" <tecoatesHatesSpam@comcast.net> wrote in message
news:YMmdnU7sTKSmMczeRVn-2Q@comcast.com...
> Thanks, everyone, for the insights. I think I'll get it working without
the
> pulsing and then reconsider.
>
> It appears that what was described to me as a standard technique is much
> more experimental.
>
> Tom, N3IJ
>
> "Tom Coates" <tecoatesHatesSpam@comcast.net> wrote in message
> news:2-idnQXJaNeGAdDeRVn-rg@comcast.com...
> > I want to build some emergency lighting equipment using LEDs and 12V. A
> > friend told me that it is possible to get more light per Watt by pulsing
> the LED to instantaneous levels well above its average ratings.
> >
> > Is this true, if you include power consumed in the pulsing circuit?
> > Tom, N3IJ

Good luck...However. I did find one Agilent ap note about LEDs , but it
didn't mention pulsed vs. non-pulsed brightness...much.

I did build a pulsed LED driver a long time ago. It used an inductor and
comparator. Turn on switch in series with LED, inductor (tried 1mH first)
and supply. When current ramps up to the desired, turn off switch. A
"catch" or "fly-wheel" diode then conducts current through LED & inductor
while current decays to a lower level where switch turns on. Neat to see
the supply current less than the LED current.

73, Steve, K9DCI

4610. Re: epoxy instead of solder?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-17 18:27:33 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dj0qelfld1@engnntp2.cig.mot.com>
Source record: 16893
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"John Fields" <jfields@austininstruments.com> wrote in message
news:haf8k1hs7u06ru7lgp10dpa81s1mdm37t3@4ax.com...
> On Wed, 05 Oct 2005 16:10:40 -0400, TRABEM <> wrote:
>
> >Has anyone tried Masterbonds conductive epoxy for attaching SMT
> >components to a printed circuit board?
> >
> >Seems like a great idea, especially if it works well:>:
>
> ---
> Aside from the resistivity of the epoxy, the largest problem I see
> is throughput. That is, where are you going to store all those
> boards while the epoxy is curing?
> Plus, it makes it really messy for the salvagers/recyclers.
> -- John Fields Professional Circuit Designer

In a production line they would probably use UV curing epoxies. They
already do, but not for solder substitute.
73, Steve, K9DCI

4611. power formula for vswr?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-17 21:41:33 UTC
From: hexter@blazenet.net
Message-ID: <11l86kdffmec9c1@corp.supernews.com>
Source record: 16894

If I know only the power in dbm is there a formula to arrive at
vswr without conversion first to watts or volts?

outbound = +63dbm (2kw)
reflected = +36dbm (4w)

This is a waveguide system with a dummyload connected in
the event the numbers seem improper.

I would like to use the formula when we connect the real antenna.

4612. Re: power formula for vswr?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-17 22:03:43 UTC
From: Paweł Stobiński <sq9nry_nospammers@wp.pl>
Message-ID: <dj173u$e5b$1@achot.icm.edu.pl>
Source record: 16895

Gudmundur wrote:
> If I know only the power in dbm is there a formula to arrive at
> vswr without conversion first to watts or volts?
>
> outbound = +63dbm (2kw)
> reflected = +36dbm (4w)
>

Take the formula for calculating vswr from P in watts, previously converting
the dBm into W.
You'll get the following vswr=(1+10^(0.5*(Pout-Pref)))/(1-10^(0.5*(Pout-Pref))).

Regards,
Paweďż˝ Stobiďż˝ski, SQ9NRY

4613. Re: Free: Radiotron Designer's Handbook, 4th Edition

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-18 01:41:31 UTC
From: hhc314@yahoo.com
Message-ID: <1129599691.023532.194420@o13g2000cwo.googlegroups.com>
Source record: 16896

Thanks for sharing. I downloaded it with Bit Torrent this morning.

Harry C.

4614. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-18 02:15:08 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <MUY4f.1931$dO2.1625@newssvr29.news.prodigy.net>
Source record: 16897
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Hello Bill,

> Hello Joerg, nice to meet you for the first time.
>

Likewise. You name sounds very familiar, IIRC from a book about design of HF gear. Didn't you work at Collins in the good old days when they had mechanical filters in their gear?

Regards, Joerg

http://www.analogconsultants.com

4615. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-18 09:09:00 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <MY25f.493976$xm3.194708@attbi_s21>
Source record: 16748
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Yes. I started at Collins Radio engineering department in 1964 and retired from Rockwell Collins in 1990. For more info search Google for my name and my call sign. See QRZ.COM for W0IYH. See www.noblepub.com.

Bill W0IYH

"Joerg" <notthisjoergsch@removethispacbell.net> wrote in message news:MUY4f.1931$dO2.1625@newssvr29.news.prodigy.net...
> Hello Bill,
>
>> Hello Joerg, nice to meet you for the first time.
>>
>
> Likewise. You name sounds very familiar, IIRC from a book about design of
> HF gear. Didn't you work at Collins in the good old days when they had
> mechanical filters in their gear?
>
> Regards, Joerg
>
> http://www.analogconsultants.com

4616. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-18 13:49:48 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4354FDA4.196B67C2@earthlink.net>
Source record: 16749
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

"William E. Sabin" wrote:
>
> Yes. I started at Collins Radio engineering department in 1964 and retired
> from Rockwell Collins in 1990. For more info search Google for my name and
> my call sign. See QRZ.COM for W0IYH. See www.noblepub.com.
>
> Bill W0IYH

Did you ever work on their microwave receiver designs?

--
?

Michael A. Terrell
Central Florida

4617. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-18 14:48:47 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <jX75f.442295$x96.129381@attbi_s72>
Source record: 16750
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Hello, Mike,

I had a little experience with some military L-band RF design (JTIDS), but that is about all. I have also designed miniature lumped-element filters for the 3 GHz region. But most of my work and also my ham radio experience have been at HF. Also, I am mostly, but not entirely, an analog specialist, which has put me somewhat into the Jurassic Age.

Bill W0IYH

"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message news:4354FDA4.196B67C2@earthlink.net...
> "William E. Sabin" wrote:
>>
>> Yes. I started at Collins Radio engineering department in 1964 and
>> retired
>> from Rockwell Collins in 1990. For more info search Google for my name
>> and
>> my call sign. See QRZ.COM for W0IYH. See www.noblepub.com.
>>
>> Bill W0IYH
>
>
> Did you ever work on their microwave receiver designs?
>
> --
> ?
>
> Michael A. Terrell
> Central Florida

4618. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-18 16:45:51 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <3F95f.2019$dO2.694@newssvr29.news.prodigy.net>
Source record: 16751
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Hello Bill,

> ... Also, I am mostly, but not entirely, an analog specialist,
> which has put me somewhat into the Jurassic Age.
>

Not really. Newly minted engineers know remarkably little about analog techniques. Yet at the beginning and the end of circuits stuff usually needs to connect to the analog world. So don't be surprised when someone begs you to do just one more stint when you are past 90.

Then again a SW engineer once told me that nothing is truly analog. There is always that smallest digital step, the quantum.

Regards, Joerg

http://www.analogconsultants.com

4619. Re: power formula for vswr?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-18 19:42:00 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <cec5f.11136$456.8299@trnddc08>
Source record: 16752

Paweďż˝ Stobiďż˝ski wrote:
> Gudmundur wrote:
>
>> If I know only the power in dbm is there a formula to arrive at
>> vswr without conversion first to watts or volts?
>>
>> outbound = +63dbm (2kw)
>> reflected = +36dbm (4w)
>>
>
> Take the formula for calculating vswr from P in watts, previously
> converting the dBm into W.
> You'll get the following
> vswr=(1+10^(0.5*(Pout-Pref)))/(1-10^(0.5*(Pout-Pref))).
>
>
> Regards,
> Paweďż˝ Stobiďż˝ski, SQ9NRY

SWR = -1?

4620. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-18 20:03:44 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43555560.1FB470CD@earthlink.net>
Source record: 16753
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

"William E. Sabin" wrote:
>
> Hello, Mike,
>
> I had a little experience with some military L-band RF design (JTIDS), but
> that is about all. I have also designed miniature lumped-element filters
> for the 3 GHz region. But most of my work and also my ham radio experience
> have been at HF. Also, I am mostly, but not entirely, an analog specialist,
> which has put me somewhat into the Jurassic Age.
>
> Bill W0IYH

There is no reason to apologize for being good with analog. ;-) I
worked as a broadcast engineer during the time they announced the first
memory chip, (1101) which was a slow, noisy 256 bit * 1 DRAM with very
critical timing. I also did analog and digital work on the microwave
equipment built at Microdyne, before L3-Com closed the Ocala plant.

The reason I asked about the microwave equipment, I would like to
meet the people who designed the C-band CATV receivers I had to maintain
in the '80s. I always loved Collins equipment, till I ran into those
radios. They had a horrible failure rate, and took over six months to
have serviced by Collins. I think I still have a set of manuals for
the fixed tuned, and the agile models. I started repairing them for
United Video in 1982, and could return most of them to service the same
day.

--
?

Michael A. Terrell
Central Florida

4621. Re: power formula for vswr?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-18 20:41:55 UTC
From: Paweł Stobiński <sq9nry_nospammers@wp.pl>
Message-ID: <dj3mmjopt1@achot.icm.edu.pl>
Source record: 16754

John - KD5YI wrote:
> SWR = -1?

Right, a little oversight. Swap Pout for Pref.

Regards,
Paweďż˝ Stobiďż˝ski, SQ9NRY

4622. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-18 23:55:53 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <dYf5f.2069$dO2.505@newssvr29.news.prodigy.net>
Source record: 16755
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Hello Michael,

> There is no reason to apologize for being good with analog. ;-) I
> worked as a broadcast engineer during the time they announced the first
> memory chip, (1101) which was a slow, noisy 256 bit * 1 DRAM with very
> critical timing. I also did analog and digital work on the microwave
> equipment built at Microdyne, before L3-Com closed the Ocala plant.
>

Seems you started with digital stuff a year or two earlier than I did.
My first RAM had a whopping 1024 bits. Not bytes, bits. 21...something,
I could look it up since the device where its in still works.

> The reason I asked about the microwave equipment, I would like to
> meet the people who designed the C-band CATV receivers I had to maintain
> in the '80s. I always loved Collins equipment, till I ran into those
> radios. They had a horrible failure rate, ...

But their HF radios were quite reliable. Unfortunately at that time out
of my budget range, and so were those nice mechanical filters :-(

Regards, Joerg

http://www.analogconsultants.com

4623. poor man's network analyzer ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 00:11:04 UTC
From: "john w." <jwallacq@hotmail.com>
Message-ID: <1129680664.582016.285580@f14g2000cwb.googlegroups.com>
Source record: 16756

Looking for suggestions / construction articles on how to make a "poor man's network analyzer" for the HF frequency range by using either an I/Q demodulator chip or else a precision phase & gain measuring chip like the AD8302.

I would swear that I had seen an article on this topic someplace, about a year ago. But I've lost the article, and I just spent several hours of fruitless Internet searching.

Thanx in Advance! john w.

4624. Re: poor man's network analyzer ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 00:45:54 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <6Hg5f.4577$t12.3547@trnddc03>
Source record: 16757

"john w." <jwallacq@hotmail.com> wrote in message
news:1129680664.582016.285580@f14g2000cwb.googlegroups.com...
>
> Looking for suggestions / construction articles on how to make a "poor
> man's network analyzer" for the HF frequency range by using either an
> I/Q demodulator chip or else a precision phase & gain measuring chip
> like the AD8302.
>
> I would swear that I had seen an article on this topic someplace, about
> a year ago. But I've lost the article, and I just spent several hours
> of fruitless Internet searching.
>
> Thanx in Advance! john w.
> See the Kanga site for the W7ZOI analyzer:
http://www.bright.net/~kanga/kanga/w7zoi/products/spectrum_analyzer.htm

W4OP

4625. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 01:56:38 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4355A812.CB7B0BEB@earthlink.net>
Source record: 16758
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Joerg wrote:
>
> Hello Michael,
>
> > There is no reason to apologize for being good with analog. ;-) I
> > worked as a broadcast engineer during the time they announced the first
> > memory chip, (1101) which was a slow, noisy 256 bit * 1 DRAM with very
> > critical timing. I also did analog and digital work on the microwave
> > equipment built at Microdyne, before L3-Com closed the Ocala plant.
> >
>
> Seems you started with digital stuff a year or two earlier than I did.
> My first RAM had a whopping 1024 bits. Not bytes, bits. 21...something,
> I could look it up since the device where its in still works.

2114? 1K * 4 bits?

> > The reason I asked about the microwave equipment, I would like to
> > meet the people who designed the C-band CATV receivers I had to maintain
> > in the '80s. I always loved Collins equipment, till I ran into those
> > radios. They had a horrible failure rate, ...
>
> But their HF radios were quite reliable. Unfortunately at that time out
> of my budget range, and so were those nice mechanical filters :-(
>
> Regards, Joerg
>
> http://www.analogconsultants.com

I still have an unused 2.1 KHz Collins 455 KHz mechanical filter I
bought at the Dayton hamfest years ago. Its a little narrow for voice,
but it would be good for CW.

I still like Collins equipment, just not their poorly designed CATV
equipment. I wish I could afford a R-390 and felt well enough to do a
complete restoration. :(

--
?

Michael A. Terrell
Central Florida

4626. Re: poor man's network analyzer ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 02:27:06 UTC
From: artie <artie.m@gmail.com>
Message-ID: <1810200519270679 64%artie.m@gmail.com>
Source record: 16759

In article <1129680664.582016.285580@f14g2000cwb.googlegroups.com>,
john w. <jwallacq@hotmail.com> wrote:

> Looking for suggestions / construction articles on how to make a "poor
> man's network analyzer" for the HF frequency range by using either an
> I/Q demodulator chip or else a precision phase & gain measuring chip
> like the AD8302.
>
> I would swear that I had seen an article on this topic someplace, about
> a year ago. But I've lost the article, and I just spent several hours
> of fruitless Internet searching.
>
> Thanx in Advance! john w.
>

Vector network analyzer:

http://www.tapr.org/kits_vna.html?PHPSESSID=a7dc69d72fed0dac75d27069f244
0fa7

Or, if you can't hack fine-pitch boards, you can buy it assembled and
tested: ($655)

http://radio.tentec.com/Amateur/vna

measurements:

S21 Magnitude: gain or loss of two-port network from input to output.

S21 Phase: the transfer phase of two-port network from input to output.

S11 Magnitude: return loss of one-port or two-port network referenced
to input of the network.

S11 Phase: the phase angle of return loss of one-port or two-port
network referenced to input of network.

Specifications

Frequency Range: 1 MHz-100 MHz at full specification. Operational with
degraded performance up to 120 MHz and down to 200 kHz.

Resolution:
.1 dB for amplitude measurements
1 degree for phase measurements

Dynamic Range:
in forward mode, 80 dB at lower frequencies
75 dB mid-range and higher frequencies

In reverse mode, -35 dB at lower frequencies
-25 dB at mid-range and higher frequencies

Output Power: nominal +3 dBm (approx. 2 mw) at TRANSMIT connector

Maximum Input Level: +10 dBm (2 V P-P) into TRANSMIT or RECEIVE
connector.

Requirements for host PC: Windows 98SE, 2000 or XP. Also requires
Windows installer program and .NET 1.1 framework (provided on CD) run
time package.

Not as good as the Agilent box I have in the lab, but the Agilent box
costs more than my car...

--
Namaste--

4627. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 02:47:01 UTC
From: Tim Williams <tmoranwms@charter.net>
Message-ID: <Eti5f.8621$IN2.115@fe04.lga>
Source record: 16760
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

"Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
news:3F95f.2019$dO2.694@newssvr29.news.prodigy.net...
> Then again a SW engineer once told me that nothing is truly analog.
> There is always that smallest digital step, the quantum.

So, digital is base two, and analog is base 1.6 x 10^19? ;-)

Tim

--
Deep Fryer: a very philosophical monk.
Website: http://webpages.charter.net/dawill/tmoranwms

4628. Re: poor man's network analyzer ??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 03:25:39 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <T0j5f.7317$Yk6.1224@trnddc01>
Source record: 16761

"artie" <artie.m@gmail.com> wrote in message
news:1810200519270679 64%artie.m@gmail.com...
> In article <1129680664.582016.285580@f14g2000cwb.googlegroups.com>,
> john w. <jwallacq@hotmail.com> wrote:
>
>> Looking for suggestions / construction articles on how to make a "poor
>> man's network analyzer" for the HF frequency range by using either an
>> I/Q demodulator chip or else a precision phase & gain measuring chip
>> like the AD8302.
>>
>> I would swear that I had seen an article on this topic someplace, about
>> a year ago. But I've lost the article, and I just spent several hours
>> of fruitless Internet searching.
>>
>> Thanx in Advance! john w.
>>
>
> Vector network analyzer:
>
> http://www.tapr.org/kits_vna.html?PHPSESSID=a7dc69d72fed0dac75d27069f244
> 0fa7
>
> Or, if you can't hack fine-pitch boards, you can buy it assembled and
> tested: ($655)
>
> http://radio.tentec.com/Amateur/vna
> Not as good as the Agilent box I have in the lab, but the Agilent box
> costs more than my car...
>
> --
> Namaste--

And not nearly as good as the N2PK VNA:
http://users.adelphia.net/~n2pk/

W4OP

4629. best material for turning a closet into a Faraday cage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 05:13:36 UTC
From: eternalsquire@comcast.net
Message-ID: <1129698816.759523.298440@g43g2000cwa.googlegroups.com>
Source record: 16762

All,

I have the opportunity to turn a walk-in closet with door into a ham station. I'm thinking of turning the closet into a Faraday cage to help in reducing common-mode QRM. To this this, I will need to line the entire inside of the closet, including the door, with some type of metal, and then connect that metal to my ground system.

Question is this: what type of metal would provide acceptable results: aluminum foil, copper foil, or tin-plated zinc sheets nailed overlapping along the closet inside?

Thanks in advance,

The Eternal Squire

4630. Shunt feedback in broadband RF amps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 05:58:55 UTC
From: meara.london@virgin.net
Message-ID: <1129701535.404399.192870@f14g2000cwb.googlegroups.com>
Source record: 16763

I'm having trouble understanding how the typical shunt feedback networks used in RF (solid state) amps work. I'm looking at the 1993 ARRL Handbook. Typical common base broadband amp. For the shunt feedback (from collector to base) they have two resistors: 560 ohms in series with 3300 ohms. The 3300 ohm is bypassed by a .01 uf cap.

So far so good. But then the text explains that because you have rising gain characteristics when the frequency drops you need something to reduce gain at lower frequencies. That's why the negative feedback helps.

Here's where I'm having trouble: "As the operating frequency is decreased the negative feedback increases becasue the network feedback reactance becomes lower." Huh? Wouldn't that network's reactance INCREASE as frequency is lowered? The only part of it with reactance is the .01 cap, correct?

Help! 73!

Bill M0HBR N2CQR CU2JL
http://www.qsl.net/n2cqr

4631. "Miss Moskita" who hurts me...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 09:06:38 UTC
From: Ecureil Affam&#65533; <mesnoisettes@free.fr>
Message-ID: <43560bf9$0$978$8fcfb975@news.wanadoo.fr>
Source record: 16764

HI,

I'm building a 40m rig, using the transmitter part of the "Miss Moskita" .
(German rig "QrpProject" : NE602-BF199-BFR96-2SC1969).
Unfortunately, it doesn't work.
I spent a lot of time (2 months) to find the mistake without any result.
At last, I changed ALL the parts of the circuit without result.

Could someone give me the voltage I should have at (DC and peak/peak).

NE602 pin 1 (I have 50mVpp 12mHz)
NE602 pin 6 (I have 0.6Vpp 4.91mHz)
NE602 pin 4-5 (I have 0.2V pp 7mHz...)
Base BF199 (I have 25mVpp and 0.75VDC)
Base BFR96 (I have 1.2Vpp)
Collector BFR96 (I have 10Vpp and 8VDC)
Base 2SC1969 (I have 2V pp)

I'm very tired...;o(
Thanks a lot for your help.

Dan

4632. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 14:55:07 UTC
From: Keith Williams <krw@att.bizzzz>
Message-ID: <MPG.1dc0285a10282227989c49@news.individual.net>
Source record: 16765
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

In article <Eti5f.8621$lN2.115@fe04.lga>, tmoranwms@charter.net
says...
> "Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
> news:3F95f.2019$dO2.694@newssvr29.news.prodigy.net...
> > Then again a SW engineer once told me that nothing is truly analog.
> > There is always that smallest digital step, the quantum.
>
> So, digital is base two, and analog is base 1.6 x 10^19? ;-)

Not really. Analog's bits are just smaller. ;-)

--
Keith

4633. Re: best material for turning a closet into a Faraday cage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 15:28:49 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <5eudnZw4Qo8m-MvenZ2dnUVZ_smdnZ2d@adelphia.com>
Source record: 16766

eternalsquire@comcast.net wrote:
> All,
>
> I have the opportunity to turn a walk-in closet with door into a ham
> station. I'm thinking of turning the closet into a Faraday cage to
> help in reducing common-mode QRM. To this this, I will need to line
> the entire inside of the closet, including the door, with some type of
> metal, and then connect that metal to my ground system.
>
> Question is this: what type of metal would provide acceptable results:
> aluminum foil, copper foil, or tin-plated zinc sheets nailed
> overlapping along the closet inside?
>
> Thanks in advance,
>
> The Eternal Squire

Just as important as the conductivity and thickness of the shield is
the continuity. Nonconducting seams can act as slot antennas. So
aluminum, though it is a very good conductor, is very difficult to
seam in a conductive way. Well connected, galvanized chicken wire
(with 1 inch or so holes) may work as well as aluminum foil that has
non conductive seams, as long as the holes are much smaller than the
shortest wavelengths you are trying to shield.

4634. Re: Shunt feedback in broadband RF amps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 15:34:40 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <8-GdnU8DB-CH-sveRVn-gQ@adelphia.com>
Source record: 16767

meara.london@virgin.net wrote:
> I'm having trouble understanding how the typical shunt feedback
> networks used in RF (solid state) amps work. I'm looking at the 1993
> ARRL Handbook. Typical common base broadband amp. For the shunt
> feedback (from collector to base) they have two resistors: 560 ohms in
> series with 3300 ohms. The 3300 ohm is bypassed by a .01 uf cap.
>
> So far so good. But then the text explains that because you have
> rising gain characteristics when the frequency drops you need something
> to reduce gain at lower frequencies. That's why the negative feedback
> helps.
>
> Here's where I'm having trouble: "As the operating frequency is
> decreased the negative feedback increases becasue the network feedback
> reactance becomes lower." Huh? Wouldn't that network's reactance
> INCREASE as frequency is lowered? The only part of it with reactance
> is the .01 cap, correct?

I think the capacitor is large enough that you can consider it a short circuit for all frequencies (above 1/(2*pi*3300*.01*10^6)=4.8kHz). So the author has confused himself about that. The feedback passes through an effectively a constant impedance of 560 ohms. The 3300 ohm resistor and capacitor are just there to set the DC operating point. As the low frequency gain rises, the feedback current increases as the output voltage tries to increase, but this has nothing to do with a change in the feedback path impedance.

4635. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 15:36:07 UTC
From: Graham W <graham@his.com.puter.INVALID>
Message-ID: <43567bcb$0$15079$ed2619ec@ptn-nntp-reader02.plus.net>
Source record: 16771
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Michael A. Terrell wrote:
> Joerg wrote:
>>
>> Hello Michael,
>>
>>> There is no reason to apologize for being good with analog. ;-) I
>>> worked as a broadcast engineer during the time they announced the
>>> first memory chip, (1101) which was a slow, noisy 256 bit * 1 DRAM
>>> with very critical timing. I also did analog and digital work on
>>> the microwave equipment built at Microdyne, before L3-Com closed
>>> the Ocala plant.
>>>
>>
>> Seems you started with digital stuff a year or two earlier than I
>> did. My first RAM had a whopping 1024 bits. Not bytes, bits.
>> 21...something, I could look it up since the device where its in
>> still works.
>
> 2114? 1K * 4 bits?

Nah - 2102 1k * 1.

Had 8 of 'em in in my homebuilt Nascom 1 computer which with a
2708 UVEPROM for the 'monitor' was all the RAM for system and
user code and video store! Nevertheless, it was sufficient for a
machine code program to run 'Lunar Lander', hee hee.

Collins filters were regarded as the bees knees in UK ham circles
but I never could afford one!

73 de G3VPC

--
Graham W http://www.gcw.org.uk/ PGM-FI page updated, Graphics Tutorial
WIMBORNE http://www.wessex-astro-society.freeserve.co.uk/ Wessex
Dorset UK Astro Society's Web pages, Info, Meeting Dates, Sites & Maps
Change 'news' to 'sewn' in my Reply address to avoid my spam filter.

4636. Re: Shunt feedback in broadband RF amps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 15:45:28 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <d3pcl1tbq8h76opfm1uprevirn00dc85ds@4ax.com>
Source record: 16768

On 18 Oct 2005 22:58:55 -0700, meara.london@virgin.net wrote:

>I'm having trouble understanding how the typical shunt feedback
>networks used in RF (solid state) amps work. I'm looking at the 1993
>ARRL Handbook. Typical common base broadband amp. For the shunt
>feedback (from collector to base) they have two resistors: 560 ohms in
>series with 3300 ohms. The 3300 ohm is bypassed by a .01 uf cap.
>
>So far so good. But then the text explains that because you have
>rising gain characteristics when the frequency drops you need something
>to reduce gain at lower frequencies. That's why the negative feedback
>helps.
>
>Here's where I'm having trouble: "As the operating frequency is
>decreased the negative feedback increases becasue the network feedback
>reactance becomes lower." Huh? Wouldn't that network's reactance
>INCREASE as frequency is lowered? The only part of it with reactance
>is the .01 cap, correct?

In the 1994 RAH the same reference is in section 4 figure 53C.

There are TWO feedback networks. One in the emitter circuit
and the Collector Base feedback. Ther is also the transformer
that will limit low frequecy response as a secondary action
which also limits Collector feedback as well.

However, they are refering to the RC pair found on the leg of the
emitter. For that case the statement would be correct.

Typically those amps (unless higher power) the emitter has a bias
resistor. That resistor is bypassed with a RC of .1 or .01uF and
series R of a few ohms (typically less than 20 ohms). That C is
fairly small for low RF and audio to effectively bypass the emitter
circuit. so at say DC and audio the Emitter resistance is 110ohms.
At some greater frequency the capacitor looks like a very low
reactance and the emitter resistance is effectively 10 ohms at RF.

That emitter network allows setting DCbias (operating point) and also
the AC feedback at the Emitter Base leg. Since the capacitor
has greater reactance at low frequencies the feedback is greater.

The RAH has only a very terse description and lacks design detail.
If you look at Solid State Design for the Radio Amateur (ARRL press)
and/or Exprimental Methods in RF Design (ARRL press) you will
have a far more detailed explanation of how that amplifier works and
how to calculate values for design.

Hope that helps.

Allison

4637. Re: best material for turning a closet into a Faraday cage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 15:53:54 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <5jqcl199rs3otbsmr99gtp5d71ikk232un@4ax.com>
Source record: 16769

On 18 Oct 2005 22:13:36 -0700, eternalsquire@comcast.net wrote:

>All,
>
>I have the opportunity to turn a walk-in closet with door into a ham
>station. I'm thinking of turning the closet into a Faraday cage to
>help in reducing common-mode QRM. To this this, I will need to line
>the entire inside of the closet, including the door, with some type of
>metal, and then connect that metal to my ground system.
>
>Question is this: what type of metal would provide acceptable results:
>aluminum foil, copper foil, or tin-plated zinc sheets nailed
>overlapping along the closet inside?
>
>Thanks in advance,
>
>The Eternal Squire

There are very few good reassons for doing this. There are also
considerations such as any thing that comes in must be bypassed
and filtered (I really mean everthing) so that none of the offending
signals arrive. AC power is the hardest to filter.

The best material and common most one is Copper screening.
Note ALL joints must be soldered or otherwise have a non corroding
and solid joint. The door also must have a 100% contact joint all the
way around (bottom too). The door will usually have phosphor bronze
allow fingers to allow contact around the periphery. What your
attempting to make is a box that has no openings that are
significant till you reach the microwave range.

Why is common mode QRM a big problem?

Allison

4638. Re: best material for turning a closet into a Faraday cage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 16:57:51 UTC
From: eternalsquire@comcast.net
Message-ID: <1129741071.224786.127220@g49g2000cwa.googlegroups.com>
Source record: 16770

Out here in the this trailer park, we have both dirty power coming from
the AC, and air-conditioning motors from a whole bunch of trailers.
These are problems that cannot be fixed, so I would rather use
defensive techniques such as a Faraday cage

4639. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 17:10:59 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <D6v5f.3535$tV6.3277@newssvr27.news.prodigy.net>
Source record: 16772
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Hello Tim,

>>Then again a SW engineer once told me that nothing is truly analog.
>>There is always that smallest digital step, the quantum.
>
> So, digital is base two, and analog is base 1.6 x 10^19? ;-)
>

Still, the digital guys kept telling us "Some day we'll get there and
then you are going to be extinct". I am not worried at all...

Regards, Joerg

http://www.analogconsultants.com

4640. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 17:38:11 UTC
From: Pooh Bear <rabbitsfriendsandrelations@hotmail.com>
Message-ID: <43568483.CCBB8C37@hotmail.com>
Source record: 16773
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Joerg wrote:

> Still, the digital guys kept telling us "Some day we'll get there
> ....

How long have they been saying that ???? ;-)

Graham

4641. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 17:55:30 UTC
From: Keith Williams <krw@att.bizzzz>
Message-ID: <MPG.1dc0529ba3517d20989c55@news.individual.net>
Source record: 16774
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

In article <43568483.CCBB8C37@hotmail.com>,
rabbitsfriendsandrelations@hotmail.com says...
>
>
> Joerg wrote:
>
> > Still, the digital guys kept telling us "Some day we'll get there
> > ....
>
> How long have they been saying that ???? ;-)

We've been getting half the way there every two years or so. ;-)

--
Keith

4642. Re: best material for turning a closet into a Faraday cage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 17:58:27 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11ld2a4t4aasme3@corp.supernews.com>
Source record: 16775

A Faraday cage is an electrostatic shield, not a shield for electromagnetic fields(*). There would be no advantage to shielding your equipment from external electrostatic fields.

Shielding your station from electromagnetic fields probably won't solve any perceived problems, either, and is a much more difficult job. As others have pointed out, it's often much more difficult to prevent energy from getting through the shield via power and other conductors and through seams and door fittings than it is to make the shield itself. If you don't pay proper attention to the sneak paths where energy can get in, you're wasting your time making the shield in the first place.

(*) I found "Faraday cage" in the index of only one of a half dozen electromagnetics texts. It's not in Terman's _Radio Engineering_ or the rather old IEEE dictionary I have, either.

Roy Lewallen, W7EL

4643. Re: best material for turning a closet into a Faraday cage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 17:59:49 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dj61il$d03$1@engnntp2.cig.mot.com>
Source record: 16776

"John Popelish" <jpopelish@rica.net> wrote in message
news:5eudnZw4Qo8m-MvenZ2dnUVZ_smdnZ2d@adelphia.com...
> eternalsquire@comcast.net wrote:
> > All,
> >
> > I have the opportunity to turn a walk-in closet with door into a ham
> > station. ...
> > Question is this: what type of metal would provide acceptable results:
> > aluminum foil, copper foil, or tin-plated zinc sheets nailed
> > overlapping along the closet inside?
> >
> > Thanks in advance,
> >
> > The Eternal Squire
>
> Just as important as the conductivity and thickness of the shield is
> the continuity. Nonconducting seams can act as slot antennas. So
> aluminum, though it is a very good conductor, is very difficult to
> seam in a conductive way. Well connected, galvanized chicken wire
> (with 1 inch or so holes) may work as well as aluminum foil that has
> non conductive seams, as long as the holes are much smaller than the
> shortest wavelengths you are trying to shield.

Lungren screen rooms use a copper screen which is just like screen door.
However, they are rated up into the GHz range. You'll also need some type
of "finger stock" around the door to provide an electrical seal. The
Lungren screen rooms have a brass-like finger stock all around the door.
The grounds _ALL_ go to one single point and only one single point

However... I'm not sure what this buys you for a ham shack...unless you want
to do receiver design and testing and need the quiet, RF free environment.
Connecting the antenna eliminates all your work, so to speak.

73, Steve, K,9.D;C'I

4644. Re: Shunt feedback in broadband RF amps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 18:16:45 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dj62iddou1@engnntp2.cig.mot.com>
Source record: 16777

<meara.london@virgin.net> wrote in message
news:1129701535.404399.192870@f14g2000cwb.googlegroups.com...
> I'm having trouble understanding how the typical shunt feedback
> networks used in RF (solid state) amps work. I'm looking at the 1993
> ARRL Handbook. Typical common base broadband amp. For the shunt
> feedback (from collector to base) they have two resistors: 560 ohms in
> series with 3300 ohms. The 3300 ohm is bypassed by a .01 uf cap.
>
> So far so good. But then the text explains that because you have
> rising gain characteristics when the frequency drops you need something
> to reduce gain at lower frequencies. That's why the negative feedback
> helps.
>
> Here's where I'm having trouble: "As the operating frequency is
> decreased the negative feedback increases becasue the network feedback
> reactance becomes lower." Huh? Wouldn't that network's reactance
> INCREASE as frequency is lowered? The only part of it with reactance
> is the .01 cap, correct?
>
> Help! 73!
>
> Bill M0HBR N2CQR CU2JL
> http://www.qsl.net/n2cqr
>

In the 70's I worked on 150 MHz PA's and we used what we called a
"banana". It was called that because once one got fried and afterward it
looked like a cooked banana. It was a orange drop (dipped) cap (I think
mylar), value forgotten - somewhere in the .001 - .01 range, with two 1/4
watt resistors in series, one at each end that held it up over the power
transistor.
Though I don't remember if they were ever measured, the rationale was
that these caps had considerable inductance at 150 MHz. and were thus an
"open" there. Down in the 1-20 MHz range, where the regen (regeneration -
oscillation) occurred, they were a "short". Also remember that the
transistor impedances are in the .1-1 ohm range for power devices. I think
we also may have put small, 50 ohm, beads on the resistor leads. If the
bead exploded, you knew you hadn't sloved the regen problem because there
was considerable energy at the regen frequency. and thay became good loads.

For regen there are the "dancing faintlies" and the "christmas tree" types.
(:-)

Forget not those parasitics in the components.
73, Steve, K,9.D;C'i

4645. Re: best material for turning a closet into a Faraday cage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 19:14:48 UTC
From: eternalsquire@comcast.net
Message-ID: <1129749288.446338.288410@z14g2000cwz.googlegroups.com>
Source record: 16778

I'm sorry to mention this, but yes, I am a builder, and its very hard to do low-level measurements. I was hoping that feeding my antenna connection through a bypassed and filtered port would allow my signals in but without the common-mode AC and motor noise.

The Eternal Squire

4646. Re: best material for turning a closet into a Faraday cage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 19:15:18 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <nh6dl15d4tropbr9jbohtoe9vdelik8rgl@4ax.com>
Source record: 16779

On 19 Oct 2005 09:57:51 -0700, eternalsquire@comcast.net wrote:

>Out here in the this trailer park, we have both dirty power coming from
>the AC, and air-conditioning motors from a whole bunch of trailers.
>These are problems that cannot be fixed, so I would rather use
>defensive techniques such as a Faraday cage

Won't work. Most of the noise is radiated and the point of
interaction is the antenna not the power cord for the most part.

If the power source really is dirty try running on isolated battery
or from the mobile rig in the car. IF you hear it there then you need
to get away from the area.

FYI: the motors used for air conditioning and refigeration are least
likely noise sources. Most are capcitor start induction types, arcing
or other raditional likely sources are not common to them.

Electonics such as TVs, Computers, Electronic Games, Lamp
dimmers and touch switches are your enemies.

Allison

4647. Re: Shunt feedback in broadband RF amps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 19:19:52 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <gt6dl19l1t05dsv6r3pam0fria3i3eje2n@4ax.com>
Source record: 16780

On Wed, 19 Oct 2005 13:16:45 -0500, "Steve Nosko"
<suteuve.nosukowicuz@moutouroula.com> wrote:

>
><meara.london@virgin.net> wrote in message
>news:1129701535.404399.192870@f14g2000cwb.googlegroups.com...
>> I'm having trouble understanding how the typical shunt feedback
>> networks used in RF (solid state) amps work. I'm looking at the 1993
>> ARRL Handbook. Typical common base broadband amp. For the shunt
>> feedback (from collector to base) they have two resistors: 560 ohms in
>> series with 3300 ohms. The 3300 ohm is bypassed by a .01 uf cap.
>>
>> So far so good. But then the text explains that because you have
>> rising gain characteristics when the frequency drops you need something
>> to reduce gain at lower frequencies. That's why the negative feedback
>> helps.
>>
>> Here's where I'm having trouble: "As the operating frequency is
>> decreased the negative feedback increases becasue the network feedback
>> reactance becomes lower." Huh? Wouldn't that network's reactance
>> INCREASE as frequency is lowered? The only part of it with reactance
>> is the .01 cap, correct?
>>
>> Help! 73!
>>
>> Bill M0HBR N2CQR CU2JL
>> http://www.qsl.net/n2cqr
>>
>
> In the 70's I worked on 150 MHz PA's and we used what we called a
>"banana". It was called that because once one got fried and afterward it
>looked like a cooked banana. It was a orange drop (dipped) cap (I think
>mylar), value forgotten - somewhere in the .001 - .01 range, with two 1/4
>watt resistors in series, one at each end that held it up over the power
>transistor.
> Though I don't remember if they were ever measured, the rationale was
>that these caps had considerable inductance at 150 MHz. and were thus an
>"open" there. Down in the 1-20 MHz range, where the regen (regeneration -
>oscillation) occurred, they were a "short". Also remember that the
>transistor impedances are in the .1-1 ohm range for power devices. I think
>we also may have put small, 50 ohm, beads on the resistor leads. If the
>bead exploded, you knew you hadn't sloved the regen problem because there
>was considerable energy at the regen frequency. and thay became good loads.
>

>For regen there are the "dancing faintlies" and the "christmas tree" types.
>(:-)
>
>Forget not those parasitics in the components.
>73, Steve, K,9.D;C'i

Having tamed a few solid state power amps I can appreciate that.
However this is not a similar case.

The amplifier in question is of the lower power (under 50mW) type
commonly used for wide band amplifiers and/or RF amps at low levels.
The question really stems from a far too brief description of said amp
in the handbook.

Allison
KB1GMX

4648. Re: best material for turning a closet into a Faraday cage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-19 20:01:01 UTC
From: eternalsquire@comcast.net
Message-ID: <1129749598.469142.318270@z14g2000cwz.googlegroups.com>
Source record: 16781

Okay, I'll try it first without the cage. I do have my wife's
electronics going through a 30 amp CORCOM filter.

The Eternal Squire

4649. Re: best material for turning a closet into a Faraday cage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-20 03:38:02 UTC
From: SignalFerret <signalferret@verizon.net>
Message-ID: <uiE5f.7728$nk2.5933@trnddc07>
Source record: 16782

Check this article out.

www.qsl.net/n9zia/wireless/pdf/julaug1998-p64.pdf

It's an article about making a shielded room from foil covered foam board. You'd still have the problem of getting your power in, and signal cable out. Actually, the signal cable out would be fairly easy. Bulkhead mounted type-N or SMA connectors are made just for that purpose. The power would be slightly more difficult. Not only do you want to keep stray RF from leaking through the hole, but it would require filtering to reduce conducted noise on the lines also. One of my first real jobs was at an commerical two-way dealer. The shop, and tower were really close (less than a mile) to a 50 kW AM broadcaster (WTOP 1500 kHz). Guess how I discovered 60 volts AC between the cases of two AC outlets. I also learned that a 3 dB reduction in reciever sensitivity makes a big difference, but reducing the noise level by 3 dB doesn't.

Come to think of it, of all the screen rooms, and sheet metal shielded rooms I've ever been in the biggest problem was ventilation.

Robert N3LGC

4650. Re: Shunt feedback in broadband RF amps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-20 05:29:03 UTC
From: meara.london@virgin.net
Message-ID: <1129786143.687991.27160@z14g2000cwz.googlegroups.com>
Source record: 16783

Allison: Thanks.

Obviously you are right. But I see the same kind of confusing language in other editions of the handbook. In the 1980 edition (otherwise one of my favorites) they have (pg 6-19) a collector-base feedback network with just a cap and a resistor in series. Text reads: "C1 and R3 provide negative feedback which increases progressively as the frequency is lowered." It calls for a cap of values between 220 pf and .00015 for hf band amps, IN SERIES with a resistor of from 51 to 5600 ohms.

Is this just a case of some confusing language that has kind of worked its way in the handbook DNA and is passed down from generation to generation? Or is there really something about these cap and resistor in series networks that cause them to increase the amount of feedback as freq drops?

73 Bill M0HBR N2CQR CU2JL
http://www.qsl.net/n2cqr

4651. Check it Out!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-20 08:30:20 UTC
From: nikool29@yahoo.com
Message-ID: <1129797020.200101.261620@g47g2000cwa.googlegroups.com>
Source record: 16784

Friend,
Check out http://ChezBrandon.com As are you, Brandon is highly intelligent, knowledgeable, and good. May you have an awesome day.
A Succinct Warning: Elements of Mossad, sated with cash from the murderous and destructive narcotics trade - for example, according to Reader's Digest, cocaine alone costs US businesses $50+ billion per year (!) - are using some medical, pharmacy, and food service workers to murder men, women, and children. (A certain tasteless acid, for instance, causes cancer.) Victor Ostrovsky's book By Way of Deception and James Ennes, Jr.'s Assault on the Liberty offer other elucidation as does the following Daily News article:
www.dailynews.lk/2005/03/01/fea10.html
President of the International Narcotics Control Board, Philip Emafo, put it excellently when he stated: "Drug trafficking does not contribute to economic growth and prosperity [rather it] destabilizes the state, the economy, and civil society apart from the damage to long-term economic development." On top of this, elements of Mossad have decided to become serial-killers/terrorists and murder men, women, and children.
-- Nick

4652. Re: Shunt feedback in broadband RF amps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-20 12:45:04 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <8r2fl15fq0jsoof2ohcnjau1c89l3tsp56@4ax.com>
Source record: 16785

On 19 Oct 2005 22:29:03 -0700, meara.london@virgin.net wrote:

>Allison: Thanks.
>
>Obviously you are right. But I see the same kind of confusing language
>in other editions of the handbook. In the 1980 edition (otherwise one
>of my favorites) they have (pg 6-19) a collector-base feedback network
>with just a cap and a resistor in series. Text reads: "C1 and R3
>provide negative feedback which increases progressively as the
>frequency is lowered." It calls for a cap of values between 220 pf and
>.00015 for hf band amps, IN SERIES with a resistor of from 51 to 5600
>ohms.
>
>Is this just a case of some confusing language that has kind of worked
>its way in the handbook DNA and is passed down from generation to
>generation? Or is there really something about these cap and resistor
>in series networks that cause them to increase the amount of feedback
>as freq drops?
>
>73 Bill M0HBR N2CQR CU2JL
>http://www.qsl.net/n2cqr

That reference is definately an error. The only way that would be
expected to occur is when the C is sufficiently large enough to be
useful at lower frequencies. Often enough it was.

Amplifiers of that type and time use transistors of say FT 150mhz
and a betacutoff of 1 to 3 mhz. What happen is as you go up in
frequency from 1 to say 30 mhz the effective AC beta goes from
about 100 down to 5. The amplifier gain also has that same
downward curve. It's that rising gain when progressing down in
frequency your working against with the described network.
So when that allowed for and the series C and R it's is possible
to say that as the feedback increases as the gain increases.
Even then without putting boundaries on the values and using
a real (working) circuit it's not a good explanation and borders
on error.

The "yabut" of amplifiers (that one being a class C poweramp)
is that EVERYthing around the transistor interacts due to the low
impedences and high currents. So by observation that circuit
may actually work somewhat as described but likely there are
onter factors at work that are not well explained there.

Examples of this (same circuit P6-19) that can cause grief. The
bypass on the collector circuit needs to be effective at audio through

RF and yet the schematic only shows one cap. The likely circuit when built would not be stable.

I think again that explanations suffers from trying to be too brief and leaving out detail. When examined without full context appears to be an error can still have validity. The RAH is a good text, lots of information and relatively few errors. However it's only one source and even they cite other sources for greater detail. Failure to take advantage of those citations and delve deeper can lead to believeing in lore rather than studied consideration.

Allison

4653. Re: Shunt feedback in broadband RF amps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-20 12:47:36 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <IIM5f.445451$x96.139037@attbi_s72>
Source record: 16786

The 1994 ARRL handbook, page 4-23, Fig 53C shows the feedback amplifier that you describe. However, it is a common-emitter circuit, not a common-base circuit. The 3300 ohm resistor returns to +12 V DC and provides DC base current for the 2N5109. The 0.01 uF bypass makes the 560 ohm resistor the main source of this feedback at radio frequencies.

There are two kinds of feedback in the circuit. One is the 560 ohms in the base circuit. The author calls this "negative feedback". I call this "voltage feedback". This feedback does not change very much over the HF region.

The other feedback (he calls it "degenerative feedback") is a 10 ohm resistor in the emitter in series with a 100 resistor which is shunted by 0.01uF. I call this "current feedback". This feedback increases at low radio frequency because the impedance from emitter to ground increases at low radio frequencies. This is the feedback that the text is referring to in the text and it is correct. This kind of feedback increases at low frequency. If the 0.01 uF were replaced by a 1.0 uF this increase in feedback would be a lot less at low radio frequencies.

The author, probably DeMaw, got his terminology slightly mixed up but he is referring to the emitter to ground current feedback, not the collector to base voltage feedback.

If you have a copy of the 2004 Handbook, chapter 17 has a sidebar discussion of negative feedback that is interesting. Later editions may have deleted it.

Bill W0IYH

<meara.london@virgin.net> wrote in message
news:1129701535.404399.192870@f14g2000cwb.googlegroups.com...
> I'm having trouble understanding how the typical shunt feedback
> networks used in RF (solid state) amps work. I'm looking at the 1993
> ARRL Handbook. Typical common base broadband amp. For the shunt
> feedback (from collector to base) they have two resistors: 560 ohms in
> series with 3300 ohms. The 3300 ohm is bypassed by a .01 uf cap.
>
> So far so good. But then the text explains that because you have
> rising gain characteristics when the frequency drops you need something
> to reduce gain at lower frequencies. That's why the negative feedback
> helps.
>
> Here's where I'm having trouble: "As the operating frequency is
> decreased the negative feedback increases becasue the network feedback
> reactance becomes lower." Huh? Wouldn't that network's reactance

> INCREASE as frequency is lowered? The only part of it with reactance
> is the .01 cap, correct?
>
> Help! 73!
>
> Bill M0HBR N2CQR CU2JL
> http://www.qsl.net/n2cqr
>

4654. ND2M EQ5 Equalizer schematic wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-20 18:42:22 UTC
From: Howie <wa2afd@gmail.com>
Message-ID: <1129833742.767660.212530@g43g2000cwa.googlegroups.com>
Source record: 16787

Hello to all and thanks for reading. I am looking for a copy of the EQ5 equalizer article that appeared in QST, December 2002. If someone has this and could send me a copy via email attachment I would greatly appppreciate it.

73 de WA2AFD Howard

4655. Boy's Books Of Radio And Electronics

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-21 01:06:17 UTC
From: Ernie <nospam@nospam.com>
Message-ID: <daX5f.162078$qY1.138794@bgtnsc04-news.ops.worldnet.att.net>
Source record: 16788

Like many of you, I also grew up with Morgan's series. With the help of my Father I built the Geiger Counter (CK1026 Geiger Tube and 3S4), One Tube Amplifier (1H6 tube?), One Transistor Amplifier (CK722) and Crystal Set---I remember our trips back in 1961 to Lafayette Radio And Electronics, 111 Jericho Turnpike, for parts. However, I just can't find myself paying $120 for the First Book and $280 for the Second Book even if they are near fine. Maybe if Lindsay (Lindsay's Technical Books: http://www.lindsaybks.com/) would offer reprints I would pay $100 for the complete set (first edition).

http://cgi.ebay.com/The-Boys-First-Book-of-Radio-Electronics-Morgan_W0QQitem
Z4583217001QQcategoryZ378QQssPageNameZWD1VQQrdZ1QQcmdZViewItem

http://cgi.ebay.com/The-Boys-Second-Book-of-Radio-Electronics-Morgan_W0QQite
mZ4583217099QQcategoryZ378QQssPageNameZWD1VQQrdZ1QQcmdZViewItem

4656. Re: power formula for vswr?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-21 03:13:55 UTC
From: Comcast News <dwbarabash@comcast.net>
Message-ID: <pPmdnWpU1YljwcXeRVn-vw@comcast.com>
Source record: 16789

Sort of ...

The Return Loss is 63dBm - 36dBm => 27dB (that's very good!)

Converting to reflection coefficient, Gamma = 10^(-27dB/20) => 0.0447

Then, VSWR = (Gamma + 1)/(Gamma-1) => 1.09 : 1

No volts or watts but, to be honest, Gamma is a voltage ratio ... :-)

Hope that helped,
Darrell ...

"Gudmundur" <hexter@blazenet.net> wrote in message
news:11l86kdffmec9c1@corp.supernews.com...
> If I know only the power in dbm is there a formula to arrive at
> vswr without conversion first to watts or volts?
>
> outbound = +63dbm (2kw)
> reflected = +36dbm (4w)
>
> This is a waveguide system with a dummyload connected in
> the event the numbers seem improper.
>
> I would like to use the formula when we connect the real antenna.
>

4657. Re: Shunt feedback in broadband RF amps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-21 13:24:05 UTC
From: tim gorman <tgorman2@cox.net>
Message-ID: <l5qajd.ne1.ln@tg6124.ab0wr.net>
Source record: 16790

meara.london@virgin.net wrote:

>
>
> I'm having trouble understanding how the typical shunt feedback
> networks used in RF (solid state) amps work. I'm looking at the 1993
> ARRL Handbook. Typical common base broadband amp. For the shunt
> feedback (from collector to base) they have two resistors: 560 ohms in
> series with 3300 ohms. The 3300 ohm is bypassed by a .01 uf cap.
>
> So far so good. But then the text explains that because you have
> rising gain characteristics when the frequency drops you need something
> to reduce gain at lower frequencies. That's why the negative feedback
> helps.
>
> Here's where I'm having trouble: "As the operating frequency is
> decreased the negative feedback increases becasue the network feedback
> reactance becomes lower." Huh? Wouldn't that network's reactance
> INCREASE as frequency is lowered? The only part of it with reactance
> is the .01 cap, correct?
>
> Help! 73!
>
> Bill M0HBR N2CQR CU2JL
> http://www.qsl.net/n2cqr

I think to actually figure this out you will need to write the gain transfer equation for the amplifier. Many of the replies here are talking about an RF amplifier but are analyzing the feedback at DC.

Remember that the output of a transistor is NOT in phase with the input. As the base voltage goes UP the collector voltage goes DOWN. (think of a transistor used as a switch - when the base is biased off the no current flows and the collector is at power supply potential - when the switch is biased on then current flows and the collector is driven toward the potential of the emitter -- i.e. the collector voltage goes down) For RF the actual phase difference between input and output is dependent upon the input and output impedances of the transistor as well as the gain transfer characteristic (things like transit times of the current carriers and junctions widths and all sorts of stuff figure in here). *THEN* you have to consider the phase contribution of the RC network in the collector to base network. At some RF frequency the collector is 180deg out of phase with the input so a direct feedback link from the collector to the base would be *negative*. It is quite possible that the phase relationships of this particular amplifier are such that the negative feedback increases as the

frequency goes down.

You would just have to write the equations and see where they take you.

tim ab0wr

4658. FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-21 14:05:35 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1129903535.253354.121770@g47g2000cwa.googlegroups.com>
Source record: 16791
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,

competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B

licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

4659. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-21 14:19:59 UTC
From: Frank Gilliland <w&#65533;renut@NOSPAM&#65533;cehouse.net>
Message-ID: <k5uhl1pm9kmh9ojl2a1s7mcjgvuqki1fai@4ax.com>
Source record: 16792
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

Gee, why didn't you crosspost this to rrcb?

On 21 Oct 2005 07:05:35 -0700, "Polymath" <aiyr.r.bean@lycos.co.uk>
wrote in <1129903535.253354.121770@g47g2000cwa.googlegroups.com>:

>What is Ham Radio?
>
>Ham Radio is a technical pursuit for those who
>are interested in the science of radio wave
>propagation and who are also interested in the
>way that their radios function. It has a long-standing
>tradition of providing a source of engineers who
>are born naturals.
>
>Ham Radio awakens in its aficionados a whole-life
>fascination with all things technical and gives
>an all-abiding curiosity to improve one's scientific
>knowledge. It's a great swimming pool, please dive in!
>
>This excitement causes a wish to share the experience
>with ones fellow man, and shows itself in the
>gentlemanly traditions of Ham Radio.
>
>Radio Hams are in a unique privileged position in that
>they can construct and operate their own equipment! No-one
>else has this privilege. Users, such as broadcasters,
>the po lice and armed farces, CBers and mobile phone
>users have to purchase ready-made gear. Manufacturers
>are not licensed to operate their gear. Radio Hams
>are qualified to design, build and then
>operate their own pieces of equipment. They do this
>with gusto, and also repair and modify their own
>equipment. This is a privilege well worth the effort
>to gain, and one to be jealously guarded.
>
>The excitement that drives a Radio Ham starts with
>relatively simple technologies at first, perhaps making
>his own Wimshurst machine and primary cells. Small pieces
>of test equipment follow, possibly multimeters and signal
>generators. Then comes receivers and transmitters. It is with
>the latter that communication with like-minded technically
>motivated people takes off. The scope for technical
>development grows with the years
>and now encompasses DSP and DDS. There is also a great deal

>of excitement in the areas of computer programming to
>be learnt and applied.
>
>The technical excitement motivates Radio Hams to compete
>with each other to determine who has designed and manufactured
>the best-quality station. This competitiveness is found in DXing,
>competitions and fox-hunts.
>
>-----OOOOO----
>
>However, beware! A Ham Radio licence is such a
>desirable thing to have that there are large
>numbers of people who wish to be thought of
>as Radio Hams when, in fact, they are nothing
>of the kind! Usually such people are a
>variation of the CB Radio hobbyist; they buy their
>radios off the shelf and send them back to be
>repaired; they are not interested in technical discussion
>and sneer at those who are; they have no idea how
>their radios work inside and have no wish to find out;
>they are free with rather silly personal insults;
>they have not satisfied any technical qualification
>and their licences prevent the use of
>self-designed-and-built equipment.
>
>These CB types engage in the competitive activities
>with their Cheque-Book-purchased off-the-shelf radios
>in a forlorn effort to prove that they are Radio Hams.
>
>No _REAL_ Radio Hams are deceived by such people!
>
>-----ooooo-----
>
>One infallible way to disambiguate the CB Radio Hobbyist
>from the _REAL_ Radio Ham is to solicit their view of the
>difference between CB Radio and Ham Radio. A Radio Ham will
>perceive Ham Radio to be a technical pursuit and will
>perceive CB Radio to be a social communications facility
>no different in essence to a land-line telephone or a
>GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
>could also hold a CB licence safe in the knowledge that
>such a licence says no more about him than having a land-line
>telephone, whilst continuing to regard Ham Radio as a separate
>technical pursuit.
>
>A CB Radio hobbyist, on the other hand, sees no difference between
>a Ham Radio licence and a CB Radio licence. To him, they are
>sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
>tries to classify himself as the equal of the Radio
>Ham when, in fact, he is nothing of the kind. A sure sign of

>a CB Radio hobbyist is if he holds, or has ever held, a licence
>issued under the gangrenous degeneration that is the
>M3/CB Fools' Licence scheme.
>
>-----ooooo-----
>
>One group of people who claim to be of the standard of
>Radio Hams but who are in reality nothing more than an
>apology for the failure of a CBer are those class B
>licensees who falsely proclaimed that they were against
>the use of a Morse Test to control access to the HF
>bands, until, that is, a test was introduced at their
>intellectual level, the intellectual level of 6-year-olds.
>
>6 year-olds simply lack the mathematical tool kit to
>enable them to handle even the simplest algebraic manipulation
>for Ohm's Law and thus, the disgraceful Class Ber's in
>the aforementioned category are not Radio Hams by any stretch
>of the imagination!
>
>Remember - A sure sign of a CB Radio hobbyist is if he holds,
>or has ever held, a licence issued under the gangrenous
>degeneration that is the M3/CB Fools' Licence scheme!

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

4660. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-21 14:30:39 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1129905039.542653.237720@f14g2000cwb.googlegroups.com>
Source record: 16793
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

Because although CBers are in a different intellectual
class to Radio Hams, it is neither my wish to insult
them nor to enter into a discourse with them.

CBers have the right to besport their habits in the
appropriate place as do all the lower classes, which
in this context is rrcb (and urrcb).

Frank Gilliland wrote:
> Gee, why didn't you crosspost this to rrcb?
>
>
>
> On 21 Oct 2005 07:05:35 -0700, "Polymath" <aiyr.r.bean@lycos.co.uk>
> wrote in <1129903535.253354.121770@g47g2000cwa.googlegroups.com>:
>
> >What is Ham Radio?
> >
> >Ham Radio is a technical pursuit for those who
> >are interested in the science of radio wave
> >propagation and who are also interested in the
> >way that their radios function. It has a long-standing
> >tradition of providing a source of engineers who
> >are born naturals.
> >
> >Ham Radio awakens in its aficionados a whole-life
> >fascination with all things technical and gives
> >an all-abiding curiosity to improve one's scientific
> >knowledge. It's a great swimming pool, please dive in!
> >
> >This excitement causes a wish to share the experience
> >with ones fellow man, and shows itself in the
> >gentlemanly traditions of Ham Radio.
> >
> >Radio Hams are in a unique privileged position in that
> >they can construct and operate their own equipment! No-one
> >else has this privilege. Users, such as broadcasters,
> >the po lice and armed farces, CBers and mobile phone
> >users have to purchase ready-made gear. Manufacturers
> >are not licensed to operate their gear. Radio Hams
> >are qualified to design, build and then
> >operate their own pieces of equipment. They do this
> >with gusto, and also repair and modify their own
> >equipment. This is a privilege well worth the effort

> >to gain, and one to be jealously guarded.
> >
> >The excitement that drives a Radio Ham starts with
> >relatively simple technologies at first, perhaps making
> >his own Wimshurst machine and primary cells. Small pieces
> >of test equipment follow, possibly multimeters and signal
> >generators. Then comes receivers and transmitters. It is with
> >the latter that communication with like-minded technically
> >motivated people takes off. The scope for technical
> >development grows with the years
> >and now encompasses DSP and DDS. There is also a great deal
> >of excitement in the areas of computer programming to
> >be learnt and applied.
> >
> >The technical excitement motivates Radio Hams to compete
> >with each other to determine who has designed and manufactured
> >the best-quality station. This competitiveness is found in DXing,
> >competitions and fox-hunts.
> >
> >-----OOOOO----
> >
> >However, beware! A Ham Radio licence is such a
> >desirable thing to have that there are large
> >numbers of people who wish to be thought of
> >as Radio Hams when, in fact, they are nothing
> >of the kind! Usually such people are a
> >variation of the CB Radio hobbyist; they buy their
> >radios off the shelf and send them back to be
> >repaired; they are not interested in technical discussion
> >and sneer at those who are; they have no idea how
> >their radios work inside and have no wish to find out;
> >they are free with rather silly personal insults;
> >they have not satisfied any technical qualification
> >and their licences prevent the use of
> >self-designed-and-built equipment.
> >
> >These CB types engage in the competitive activities
> >with their Cheque-Book-purchased off-the-shelf radios
> >in a forlorn effort to prove that they are Radio Hams.
> >
> >No _REAL_ Radio Hams are deceived by such people!
> >
> >-----ooooo-----
> >
> >One infallible way to disambiguate the CB Radio Hobbyist
> >from the _REAL_ Radio Ham is to solicit their view of the
> >difference between CB Radio and Ham Radio. A Radio Ham will
> >perceive Ham Radio to be a technical pursuit and will
> >perceive CB Radio to be a social communications facility
> >no different in essence to a land-line telephone or a

> >GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
> >could also hold a CB licence safe in the knowledge that
> >such a licence says no more about him than having a land-line
> >telephone, whilst continuing to regard Ham Radio as a separate
> >technical pursuit.
> >
> >A CB Radio hobbyist, on the other hand, sees no difference between
> >a Ham Radio licence and a CB Radio licence. To him, they are
> >sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
> >tries to classify himself as the equal of the Radio
> >Ham when, in fact, he is nothing of the kind. A sure sign of
> >a CB Radio hobbyist is if he holds, or has ever held, a licence
> >issued under the gangrenous degeneration that is the
> >M3/CB Fools' Licence scheme.
> >
> >-----ooooo-----
> >
> >One group of people who claim to be of the standard of
> >Radio Hams but who are in reality nothing more than an
> >apology for the failure of a CBer are those class B
> >licensees who falsely proclaimed that they were against
> >the use of a Morse Test to control access to the HF
> >bands, until, that is, a test was introduced at their
> >intellectual level, the intellectual level of 6-year-olds.
> >
> >6 year-olds simply lack the mathematical tool kit to
> >enable them to handle even the simplest algebraic manipulation
> >for Ohm's Law and thus, the disgraceful Class Ber's in
> >the aforementioned category are not Radio Hams by any stretch
> >of the imagination!
> >
> >Remember - A sure sign of a CB Radio hobbyist is if he holds,
> >or has ever held, a licence issued under the gangrenous
> >degeneration that is the M3/CB Fools' Licence scheme!
>
>
> -----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
> ----= East and West-Coast Server Farms - Total Privacy via Encryption =----

4661. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-21 15:06:04 UTC
From: panteltje@yahoo.com
Message-ID: <1129907164.767284.255910@g49g2000cwa.googlegroups.com>
Source record: 16794
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

Polymath wrote:
> Because although CBers are in a different intellectual
> class to Radio Hams,
You just demonstrated that you are one of the worst discrimination
idiots I
have ever met on Usenet, and I have been on Usenet for 13 years.
On radio much much longer.
Look little motherf*cker, there are even professors on CB.
And there are clearly complete idiots like you that accidently got
an amateur radio license on the amateur bands.

Even if you get an amateur license, you are STILL an amateur.

Actually I worked in professional broadcasting and designed
professional
transmitters.
You just convinced me NOT to listen on amateur frequencies.
F*cking idiot moron.
hehe

4662. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-21 15:35:05 UTC
From: Unknown <nope@way.cc>
Message-ID: <pan.2005.10.21.15.35.08.150599@way.cc>
Source record: 16795
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Fri, 21 Oct 2005 07:05:35 -0700, Polymath wrote:

> What is Ham Radio?
>
Ham Radio is a hobby for the type of people who would be in local
government but got thrown out for not being progressive enough. If your
favourite hobby is hosting a committee or writing a new regulation then
this is the hobby for you.

To be a "proper" radio amateur you agree with one or more of the following :

1) I've voted Tory all my life
2) Im Over 50
3) Im Buracratic
4) I smoke a pipe or cigar
5) Im not a racist, I just don't like
-Foreign people
-People who speak differently
-People who are not the same colour as me

6) HF is the one true mode, real radio doesn't use a microphone
7) In my day it was all CW *yawn*
8) Repeaters are for morons
9) Dam young people, fools the lot of them ra ra ra ! Join the RSGB ...
10) Data isn't a 'real' mode
11) Whats wrong with the licence as it is - I see nothing wrong.
12) You should have a NOV for anything that hasn't already been excluded
by the licence
13) Nothing interesting happens above 30Mhz
14) I know all about computers, thats why I hate them
15) I'm a shit hot designer - my radio was designed by a small yellow man
with more skill than me, but im not angry (see 5)
16) I make my own wire antennas that makes me an RF designer
17) People with less skill than me are worthless

If you identify with this then this is the hobby for you. But hurry, be
quick - when all the stupid old fuckers have died out then nobody will be
left ....

4663. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-21 15:39:26 UTC
From: "Jock." <real_classs_a@yahoo.co.uk>
Message-ID: <5o2il1pdkhg83i6t9vpk01ouflf236f9pl@4ax.com>
Source record: 16796
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

On 21 Oct 2005 08:06:04 -0700, panteltje@yahoo.com wrote:

>You just demonstrated that you are one of the worst discrimination
>idiots I have ever met on Usenet, and I have been on Usenet for 13
>years. On radio much much longer. Look little motherf*cker, there
>are even professors on CB.

My goodness! Professors of what?

>And there are clearly complete idiots like you that accidently got
>an amateur radio license on the amateur bands.
>
>*Even if you get an amateur license, you are STILL an amateur.*
>
>Actually I worked in professional broadcasting and designed
>professional transmitters.

Golly! CB transmitters?

>You just convinced me NOT to listen on amateur frequencies.
>F*cking idiot moron.
>hehe

Not difficult to deduce that you are a CB-er.

--

73 de Jock.

"Choice has always been a privilege of those who
could afford to pay for it."
- Ellen Frankfort

4664. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-21 16:14:24 UTC
From: Sigurd Stenersen <sigurds@utvikling.com>
Message-ID: <uvadnSn21pB4jsTeRVnzvA@telenor.com>
Source record: 16797
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Unknown wrote:
> On Fri, 21 Oct 2005 07:05:35 -0700, Polymath wrote:
>
>> What is Ham Radio?
>>
> Ham Radio is a hobby for the type of people who would be in local
> government but got thrown out for not being progressive enough. If
> your favourite hobby is hosting a committee or writing a new
> regulation then this is the hobby for you.
>
> To be a "proper" radio amateur you agree with one or more of the
> following :

I'm going to take your test...

> 1) I've voted Tory all my life

Nope. In fact, I haven't voted for a long time.

> 2) Im Over 50

Nope.

> 3) Im Buracratic

Absolutely not.

> 4) I smoke a pipe or cigar

Wrong again.

> 5) Im not a racist, I just don't like
> -Foreign people

Not true. I know several, and I like them. I also enjoy DX.

> -People who speak differently

Not a problem.

> -People who are not the same colour as me

What "colour" would that be ?

> 6) HF is the one true mode, real radio doesn't use a microphone

I find HF more interesting than higher frequencies, because it allows me to
communicate with people across the globe. CW is my favorite mode, but that
doesn't mean I think there's anything less "real" about other modes.

> 7) In my day it was all CW *yawn*

Actually, it was. When I got my license, CW was all I was allowed to do.
And it was really interesting, too.

> 8) Repeaters are for morons

They ARE ? How come ?

> 9) Dam young people, fools the lot of them ra ra ra ! Join the RSGB

I don't have anything against young people. As a matter of fact, I live
with a couple of those and I frequently meet other kids.

> ... 10) Data isn't a 'real' mode

It's real. But to me it's not all that interesting.

> 11) Whats wrong with the licence as it is - I see nothing wrong.

Me neither. So what IS wrong with it ?

> 12) You should have a NOV for anything that hasn't already been
> excluded
> by the licence

What's a NOV and how can I get one ?

> 13) Nothing interesting happens above 30Mhz

Not true at all.

> 14) I know all about computers, thats why I hate them

I know a lot about computers, I work with them for a living. And that is
one of the main reason for my interest in ham radio.

> 15) I'm a shit hot designer - my radio was designed by a small yellow
> man with more skill than me, but im not angry (see 5)

Completely wrong.

> 16) I make my own wire antennas that makes me an RF designer

I might make my own antennas, but that doesn't make me anything. It might
make my radio function better, tho.

> 17) People with less skill than me are worthless

Only when they behave as if they know everything.

> If you identify with this then this is the hobby for you.

Obviously, it's not the hobby for me, then. So how come I'm staying at it ?

> But hurry, be quick - when all the stupid old fuckers have died out
> then nobody will be left ....

Nobody are more helpful than those "stupid old fuckers" so that will be a sad day.

73 de LB3KB, Sigurd
http://justlearnmorsecode.com

4665. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-21 18:11:52 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <djbb26$2eb$1@newsg1.svr.pol.co.uk>
Source record: 16698
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

Hold about a bit matey boy... Just because someone uses a CB doesnt make them a lower class person or less intellectual than an Amateur radio user. They may have brains far exceeding yours on several topics, just not on radio. Just because you know a bit about radio doesnt make you a higher class of person... IT JUST MEANS YOU KNOW ABOUT RADIO'S..... now try learning common sense, respect for ones fellow man and remember.. Amateur Radio.. Just like CB.. is JUST A HOBBY...
I love the bit though where you say "it is neither my wish to insult them" but you manage to do it anyhow...
10-4 over and out .. or in your case QRT..

"Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message news:1129905039.542653.237720@f14g2000cwb.googlegroups.com...
> Because although CBers are in a different intellectual
> class to Radio Hams, it is neither my wish to insult
> them nor to enter into a discourse with them.
>
> CBers have the right to besport their habits in the
> appropriate place as do all the lower classes, which
> in this context is rrcb (and urrcb).
>

4666. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-21 18:14:10 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <djbb6ghdr1@newsg4.svr.pol.co.uk>
Source record: 16699
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

> Not difficult to deduce that you are a CB-er.

Why is that then.. is it because he has friends, his house isn't full of
bits of old crap and he doesnt stink of wee and biscuits??

4667. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-21 18:19:30 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <HuSdnaqXGLq2rMTeRVn-tg@giganews.com>
Source record: 16700
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

The Magnum wrote:
> Hold about a bit matey boy... Just because someone uses a CB doesnt
> make them a lower class person or less intellectual than an Amateur
> radio user. They may have brains far exceeding yours on several
> topics, just not on radio. Just because you know a bit about radio
> doesnt make you a higher class of person... IT JUST MEANS YOU KNOW
> ABOUT RADIO'S..... now try learning common sense, respect for ones
> fellow man and remember.. Amateur Radio.. Just like CB.. is JUST A
> HOBBY...
> I love the bit though where you say "it is neither my wish to insult
> them" but you manage to do it anyhow...
> 10-4 over and out .. or in your case QRT..
>

Poly Parrot has forgotten he has owned a CB and a license (still does, I expect), ignore him.. having been arrested he is a prime example of what amateur radio has descended to.
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

4668. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-21 18:44:55 UTC
From: whinyslit_lloydie@yahoo.com
Message-ID: <1129920294.987230.44440@g44g2000cwa.googlegroups.com>
Source record: 16701
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

huLLy wrote:
> The Magnum wrote:
> > Hold about a bit matey boy... Just because someone uses a CB doesnt
> > make them a lower class person or less intellectual than an Amateur
> > radio user. They may have brains far exceeding yours on several
> > topics, just not on radio. Just because you know a bit about radio
> > doesnt make you a higher class of person... IT JUST MEANS YOU KNOW
> > ABOUT RADIO'S..... now try learning common sense, respect for ones
> > fellow man and remember.. Amateur Radio.. Just like CB.. is JUST A
> > HOBBY...
> > I love the bit though where you say "it is neither my wish to insult
> > them" but you manage to do it anyhow...
> > 10-4 over and out .. or in your case QRT..
> >
>
> Poly Parrot has forgotten he has owned a CB and a license (still does, I
> expect), ignore him.. having been arrested he is a prime example of what
> amateur radio has descended to.
> --
> huLLy
> Mobile phone 07976 123278
> ICQ 136-987-925

Does he get on there with a linear and talk to W4LLI, Billy Jack like
he used to do on 75/80 meters?

4669. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-21 18:51:02 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1129920662.717947.78290@g44g2000cwa.googlegroups.com>
Source record: 16702
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

Unbeknown to me, this thread had already been cross-posted to
the CB groups, and I would have removed that cross-posting
had I been aware of it.

In respect of that, I apologise if my remarks have caused
any offence to the CB community. However, I do not
withdraw my remarks - they are my opinion as to the
relative standing of Radio Hams and of CB Radio
enthusiasts where the playing-field is that of Radio
Hams.

However, having said that, the material quoted below
serves, I think, to illustrate quite well the
intellectual standing of CB Radio enthusiasts
upon which I have commented.....

panteltje@yahoo.com wrote:
> you are one of the worst.....idiots.....
> little motherf*cker.....complete idiots like
> you.....F*cking idiot moron.

4670. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-21 19:05:53 UTC
From: whinyslit_lloydie@yahoo.com
Message-ID: <1129921553.704847.8800@g43g2000cwa.googlegroups.com>
Source record: 16704
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

Especially for you.

4671. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-21 19:09:34 UTC
From: whinyslit_lloydie@yahoo.com
Message-ID: <1129921774.753022.136570@f14g2000cwb.googlegroups.com>
Source record: 16706
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

Cmd Buzz Corey wrote:
> panteltje@yahoo.com wrote:
> > Polymath wrote:
> >
> >>Because although CBers are in a different intellectual
> >>class to Radio Hams,
> >
> > You just demonstrated that you are one of the worst discrimination
> > idiots I
> > have ever met on Usenet, and I have been on Usenet for 13 years.
> > On radio much much longer.
> > Look little motherf*cker, there are even professors on CB.
> > And there are clearly complete idiots like you that accidently got
> > an amateur radio license on the amateur bands.
> >
> > *Even if you get an amateur license, you are STILL an amateur.*
> >
> > Actually I worked in professional broadcasting and designed
> > professional
> > transmitters.
>
> So how many cb transmittes you designed?

As if you ever designed anything.

>
> > You just convinced me NOT to listen on amateur frequencies.
> > F*cking idiot moron.
> > hehe
> >
>
> Roger that thar, ten-fer gud buddy, squwak-squeek, gotge ears on thar
> gud buddy, bring-it on MFer, aaaaaaaaauuuuuuuuuddddddddiiiiiiiiooooooooooo.

You post like you have experience talking on it, loser.

4672. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-21 20:00:11 UTC
From: Cmd Buzz Corey <me@this.ten>
Message-ID: <A-OdnZ0c6Peup8TeRVn-sA@gbronline.com>
Source record: 16703
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

Frank Gilliland wrote:
>
> Gee, why didn't you crosspost this to rrcb?

Yeah, that was a waste of bandwidth, it is much too technical for cbers
to comprehend.

4673. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-21 20:01:59 UTC
From: whinyslit_lloydie@yahoo.com
Message-ID: <1129921366.139906.135630@g47g2000cwa.googlegroups.com>
Source record: 16707
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

Cmd Buzz Corey wrote:
> Frank Gilliland wrote:
> >
> > Gee, why didn't you crosspost this to rrcb?
>
> Yeah, that was a waste of bandwidth, it is much too technical for cbers
> to comprehend.

Especially you.

4674. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-21 20:08:45 UTC
From: Cmd Buzz Corey <me@this.ten>
Message-ID: <7cCdnf5aqtCzocTeRVn-gA@gbronline.com>
Source record: 16705
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

panteltje@yahoo.com wrote:
> Polymath wrote:
>
>>Because although CBers are in a different intellectual
>>class to Radio Hams,
>
> You just demonstrated that you are one of the worst discrimination
> idiots I
> have ever met on Usenet, and I have been on Usenet for 13 years.
> On radio much much longer.
> Look little motherf*cker, there are even professors on CB.
> And there are clearly complete idiots like you that accidently got
> an amateur radio license on the amateur bands.
>
> *Even if you get an amateur license, you are STILL an amateur.*
>
> Actually I worked in professional broadcasting and designed
> professional
> transmitters.

So how many cb transmittes you designed?

> You just convinced me NOT to listen on amateur frequencies.
> F*cking idiot moron.
> hehe
>

Roger that thar, ten-fer gud buddy, squwak-squeek, gotge ears on thar
gud buddy, bring-it on MFer, aaaaaaaaauuuuuuuuuddddddddiiiiiiiiooooooooooo.

4675. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-21 21:10:02 UTC
From: "Jock." <real_classs_a@yahoo.co.uk>
Message-ID: <56mil11d1o9mpajvcsq8fnfocq43gv0te1@4ax.com>
Source record: 16708
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

On Fri, 21 Oct 2005 19:11:52 +0100, "The Magnum"
<magnum@NOSPAMmag2781.freeserve.co.uk> wrote:

>Hold about a bit matey boy... Just because someone uses a CB doesnt make
>them a lower class person or less intellectual than an Amateur radio user.
>They may have brains far exceeding yours on several topics, just not on
>radio. Just because you know a bit about radio doesnt make you a higher
>class of person... IT JUST MEANS YOU KNOW ABOUT RADIO'S..... now try
>learning common sense, respect for ones fellow man and remember.. Amateur
>Radio.. Just like CB.. is JUST A HOBBY...
>I love the bit though where you say "it is neither my wish to insult them"
>but you manage to do it anyhow...
>10-4 over and out .. or in your case QRT..

Another CB-er and potential F-class adherent.

(You can spot them the minute they put finger to keyboard).

--

73 de Jock.

"Choice has always been a privilege of those who
could afford to pay for it."
- Ellen Frankfort

4676. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-21 22:03:18 UTC
From: NetKKop <gareth.paley@gmail.com>
Message-ID: <djboj6htg1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 16710
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

Now stop this at once please Children! GROW UP

--
--
73deG1LVN(M0WWS)
it's back it's: http://qsy.to/ChorleyFM !!
http://www.g1lvn.org.uk/wavefiles/

"Cmd Buzz Corey" <me@this.ten> wrote in message
news:orudnSwvBMEiwcTenZ2dnUVZ_sqdnZ2d@gbronline.com...
> whinyslit_lloydie@yahoo.com wrote:
>> Cmd Buzz Corey wrote:
>>
>>>Frank Gilliland wrote:
>>>
>>>>Gee, why didn't you crosspost this to rrcb?
>>>
>>>Yeah, that was a waste of bandwidth, it is much too technical for cbers
>>>to comprehend.
>>
>>
>> Especially you.
>>
>
> Hey wogie, tell us all about that negative swr. LOLOLOLOLOLOL!!!!

4677. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-21 22:27:44 UTC
From: Cmd Buzz Corey <me@this.ten>
Message-ID: <orudnSwvBMEiwcTenZ2dnUVZ_sqdnZ2d@gbronline.com>
Source record: 16709
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

whinyslit_lloydie@yahoo.com wrote:
> Cmd Buzz Corey wrote:
>
>>Frank Gilliland wrote:
>>
>>>Gee, why didn't you crosspost this to rrcb?
>>
>>Yeah, that was a waste of bandwidth, it is much too technical for cbers
>>to comprehend.
>
>
> Especially you.
>

Hey wogie, tell us all about that negative swr. LOLOLOLOLOLOLOL!!!!

4678. Re: Boy's Books Of Radio And Electronics

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 00:31:27 UTC
From: hhc314@yahoo.com
Message-ID: <1129941087.768605.276780@g44g2000cwa.googlegroups.com>
Source record: 16711

Does anyone know the actual reason why eBay elected to terminate these
listings?

Harry C.

4679. Re: Boy's Books Of Radio And Electronics

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 00:44:38 UTC
From: Ernie <nospam@nospam.com>
Message-ID: <WXf6f.165543$qY1.69186@bgtnsc04-news.ops.worldnet.att.net>
Source record: 16712

<hhc314@yahoo.com> wrote in message
news:1129941087.768605.276780@g44g2000cwa.googlegroups.com...
> Does anyone know the actual reason why eBay elected to terminate these
> listings?
>
> Harry C.

Harry, I checked and I found them still listed (eBay store). Apparently the the url I gave was defective---perhaps cut and paste the entire link into browser to get to them or do a eBay search for Alfred Morgan. There is also a 'second boy's book' for auction with bidding at $31.

Maybe I'm slow but I have yet to find a way to properly post those page long urls so as to make a 1-click link.

4680. Re: Boy's Books Of Radio And Electronics

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 01:26:23 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrndlj59v.vua.bit-bucket@shell.config.com>
Source record: 16713

On Sat, 22 Oct 2005 00:44:38 GMT, Ernie wrote:
>
><hhc314@yahoo.com> wrote in message
> news:1129941087.768605.276780@g44g2000cwa.googlegroups.com...
>> Does anyone know the actual reason why eBay elected to terminate these
>> listings?
>
> Harry, I checked and I found them still listed (eBay store). Apparently the
> the url I gave was defective---perhaps cut and paste the entire link into
> browser to get to them or do a eBay search for Alfred Morgan. There is also
> a 'second boy's book' for auction with bidding at $31.
>
> Maybe I'm slow but I have yet to find a way to properly post those page long
> urls so as to make a 1-click link.

http://tinyurl.com/

4681. Re: Boy's Books Of Radio And Electronics

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 02:00:13 UTC
From: Ernie <nospam@nospam.com>
Message-ID: <N2h6f.476704$5N3.292355@bgtnsc05-news.ops.worldnet.att.net>
Source record: 16714

Allodoxaphobia <bit-bucket@config.com> wrote in message
news:slrndlj59v.vua.bit-bucket@shell.config.com...
> On Sat, 22 Oct 2005 00:44:38 GMT, Ernie wrote:
> >
> ><hhc314@yahoo.com> wrote in message
> > news:1129941087.768605.276780@g44g2000cwa.googlegroups.com...
> >> Does anyone know the actual reason why eBay elected to terminate these
> >> listings?
> >
> > Harry, I checked and I found them still listed (eBay store). Apparently
the
> > the url I gave was defective---perhaps cut and paste the entire link
into
> > browser to get to them or do a eBay search for Alfred Morgan. There is
also
> > a 'second boy's book' for auction with bidding at $31.
> >
> > Maybe I'm slow but I have yet to find a way to properly post those page
long
> > urls so as to make a 1-click link.
>
> http://tinyurl.com/

Yea... I've heard of them but the times folks used it, it didn't work. I'll
check it out again---thanks for mentioning it.

4682. Re: Boy's Books Of Radio And Electronics

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 02:00:13 UTC
From: Ernie <nospam@nospam.com>
Message-ID: <N2h6f.476705$5N3.471818@bgtnsc05-news.ops.worldnet.att.net>
Source record: 16715

Ernie <nospam@nospam.com> wrote in message
news:WXf6f.165543$qY1.69186@bgtnsc04-news.ops.worldnet.att.net...
>
> <hhc314@yahoo.com> wrote in message
> news:1129941087.768605.276780@g44g2000cwa.googlegroups.com...
> > Does anyone know the actual reason why eBay elected to terminate these
> > listings?
> >
> > Harry C.
>
> Harry, I checked and I found them still listed (eBay store). Apparently
the
> the url I gave was defective---perhaps cut and paste the entire link into
> browser to get to them or do a eBay search for Alfred Morgan. There is
also
> a 'second boy's book' for auction with bidding at $31.
>
> Maybe I'm slow but I have yet to find a way to properly post those page
long
> urls so as to make a 1-click link.

Try these links:
http://tinyurl.com/dv2mt

http://tinyurl.com/bpyj9

4683. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 03:21:44 UTC
From: N0VFP <lloyd_n0vfp@yahoo.com>
Message-ID: <1129951304.873446.80390@g43g2000cwa.googlegroups.com>
Source record: 16716
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

Cmd Buzz Corey wrote:
> whinyslit_lloydie@yahoo.com wrote:
> > Cmd Buzz Corey wrote:
> >
> >>Frank Gilliland wrote:
> >>
> >>>Gee, why didn't you crosspost this to rrcb?
> >>
> >>Yeah, that was a waste of bandwidth, it is much too technical for cbers
> >>to comprehend.
> >
> >
> > Especially you.
> >
>
> Hey wogie, tell us all about that negative swr. LOLOLOLOLOLOLOL!!!!

Hey, dumbass, tell us how you have a "pilot's license"
HAHAHAHAHAHAHAHAHA!!!!!!!!

4684. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 03:22:57 UTC
From: N0VFP <lloyd_n0vfp@yahoo.com>
Message-ID: <1129951377.152066.7740@g14g2000cwa.googlegroups.com>
Source record: 16717
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

Cmd Buzz Corey will try to sell you pictures of his naked granddaughter.

4685. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 04:31:46 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1129955506.752390.130760@g43g2000cwa.googlegroups.com>
Source record: 16718
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

NetKKop wrote:
> Now stop this at once please Children! GROW UP

good luck with them

I truely do wish you luck
>
> --
> --
> 73deG1LVN(M0WWS)
> it's back it's: http://qsy.to/ChorleyFM !!
> http://www.g1lvn.org.uk/wavefiles/
>
>
> "Cmd Buzz Corey" <me@this.ten> wrote in message
> news:orudnSwvBMEiwcTenZ2dnUVZ_sqdnZ2d@gbronline.com...
> > whinyslit_lloydie@yahoo.com wrote:
> >> Cmd Buzz Corey wrote:
> >>
> >>>Frank Gilliland wrote:
> >>>
> >>>>Gee, why didn't you crosspost this to rrcb?
> >>>
> >>>Yeah, that was a waste of bandwidth, it is much too technical for cbers
> >>>to comprehend.
> >>
> >>
> >> Especially you.
> >>
> >
> > Hey wogie, tell us all about that negative swr. LOLOLOLOLOLOL!!!!

4686. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 04:34:18 UTC
From: whinyslit_lloydie@yahoo.com
Message-ID: <1129955657.980144.284220@g47g2000cwa.googlegroups.com>
Source record: 16719
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

an_old_friend wrote:
> NetKKop wrote:
> > Now stop this at once please Children! GROW UP
>
> good luck with them
>
> I truely do wish you luck

You need all the mental help you can get, Marky.

4687. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 04:48:19 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1129956499.057345.134930@g14g2000cwa.googlegroups.com>
Source record: 16720
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

whinyslit_lloydie@yahoo.com wrote:
> an_old_friend wrote:
> > NetKKop wrote:
> > > Now stop this at once please Children! GROW UP
> >
> > good luck with them
> >
> > I truely do wish you luck
>
> You need all the mental help you can get, Marky.

not really but do grow up

you could Mr Slit by using a real name or at least some that is not so
stupid

4688. Putting the "Real" back into _REAL_ Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 08:40:52 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1129970452.489970.290430@g47g2000cwa.googlegroups.com>
Source record: 16721
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

REAL Ham Radio is a technical pursuit.

One area that remains easily open is the construction
of CW rigs - you need little more than an
oscillator.

Off-the-shelf talk-boxes are the stuff of which
CB is made, and not Ham Radio.

Therefore let us move to ban voice communications
from Ham Radio - a listen to 20m shows up inane
conversations from CB types only.

CW comms has always been the essence of Ham Radio,
and remains a feature of Ham Radio now that the
commercial world has moved into Sat comms.

So.....
1. Restore the 12 WPM Morse test around the world.
2. Cancel _ALL_ licences where the licensee has not
passed a 12 WPM Morse Test.
3. Remove all band plans - only Morse is now allowed.
4. All new licensees to be limited to their first year
op operation to 10W home-brewed rigs (And, of course,
on CW as there will be no more voice)
Let us fight the insidious march of the Mongolian
Hordes of CBers-Masquerading-As-Radio-Hams before it
is far too late!

4689. Re: Putting the "Real" back into _REAL_ Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 08:59:17 UTC
From: Groid <bongobongoland@hotmail.com>
Message-ID: <1129971557.066053.205350@g49g2000cwa.googlegroups.com>
Source record: 16722
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

A poor troll
you will really have to try harder
does anybody actually take notice of trolls this poor on here anymore ?

4690. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 09:06:27 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <djcvf4nbl1@newsg4.svr.pol.co.uk>
Source record: 16723
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1129920662.717947.78290@g44g2000cwa.googlegroups.com...
> Unbeknown to me, this thread had already been cross-posted to
> the CB groups, and I would have removed that cross-posting
> had I been aware of it.
>
> In respect of that, I apologise if my remarks have caused
> any offence to the CB community. However, I do not
> withdraw my remarks - they are my opinion as to the
> relative standing of Radio Hams and of CB Radio
> enthusiasts where the playing-field is that of Radio
> Hams.
>
> However, having said that, the material quoted below
> serves, I think, to illustrate quite well the
> intellectual standing of CB Radio enthusiasts
> upon which I have commented.....
>
> panteltje@yahoo.com wrote:
> > you are one of the worst.....idiots.....
> > little motherf*cker.....complete idiots like
> > you.....F*cking idiot moron.

In the realms of talking specifically about radio apology accepted but
everyone swears at some time. Amateurs included. While i dont condone it i
can understand it. If you upset someone enough you "will" get this sort of
response. Im a CB'er by the way.
Regards,
Graham

4691. Re: Putting the "Real" back into _REAL_ Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 09:10:42 UTC
From: realradioham <realradioham@tiscali.co.uk>
Message-ID: <435a0211$1_1@mk-nntp-2.news.uk.tiscali.com>
Source record: 16724
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

I'm not a technical pursuit old boy...

RRH
"Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1129970452.489970.290430@g47g2000cwa.googlegroups.com...
> _REAL_ Ham Radio is a technical pursuit.
>
> One area that remains easily open is the construction
> of CW rigs - you need little more than an
> oscillator.
>
> Off-the-shelf talk-boxes are the stuff of which
> CB is made, and not Ham Radio.
>
> Therefore let us move to ban voice communications
> from Ham Radio - a listen to 20m shows up inane
> conversations from CB types only.
>
> CW comms has always been the essence of Ham Radio,
> and remains a feature of Ham Radio now that the
> commercial world has moved into Sat comms.
>
> So.....
> 1. Restore the 12 WPM Morse test around the world.
> 2. Cancel _ALL_ licences where the licensee has not
> passed a 12 WPM Morse Test.
> 3. Remove all band plans - only Morse is now allowed.
> 4. All new licensees to be limited to their first year
> op operation to 10W home-brewed rigs (And, of course,
> on CW as there will be no more voice)
> Let us fight the insidious march of the Mongolian
> Hordes of CBers-Masquerading-As-Radio-Hams before it
> is far too late!
>

4692. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 09:12:56 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <djcvr9$83g$1@newsg1.svr.pol.co.uk>
Source record: 16725
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

> > Roger that thar, ten-fer gud buddy, squwak-squeek, gotge ears on thar
> > gud buddy, bring-it on MFer,
aaaaaaaaauuuuuuuuuddddddddiiiiiiiiooooooooooo.
>
> You post like you have experience talking on it, loser.

Do you know, in all my years of CB radio use ive never actually heard anyone talk like that on the CB. Ive been on since 1979 (not continuously, i do let go the mic occasionally ;o) The only people who talk like that are people who have no real idea of CB and are just taking the Mick. Am i wrong?? do people talk like that on the CB where you live?? Let us know where these people are so we can avoid them ....
Graham

4693. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 09:16:35 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <djd024nqd1@newsg4.svr.pol.co.uk>
Source record: 16726
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"huLLy" <thisainthamradio@aol.com> wrote in message
news:HuSdnaqXGLq2rMTeRVn-tg@giganews.com...
> The Magnum wrote:
> > Hold about a bit matey boy... Just because someone uses a CB doesnt
> > make them a lower class person or less intellectual than an Amateur
> > radio user. They may have brains far exceeding yours on several
> > topics, just not on radio. Just because you know a bit about radio
> > doesnt make you a higher class of person... IT JUST MEANS YOU KNOW
> > ABOUT RADIO'S..... now try learning common sense, respect for ones
> > fellow man and remember.. Amateur Radio.. Just like CB.. is JUST A
> > HOBBY...
> > I love the bit though where you say "it is neither my wish to insult
> > them" but you manage to do it anyhow...
> > 10-4 over and out .. or in your case QRT..
> >
>
> Poly Parrot has forgotten he has owned a CB and a license (still does, I
> expect), ignore him.. having been arrested he is a prime example of what
> amateur radio has descended to.
> --
> huLLy
> Mobile phone 07976 123278
> ICQ 136-987-925

Hi Hully,
Unfortunately there are a few like him on the Amateur band. Its a shame really. Its meant to be a hobby after all and his attitude will put many prospective new Amateurs off as they will see it as an unfriendly place. Not good for the cause..
Regards,
Graham

4694. Re: Putting the "Real" back into _REAL_ Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 09:17:45 UTC
From: Gordon Hudson <gordon@usenet3.hostroute.co.uk>
Message-ID: <435a03bb$0$38039$5a6aecb4@news.aaisp.net.uk>
Source record: 16727
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Groid" <bongobongoland@hotmail.com> wrote in message
news:1129971557.066053.205350@g49g2000cwa.googlegroups.com...
>A poor troll
> you will really have to try harder
> does anybody actually take notice of trolls this poor on here anymore ?

is this like the Real_IRA then ?

4695. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 09:18:20 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <djd05d$8bh$1@newsg1.svr.pol.co.uk>
Source record: 16728
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"Cmd Buzz Corey" <me@this.ten> wrote in message
news:A-OdnZ0c6Peup8TeRVn-sA@gbronline.com...
> Frank Gilliland wrote:
> >
> > Gee, why didn't you crosspost this to rrcb?
>
> Yeah, that was a waste of bandwidth, it is much too technical for cbers
> to comprehend.

You seem to think the average person would be interested..... suprising
that. Now careful on that pedistall. Id hate for you to fall and hurt
yourself.

4696. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 09:23:37 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <djd0faurq1@newsg2.svr.pol.co.uk>
Source record: 16729
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"Jock." <real_classs_a@yahoo.co.uk> wrote in message
news:56mil11d1o9mpajvcsq8fnfocq43gv0te1@4ax.com...
> On Fri, 21 Oct 2005 19:11:52 +0100, "The Magnum"
> <magnum@NOSPAMmag2781.freeserve.co.uk> wrote:
>
> >Hold about a bit matey boy... Just because someone uses a CB doesnt make
> >them a lower class person or less intellectual than an Amateur radio
user.
> >They may have brains far exceeding yours on several topics, just not on
> >radio. Just because you know a bit about radio doesnt make you a higher
> >class of person... IT JUST MEANS YOU KNOW ABOUT RADIO'S..... now try
> >learning common sense, respect for ones fellow man and remember.. Amateur
> >Radio.. Just like CB.. is JUST A HOBBY...
> >I love the bit though where you say "it is neither my wish to insult
them"
> >but you manage to do it anyhow...
> >10-4 over and out .. or in your case QRT..
>
> Another CB-er and potential F-class adherent.
>
> (You can spot them the minute they put finger to keyboard).

Are you referring to me dear boy? Now perhaps you could explain your
remarkable assumption. Perhaps its the bit where i dont pamper to the
"mighty Amateur holier than tho attitude" .. who knows, ill wait for your
reply..

> 73 de Jock.
>
> "Choice has always been a privilege of those who
> could afford to pay for it."
> - Ellen Frankfort

4697. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 10:33:50 UTC
From: Steveo <moparholic@hotmail.com>
Message-ID: <20051022063350.853$5T@newsreader.com>
Source record: 16730
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

```
"N0VFP" <lloyd_n0vfp@yahoo.com> wrote:
> Cmd Buzz Corey wrote:
> > whinyslit_lloydie@yahoo.com wrote:
> > > Cmd Buzz Corey wrote:
> > >
> > >>Frank Gilliland wrote:
> > >>
> > >>>Gee, why didn't you crosspost this to rrcb?
> > >>
> > >>Yeah, that was a waste of bandwidth, it is much too technical for
> > >>cbers to comprehend.
> > >
> > >
> > > Especially you.
> > >
> >
> > Hey wogie, tell us all about that negative swr. LOLOLOLOLOLOL!!!!
>
> Hey, dumbass, tell us how you have a "pilot's license"
> HAHAHAHAHAHAHAHA!!!!!!!!
>
Is "Cmd Buzz Corey" a CB handle, or the name this anonymous no code
shitstain uses on Usenet? He fakes being a pilot too? lol

--
http://NewsReader.Com/
```

4698. Re: Ping N8WWM dogie adair the section eight sissy

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 10:40:26 UTC
From: Steveo <moparholic@hotmail.com>
Message-ID: <20051022064026.968$P1_-_@newsreader.com>
Source record: 16731
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

N8WWM posting as -"Keyclowns are limpwristed" <keyklownzrnutjobs@yahoo.com>
wrote:
> wrong, retard...nobody cares about your "attention". Like I said
> before. We know where and who you are, and all the fun starts when WE
> want to start. Not when you do. AKC owns you, and Uhl love how well we
> maintain our property.
>
I've seen how well you maintain your section eight property, you cowardly
sissy. Get busted for jamming the Toledo repeaters again lately?

http://n8wwm.4t.com/

--
http://NewsReader.Com/

4699. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 12:14:39 UTC
From: whinyslit_lloydie@yahoo.com
Message-ID: <1129983279.068909.215920@o13g2000cwo.googlegroups.com>
Source record: 16732
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

Steveo wrote:
> "N0VFP" <lloyd_n0vfp@yahoo.com> wrote:
> > Cmd Buzz Corey wrote:
> > > whinyslit_lloydie@yahoo.com wrote:
> > > > Cmd Buzz Corey wrote:
> > > >
> > > >>Frank Gilliland wrote:
> > > >>
> > > >>>Gee, why didn't you crosspost this to rrcb?
> > > >>
> > > >>Yeah, that was a waste of bandwidth, it is much too technical for
> > > >>cbers to comprehend.
> > > >
> > > >
> > > > Especially you.
> > > >
> > >
> > > Hey wogie, tell us all about that negative swr. LOLOLOLOLOLOLOL!!!!
> >
> > Hey, dumbass, tell us how you have a "pilot's license"
> > HAHAHAHAHAHAHAHAHA!!!!!!!!
> >
> Is "Cmd Buzz Corey" a CB handle, or the name this anonymous no code
> shitstain uses on Usenet? He fakes being a pilot too? lol

Indeed. He claims to have both a now obsolete advanced ham ticket,
(unlikely) and a pilot's license (highly unlikely.)! But he hides
behind a cheezy handle swiped from a cheezy 50's sci-fi show.

4700. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 12:35:31 UTC
From: Steveo <moparholic@hotmail.com>
Message-ID: <20051022083531.029$GT@newsreader.com>
Source record: 16733
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

whinyslit_lloydie@yahoo.com wrote:
> Steveo wrote:
> > "N0VFP" <lloyd_n0vfp@yahoo.com> wrote:
> > > Cmd Buzz Corey wrote:
> > > > whinyslit_lloydie@yahoo.com wrote:
> > > > > Cmd Buzz Corey wrote:
> > > > > >
> > > > > >>Frank Gilliland wrote:
> > > > > >>
> > > > > >>>Gee, why didn't you crosspost this to rrcb?
> > > > > >>
> > > > > >>Yeah, that was a waste of bandwidth, it is much too technical for
> > > > > >>cbers to comprehend.
> > > > > >
> > > > > >
> > > > > > Especially you.
> > > > > >
> > > > >
> > > > > Hey wogie, tell us all about that negative swr. LOLOLOLOLOLOLOL!!!!
> > > >
> > > Hey, dumbass, tell us how you have a "pilot's license"
> > > HAHAHAHAHAHAHAHAHA!!!!!!!!
> > >
> > Is "Cmd Buzz Corey" a CB handle, or the name this anonymous no code
> > shitstain uses on Usenet? He fakes being a pilot too? lol
>
> Indeed. He claims to have both a now obsolete advanced ham ticket,
> (unlikely) and a pilot's license (highly unlikely.)! But he hides
> behind a cheezy handle swiped from a cheezy 50's sci-fi show.
>
He nym shifts too, he used to post as "JJ" from that TV show goodtimes..his
CB handle was 'kid dynomite' back in the CB boom of the 70's. What a putz.

--
http://NewsReader.Com/

4701. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 12:44:49 UTC
From: whinyslit_lloydie@yahoo.com
Message-ID: <1129985089.363728.146880@g43g2000cwa.googlegroups.com>
Source record: 16734
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

The Cmd of buttholes sure hasn't made any "DYNO-MITE" pronouncements on the internet, has he?

4702. WTB:Heathkit parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 13:17:29 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <JZq6f.167237$qY1.29026@bgtnsc04-news.ops.worldnet.att.net>
Source record: 16735
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Looking for a replacement round dial scale (0-100) for SB series and a low B+ choke for SB-401. What you got hidden away????? Joe

4703. Link to QST/QEX files

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 13:55:07 UTC
From: Johnson <jdwalton@comt.net>
Message-ID: <ceCdnfHsDq9X38feRVn-qQ@comcast.com>
Source record: 16736

Below is a link to the ARRL's binaries -- you'll find the addenda to a lot of articles, PDF's, software -- it was partially mentioned in the Steber LMS article which appeared in the October QST and Sep/Oct QEX.

http://www.arrl.org/files/qst-binaries/

4704. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 14:37:36 UTC
From: Steveo <moparholic@hotmail.com>
Message-ID: <20051022103736.581$CY@newsreader.com>
Source record: 16737
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

whinyslit_lloydie@yahoo.com wrote:
> The Cmd of buttholes sure hasn't made any "DYNO-MITE" pronouncements on
> the internet, has he?
>
He still loves his CB.

--
http://NewsReader.Com/

4705. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 14:54:04 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1129992844.884556.277730@g44g2000cwa.googlegroups.com>
Source record: 16738
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

The Magnum wrote:
> > > Roger that thar, ten-fer gud buddy, squwak-squeek, gotge ears on thar
> > > gud buddy, bring-it on MFer,
> aaaaaaaaauuuuuuuuuddddddddiiiiiiiiooooooooooo.
> >
> > You post like you have experience talking on it, loser.
>
>
> Do you know, in all my years of CB radio use ive never actually heard anyone
> talk like that on the CB. Ive been on since 1979 (not continuously, i do let
> go the mic occasionally ;o) The only people who talk like that are people
> who have no real idea of CB and are just taking the Mick. Am i wrong?? do
> people talk like that on the CB where you live?? Let us know where these
> people are so we can avoid them ....

closest I have ever heard to such is the guy who clearly has a his rig
out of tune and you can't tell what he is saying, but they are the
occasional exception
> Graham

4706. Re: Putting the "Real" back into _REAL_ Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 15:06:00 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1129993560.832541.147330@g14g2000cwa.googlegroups.com>
Source record: 16739
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Polymath wrote:
> _REAL_ Ham Radio is a technical pursuit.
>
> One area that remains easily open is the construction
> of CW rigs - you need little more than an
> oscillator.
>
> Off-the-shelf talk-boxes are the stuff of which
> CB is made, and not Ham Radio.
>
> Therefore let us move to ban voice communications
> from Ham Radio - a listen to 20m shows up inane
> conversations from CB types only.
>
> CW comms has always been the essence of Ham Radio,
> and remains a feature of Ham Radio now that the
> commercial world has moved into Sat comms.
>
> So.....
> 1. Restore the 12 WPM Morse test around the world.
> 2. Cancel _ALL_ licences where the licensee has not
> passed a 12 WPM Morse Test.
> 3. Remove all band plans - only Morse is now allowed.
> 4. All new licensees to be limited to their first year
> op operation to 10W home-brewed rigs (And, of course,
> on CW as there will be no more voice)
> Let us fight the insidious march of the Mongolian
> Hordes of CBers-Masquerading-As-Radio-Hams before it
> is far too late!

Ham Radio is dead Long live the new and improved Ham radio

4707. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 15:35:13 UTC
From: "Jock." <real_classs_a@yahoo.co.uk>
Message-ID: <9mmkl1dpdj8alridh112p8updj9bbbng94@4ax.com>
Source record: 16740
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sat, 22 Oct 2005 10:23:37 +0100, "The Magnum"
<magnum@NOSPAMmag2781.freeserve.co.uk> wrote:

>"Jock." <real_classs_a@yahoo.co.uk> wrote in message
>news:56mil11d1o9mpajvcsq8fnfocq43gv0te1@4ax.com...
>> On Fri, 21 Oct 2005 19:11:52 +0100, "The Magnum"
>> <magnum@NOSPAMmag2781.freeserve.co.uk> wrote:

>> Another CB-er and potential F-class adherent.
>>
>> (You can spot them the minute they put finger to keyboard).
>
>Are you referring to me dear boy?

I am indeed, who else?

>Now perhaps you could explain your remarkable assumption.
>Perhaps its the bit where i dont pamper to the
>"mighty Amateur holier than tho attitude"

Which particular mis-spelt, mis-punctuated part was
that?

At least this "holier-than-tho" amateur knows how to trim
and quote UseNet posts properly.

>who knows, ill wait for your reply..

You'll wait a bloody long time then, I try not to cross-
post too much, particularly to anything that smells of
CB.

--

73 de Jock.

"Choice has always been a privilege of those who
could afford to pay for it."
- Ellen Frankfort

4708. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 16:00:31 UTC
From: N0VFP <lloyd_n0vfp@yahoo.com>
Message-ID: <1129996831.222959.42890@g47g2000cwa.googlegroups.com>
Source record: 16742
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

Cmdr Buzz Corey wrote:
> whinyshit_lloydie@yahoo.com wrote:
> >>shitstain uses on Usenet? He fakes being a pilot too? lol
> > >
> > >
> > > Indeed. He claims to have both a now obsolete advanced ham ticket,
> > > (unlikely) and a pilot's license (highly unlikely.)! But he hides
> > > behind a cheezy handle swiped from a cheezy 50's sci-fi show.
> > >
> >
> > LOL at 2test wogie, the porta-a-pottie specialists.

LOL at Butt Cornholer, has to pretend he has a ham and pilot's license.
He's familiar with port-a-potties, though, since that is where he gets
his meals from.

4709. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 16:03:08 UTC
From: N0VFP <lloyd_n0vfp@yahoo.com>
Message-ID: <1129996988.761279.195160@o13g2000cwo.googlegroups.com>
Source record: 16744
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Cmdr Buzz Corey wrote:
> Jock. wrote:
> > On Sat, 22 Oct 2005 10:23:37 +0100, "The Magnum"
> > <magnum@NOSPAMmag2781.freeserve.co.uk> wrote:
> >
> >
> > >>"Jock." <real_classs_a@yahoo.co.uk> wrote in message
> > >>news:56mil11d1o9mpajvcsq8fnfocq43gv0te1@4ax.com...
> > >>
> > >>>On Fri, 21 Oct 2005 19:11:52 +0100, "The Magnum"
> > >>><magnum@NOSPAMmag2781.freeserve.co.uk> wrote:
> > >
> > >
> > >>>Another CB-er and potential F-class adherent.
> > >>>
> > >>>(You can spot them the minute they put finger to keyboard).
> > >>
> > >>Are you referring to me dear boy?
> > >
> > >
> > > I am indeed, who else?
> > >
> > >
> > >>Now perhaps you could explain your remarkable assumption.
> > >>Perhaps its the bit where i dont pamper to the
> > >>"mighty Amateur holier than tho attitude"
> > >
> > >
> > > Which particular mis-spelt, mis-punctuated part was
> > > that?
> > >
> > > At least this "holier-than-tho" amateur knows how to trim
> > > and quote UseNet posts properly.
> > >
> > >
> > >>who knows, ill wait for your reply..
> > >
> > >
> > > You'll wait a bloody long time then, I try not to cross-
> > > post too much, particularly to anything that smells of
> > > CB.
> > >
>

> It sure gets those cbers like steveo, wogie, and frankieboy upset
> though when you post to the children's band group.

Drunk again, Toad?

4710. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 16:58:23 UTC
From: Cmdr Buzz Corey <me@that.moc>
Message-ID: <LpqdnU7r4fWQ_MfenZ2dnUVZ_sqdnZ2d@gbronline.com>
Source record: 16741
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

whinyshit_lloydie@yahoo.com wrote:
>>shitstain uses on Usenet? He fakes being a pilot too? lol
>
>
> Indeed. He claims to have both a now obsolete advanced ham ticket,
> (unlikely) and a pilot's license (highly unlikely.)! But he hides
> behind a cheezy handle swiped from a cheezy 50's sci-fi show.
>

LOL at 2test wogie, the porta-a-pottie specialists.

4711. Ham radio kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 17:00:03 UTC
From: Jatin <TripleDerby100-ng@yahoo.com>
Message-ID: <neu6f.5518$q%.3129@newssvr12.news.prodigy.com>
Source record: 16745

Are there any places/sites where I can buy ham radio in Kit form? I want my daughtrer to build one for herself as an introduction to this new hobby. She just got her license.

Thanks,

Jatin
==========

4712. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 17:03:46 UTC
From: Cmdr Buzz Corey <me@that.moc>
Message-ID: <LpqdnUvr4fXS_8fenZ2dnUVZ_sqdnZ2d@gbronline.com>
Source record: 16743
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Jock. wrote:
> On Sat, 22 Oct 2005 10:23:37 +0100, "The Magnum"
> <magnum@NOSPAMmag2781.freeserve.co.uk> wrote:
>
>
>>"Jock." <real_classs_a@yahoo.co.uk> wrote in message
>>news:56mil11d1o9mpajvcsq8fnfocq43gv0te1@4ax.com...
>>
>>>On Fri, 21 Oct 2005 19:11:52 +0100, "The Magnum"
>>><magnum@NOSPAMmag2781.freeserve.co.uk> wrote:
>
>
>>>Another CB-er and potential F-class adherent.
>>>
>>>(You can spot them the minute they put finger to keyboard).
>>
>>Are you referring to me dear boy?
>
>
> I am indeed, who else?
>
>
>>Now perhaps you could explain your remarkable assumption.
>>Perhaps its the bit where i dont pamper to the
>>"mighty Amateur holier than tho attitude"
>
>
> Which particular mis-spelt, mis-punctuated part was
> that?
>
> At least this "holier-than-tho" amateur knows how to trim
> and quote UseNet posts properly.
>
>
>>who knows, ill wait for your reply..
>
>
> You'll wait a bloody long time then, I try not to cross-
> post too much, particularly to anything that smells of
> CB.
>

It sure gets those cbers like steveo, wogie, and frankieboy upset
though when you post to the children's band group.

4713. Re: Ham radio kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 17:13:17 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <wqu6f.4701$i%.795@fed1read07>
Source record: 16746

Lots of Ham Radio kits available at URL:
http://ac6v.com/kits.htm#HAM

Many different vendors

If you can afford it and have the time -- try an Elecraft -- great
transceiver
http://www.elecraft.com/

--
CL -- I doubt, therefore I might be !

"Jatin" <TripleDerby100-ng@yahoo.com> wrote in message
news:neu6f.5518$q%.3129@newssvr12.news.prodigy.com...
> Are there any places/sites where I can buy ham radio in Kit form? I want
> my daughtrer to build one for herself as an introduction to this new
> hobby. She just got her license.
>
> Thanks,
>
> Jatin
> ==============

4714. impedance of 2x 4cx800a ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 19:15:35 UTC
From: James Skalski <jskalski@yahoo.com>
Message-ID: <rdw6f.2811$%A1.284@trndny01>
Source record: 16747

What is the plate load impedance of a pair of 4cx800A tubes run at
2500VDC and 1500 watts out?
I have read varying opinions on the amp groups ranging from 800ohms to
2100 ohms. I thought it might be 1600 ohms. :)
Once the impedance is known I can try to determine the minimum tuning
capacitance that I need.
The pair of tubes are 22pf. What would be guesstimate of the stray
capacitance in the tank circuit?

I am undecided if I will use Pi or Pi-L network and whether it will be a
load of 50 ohm or 200ohms with a toroid to bring it down to 50 ohms. I
have to use real world parts....

I can use a vacuum cap to keep things simple.
since I am not an engineer, I want to be sure that my guesses are in the
ballpark...

any input would be appreciated.

Last time that I built an amp was over twenty years ago. It was a
4-1000a and I built the Hypersil plate transformer by hand winding it :)
This time I will have Peter Dahl earn his money.

Jim n2go

4715. Buy and Sell your Tube Gear!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 19:33:56 UTC
From: Jeff James <cbstv@optonline.net>
Message-ID: <Fuw6f.33343$Ge5.28467@fe10.lga>
Source record: 16648

You never know what you'll find..
http://www.dealamerica.com/deal/cgi-bin/ads/bcads.cgi
FREE ads Dedicated to Vintage Amateur Radio...

4716. Re: Putting the "Real" back into _REAL_ Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 20:15:47 UTC
From: Bob Schreibmaier <k3ph@ptd.net>
Message-ID: <gTOdne6vLo5vAMfeUSdV9g@ptd.net>
Source record: 16649
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

The Armenian judges gave this a 9.8 on the Olympic Troll-O-Meter,
but they were overruled by the umpires in instant replay, who
awarded it a 2.6.

The Armenian judges lodged a formal protest!

It was sufficiently trollish, of course, but way too obvious.
It was poorly written, poorly executed, and was so incredibly
lame as to lack the true drawing power of a really masterful
troll. Maybe as high as a 3.1 for the intense stupidity of the
premise, but a 9.8? Never! The Armenian judges tear their
hair out, throw their balalaikas down in dismay, and perform
the traditional Armenian Dismay Chant! They demand a recount!

0 2 4 6 8 10
\
\
\
\
\
TROLL-O-METER

In article <1129970452.489970.290430@g47g2000cwa.googlegroups.com>,
aiyr.r.bean@lycos.co.uk says...
>
>
>_REAL_ Ham Radio is a technical pursuit.
>
>One area that remains easily open is the construction
>of CW rigs - you need little more than an
>oscillator.
>
>Off-the-shelf talk-boxes are the stuff of which
>CB is made, and not Ham Radio.
>
>Therefore let us move to ban voice communications
>from Ham Radio - a listen to 20m shows up inane
>conversations from CB types only.
>
>CW comms has always been the essence of Ham Radio,
>and remains a feature of Ham Radio now that the
>commercial world has moved into Sat comms.
>
>So.....

>1. Restore the 12 WPM Morse test around the world.
>2. Cancel _ALL_ licences where the licensee has not
>passed a 12 WPM Morse Test.
>3. Remove all band plans - only Morse is now allowed.
>4. All new licensees to be limited to their first year
>op operation to 10W home-brewed rigs (And, of course,
>on CW as there will be no more voice)
>Let us fight the insidious march of the Mongolian
>Hordes of CBers-Masquerading-As-Radio-Hams before it
>is far too late!
>

--
+--+
| Bob Schreibmaier K3PH | E-mail: k3ph@ptd.net |
| Kresgeville, PA 18333 | http://www.dxis.org |
+--+

4717. Re: Putting the "Real" back into _REAL_ Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 20:25:24 UTC
From: "G1LVN (for it is he)" <gareth.paley@gmail.com>
Message-ID: <dje77kbor1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 16650
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Bob Schreibmaier" <k3ph@ptd.net> wrote in message
news:gTOdne6vLo5vAMfeUSdV9g@ptd.net...
BEST WISHES, ALL THE HIGH NUMBERS 88'S 73 51'S ETC..10-10 till we do it
AGAIN...DE ALL AT GBR@UK.RADIO.AMATEUR

--
--
73deG1LVN(M0WWS)
it's back it's: http://qsy.to/ChorleyFM !!
http://www.g1lvn.org.uk/wavefiles/

4718. Re: impedance of 2x 4cx800a ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 20:57:38 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <lr7ll1ho4tjan7nohvqt1knpf0t4maq550@4ax.com>
Source record: 16651

On Sat, 22 Oct 2005 19:15:35 GMT, James Skalski <jskalski@yahoo.com>
wrote:

>What is the plate load impedance of a pair of 4cx800A tubes run at
>2500VDC and 1500 watts out?

Depends on what class of operation you intend and on the screen
voltage.

The best way to determine it is using the Eimac Tube Peformance
Calculator, which was a graphical way to implement Chaffee's method.

This is described in "Care and Feeding of Power Grid Tubes" section 3,
which can be found online at:

http://www.cpii.com/eimac/PDF/C&F3Web.pdf

>I have read varying opinions on the amp groups ranging from 800ohms to
>2100 ohms. I thought it might be 1600 ohms. :)
>Once the impedance is known I can try to determine the minimum tuning
>capacitance that I need.
>The pair of tubes are 22pf. What would be guesstimate of the stray
>capacitance in the tank circuit?

Probably figure 5-10 pF.

>
>I am undecided if I will use Pi or Pi-L network and whether it will be a
>load of 50 ohm or 200ohms with a toroid to bring it down to 50 ohms. I
>have to use real world parts....

I would not use a transformer here.

>
>I can use a vacuum cap to keep things simple.
>since I am not an engineer, I want to be sure that my guesses are in the
>ballpark...

With your plate voltage you might not need the vacuum cap but it won't
hurt and the minimum C will be an advantage.

>
>any input would be appreciated.
>
>Last time that I built an amp was over twenty years ago. It was a
>4-1000a and I built the Hypersil plate transformer by hand winding it :)
>This time I will have Peter Dahl earn his money.

Way to go.

4719. How to receive out of band signals..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 21:00:30 UTC
From: SOMMERGIBILE <nomailtosp@mmers.it.invalid>
Message-ID: <435aa9a4$0$8479$5fc30a8@news.tiscali.it>
Source record: 16652

by an VHF or UHF radio and other projects on:
http://web.tiscali.it/am2zy/index.html

4720. Re: Ping N8WWM dogie adair the section eight sissy

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 21:34:57 UTC
From: Steveo <moparholic@hotmail.com>
Message-ID: <20051022173457.734$nv@newsreader.com>
Source record: 16653
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

pierrejalbert@nhl.ca wrote:
> > N8WWM posting as -"Keyclowns are limpwristed"
> > <keyklownzrnutjobs@yahoo.com> wrote:
> > > wrong, retard...nobody cares about your "attention". Like I said
> > > before. We know where and who you are, and all the fun starts when WE
> > > want to start. Not when you do. AKC owns you, and Uhl love how well
> > > we maintain our property.
> > >
> > I've seen how well you maintain your section eight property, you
> > cowardly sissy. Get busted for jamming the Toledo repeaters again
> > lately?
> >
> > http://n8wwm.4t.com/
> >
> > --
> > http://NewsReader.Com/
>
> what's your tech callsign steveo
>
Don't have one.

4721. Re: Putting the "Real" back into _REAL_ Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-22 23:43:32 UTC
From: Steve Stone <spfleck@citlink.net>
Message-ID: <MPG.1dc498acc51bc3b39896d0@news.frontiernet.net>
Source record: 16654
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

In article <1129970452.489970.290430@g47g2000cwa.googlegroups.com>,
aiyr.r.bean@lycos.co.uk says...
> So.....
> 1. Restore the 12 WPM Morse test around the world.
> 2. Cancel _ALL_ licences where the licensee has not
> passed a 12 WPM Morse Test.
>

What is your FISTS number ???

4722. Re: Putting the "Real" back into _REAL_ Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 03:22:59 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1130037779.336942.175210@g14g2000cwa.googlegroups.com>
Source record: 16655
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Nailsea Grammar School?

Steve Stone wrote:
>
> What is your FISTS number ???

4723. High Q caps for 60 Khz loop antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 03:58:10 UTC
From: TRABEM <>
Message-ID: <jpvll1tsjafrmsgmoskph4td69hc88ccpt@4ax.com>
Source record: 16656

What caps should I use for a resonant loop antenna for VLF? I have some antenna plans and need .2 uf total capacitance to resonate a loop antenna at 60 Khz.

I know I should avoid electrolytic and tantalum due to their poor temperature stability.

Disc ceramics are so poor thermally that they are out of the question, especially since the caps are going to be outdoors.

Silver Mica's are horribly expensive these days, and aren't available much past .01uf anyway.

I have a Mouser catalog and plan to order from them soon, but it's not clear which type of cap I should order.

Any suggestions for 50,000 pF caps that don't cost a fortune?

Note that this is a receive only antenna so voltage rating and current carrying capacity are not an issue.

Thanks.

T

4724. test

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 03:58:11 UTC
From: TRABEM <>
Message-ID: <rsvll111gbf65oo94q09culsoagloeigmc@4ax.com>
Source record: 16657

test

4725. Using a Y5V dielectric capacitor for tuning

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 04:15:35 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11lm3mgh6s2l879@corp.supernews.com>
Source record: 16658

I came across this link: https://www.avx.com/docs/techinfo/mlc-tant.pdf ... which points out that Y5V dielectric capacitors chance their effective capacitance across about a 5:1 range depending on the DC basis. Has anyone used this "feature" to obtain tuning in a radio? Similar to using a varactor diode's capacitance for the same effect? I'm thinking that it might not work as well as a varactor diode (especially given Y5V's very significant temperature dependence), but it still seems like it could be a novel idea for a low parts count receiver that didn't need particularly stable tuning.

---Joel Kolstad

4726. Re: High Q caps for 60 Khz loop antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 04:47:34 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <pr-dnewfGcT2iMbeRVn-rg@adelphia.com>
Source record: 16659

TRABEM wrote:
> What caps should I use for a resonant loop antenna for VLF? I have
> some antenna plans and need .2 uf total capacitance to resonate a loop
> antenna at 60 Khz.
>
> I know I should avoid electrolytic and tantalum due to their poor
> temperature stability.
>
> Disc ceramics are so poor thermally that they are out of the question,
> especially since the caps are going to be outdoors.
>
> Silver Mica's are horribly expensive these days, and aren't available
> much past .01uf anyway.
>
> I have a Mouser catalog and plan to order from them soon, but it's not
> clear which type of cap I should order.
>
> Any suggestions for 50,000 pF caps that don't cost a fortune?
>
> Note that this is a receive only antenna so voltage rating and current
> carrying capacity are not an issue.
>
> Thanks.
>
> T

Some possibilities might be polystyrene and metalized polypropylene.
They will be large, but not so expensive in that size.

4727. Re: High Q caps for 60 Khz loop antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 05:17:34 UTC
From: TRABEM <>
Message-ID: <3m6ml1dm3ehvi06gap7r6stpgv0b479o1o@4ax.com>
Source record: 16660

Thanks John,

I did find metalized polypropylene caps in the Mouser catalog. Some
are quite expensive for no apparent reason and a few are inexpensive.
I still don't know why the big cost difference.

There were many pages of metalized polyester film caps, not sure if
they are ok or not. But, they are way cheaper, about half the price of
the lowest priced metalized polystyrene caps.

Are metalized polyester caps just as good as metalized polypropylene
caps?

Thanks,

T

>
>Some possibilities might be polystyrene and metalized polypropylene.
>They will be large, but not so expensive in that size.

4728. Re: Putting the "Real" back into _REAL_ Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 05:22:41 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1130044961.812225.287750@g49g2000cwa.googlegroups.com>
Source record: 16661
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Polymath wrote:
> Nailsea Grammar School?

you don't even know what he Means?

good greif I know what Steve Stone means and I think the ARS would be
better off with Morse Code USE banned (but I don't addvocate it in the
US becuase I beleive the Code users have the right do such things even
if I find them wastefull or counter productive
>
> Steve Stone wrote:
> >
> > What is your FISTS number ???

4729. Looking for 1296 MHz beacon project

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 08:38:39 UTC
From: Rightrik <gaggiorNOSPAM@tin.it>
Message-ID: <3s10ggFljbipU2@individual.net>
Source record: 16662

Hello,
i would like to realize a 1296 MHz beacon : do you have any good online
projects or, better, kits, to suggest ?

Thank you,
73 de Riccardo IK5WQO

4730. Re: Ping N8WWM dogie adair the section eight sissy

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 15:04:05 UTC
From: Steveo <moparholic@hotmail.com>
Message-ID: <20051023110405.176$zw@newsreader.com>
Source record: 16663
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

pierrejalbert@nhl.ca wrote:
>> > http://n8wwm.4t.com/
> >
> > --
> > http://NewsReader.Com/
>
> what's your tech callsign steveo
>
What's your aol callsign, forge-fuck?

4731. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 15:52:03 UTC
From: Landshark <s3buell@sbcglobal.net>
Message-ID: <DkO6f.6507$tV6.1664@newssvr27.news.prodigy.net>
Source record: 16664
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"The Magnum" <magnum@NOSPAMmag2781.freeserve.co.uk> wrote in message
news:djbb6ghdr1@newsg4.svr.pol.co.uk...
>
>> Not difficult to deduce that you are a CB-er.
>
> Why is that then.. is it because he has friends, his house isn't full of
> bits of old crap and he doesnt stink of wee and biscuits??

In other words, a serving of Haggis ;)

Landshark

--
The internet is fun but it's no substitute for books, people, nature,
or direct experiences. But you think that you can get everything you
need from your computer, you are a fool.

Frank Gililland

4732. Re: High Q caps for 60 Khz loop antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 16:38:02 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <bsKdnQ40jNxwJsbeRVn-ig@adelphia.com>
Source record: 16666

TRABEM wrote:
> Thanks John,
>
> I did find metalized polypropylene caps in the Mouser catalog. Some
> are quite expensive for no apparent reason and a few are inexpensive.
> I still don't know why the big cost difference.
>
> There were many pages of metalized polyester film caps, not sure if
> they are ok or not. But, they are way cheaper, about half the price of
> the lowest priced metalized polystyrene caps.
>
> Are metalized polyester caps just as good as metalized polypropylene
> caps?

Mylar caps are pretty good, but not as stable or as high @ as polystyrene.

You might read through this dielectric tutorial:
http://my.execpc.com/~endlr/film.html

4733. Re: High Q caps for 60 Khz loop antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 16:39:22 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <bsKdnQk0jNygIcbeRVn-ig@adelphia.com>
Source record: 16667

TRABEM wrote:
> What caps should I use for a resonant loop antenna for VLF? I have
> some antenna plans and need .2 uf total capacitance to resonate a loop
> antenna at 60 Khz.
>
> I know I should avoid electrolytic and tantalum due to their poor
> temperature stability.
>
> Disc ceramics are so poor thermally that they are out of the question,
> especially since the caps are going to be outdoors.
>
> Silver Mica's are horribly expensive these days, and aren't available
> much past .01uf anyway.
>
> I have a Mouser catalog and plan to order from them soon, but it's not
> clear which type of cap I should order.
>
> Any suggestions for 50,000 pF caps that don't cost a fortune?
>
> Note that this is a receive only antenna so voltage rating and current
> carrying capacity are not an issue.

Is there any possibility that you could add turns to your loop, to
lower the size of the capacitor needed?

4734. Re: Ham radio kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 17:03:08 UTC
From: Jatin <TripleDerby100-ng@yahoo.com>
Message-ID: <gnP6f.3543$D13.3524@newssvr11.news.prodigy.com>
Source record: 16665

Thanks. Just what I was looking for!

Jatin
==========

Caveat Lector wrote:
> Lots of Ham Radio kits available at URL:
> http://ac6v.com/kits.htm#HAM
>
> Many different vendors
>
> If you can afford it and have the time -- try an Elecraft -- great
> transceiver
> http://www.elecraft.com/
>

4735. Re: High Q caps for 60 Khz loop antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 17:26:25 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <MJKdnSn245nZWsbenZ2dnUVZ_sydnZ2d@adelphia.com>
Source record: 16668

John Popelish wrote:
> TRABEM wrote:
>
>> Thanks John,
>>
>> I did find metalized polypropylene caps in the Mouser catalog. Some
>> are quite expensive for no apparent reason and a few are inexpensive.
>> I still don't know why the big cost difference.
>>
>> There were many pages of metalized polyester film caps, not sure if
>> they are ok or not. But, they are way cheaper, about half the price of
>> the lowest priced metalized polystyrene caps.
>>
>> Are metalized polyester caps just as good as metalized polypropylene
>> caps?
>
>
> Mylar caps are pretty good, but not as stable or as high @ as polystyrene.

Well, it sort of looks like a Q. That should have read:

Mylar caps are pretty good, but not as stable or as high Q as polystyrene.

4736. Curtis 8044 keyer chip

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 18:13:00 UTC
From: WildBlue <Joel@cyberbest.com>
Message-ID: <QoQ6f.45$XE2.313475@news.sisna.com>
Source record: 16670

I have been looking high and low for a Curtis 8044 (16 pin) Keyer chip. I can't seem to find one anywhere..

Anyone have any ideas?

Joe
AG4QC

4737. Re: Putting the "Real" back into _REAL_ Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 18:22:23 UTC
From: Dan/W4NTI <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <zxQ6f.18196$vw6.10184@newsread1.news.atl.earthlink.net>
Source record: 16669
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"an_old_friend" <konstans@hotmail.com> wrote in message
news:1130044961.812225.287750@g49g2000cwa.googlegroups.com...
>
> Polymath wrote:
>> Nailsea Grammar School?
>
> you don't even know what he Means?
>
> good greif I know what Steve Stone means and I think the ARS would be
> better off with Morse Code USE banned (but I don't addvocate it in the
> US becuase I beleive the Code users have the right do such things even
> if I find them wastefull or counter productive
>>
>> Steve Stone wrote:
>> >
>> > What is your FISTS number ???
>

Oh please Mr. Know-it-all Markie explain to us ignorant Real Hams how using Morse Code is "wastefull or counter productive". I can hardly wait for this one.

Dan/W4NTI

4738. EAS decoder..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 19:04:46 UTC
From: AG4QC <Joel@cyberbest.com>
Message-ID: <n9R6f.47$CY1.276622@news.sisna.com>
Source record: 16671

We are looking to add EAS broadcasts to our local repeater. I was thinking we could build a EAS decoder and then determine which alerts to have repeated. Has anyone looked into building a EAS decoder?

Joe
-AG4QC

4739. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 19:04:54 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <435BDF1F.386041D3@earthlink.net>
Source record: 16672
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Graham W wrote:
>
> Michael A. Terrell wrote:
> > Joerg wrote:
> >>
> >> Hello Michael,
> >>
> >>> There is no reason to apologize for being good with analog. ;-) I
> >>> worked as a broadcast engineer during the time they announced the
> >>> first memory chip, (1101) which was a slow, noisy 256 bit * 1 DRAM
> >>> with very critical timing. I also did analog and digital work on
> >>> the microwave equipment built at Microdyne, before L3-Com closed
> >>> the Ocala plant.
> >>>
> >>
> >> Seems you started with digital stuff a year or two earlier than I
> >> did. My first RAM had a whopping 1024 bits. Not bytes, bits.
> >> 21...something, I could look it up since the device where its in
> >> still works.
> >>
> > 2114? 1K * 4 bits?
>
> Nah - 2102 1k * 1.

That was one early memory chip i don't recall using.

> Had 8 of 'em in in my homebuilt Nascom 1 computer which with a
> 2708 UVEPROM for the 'monitor' was all the RAM for system and
> user code and video store! Nevertheless, it was sufficient for a
> machine code program to run 'Lunar Lander', hee hee.
>
> Collins filters were regarded as the bees knees in UK ham circles
> but I never could afford one!

The price was right, that day at the Dayton hamfest. ;-)

> 73 de G3VPC

--
?

Michael A. Terrell
Central Florida

4740. Re: EAS decoder..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 20:25:54 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <435BF1D1.8040207@invalid.invalid>
Source record: 16673

AG4QC wrote:
> We are looking to add EAS broadcasts to our local repeater. I was thinking
> we could build a EAS decoder and then determine which alerts to have
> repeated. Has anyone looked into building a EAS decoder?

I have, without much success. They used non-standard modem tones and
data rates. (probably to discourage spoofing)

I wonder if the easiest way might be to cannibalize a S.A.M.E. weather
radio? You could even tap the warning lights to signal the repeater
when an alert is present, and simply use the programming of the weather
radio to decide which alerts to relay.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

4741. Re: Putting the "Real" back into _REAL_ Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 20:42:27 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1130100147.097922.31880@z14g2000cwz.googlegroups.com>
Source record: 16674
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Dan/W4NTI wrote:
> "an_old_friend" <konstans@hotmail.com> wrote in message
> news:1130044961.812225.287750@g49g2000cwa.googlegroups.com...
> >
> > Polymath wrote:
> >> Nailsea Grammar School?
> >
> > you don't even know what he Means?
> >
> > good greif I know what Steve Stone means and I think the ARS would be
> > better off with Morse Code USE banned (but I don't addvocate it in the
> > US becuase I beleive the Code users have the right do such things even
> > if I find them wastefull or counter productive
> >>
> >> Steve Stone wrote:
> >> >
> >> > What is your FISTS number ???
> >
> >
> Oh please Mr. Know-it-all Markie explain to us ignorant Real Hams how using
> Morse Code is "wastefull or counter productive". I can hardly wait for this
> one.

I oputght to make you wait for it

but I will not

Morse Code use has brought about a Cult statuts that has clearly served
and will most likely continue to serve as a dividing point amoug the
memebers of the ARS

I have more but if you want I will make you wait
>
> Dan/W4NTI

4742. Re: Curtis 8044 keyer chip

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 20:48:21 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <7GS6f.8459$i%.4601@fed1read07>
Source record: 16675

Try MFJ

Company
Curtis Electro Devices - see MFJ

USA

Products and Services
COMPONENT>INTEGRATED CIRCUIT; MORSE CODE>KEYER;
Notes
Curtis 8044 and 8044ABM keyer chips are being sold by MFJ. They have a small quantity priced at $19.95.

FROM URL:
http://www.arrl.org/cgi-bin/tisfind?case=on&patt=MORSE+CODE%3EKEY

--
CL -- I doubt, therefore I might be !

"WildBlue" <Joel@cyberbest.com> wrote in message
news:QoQ6f.45$XE2.313475@news.sisna.com...
>I have been looking high and low for a Curtis 8044 (16 pin) Keyer chip. I
>can't seem to find one anywhere..
>
> Anyone have any ideas?
>
> Joe
> AG4QC
>

4743. Re: EAS decoder..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 21:50:00 UTC
From: Bill <exray@coqui.net>
Message-ID: <79fd8$435c058b$4232bd92$14023@COQUI.NET>
Source record: 16676

Doug Smith W9WI wrote:

> I wonder if the easiest way might be to cannibalize a S.A.M.E. weather
> radio? You could even tap the warning lights to signal the repeater
> when an alert is present, and simply use the programming of the weather
> radio to decide which alerts to relay.

Agreed. Locally here they have been advertising EAS type consumer
radios. From what I gather from the blurb they seem like the real thing
with programmable municipality codes, programmable to your choice of
alert tones, etc. I don't know what a S.A.M.E. is , maybe the same
thing ? (Oops, sri for the pun)
I haven't bothered to hear a brand name or price but I suspect its cheap
enough to negate building your own from scratch.

Good luck,
Bill

4744. Re: Putting the "Real" back into _REAL_ Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 21:59:04 UTC
From: Dan/W4NTI <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <IIT6f.488$AS6.42@newsread3.news.atl.earthlink.net>
Source record: 16677
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"an_old_friend" <konstans@hotmail.com> wrote in message
news:1130100147.097922.31880@z14g2000cwz.googlegroups.com...
>
> Dan/W4NTI wrote:
>> "an_old_friend" <konstans@hotmail.com> wrote in message
>> news:1130044961.812225.287750@g49g2000cwa.googlegroups.com...
>> >
>> > Polymath wrote:
>> >> Nailsea Grammar School?
>> >
>> > you don't even know what he Means?
>> >
>> > good greif I know what Steve Stone means and I think the ARS would be
>> > better off with Morse Code USE banned (but I don't addvocate it in the
>> > US becuase I beleive the Code users have the right do such things even
>> > if I find them wastefull or counter productive
>> >>
>> >> Steve Stone wrote:
>> >> >
>> >> > What is your FISTS number ???
>> >
>> >>
>> Oh please Mr. Know-it-all Markie explain to us ignorant Real Hams how
>> using
>> Morse Code is "wastefull or counter productive". I can hardly wait for
>> this
>> one.
>
> I oputght to make you wait for it
>
>
>
>
>
>
>
>
>
>
>
>
>
> but I will not
>

> Morse Code use has brought about a Cult statuts that has clearly served
> and will most likely continue to serve as a dividing point amoug the
> memebers of the ARS
>
> I have more but if you want I will make you wait
>>
>> Dan/W4NTI
>

A cult you say? A dividing point you say? Who is the leader of this cult Markie? Do we stand around NAKED in a circle and summon demons?

A dividing point? What might that be Markie? The CW qualified, and the NOT? Why is THAT such a problem to you? Because your too LAZY to memorize enough Morse to pass a multiple GUESS test at the ridicolous slow speed of FIVE WORDS A MINUTE? You could pass that by knowing 15 letters and guessing at the rest.

I think the word of interest here is LAZY.

Continue Markey.....I can hardly wait.

Dan/W4NTI

4745. MPS6543 Transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 22:05:15 UTC
From: Alt Beer <null@null.org>
Message-ID: <vOT6f.1416$iZ4.5@newsfe2-gui.ntli.net>
Source record: 16679

My HP Q meter has a duff MPS6543 transistor.
Anyone have one or know where I can obtain one?

Thanks,
John G3UGY

4746. Re: High Q caps for 60 Khz loop antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 22:06:11 UTC
From: novatech@eskimo.com
Message-ID: <djh1gjiaf1@eskinews.eskimo.com>
Source record: 16678

John Popelish <jpopelish@rica.net> writes:

>TRABEM wrote:
>> Thanks John,
>>
>> I did find metalized polypropylene caps in the Mouser catalog. Some
>> are quite expensive for no apparent reason and a few are inexpensive.
>> I still don't know why the big cost difference.
>>
>> There were many pages of metalized polyester film caps, not sure if
>> they are ok or not. But, they are way cheaper, about half the price of
>> the lowest priced metalized polystyrene caps.
>>
>> Are metalized polyester caps just as good as metalized polypropylene
>> caps?

>Mylar caps are pretty good, but not as stable or as high @ as polystyrene.

>You might read through this dielectric tutorial:
>http://my.execpc.com/~endlr/film.html

You can easily get Q>1000 with polypropylene capactor. Wima made some
really nice ones.
--
Steven D. Swift, novatech@eskimo.com, http://www.novatech-instr.com
NOVATECH INSTRUMENTS, INC. P.O. Box 55997
206.301.8986, fax 206.363.4367 Seattle, Washington 98155 USA

4747. Re: Putting the "Real" back into _REAL_ Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 22:26:39 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1130106399.644208.224450@f14g2000cwb.googlegroups.com>
Source record: 16680
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Dan/W4NTI wrote:
> "an_old_friend" <konstans@hotmail.com> wrote in message
> news:1130100147.097922.31880@z14g2000cwz.googlegroups.com...
> >
> > Dan/W4NTI wrote:
> >> "an_old_friend" <konstans@hotmail.com> wrote in message
> >> news:1130044961.812225.287750@g49g2000cwa.googlegroups.com...
> >> >
> >> > Polymath wrote:
> >> >> Nailsea Grammar School?
> >> >
> >> > you don't even know what he Means?
> >> >
> >> > good greif I know what Steve Stone means and I think the ARS would be
> >> > better off with Morse Code USE banned (but I don't addvocate it in the
> >> > US becuase I beleive the Code users have the right do such things even
> >> > if I find them wastefull or counter productive
> >> >>
> >> >> Steve Stone wrote:
> >> >> >
> >> >> > What is your FISTS number ???
> >> >
> >> >
> >> Oh please Mr. Know-it-all Markie explain to us ignorant Real Hams how
> >> using
> >> Morse Code is "wastefull or counter productive". I can hardly wait for
> >> this
> >> one.
> >
> > I oputght to make you wait for it
> >
> >
> >
> >
> >
> >
> >
> >
> >
> >
> >
> >
> >
> > but I will not

> >
> > Morse Code use has brought about a Cult statuts that has clearly served
> > and will most likely continue to serve as a dividing point amoug the
> > memebers of the ARS
> >
> > I have more but if you want I will make you wait
> >>
> >> Dan/W4NTI
> >
>
> A cult you say?
yes and others have as well

> A dividing point you say?

certainly
> Who is the leader of this cult
> Markie?

well I rather to name the Late Maxim dead a buried leaders are safer

but realy I don't get the memos of the cult of the MMM, being that I am
not on the membership roster
>Do we stand around NAKED in a circle and summon demons?

again I would not know, but I am inclinded to doubt it

>
> A dividing point? What might that be Markie? The CW qualified, and the
> NOT? Why is THAT such a problem to you? Because your too LAZY to memorize
> enough Morse to pass a multiple GUESS test at the ridicolous slow speed of
> FIVE WORDS A MINUTE? You could pass that by knowing 15 letters and guessing
> at the rest.
>
> I think the word of interest here is LAZY.

nothing you have said before, fortunately the FCC can see though that
line of BS even if you can't

>
> Continue Markey.....I can hardly wait.

when you going to pay me?
>
> Dan/W4NTI

4748. Re: MPS6543 Transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-23 23:01:50 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <aj3ol1dhlljc0168k9sda29vhe7ign4d70@4ax.com>
Source record: 16681

Hi,

>My HP Q meter has a duff MPS6543 transistor.
>Anyone have one or know where I can obtain one?

According to the data sheet the MPS6543 isn't particularly unusual and you should be able to substitute if you don't find the real thing.

Have a look here -

http://www.datasheet4u.com/

It is a general-purpose, 350mW, 25V, UHF, silicon, NPN device with an FT of 750MHz, an HFE(min) of 25 and a Cob of 1.0pF in a TO-92 case with the emitter lead in the middle. Maplin have some transistors that might do in their High Frequency, Low Power NPN listing - possibly the BF199?.

BTW, I saw your posting on the HP_Agilent Yahoo Group and meant to reply then but forgot.

Cheers - Joe

4749. High Q caps for 60 Khz loop antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 00:01:00 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_435c1e2b@fidonet.org>
Source record: 16682

"TRABEM" bravely wrote to "All" (22 Oct 05 23:58:10)
--- on the heady topic of "High Q caps for 60 Khz loop antenna?"

Hi,

60KHz really isn't all that demanding. How about polycarbonate,
polystyrene, or mylar? The cheaper the better for receiving.
There are 0,22uF and lower standard value caps in all the above types.
Polystyrene are possibly the more stable but more easily damaged by
the heat of soldering. Just heatsink the lead with needlenose pliers
as close to the body as possible while soldering.

A*s*i*m*o*v

TR> From: TRABEM <>
TR> Xref: core-easynews rec.radio.amateur.homebrew:88419

TR> What caps should I use for a resonant loop antenna for VLF? I have
TR> some antenna plans and need .2 uf total capacitance to resonate a loop
TR> antenna at 60 Khz.
[,,,]
TR> Any suggestions for 50,000 pF caps that don't cost a fortune?

TR> Note that this is a receive only antenna so voltage rating and current
TR> carrying capacity are not an issue.

TR> Thanks.

... A mind is a terrible thing to ...oooohhhhh, pastel Wonderbras.

4750. Re: High Q caps for 60 Khz loop antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 00:34:17 UTC
From: TRABEM <>
Message-ID: <6aaol19b77u80qimdn2mf24oj1dc03i1o3@4ax.com>
Source record: 16683

Hi John,

The loop is already bigger then my house and buying the large diameter wire to make it was not cheap. Buying an additional length just to add another turn would not be easy on me physically. Further, the R(ac), and therefore the Q would suffer since the loops resistance is now doubled by the addition of a second turn.

I am going to feed this into a quadrature front end, which has a problem with harmonics getting into the receiver. My hope is to use the loop as the sole tuning for the front end of the receiver, so maintaining the highest possible Q is imperative.

In terms of labor and cost, it is much more practical to use a larger value capacitor to get higher Q than it would be to use larger cable and more turns of it for the loop.

So, I will try to stick with the larger diameter single turn loop, which I why I asked for suggestions on which type of capacatior to buy to resonate the loop with.

Thanks to all who replied. I appreciate all the comments.

T

>Is there any possibility that you could add turns to your loop, to
>lower the size of the capacitor needed?

4751. Re: High Q caps for 60 Khz loop antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 00:40:19 UTC
From: TRABEM <>
Message-ID: <c3bol1pvjuva9ctm8afgtul0vnbk24lg2r@4ax.com>
Source record: 16684

>> Are metalized polyester caps just as good as metalized polypropylene
>> caps?
>
>Mylar caps are pretty good, but not as stable or as high @ as polystyrene.
>

OK John,

I didn't realize that a polyester cap was the same as a 'mylar' cap.
But, it makes sense now that I know.

Some polyester film caps are pretty inexpensive. I might have gone for
them if I didn't need all the Q I can get for this particular antenna.

Thanks for the tip and to all who commented.

T

4752. Re: High Q caps for 60 Khz loop antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 00:50:32 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <786dndhcytfGssHeRVn-tg@adelphia.com>
Source record: 16685

TRABEM wrote:
> John Popelish wrote:
>>Is there any possibility that you could add turns to your loop, to
>>lower the size of the capacitor needed?

> Hi John,
>
> The loop is already bigger then my house and buying the large diameter
> wire to make it was not cheap. Buying an additional length just to add
> another turn would not be easy on me physically.

All this makes sense.

> Further, the R(ac),
> and therefore the Q would suffer since the loops resistance is now
> doubled by the addition of a second turn.

This, however, doesn't, necessarily. The resistance would double, but
the inductance would quadruple. The impedance would also quagruple
from about 119 ohms to 476 ohms, so the Q would roughly double when
tuned with a .055 uF capacitor. This, of course, neglects the loading
effect of the receiver input resistance and the radiation resistance
of the loop, and the eddy current loading of nearby conducting objects.

> I am going to feed this into a quadrature front end, which has a
> problem with harmonics getting into the receiver. My hope is to use
> the loop as the sole tuning for the front end of the receiver, so
> maintaining the highest possible Q is imperative.

Understood.

> In terms of labor and cost, it is much more practical to use a
> larger value capacitor to get higher Q than it would be to use
> larger cable and more turns of it for the loop.

I can certainly see the cost advantage. Even an expensive capacitor
is probably cheaper than more wire.

> So, I will try to stick with the larger diameter single turn loop,
> which I why I asked for suggestions on which type of capacatior
> to buy to resonate the loop with.
(snip)

Makes lots more sense, now that I understand you are not using a
ferrite rod antenna.

4753. Re: Putting the "Real" back into _REAL_ Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 01:08:18 UTC
From: Dan/W4NTI <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <6uW6f.19062$QE1.12984@newsread2.news.atl.earthlink.net>
Source record: 16686
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"an_old_friend" <konstans@hotmail.com> wrote in message
news:1130106399.644208.224450@f14g2000cwb.googlegroups.com...
>
> Dan/W4NTI wrote:
>> "an_old_friend" <konstans@hotmail.com> wrote in message
>> news:1130100147.097922.31880@z14g2000cwz.googlegroups.com...
>> >
>> > Dan/W4NTI wrote:
>> >> "an_old_friend" <konstans@hotmail.com> wrote in message
>> >> news:1130044961.812225.287750@g49g2000cwa.googlegroups.com...
>> >> >
>> >> > Polymath wrote:
>> >> >> Nailsea Grammar School?
>> >> >
>> >> > you don't even know what he Means?
>> >> >
>> >> > good greif I know what Steve Stone means and I think the ARS would
>> >> > be
>> >> > better off with Morse Code USE banned (but I don't addvocate it in
>> >> > the
>> >> > US becuase I beleive the Code users have the right do such things
>> >> > even
>> >> > if I find them wastefull or counter productive
>> >> >>
>> >> >> Steve Stone wrote:
>> >> >> >
>> >> >> > What is your FISTS number ???
>> >> >
>> >>
>> >> Oh please Mr. Know-it-all Markie explain to us ignorant Real Hams how
>> >> using
>> >> Morse Code is "wastefull or counter productive". I can hardly wait
>> >> for
>> >> this
>> >> one.
>> >
>> > I oputght to make you wait for it
>> >
>> >
>> >
>> >
>> >
>> >

>> >
>> >
>> >
>> >
>> >
>> >
>> > but I will not
>> >
>> > Morse Code use has brought about a Cult statuts that has clearly served
>> > and will most likely continue to serve as a dividing point amoug the
>> > memebers of the ARS
>> >
>> > I have more but if you want I will make you wait
>> >>
>> >> Dan/W4NTI
>> >
>>
>> A cult you say?
> yes and others have as well
>

Who, where, when did others say that. Prove it Moron.

>> A dividing point you say?
>
> certainly

Thats it Markey? Is this the best you can do wimp?

>> Who is the leader of this cult
>> Markie?
>
> well I rather to name the Late Maxim dead a buried leaders are safer
>

Hiram Percy Maxim I presume is who you are defiling. And you wonder why
people want to kick your ass.

HPM among other things was the founder of the ARRL. And you claim he was
the head of a cult consisting of CW users?

BWAHHHHHHAAAAAAAAAAAAA what a flippin idiot you are you discusting excuse
for a human being.

Maybe someone will use on of Mr. Maxims inventions to give you a attitude
adjustment. Any idea what that might be moron?

> but realy I don't get the memos of the cult of the MMM, being that I am
> not on the membership roster
>>Do we stand around NAKED in a circle and summon demons?
>
> again I would not know, but I am inclinded to doubt it
>

>>
>> A dividing point? What might that be Markie? The CW qualified, and the
>> NOT? Why is THAT such a problem to you? Because your too LAZY to
>> memorize
>> enough Morse to pass a multiple GUESS test at the ridicolous slow speed
>> of
>> FIVE WORDS A MINUTE? You could pass that by knowing 15 letters and
>> guessing
>> at the rest.
>>
>> I think the word of interest here is LAZY.
>
> nothing you have said before, fortunately the FCC can see though that
> line of BS even if you can't
>

BWAHAAAAAAAAAAA... what a moron. The FCC is only doing what IT THINKS the hams want. Based on people like you.

You are the reason ham radio went to hell in the last few decades. You and your ilk need to be removed from the service. You are the cause of this whole mess. And you want me and others that are old enough to know what ham radio used to be fall for you bs. Well forget it Asshole, we know better.

>
>>
>> Continue Markey.....I can hardly wait.
>
> when you going to pay me?
>>
Ever see Candid Camera? You figure it out moron.

Dan/W4NTI

4754. Re: Putting the "Real" back into _REAL_ Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 02:11:35 UTC
From: Frank Gilliland <w&#65533;renut@NOSPAM&#65533;cehouse.net>
Message-ID: <66gol15lkr364ip6snlnqh8cmna0nr83pa@4ax.com>
Source record: 16688
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Mon, 24 Oct 2005 01:08:18 GMT, "Dan/W4NTI"
<w4nti@mindNOSPAMATALLspring.com> wrote in
<6uW6f.19062$QE1.12984@newsread2.news.atl.earthlink.net>:

<snip>
>>> I think the word of interest here is LAZY.
>>
>> nothing you have said before, fortunately the FCC can see though that
>> line of BS even if you can't
>>
>
>BWAHAAAAAAAAAAA... what a moron. The FCC is only doing what IT THINKS the
>hams want. Based on people like you.

Gee, and here I thought the FCC was acting on behalf of the ARRL
lobby..... easier tests = more hams = more revenue from RAH sales,
membership dues, sponsor organizations, federal grants, etc, etc.

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

4755. Re: Using a Y5V dielectric capacitor for tuning

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 02:12:21 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <gm9nl11ulblq83mab7t53piqbua2t8gt9e@4ax.com>
Source record: 16689

On Sat, 22 Oct 2005 21:15:35 -0700 "Joel Kolstad"
<JKolstad71HatesSpam@yahoo.com> wrote:

>I came across this link: https://www.avx.com/docs/techinfo/mlc-tant.pdf ...
>which points out that Y5V dielectric capacitors chance their effective
>capacitance across about a 5:1 range depending on the DC basis. Has anyone
>used this "feature" to obtain tuning in a radio? Similar to using a varactor
>diode's capacitance for the same effect? I'm thinking that it might not work
>as well as a varactor diode (especially given Y5V's very significant
>temperature dependence), but it still seems like it could be a novel idea for
>a low parts count receiver that didn't need particularly stable tuning.

The 5:1 range is more than I remember. All class 2 ceramics will do
this to some extent, but the nonlinear tempco is the drawback.

Varactor diodes have a much smaller C range, but that can be dealt
with.

-

Jim Adney jadney@vwtype3.org
Madison, WI 53711 USA

4756. Re: High Q caps for 60 Khz loop antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 02:44:28 UTC
From: TRABEM <>
Message-ID: <diiol1htl8e5lv47598jj1ufgta36mht9c@4ax.com>
Source record: 16690

>Makes lots more sense, now that I understand you are not using a
>ferrite rod antenna.

Ouch! Dern it. I left out a really important detail. Sorry for the
oversight.

Thanks so much for the comments.

T

4757. Re: Ping N8WWM dogie adair the section eight sissy

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 03:11:10 UTC
From: Cmdr Buzz Corey <me@that.moc>
Message-ID: <EZWdncRzmMO238HeRVn-oQ@gbronline.com>
Source record: 16687
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

pierrejalbert@nhl.ca wrote:
>>N8WWM posting as -"Keyclowns are limpwristed" <keyklownzrnutjobs@yahoo.com>
>>wrote:
>>
>>>wrong, retard...nobody cares about your "attention". Like I said
>>>before. We know where and who you are, and all the fun starts when WE
>>>want to start. Not when you do. AKC owns you, and Uhl love how well we
>>>maintain our property.
>>>
>>
>>I've seen how well you maintain your section eight property, you cowardly
>>sissy. Get busted for jamming the Toledo repeaters again lately?
>>
>>http://n8wwm.4t.com/
>>
>>--
>> http://NewsReader.Com/
>
>
>
> what's your tech callsign steveo

Steveo can't even get a no-code tech.

4758. Wideband RF blocking

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 03:26:37 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11lol6n6q2qsjc0@corp.supernews.com>
Source record: 16691

In a receiver, for wideband (10-150MHz) biasing of a MMIC amplifier using inductors between the RF trace and the power rails, I'm finding that a single inductor tends not to work so well due to (1) wanting a largish inductor (say, one with 500 ohms of reactance at 10MHz in a 50 ohm system --> 8uH) but (2) not going beyond the self-resonant frequency of the inductor, which of course is smaller the larger the inductance (that 8uH inductor might typically have an SRF of 50MHz, noticeably below the 150MHz I'm trying to achieve RF blocking to!).

Is there a better means of providing wideband DC biasing/RF blocking than just placing a large and small inductor in series? I've run SPICE simulations of this, and -- just as when you stack multiple capacitors in parallel for wider RF coupling -- there are significant anti-resonances that drop the overall reactance of the pair of inductors to much less than 500 ohm (even less than 50 ohms!) unless you're very careful in the choice of individual inductor SRFs, inductances, etc.

Thanks,
---Joel Kolstad

4759. Re: High Q caps for 60 Khz loop antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 05:32:58 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <vcqol1t9ugabi5nele60tj4vgjtlssqqsh@4ax.com>
Source record: 16692

On Sun, 23 Oct 2005 20:34:17 -0400, TRABEM <> wrote:

>I am going to feed this into a quadrature front end, which has a
>problem with harmonics getting into the receiver. My hope is to use
>the loop as the sole tuning for the front end of the receiver, so
>maintaining the highest possible Q is imperative.

Before going to such extreme measures, are you absolutely sure that the "harmonics" are entering the receiver from the actual loop due to insufficient Q and _not_ sneaking in through the cable shield, power supply lines etc. or other antenna effects ?

Even if you have a single strong unwanted signal at some harmonic frequency, taking it out with a high-Q notch filter prior to the mixer(s) would be easier. An isolation stage (emitter follower etc.) might be needed between the receiver loop and the notch filter to prevent too much interaction.

Paul OH3LWR

4760. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 05:51:03 UTC
From: DrDeath <drdeath555usb@yahoo.com>
Message-ID: <11loti63r2mj524@corp.supernews.com>
Source record: 16693
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"Jock." <real_classs_a@yahoo.co.uk> wrote in message
news:56mil11d1o9mpajvcsq8fnfocq43gv0te1@4ax.com...
> On Fri, 21 Oct 2005 19:11:52 +0100, "The Magnum"
> <magnum@NOSPAMmag2781.freeserve.co.uk> wrote:
>
>>Hold about a bit matey boy... Just because someone uses a CB doesnt make
>>them a lower class person or less intellectual than an Amateur radio user.
>>They may have brains far exceeding yours on several topics, just not on
>>radio. Just because you know a bit about radio doesnt make you a higher
>>class of person... IT JUST MEANS YOU KNOW ABOUT RADIO'S..... now try
>>learning common sense, respect for ones fellow man and remember.. Amateur
>>Radio.. Just like CB.. is JUST A HOBBY...
>>I love the bit though where you say "it is neither my wish to insult them"
>>but you manage to do it anyhow...
>>10-4 over and out .. or in your case QRT..
>
> Another CB-er and potential F-class adherent.
>
> (You can spot them the minute they put finger to keyboard).

Yet another reason I will never obtain a ham ticket. You seem to think that
your little piece of paper raises your IQ.

4761. Re: Ping N8WWM dogie adair the section eight sissy

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 06:31:45 UTC
From: DrDeath <drdeath555usb@yahoo.com>
Message-ID: <11lovuh1v5uht52@corp.supernews.com>
Source record: 16694
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"Cmdr Buzz Corey" <me@that.moc> wrote in message
news:EZWdncRzmMO238HeRVn-oQ@gbronline.com...
> pierrejalbert@nhl.ca wrote:
>>>N8WWM posting as -"Keyclowns are limpwristed"
>>><keyklownzrnutjobs@yahoo.com>
>>>wrote:
>>>
>>>>wrong, retard...nobody cares about your "attention". Like I said
>>>>before. We know where and who you are, and all the fun starts when WE
>>>>want to start. Not when you do. AKC owns you, and Uhl love how well we
>>>>maintain our property.
>>>>
>>>
>>>I've seen how well you maintain your section eight property, you cowardly
>>>sissy. Get busted for jamming the Toledo repeaters again lately?
>>>
>>>http://n8wwm.4t.com/
>>>
>>>--
>>> http://NewsReader.Com/
>>
>>
>>
>> what's your tech callsign steveo
>
> Steveo can't even get a no-code tech.

Why would he want it?
I should get one, wipe my ass with it and send it to the FCC.

4762. 4CX250B amp, with lumped output tuning

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 07:56:14 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <1130140574.864981.323150@f14g2000cwb.googlegroups.com>
Source record: 16695

Hi All,

I am contemplating the design of a class C amp for 144MHz using wound output inductors and a split stator (butterfly) tuning cap. This seems to be a very common approach in the good old days for QQV06-40As, but I don't think that I have seen such a design for 250Bs in push pull.

The issue of voltage rating of the o/p cap is of course an issue, and the output coupling loop will need to be well insulated (assume 1500VDC on the anodes).

Any obvious reason that this isn't a common approach ?

Ian ? Anyone ??

Thanks,

Mark.

4763. Re: Ping N8WWM dogie adair the section eight sissy

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 10:38:51 UTC
From: Steveo <moparholic@hotmail.com>
Message-ID: <20051024063851.281$Gh@newsreader.com>
Source record: 16696
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

Cmdr Buzz Corey <me@that.moc> wrote:
> pierrejalbert@nhl.ca wrote:
> >>N8WWM posting as -"Keyclowns are limpwristed"
> >><keyklownzrnutjobs@yahoo.com> wrote:
> >>
> >>>wrong, retard...nobody cares about your "attention". Like I said
> >>>before. We know where and who you are, and all the fun starts when WE
> >>>want to start. Not when you do. AKC owns you, and Uhl love how well we
> >>>maintain our property.
> >>>
> >>
> >>I've seen how well you maintain your section eight property, you
> >>cowardly sissy. Get busted for jamming the Toledo repeaters again
> >>lately?
> >>
> >>http://n8wwm.4t.com/
> >>
> >>--
> >> http://NewsReader.Com/
> >
> >
> >
> > what's your tech callsign steveo
>
> Steveo can't even get a no-code tech.
>
Stop bragging about being a no code, JJ the model airplane pilot.

4764. Re: Ping N8WWM dogie adair the section eight sissy

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 10:40:22 UTC
From: Steveo <moparholic@hotmail.com>
Message-ID: <20051024064022.734$Nn@newsreader.com>
Source record: 16697
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"DrDeath" <drdeath555usb@yahoo.com> wrote:
> "Cmdr Buzz Corey" <me@that.moc> wrote in message
> news:EZWdncRzmMO238HeRVn-oQ@gbronline.com...
> > pierrejalbert@nhl.ca wrote:
> >>>N8WWM posting as -"Keyclowns are limpwristed"
> >>><keyklownzrnutjobs@yahoo.com>
> >>>wrote:
> >>>
> >>>>wrong, retard...nobody cares about your "attention". Like I said
> >>>>before. We know where and who you are, and all the fun starts when WE
> >>>>want to start. Not when you do. AKC owns you, and Uhl love how well
> >>>>we maintain our property.
> >>>>
> >>>
> >>>I've seen how well you maintain your section eight property, you
> >>>cowardly sissy. Get busted for jamming the Toledo repeaters again
> >>>lately?
> >>>
> >>>http://n8wwm.4t.com/
> >>>
> >>>--
> >>> http://NewsReader.Com/
> >>
> >>
> >>
> >> what's your tech callsign steveo
> >
> > Steveo can't even get a no-code tech.
>
> Why would he want it?
> I should get one, wipe my ass with it and send it to the FCC.
>
Cmd buzzard thinks he's special with his space patrol walkie-talkie.

4765. Wideband RF blocking

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 12:11:11 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_435cbefb@fidonet.org>
Source record: 16598

"Joel Kolstad" bravely wrote to "All" (23 Oct 05 20:26:37)
--- on the heady topic of "Wideband RF blocking"

Add series or/and parallel resistance to dampen the resonances.

A*s*i*m*o*v

JK> From: "Joel Kolstad" <JKolstad71HatesSpam@yahoo.com>
JK> Xref: core-easynews rec.radio.amateur.homebrew:88454

JK> In a receiver, for wideband (10-150MHz) biasing of a MMIC amplifier
JK> using inductors between the RF trace and the power rails, I'm finding
JK> that a single inductor tends not to work so well due to (1) wanting a
JK> largish inductor (say, one with 500 ohms of reactance at 10MHz in a 50
JK> ohm system --> 8uH) but (2) not going beyond the self-resonant
JK> frequency of the inductor, which of course is smaller the larger the
JK> inductance (that 8uH inductor might typically have an SRF of 50MHz,
JK> noticeably below the 150MHz I'm trying to achieve RF blocking to!).

JK> Is there a better means of providing wideband DC biasing/RF blocking
JK> than just placing a large and small inductor in series? I've run
JK> SPICE simulations of this, and -- just as when you stack multiple
JK> capacitors in parallel for wider RF coupling -- there are significant
JK> anti-resonances that drop the overall reactance of the pair of
JK> inductors to much less than 500 ohm (even less than 50 ohms!) unless
JK> you're very careful in the choice of individual inductor SRFs,
JK> inductances, etc.
JK> Thanks,
JK> ---Joel Kolstad

... Why do we park on driveways and drive on parkways?

4766. Re: MPS6543 Transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 12:58:28 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <kLGdnU3mLPToR8HeRVnygw@pipex.net>
Source record: 16599

> My HP Q meter has a duff MPS6543 transistor.
> Anyone have one or know where I can obtain one?
==========
According to Tower's International Transistor Selector , BF183 is equivalent
to MPS6543.
For BF183 you can check with Mode Components , www.modecomponents.co.uk

Good Luck

Frank GM0CSZ / KN6WH

4767. Re: EAS decoder..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 13:46:03 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <435CE593.2090101@invalid.invalid>
Source record: 16600

Bill wrote:
> Agreed. Locally here they have been advertising EAS type consumer
> radios. From what I gather from the blurb they seem like the real thing
> with programmable municipality codes, programmable to your choice of
> alert tones, etc. I don't know what a S.A.M.E. is , maybe the same
> thing ? (Oops, sri for the pun)

<ouch!>

S.A.M.E. = Specific Area Message Encoding. It decodes the EAS bursts so
you can program it to only respond to alerts for your area, as opposed
to the older radios that keyed on the alert tone & would go off for
everything.

> I haven't bothered to hear a brand name or price but I suspect its cheap
> enough to negate building your own from scratch.

Radio Shack sells them, for well under $100. However, the model I had
can only be programmed for location, not for alert type. (i.e. you can
program which counties it'll go off for, but it'll go off for all types
of alert for those counties. If they issue another Amber Alert at 3am
I'm going to turn the d*mned thing off...)
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

4768. Re: 4CX250B amp, with lumped output tuning

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 13:54:30 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1130162070.676916.65480@g43g2000cwa.googlegroups.com>
Source record: 16601

MarkAren wrote:
> Hi All,
>
>
> Any obvious reason that this isn't a common approach ?
>
> Ian ? Anyone ??
>
> Thanks,
>
> Mark.

Yep - push pull amps make wonderful frequency multipliers. In the days when there was nothing in use above them, it didnt matter. Now it does.

Andrew VK3BFA.

4769. Re: Putting the "Real" back into _REAL_ Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 14:08:49 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1130162929.845318.13120@g49g2000cwa.googlegroups.com>
Source record: 16602
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Dan/W4NTI wrote:
> "an_old_friend" <konstans@hotmail.com> wrote in message
> news:1130106399.644208.224450@f14g2000cwb.googlegroups.com...
> >
> > Dan/W4NTI wrote:
> >> "an_old_friend" <konstans@hotmail.com> wrote in message
> >> news:1130100147.097922.31880@z14g2000cwz.googlegroups.com...
> >> >
> >> > Dan/W4NTI wrote:
> >> >> "an_old_friend" <konstans@hotmail.com> wrote in message
> >> >> news:1130044961.812225.287750@g49g2000cwa.googlegroups.com...
> >> >> >
> >> >> > Polymath wrote:
> >> >> >> Nailsea Grammar School?
> >> >> >
> >> >> > you don't even know what he Means?
> >> >> >
> >> >> > good greif I know what Steve Stone means and I think the ARS would
> >> >> > be
> >> >> > better off with Morse Code USE banned (but I don't addvocate it in
> >> >> > the
> >> >> > US becuase I beleive the Code users have the right do such things
> >> >> > even
> >> >> > if I find them wastefull or counter productive
> >> >> >>
> >> >> >> Steve Stone wrote:
> >> >> >> >
> >> >> >> > What is your FISTS number ???
> >> >> >
> >> >>
> >> >> Oh please Mr. Know-it-all Markie explain to us ignorant Real Hams how
> >> >> using
> >> >> Morse Code is "wastefull or counter productive". I can hardly wait
> >> >> for
> >> >> this
> >> >> one.
> >> >
> >> > I oputght to make you wait for it
> >> >
> >> >
> >> >
> >> >
> >> >
> >
> >

> >> >
> >> >
> >> >
> >> >
> >> >
> >> >
> >> >
> >> > but I will not
> >> >
> >> > Morse Code use has brought about a Cult statuts that has clearly served
> >> > and will most likely continue to serve as a dividing point amoug the
> >> > memebers of the ARS
> >> >
> >> > I have more but if you want I will make you wait
> >> >>
> >> >> Dan/W4NTI
> >> >
> >>
> >> A cult you say?
> > yes and others have as well
> >
>
> Who, where, when did others say that. Prove it Moron.

Len Anderson many times google it yourself the only thing you might
trouble with is keeping DOWN the number of hits

Frank may have said the same

>
> >> A dividing point you say?
> >
> > certainly
>
> Thats it Markey? Is this the best you can do wimp?

it is enough

I see no need to exlaborate further

>
> >> Who is the leader of this cult
> >> Markie?
> >
> > well I rather to name the Late Maxim dead a buried leaders are safer
> >
>
> Hiram Percy Maxim I presume is who you are defiling.

I would dispute your attribution of who is doing the defiling but yes I
was refering to him

> And you wonder why
> people want to kick your ass.

another lie

I know why. I don't worship what they spread out over the ground. It
is good for crops but little else

>
> HPM among other things was the founder of the ARRL.

Yes I know that

> And you claim he was
> the head of a cult consisting of CW users?

I claim he has been evelvated and preverted and since you use the term
defilved in holding such a position

and he can no longer defend himself either

>
> BWAHHHHHHAAAAAAAAAAAAA what a flippin idiot you are you discusting excuse
> for a human being.
>
> Maybe someone will use on of Mr. Maxims inventions to give you a attitude
> adjustment. Any idea what that might be moron?

yes I am aware of the tool of violence you are referring too

but the only person that has talked about an attitude adjugement is YOU

a leading advocate of violence around here

>
> > but realy I don't get the memos of the cult of the MMM, being that I am
> > not on the membership roster
> >>Do we stand around NAKED in a circle and summon demons?
> >
> > again I would not know, but I am inclinded to doubt it
> >
> >>
> >> A dividing point? What might that be Markie? The CW qualified, and the
> >> NOT? Why is THAT such a problem to you? Because your too LAZY to
> >> memorize
> >> enough Morse to pass a multiple GUESS test at the ridicolous slow speed
> >> of
> >> FIVE WORDS A MINUTE? You could pass that by knowing 15 letters and
> >> guessing
> >> at the rest.
> >>
> >> I think the word of interest here is LAZY.
> >
> > nothing you have said before, fortunately the FCC can see though that
> > line of BS even if you can't

> >
>
> BWAHAAAAAAAAAAA... what a moron.

the moronic statement is the one that follows your statement

> The FCC is only doing what IT THINKS the
> hams want.

the FCC does not care what Ham want

the FCC like every other part of the Govt wants to do the least it can
and still justify its budget as serving the mandates it is assigned

> Based on people like you.

appreantly an awfull lot of them

>
> You are the reason ham radio went to hell in the last few decades.

realy

you are mistaken of course in assuming that becuase you find to be
hellish it is. it is your ego talking here.

> You and
> your ilk need to be removed from the service.

that is the way of the tyrant remove all that disagree with you

> You are the cause of this
> whole mess.

I caused the wizards of 80m? a No Code Tech,

thanks I needed the laugh this morning

> And you want me and others that are old enough to know what ham
> radio used to be fall for you bs.
"you bs"

too bad for you can't live in the past

the Mr Maxim I trust would unhappy at the way you and your freind have
cared for Ham Radio

stifling inovation helping take ham away from the cutting of technlogy
and so on.

but you insist on traping him as a demigod of your sick cult that has
all but ruined Ham radio

Momhamond founder of Islam was afrad of a similar fate one he saw as
having befallen Jesus

> Well forget it Asshole, we know better.

sadly the problem is you think you know better

the number and the times say otherwise

>
>
> >
> >>
> >> Continue Markey.....I can hardly wait.
> >
> > when you going to pay me?
> >>
> Ever see Candid Camera? You figure it out moron.

never I take it
>
> Dan/W4NTI

4770. Re: 4CX250B amp, with lumped output tuning

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 14:11:59 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2005.10.24.14.11.57.924653@oceanfree.net>
Source record: 16603

On Mon, 24 Oct 2005 00:56:14 -0700, MarkAren wrote:

> Hi All,
>
> I am contemplating the design of a class C amp for 144MHz using wound
> output inductors and a split stator (butterfly) tuning cap. This seems to
> be a very common approach in the good old days for QQV06-40As, but I don't
> think that I have seen such a design for 250Bs in push pull.

There is a design for a 2M amp using a single 4CX250B in the old
RSGB VHF/UHF Manual. The inductor in the anode circuit is 3.5 turns
of 1/8 inch copper tube. The output coupling loop is 1 turn.

I don't see any reason why you couldn't make a push-pull
version with a pair of 250Bs.

> The issue of voltage rating of the o/p cap is of course an issue, and the
> output coupling loop will need to be well insulated (assume 1500VDC on the
> anodes).

You can reduce the risk of frying the operator by grounding one
end of the output coupling loop.

> Any obvious reason that this isn't a common approach ?

The only advantage I can see with this arrangment is a reduction
in the size of the amp. Since a 500W tube amp will require a large
power supply, I don't see much point in building a tiny PA.
A stripline amp will give greater efficiency and will only
be a little bit bigger.

73, C U on 2M. Ed. EI9GQ.

--
linux-2.6.13
Remove 'X' to reply by e-mail.

4771. Re: Curtis 8044 keyer chip

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 14:30:00 UTC
From: Larry Gagnon <lagagnon@fakeuniserve.com>
Message-ID: <pan.2005.10.24.14.30.00.234000@fakeuniserve.com>
Source record: 16604

On Sun, 23 Oct 2005 13:13:00 -0500, WildBlue wrote:

> I have been looking high and low for a Curtis 8044 (16 pin) Keyer chip. I
> can't seem to find one anywhere..
>
> Anyone have any ideas?
>
> Joe
> AG4QC

If you need a replacement the other poster gave you the details. But if
you want a MUCH more powerful keyer chip, for less, try
http://www.k1el.com

Larry VE7EA

4772. Re: High Q caps for 60 Khz loop antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 15:26:04 UTC
From: TRABEM <>
Message-ID: <pptpl15nqhg7pogko98vaffrhnld62mdr3@4ax.com>
Source record: 16605

Yes, I'm sure.

It's a 60 foot run to the house, which is relatively short in terms of wavelength.

I am feeding it with a balanced line (actually both conductors floating). So, the pickup by the line to the house should be quite minimal. I've tried 300 ohm twinlead and cat5 twisted wire cable. Both work well.

Would never use anything as crude as coax for something like this, it is just asking for trouble.

On Mon, 24 Oct 2005 08:32:58 +0300, Paul Keinanen <keinanen@sci.fi> wrote:

>On Sun, 23 Oct 2005 20:34:17 -0400, TRABEM <> wrote:
>
>>I am going to feed this into a quadrature front end, which has a
>>problem with harmonics getting into the receiver. My hope is to use
>>the loop as the sole tuning for the front end of the receiver, so
>>maintaining the highest possible Q is imperative.
>
>Before going to such extreme measures, are you absolutely sure that
>the "harmonics" are entering the receiver from the actual loop due to
>insufficient Q and _not_ sneaking in through the cable shield, power
>supply lines etc. or other antenna effects ?
>
>Even if you have a single strong unwanted signal at some harmonic
>frequency, taking it out with a high-Q notch filter prior to the
>mixer(s) would be easier. An isolation stage (emitter follower etc.)
>might be needed between the receiver loop and the notch filter to
>prevent too much interaction.

Paul, there are no mixers. It's not a superhet. No mixers, no diode detector, no tuned circuit between the antenna and the detector. An active component anywhere between the antenna and the detector defeats the purpose of a quadrature detector...and, since we don't need an rf stage at all, the receiver is much cleaner than conventional superhets ever could hope to be.

Strong signals on adjacent frequencies that force their way into the front end just end up being cancelled out by the quadrature detector (witht he exception of harmonically related signals)...which is another advantage.

The audio is remarkably clean and crisp.

One would NEVER use any sort of a preamp in a quadrature based
receiver.
Regards,

T

4773. Re: 4CX250B amp, with lumped output tuning

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 17:30:31 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <dh5ql1tv081vjseav82hh1q2805tming8d@4ax.com>
Source record: 16606

On 24 Oct 2005 00:56:14 -0700, "MarkAren" <markaren10@yahoo.com>
wrote:

>Hi All,
>
>I am contemplating the design of a class C amp for 144MHz using wound
>output inductors and a split stator (butterfly) tuning cap. This seems
>to be a very common approach in the good old days for QQV06-40As, but I
>don't think that I have seen such a design for 250Bs in push pull.
>
>The issue of voltage rating of the o/p cap is of course an issue, and
>the output coupling loop will need to be well insulated (assume 1500VDC
>on the anodes).
>
>Any obvious reason that this isn't a common approach ?

The loaded Q (and the circulating current) of the tank will be
necessarily high because of the tube output capacitance. The
efficiency is dependent upon the loaded to unloaded Q ratio. The
tuned line approach can offer higher unloaded Q and a physically
larger structure to dissipate the heat generated by the inevitable
loss.

Output coupling will likely be problematic as well.

I ran a single tube with a wound plate inductor and the efficiency was
pretty low, but it was just a 100W driver so size was more important
than efficiency.

4774. Re: EAS decoder..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 17:30:47 UTC
From: Bill <exray@coqui.net>
Message-ID: <3d745$435d1a4a$4232bd24$24871@COQUI.NET>
Source record: 16607

Doug Smith W9WI wrote:

>> I haven't bothered to hear a brand name or price but I suspect its
>> cheap enough to negate building your own from scratch.
>
>
> Radio Shack sells them, for well under $100. However, the model I had
> can only be programmed for location, not for alert type. (i.e. you can
> program which counties it'll go off for, but it'll go off for all types
> of alert for those counties. If they issue another Amber Alert at 3am
> I'm going to turn the d*mned thing off...)

I heard the ad again. Midland WR-100, $39.95 at Walgreen's. Says its
programmable for 60 types of alerts, municipality coding, etc.

-Bill

4775. Re: 4CX250B amp, with lumped output tuning

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 17:33:34 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <ui6ql1hc8ffci816qdh3gi4lvri62mv1bi@4ax.com>
Source record: 16608

On 24 Oct 2005 06:54:30 -0700, "Andrew VK3BFA"
<ablight@alphalink.com.au> wrote:

>
>MarkAren wrote:
>> Hi All,
>>
>>
>> Any obvious reason that this isn't a common approach ?
>>
>> Ian ? Anyone ??
>>
>> Thanks,
>>
>> Mark.
>
>Yep - push pull amps make wonderful frequency multipliers. In the days
>when there was nothing in use above them, it didnt matter. Now it does.

All class C amps make pretty good frequency multipliers. If you're
worried about the -second- harmonic, then p-p is superior.

4776. Re: Wideband RF blocking

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 17:41:01 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1dc6bc8973bc38669896f8@news-central.giganews.com>
Source record: 16609

In article <11lol6n6q2qsjc0@corp.supernews.com>,
JKolstad71HatesSpam@yahoo.com says...

> Is there a better means of providing wideband DC biasing/RF blocking than just
> placing a large and small inductor in series?

Not really. That's the way it's usually done (along with a resistor).

Have a look at the ADCH-80A from Mini-Circuits -- it's designed
expressly to bias MMICs. Good to several GHz.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

4777. Re: Ping N8WWM dogie adair the section eight sissy

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 18:42:59 UTC
From: whinyslit_lloydie@yahoo.com
Message-ID: <1130179378.969888.288980@g44g2000cwa.googlegroups.com>
Source record: 16610
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

He's dreaming about Uranus.

4778. Re: EAS decoder..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 19:52:54 UTC
From: clifto <clifto@clifto.com>
Message-ID: <mlqv23-fsp.ln1@remote.clifto.com>
Source record: 16611

Doug Smith W9WI wrote:
> Radio Shack sells them, for well under $100. However, the model I had
> can only be programmed for location, not for alert type. (i.e. you can
> program which counties it'll go off for, but it'll go off for all types
> of alert for those counties. If they issue another Amber Alert at 3am
> I'm going to turn the d*mned thing off...)

So they are doing that. I saw it coming but never got that far. Mine went off permanently on May 22, 2004, after being awakened twice in three hours for a thunderstorm *watch* (which wasn't important enough to "tone out" at 12:06 AM when it was issued). I was two pages into a letter to my Congresswoman before I found out that the amber alerts soon to come were mandated by Congress.

The web sellers of these things don't make it easy to determine whether their radios allow programming by type of alert. Though one did offer a selection something like normal/priority/emergency, that doesn't help because they'll probably make all the amber alerts emergency status. I'd love to see a list of weather radios by feature that included this information.

--
If John McCain gets the 2008 Republican Presidential nomination,
my vote for President will be a write-in for Jiang Zemin.

4779. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 22:01:25 UTC
From: Cmdr Buzz Corey <me@that.ten>
Message-ID: <rPadnWnAaYiN1sDeRVn-pw@gbronline.com>
Source record: 16612
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

DrDeath wrote:
> "Jock." <real_classs_a@yahoo.co.uk> wrote in message
> news:56mil11d1o9mpajvcsq8fnfocq43gv0te1@4ax.com...
>
>>On Fri, 21 Oct 2005 19:11:52 +0100, "The Magnum"
>><magnum@NOSPAMmag2781.freeserve.co.uk> wrote:
>>
>>
>>>Hold about a bit matey boy... Just because someone uses a CB doesnt make
>>>them a lower class person or less intellectual than an Amateur radio user.
>>>They may have brains far exceeding yours on several topics, just not on
>>>radio. Just because you know a bit about radio doesnt make you a higher
>>>class of person... IT JUST MEANS YOU KNOW ABOUT RADIO'S..... now try
>>>learning common sense, respect for ones fellow man and remember.. Amateur
>>>Radio.. Just like CB.. is JUST A HOBBY...
>>>I love the bit though where you say "it is neither my wish to insult them"
>>>but you manage to do it anyhow...
>>>10-4 over and out .. or in your case QRT..
>>
>>Another CB-er and potential F-class adherent.
>>
>>(You can spot them the minute they put finger to keyboard).
>
>
> Yet another reason I will never obtain a ham ticket.

Good news for ham radio!

> You seem to think that
> your little piece of paper raises your IQ.

Yet with you cber IQ you couldn't pass the test even though the answers
to the questions are available.

4780. Re: Wideband RF blocking

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-24 22:02:44 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11lqmjjo35gdce2@corp.supernews.com>
Source record: 16613

> Have a look at the ADCH-80A from Mini-Circuits -- it's designed
> expressly to bias MMICs. Good to several GHz.

Thanks, that's a pretty nice part!

4781. Re: High Q caps for 60 Khz loop antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-25 00:16:19 UTC
From: novatech@eskimo.com
Message-ID: <djjtgjdge1@eskinews.eskimo.com>
Source record: 16614

TRABEM <> writes:

>>> Are metalized polyester caps just as good as metalized polypropylene
>>> caps?
>>
>>Mylar caps are pretty good, but not as stable or as high @ as polystyrene.
>>

Wrap-and-fill polypropylene are a lot better than metalized polyester (mylar
is a trade name for polyester). Mylar also absorbs water and shifts its
Q with time rather badly.

If you care about Q for large values, polypropylene is going to be your
best shot. There are other caps (teflon, and other exotic materials) that
are better, but you also seemed concerned with cost. Higher voltage for the
same value with give a better Q.

Good luck.

Steve.
--
Steven D. Swift, novatech@eskimo.com, http://www.novatech-instr.com
NOVATECH INSTRUMENTS, INC. P.O. Box 55997
206.301.8986, fax 206.363.4367 Seattle, Washington 98155 USA

4782. Re: Curtis 8044 keyer chip

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-25 00:50:52 UTC
From: AG4QC <Joel@cyberbest.com>
Message-ID: <Sjf7f.47$Gp3.237712@news.sisna.com>
Source record: 16617

Thanks to everyone.. I called MFJ and they didn't have a replacement chip...
This is for a 422 keyer I bought off E-Bay Of course, it was suppose to be
working .. But it had a blown keyer chip.. It's on it's way back for a
refund.. <shrug>

Yeah, I used the K-10 chip in a QRP rig a while ago. They have a nice
product and it's small.. Actually I have the battery version of the K-12,
(using a watch battery) mounted in a mouse that I use for QRP.. Talk about
cool and easy to do!...

Joe AG4QC

"Larry Gagnon" <lagagnon@fakeuniserve.com> wrote in message
news:pan.2005.10.24.14.30.00.234000@fakeuniserve.com...
> On Sun, 23 Oct 2005 13:13:00 -0500, WildBlue wrote:
>
>> I have been looking high and low for a Curtis 8044 (16 pin) Keyer chip.
>> I
>> can't seem to find one anywhere..
>>
>> Anyone have any ideas?
>>
>> Joe
>> AG4QC
>
> If you need a replacement the other poster gave you the details. But if
> you want a MUCH more powerful keyer chip, for less, try
> http://www.k1el.com
>
> Larry VE7EA

4783. 20meter propagation question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-25 00:51:54 UTC
From: J Shrum <shrumj@madisontelco.com>
Message-ID: <u5qdnYCt0JA2HMDeRVn-tQ@madisontelco.com>
Source record: 16615

Greetings. I've only been a ham for a couple years. Not really done anything w/ it however. Just homebrewed a thing or two, but never made any QSO's. I just acquired a 5w 20m rig (all my budget could allow).
Can someone give me any tips on how to know when 20m is open? What time of year or time of day is typically good for 20?
I tried looking over some MUF charts... but its greek to me at this point.
I've tried googling, but unless I know exactly how to phrase my search, I'm coming up empty...

Any pointers would be great.
Thanks
Jim
KC9FFX

4784. Re: EAS decoder..

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-25 01:03:22 UTC
From: AG4QC <Joel@cyberbest.com>
Message-ID: <yvf7f.48$Yi.18451@news.sisna.com>
Source record: 16618

Most of the radios I see have only warning watch and statement.. The Amber alerts come in as watches.. So you can't distinguish between them and normal weather warning.. My Midland model WR-100 has led's for the alert types so I am thinking about taking that voltage to start things off.. But I never thought about the amber alerts.. I know most people around here monitor the repeater around the clock.. I'm not sure how receptive they would be to a repeated amber alert at 2am.

Joe AG4QC

"Doug Smith W9WI" <w9wi@invalid.invalid> wrote in message news:435CE593.2090101@invalid.invalid...
> Bill wrote:
>> Agreed. Locally here they have been advertising EAS type consumer
>> radios. From what I gather from the blurb they seem like the real thing
>> with programmable municipality codes, programmable to your choice of
>> alert tones, etc. I don't know what a S.A.M.E. is , maybe the same thing
>> ? (Oops, sri for the pun)
>
> <ouch!>
>
> S.A.M.E. = Specific Area Message Encoding. It decodes the EAS bursts so
> you can program it to only respond to alerts for your area, as opposed to
> the older radios that keyed on the alert tone & would go off for
> everything.
>
>> I haven't bothered to hear a brand name or price but I suspect its cheap
>> enough to negate building your own from scratch.
>
> Radio Shack sells them, for well under $100. However, the model I had can
> only be programmed for location, not for alert type. (i.e. you can
> program which counties it'll go off for, but it'll go off for all types of
> alert for those counties. If they issue another Amber Alert at 3am I'm
> going to turn the d*mned thing off...)
> --
> Doug Smith W9WI
> Pleasant View (Nashville), TN EM66
> http://www.w9wi.com
>

4785. Re: 20meter propagation question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-25 01:28:15 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <PSf7f.19552$QE1.776@newsread2.news.atl.earthlink.net>
Source record: 16616

"J Shrum" <shrumj@madisontelco.com> wrote in message
news:u5qdnYCt0JA2HMDeRVn-tQ@madisontelco.com...
> Greetings. I've only been a ham for a couple years. Not really done
anything
> w/ it however. Just homebrewed a thing or two, but never made any QSO's. I
> just acquired a 5w 20m rig (all my budget could allow).
> Can someone give me any tips on how to know when 20m is open? What time of
> year or time of day is typically good for 20?
> I tried looking over some MUF charts... but its greek to me at this point.
> I've tried googling, but unless I know exactly how to phrase my search,
I'm
> coming up empty...
>
> Any pointers would be great.
> Thanks
> Jim
> KC9FFX
>

Turn the rig on and listen. 20 meters is open about any time of the year
especially during the daylight hours.

4786. Re: 20meter propagation question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-25 04:08:56 UTC
From: wendy <wendy_williams@spamfree.com>
Message-ID: <435DAFD5.8AA536F2@spamfree.com>
Source record: 16619

hi jim,

you should be able to copy wwv at 14.000 mhz anytime,

what type of antenna are you using (dipole, long wire)
tuner also ? How high is your antenna ?

73 wendy

J Shrum wrote:

> Greetings. I've only been a ham for a couple years. Not really done anything
> w/ it however. Just homebrewed a thing or two, but never made any QSO's. I
> just acquired a 5w 20m rig (all my budget could allow).
> Can someone give me any tips on how to know when 20m is open? What time of
> year or time of day is typically good for 20?
> I tried looking over some MUF charts... but its greek to me at this point.
> I've tried googling, but unless I know exactly how to phrase my search, I'm
> coming up empty...
>
> Any pointers would be great.
> Thanks
> Jim
> KC9FFX

4787. Re: 20meter propagation question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-25 04:47:53 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <435DB8F9.6020202@invalid.invalid>
Source record: 16620

J Shrum wrote:
> Greetings. I've only been a ham for a couple years. Not really done anything
> w/ it however. Just homebrewed a thing or two, but never made any QSO's. I
> just acquired a 5w 20m rig (all my budget could allow).
> Can someone give me any tips on how to know when 20m is open? What time of
> year or time of day is typically good for 20?

As a **VERY** general rule 20m is open pretty much every day pretty much
all day long and an hour or two into the evening.

(many nights it will stay open considerably later)
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

4788. Re: 20meter propagation question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-25 05:01:02 UTC
From: Bill <exray@coqui.net>
Message-ID: <f31fe$435dbc10$4232bd43$7990@COQUI.NET>
Source record: 16621

wendy wrote:
> hi jim,
>
> you should be able to copy wwv at 14.000 mhz anytime,

Ouch! Try 15.000 Mhz.

-Bill

4789. Re: Shunt feedback in broadband RF amps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-25 07:15:04 UTC
From: meara.london@virgin.net
Message-ID: <1130224504.589121.286790@o13g2000cwo.googlegroups.com>
Source record: 16622

Thanks to all who responded to my question.

I went back and took a closer look at other editions of the Handbook,
and at Solid State Design for the Radio Amateur (SSDRA).

The Handbooks all seem to suggest that the shunt feedback networks
using a resistor and a cap in series will somehow result in more
negative feedback at lower frequencies. Given that capacitive
reactance varies inversely with freq, I still can't see how this
happens. Tim's message seems to provide one possible explanation, but
I'm kind of surprised that I haven't seen mention of this in the ham
literature.

When SSDRA discusses shunt feedback, (Chapter 8, page 188) they have a
resistor, a blocking cap, and an inductor all in series between the
collector and the base in a common emmiter amp. "The inductor has the
effect of decreasing the feedback at high frequencies, while the 470
ohm resistor is the dominant element at low frequencies." That's easy
to see. But without the inductor (no inductor in the Handbook
presentations) it is hard to see how this works.

Thanks again to all,

73 Bill M0HBR CU2JL N2CQR
http://www.qsl.net/n2cqr

tim gorman wrote:
> meara.london@virgin.net wrote:
>
> > >
> > > I'm having trouble understanding how the typical shunt feedback
> > > networks used in RF (solid state) amps work. I'm looking at the 1993
> > > ARRL Handbook. Typical common base broadband amp. For the shunt
> > > feedback (from collector to base) they have two resistors: 560 ohms in
> > > series with 3300 ohms. The 3300 ohm is bypassed by a .01 uf cap.
> > >
> > > So far so good. But then the text explains that because you have
> > > rising gain characteristics when the frequency drops you need something
> > > to reduce gain at lower frequencies. That's why the negative feedback
> > > helps.
> > >
> > > Here's where I'm having trouble: "As the operating frequency is
> > > decreased the negative feedback increases becasue the network feedback
> > > reactance becomes lower." Huh? Wouldn't that network's reactance
> > > INCREASE as frequency is lowered? The only part of it with reactance

> > is the .01 cap, correct?
> >
> > Help! 73!
> >
> > Bill M0HBR N2CQR CU2JL
> > http://www.qsl.net/n2cqr
>
> I think to actually figure this out you will need to write the gain transfer
> equation for the amplifier. Many of the replies here are talking about an
> RF amplifier but are analyzing the feedback at DC.
>
> Remember that the output of a transistor is NOT in phase with the input. As
> the base voltage goes UP the collector voltage goes DOWN. (think of a
> transistor used as a switch - when the base is biased off the no current
> flows and the collector is at power supply potential - when the switch is
> biased on then current flows and the collector is driven toward the
> potential of the emitter -- i.e. the collector voltage goes down) For RF
> the actual phase difference between input and output is dependent upon the
> input and output impedances of the transistor as well as the gain transfer
> characteristic (things like transit times of the current carriers and
> junctions widths and all sorts of stuff figure in here). *THEN* you have to
> consider the phase contribution of the RC network in the collector to base
> network. At some RF frequency the collector is 180deg out of phase with the
> input so a direct feedback link from the collector to the base would be
> *negative*. It is quite possible that the phase relationships of this
> particular amplifier are such that the negative feedback increases as the
> frequency goes down.
>
> You would just have to write the equations and see where they take you.
>
> tim ab0wr

4790. Re: Shunt feedback in broadband RF amps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-25 11:51:42 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <6v5sl11kbgh2e7k2enrq5quhtv0pj8ehki@4ax.com>
Source record: 16623

Since your top posting...

The series C has enough reactance to be effective to fairly low
frequencies. Consider that the 0.1uf cap seen has reactance of
10ohms around 150Khz thats insignificant compared to the resistor.
If the resistor is 1000 ohm then R=C around 2khz.

What you have to ask is what frequency does the capacitors
reactance become equal to the series resistor? For even a
.1uF cap that's a fairly low frequency. I suspect not recognizing
that detail may be confusing. As you get to very low frequencies
that cap may appear to be insignificant but those frequencies are
very low.

To appreciate that revisit those circuits in question and calculate
the capacitor Xc for 1khz, 10khz 100khz and 1Mhz.

Allison

On 25 Oct 2005 00:15:04 -0700, meara.london@virgin.net wrote:

>Thanks to all who responded to my question.
>
>I went back and took a closer look at other editions of the Handbook,
>and at Solid State Design for the Radio Amateur (SSDRA).
>
>The Handbooks all seem to suggest that the shunt feedback networks
>using a resistor and a cap in series will somehow result in more
>negative feedback at lower frequencies. Given that capacitive
>reactance varies inversely with freq, I still can't see how this
>happens. Tim's message seems to provide one possible explanation, but
>I'm kind of surprised that I haven't seen mention of this in the ham
>literature.
>
>When SSDRA discusses shunt feedback, (Chapter 8, page 188) they have a
>resistor, a blocking cap, and an inductor all in series between the
>collector and the base in a common emmiter amp. "The inductor has the
>effect of decreasing the feedback at high frequencies, while the 470
>ohm resistor is the dominant element at low frequencies." That's easy
>to see. But without the inductor (no inductor in the Handbook
>presentations) it is hard to see how this works.
>
>Thanks again to all,
>
>73 Bill M0HBR CU2JL N2CQR
>http://www.qsl.net/n2cqr

>
>tim gorman wrote:
>> meara.london@virgin.net wrote:
>>
>> >
>> >
>> > I'm having trouble understanding how the typical shunt feedback
>> > networks used in RF (solid state) amps work. I'm looking at the 1993
>> > ARRL Handbook. Typical common base broadband amp. For the shunt
>> > feedback (from collector to base) they have two resistors: 560 ohms in
>> > series with 3300 ohms. The 3300 ohm is bypassed by a .01 uf cap.
>> >
>> > So far so good. But then the text explains that because you have
>> > rising gain characteristics when the frequency drops you need something
>> > to reduce gain at lower frequencies. That's why the negative feedback
>> > helps.
>> >
>> > Here's where I'm having trouble: "As the operating frequency is
>> > decreased the negative feedback increases becasue the network feedback
>> > reactance becomes lower." Huh? Wouldn't that network's reactance
>> > INCREASE as frequency is lowered? The only part of it with reactance
>> > is the .01 cap, correct?
>> >
>> > Help! 73!
>> >
>> > Bill M0HBR N2CQR CU2JL
>> > http://www.qsl.net/n2cqr
>>
>> I think to actually figure this out you will need to write the gain transfer
>> equation for the amplifier. Many of the replies here are talking about an
>> RF amplifier but are analyzing the feedback at DC.
>>
>> Remember that the output of a transistor is NOT in phase with the input. As
>> the base voltage goes UP the collector voltage goes DOWN. (think of a
>> transistor used as a switch - when the base is biased off the no current
>> flows and the collector is at power supply potential - when the switch is
>> biased on then current flows and the collector is driven toward the
>> potential of the emitter -- i.e. the collector voltage goes down) For RF
>> the actual phase difference between input and output is dependent upon the
>> input and output impedances of the transistor as well as the gain transfer
>> characteristic (things like transit times of the current carriers and
>> junctions widths and all sorts of stuff figure in here). *THEN* you have to
>> consider the phase contribution of the RC network in the collector to base
>> network. At some RF frequency the collector is 180deg out of phase with the
>> input so a direct feedback link from the collector to the base would be
>> *negative*. It is quite possible that the phase relationships of this
>> particular amplifier are such that the negative feedback increases as the
>> frequency goes down.
>>
>> You would just have to write the equations and see where they take you.

>>
>> tim ab0wr

4791. Re: Putting the "Real" back into _REAL_ Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-25 14:20:25 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <435e3ebe.14301885@news.blueyonder.co.uk>
Source record: 16624
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sat, 22 Oct 2005 10:10:42 +0100, "realradioham"
<realradioham@tiscali.co.uk> wrote:

>I'm not a technical pursuit old boy...
>
>RRH
>"Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
>news:1129970452.489970.290430@g47g2000cwa.googlegroups.com...
>> _REAL_ Ham Radio is a technical pursuit.
>>

Please don't quote bean in full. Many of us have him in our killfiles
and we don't wish to see anything he's posted.

4792. Re: Putting the "Real" back into _REAL_ Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-25 14:21:29 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <435f3f00.14367779@news.blueyonder.co.uk>
Source record: 16625
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sat, 22 Oct 2005 16:15:47 -0400, Bob Schreibmaier <k3ph@ptd.net>
wrote:

>The Armenian judges gave this a 9.8 on the Olympic Troll-O-Meter,
>but they were overruled by the umpires in instant replay, who
>awarded it a 2.6.

Bean eis not a troll.... just one very sick (in the mind) person..
just ignore him.

4793. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-25 15:54:31 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <djlkg8$8rh$1@newsg4.svr.pol.co.uk>
Source record: 16626
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

> > Yet another reason I will never obtain a ham ticket.
>
> Good news for ham radio!

Yep, there will be no one left on Ham soon after all the old farts have
died...

> > You seem to think that
> > your little piece of paper raises your IQ.
>
> Yet with you cber IQ you couldn't pass the test even though the answers
> to the questions are available.

Try taking an IQ test and i bet theres hardly any difference between you and
most people on CB. The only test you would outshine most CBers would be
radio related...

4794. Re: Shunt feedback in broadband RF amps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-25 16:31:09 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <h5t7f.274516$084.214715@attbi_s22>
Source record: 16627

Here is a repeat of my previous input on this topic.

Bill W0IYH

"William E. Sabin" <w.sabin@mchsi.com> wrote in message
news:IlM5f.445451$x96.139037@attbi_s72...
> The 1994 ARRL handbook, page 4-23, Fig 53C shows the feedback amplifier
> that you describe. However, it is a common-emitter circuit, not a
> common-base circuit. The 3300 ohm resistor returns to +12 V DC and
> provides DC base current for the 2N5109. The 0.01 uF bypass makes the 560
> ohm resistor the main source of this feedback at radio frequencies.
>
> There are two kinds of feedback in the circuit. One is the 560 ohms in
> the base circuit. The author calls this "negative feedback". I call this
> "voltage feedback". This feedback does not change very much over the HF
> region.
>
> The other feedback (he calls it "degenerative feedback") is a 10 ohm
> resistor in the emitter in series with a 100 resistor which is shunted by
> 0.01uF. I call this "current feedback". This feedback increases at low
> radio frequency because the impedance from emitter to ground increases at
> low radio frequencies. This is the feedback that the text is referring to
> in the text and it is correct. This kind of feedback increases at low
> frequency. If the 0.01 uF were replaced by a 1.0 uF this increase in
> feedback would be a lot less at low radio frequencies.
>
> The author, probably DeMaw, got his terminology slightly mixed up but he
> is referring to the emitter to ground current feedback, not the collector
> to base voltage feedback.
>
> If you have a copy of the 2004 Handbook, chapter 17 has a sidebar
> discussion of negative feedback that is interesting. Later editions may
> have deleted it.
>
> Bill W0IYH
>
> <meara.london@virgin.net> wrote in message
> news:1129701535.404399.192870@f14g2000cwb.googlegroups.com...
>> I'm having trouble understanding how the typical shunt feedback
>> networks used in RF (solid state) amps work. I'm looking at the 1993
>> ARRL Handbook. Typical common base broadband amp. For the shunt
>> feedback (from collector to base) they have two resistors: 560 ohms in
>> series with 3300 ohms. The 3300 ohm is bypassed by a .01 uf cap.
>>
>> So far so good. But then the text explains that because you have

>> rising gain characteristics when the frequency drops you need something
>> to reduce gain at lower frequencies. That's why the negative feedback
>> helps.
>>
>> Here's where I'm having trouble: "As the operating frequency is
>> decreased the negative feedback increases becasue the network feedback
>> reactance becomes lower." Huh? Wouldn't that network's reactance
>> INCREASE as frequency is lowered? The only part of it with reactance
>> is the .01 cap, correct?
>>
>> Help! 73!
>>
>> Bill M0HBR N2CQR CU2JL
>> http://www.qsl.net/n2cqr
>>
>
>

4795. Re: 20meter propagation question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-25 16:48:49 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <Blt7f.13869$i%.11388@fed1read07>
Source record: 16628

You can tell where 20M is open world wide by using the NCDXF/IARU beacon
system
See URL:
http://www.ncdxf.org/Beacon/intro.html

Specifically 14.100 MHz
If the morse code is too fast --

see URL:
http://www.ncdxf.org/Beacon/BeaconPrograms.html

For programs that will tell which beacons are transmitting

Be sure your computer clock is accurate to within a fraction of a second --
See URL:
http://www.locutuscodeware.com/swatch.htm
--
CL -- I doubt, therefore I might be !

"J Shrum" <shrumj@madisontelco.com> wrote in message
news:u5qdnYCt0JA2HMDeRVn-tQ@madisontelco.com...
> Greetings. I've only been a ham for a couple years. Not really done
> anything
> w/ it however. Just homebrewed a thing or two, but never made any QSO's. I
> just acquired a 5w 20m rig (all my budget could allow).
> Can someone give me any tips on how to know when 20m is open? What time of
> year or time of day is typically good for 20?
> I tried looking over some MUF charts... but its greek to me at this point.
> I've tried googling, but unless I know exactly how to phrase my search,
> I'm
> coming up empty...
>
> Any pointers would be great.
> Thanks
> Jim
> KC9FFX
>

4796. Re: 20meter propagation question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-25 16:49:03 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1130258943.158591.191820@g47g2000cwa.googlegroups.com>
Source record: 16629

> you should be able to copy wwv at 14.000 mhz anytime,

(15MHz and a little QRP transceiver probably isn't a general coverage receiver but...)

Not that easy here on the East Coast. Pretty reliable when there's daytime on one end or the other or both, but a fair bit of fluctuation.

Tim.

4797. Re: 20meter propagation question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-25 18:05:34 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1130263534.713168.18350@g44g2000cwa.googlegroups.com>
Source record: 16630

Caveat Lector wrote:
> You can tell where 20M is open world wide by using the NCDXF/IARU beacon
> system
> See URL:
> http://www.ncdxf.org/Beacon/intro.html
>
> Specifically 14.100 MHz
> If the morse code is too fast --

you need to read the code if the question is the band open at all

indeed I listen for beacons on 6m myself and code at any speed is too
fast but if I can hear em esp if I can a bunch of em the band my well
be open enough to use
>
> see URL:
> http://www.ncdxf.org/Beacon/BeaconPrograms.html
>
> For programs that will tell which beacons are transmitting
>
> Be sure your computer clock is accurate to within a fraction of a second --
> See URL:
> http://www.locutuscodeware.com/swatch.htm
> --
> CL -- I doubt, therefore I might be !
>
>
>
>
>
>
> "J Shrum" <shrumj@madisontelco.com> wrote in message
> news:u5qdnYCt0JA2HMDeRVn-tQ@madisontelco.com...
> > Greetings. I've only been a ham for a couple years. Not really done
> > anything
> > w/ it however. Just homebrewed a thing or two, but never made any QSO's. I
> > just acquired a 5w 20m rig (all my budget could allow).
> > Can someone give me any tips on how to know when 20m is open? What time of
> > year or time of day is typically good for 20?
> > I tried looking over some MUF charts... but its greek to me at this point.
> > I've tried googling, but unless I know exactly how to phrase my search,
> > I'm
> > coming up empty...
> >
> > Any pointers would be great.

> > Thanks
> > Jim
> > KC9FFX
> >

4798. HF Power Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-25 18:12:06 UTC
From: "Dennis, KA6GDT" <wdwyman@comcast.net>
Message-ID: <cd2dnYCct7_j6MPenZ2dnUVZ_s6dnZ2d@comcast.com>
Source record: 16631

Can anyone direct me to an area where I could find plans and/or directions
to construct a HF power amplifier?

4799. Re: HF Power Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-25 23:15:10 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <POKdnSzY2qbYIcPenZ2dnUVZ_s6dnZ2d@bright.net>
Source record: 16632

Any ARRL Handbook would have several. That's probably the best place to start...

Scott
N0EDV

Dennis, KA6GDT wrote:
> Can anyone direct me to an area where I could find plans and/or directions
> to construct a HF power amplifier?
>
>

4800. Closing station, PCB shop, going QRT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-26 00:42:57 UTC
From: n5tde@earthlink.net
Message-ID: <liA7f.229$m81.227@newsread1.news.atl.earthlink.net>
Source record: 16633

For sale: 1) a complete computer controlled PCB machine, computer software, manual, design software and manuals, all that is needed is a small air compressor. Router bits and drills of misc. sizes. The machine is by T-Tech. Does double sided with a .00008 offset resolution or better. I do not have the thru hole plating, T-Tech works with you on that or rig your own. Numerous support computers, the slowest 800 MHz 2) Icom 706 original, Icom 706 MkII GS, Kenwood 1000 general receiver, Kenwood TS450 (needs audio work) spare 6146 finals, driver 12AT7, O'scope(TV repair 6MHz type), HP counter says 50 MHZ top end, worked to 100Mhz with total accuracy, Kenwood 732A 2m/440 transceiver, HP7475 Plotter up to 18x24 multicolor, Heathkit Station: SB101, SB600, SB200, swr,phone patch, HW160 minus top w/homemade power supply, Two large air caps and roller inductor for unbilt matcher, MFJ dual meter matcher, Kantronics KPC-3 with updated firmware complete APRS station, Several audio I/O PCB 1 working proto for digital modes, 14 Mhz Psk31 transceiver QRP about 5 watts out, MFJ 160-6 matcher , 6 meter 3 ele. beam, 2 meter 4 elem. beam, J-pole, 440 6 element beam home design, Large component collection in 50 bin cases, large SMT collection, proto kits unused, 25 ea. ISD2560 voice chips, 30 2cx250s with sockets-or as a whole about
15kw between 10 meter and 440mhz-(commercial RF shield testing of helicopters). No power supply for it, Multitude of 110:24v 1amp ct. power transformers. Fluke meter, old test equip: RF generator, Heath Gate dip osc with all coils plus 440 coil, numerous meters etc. Web site all documentation/support/financial etc., will sign noncompete agreement. Make offer N5TDE@Gardcircuits.com

4801. Re: HF Power Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-26 00:50:09 UTC
From: n5tde@earthlink.net
Message-ID: <5pA7f.234$m81.46@newsread1.news.atl.earthlink.net>
Source record: 16634

1) what bands 2) what power 3) how much money do you want to spend? N5TDE
"Dennis, KA6GDT" <wdwyman@comcast.net> wrote in message
news:cd2dnYCct7_j6MPenZ2dnUVZ_s6dnZ2d@comcast.com...
> Can anyone direct me to an area where I could find plans and/or directions
> to construct a HF power amplifier?
>
>

4802. Re: High Q caps for 60 Khz loop antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-26 00:53:30 UTC
From: n5tde@earthlink.net
Message-ID: <esA7f.237$m81.72@newsread1.news.atl.earthlink.net>
Source record: 16635

Someone tell Trabem about polystyrene and/or NPO disc please!!!!!!!!! N5TDE

<TRABEM> wrote in message news:jpvll1tsjafrmsgmoskph4td69hc88ccpt@4ax.com...
> What caps should I use for a resonant loop antenna for VLF? I have
> some antenna plans and need .2 uf total capacitance to resonate a loop
> antenna at 60 Khz.
>
> I know I should avoid electrolytic and tantalum due to their poor
> temperature stability.
>
> Disc ceramics are so poor thermally that they are out of the question,
> especially since the caps are going to be outdoors.
>
> Silver Mica's are horribly expensive these days, and aren't available
> much past .01uf anyway.
>
> I have a Mouser catalog and plan to order from them soon, but it's not
> clear which type of cap I should order.
>
> Any suggestions for 50,000 pF caps that don't cost a fortune?
>
> Note that this is a receive only antenna so voltage rating and current
> carrying capacity are not an issue.
>
> Thanks.
>
> T

4803. Re: High Q caps for 60 Khz loop antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-26 01:08:34 UTC
From: Bill <exray@coqui.net>
Message-ID: <d7185$435ed715$4232bd3b$24791@COQUI.NET>
Source record: 16636

n5tde@earthlink.net wrote:

> Someone tell Trabem about polystyrene and/or NPO disc please!!!!!!!!!! N5TDE

Where can you buy .2uf NP0 discs?

-Bill

4804. Re: 4CX250B amp, with lumped output tuning

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-26 01:54:13 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1130291653.445366.237140@f14g2000cwb.googlegroups.com>
Source record: 16637

Wes Stewart wrote:
> On 24 Oct 2005 06:54:30 -0700, "Andrew VK3BFA"
> <ablight@alphalink.com.au> wrote:
>

>
> All class C amps make pretty good frequency multipliers. If you're
> worried about the -second- harmonic, then p-p is superior.

Tnks Wes - didnt know that one, obviously need to dig out my theory handbooks and do some revision.

4805. Re: Shunt feedback in broadband RF amps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-26 03:01:47 UTC
From: tim gorman <tgorman2@cox.net>
Message-ID: <sirmjd.sg1.ln@tg6124.ab0wr.net>
Source record: 16639

Again, the common emitter amplifier gives you 180deg of phase change. If this were to be applied directly to the base of the transistor through only a resistor, you would get direct cancellation at a level determnined by the size of the resistor. The feedback network throws in a phase change proportional to the tangent of the reactance and the resistance part of the network. I think the tangent function for the feedback will look something like:

w(k1) / [k2 + w(k3)]

where w is the radian freq. and k1, k2, and k3 are constants made up of R1, R2, and C. k1 = C(R2)**2 or something like that.

As the freq goes up the phase change gets larger - i.e. it moves the phase difference between the collector and the base away from 180deg., which means less negative feedback. The maximum phase change contribution from the RC network would be 45deg as w gets very, very large (arctan 1 = 45). As the frequency goes down, the phase change contribution from the RC circuit gets to be smaller and smaller which means the feedback moves closer and closer to being 180deg - which means more negative feedback. (as w approaches zero arctan 0 = 0)

This is probably only good for RF frequencies. Say, above 1Mhz. I would have to actually write out the transfer characteristic and graph it to see exactly what happens. Conceptually, it makes sense though.

tim ab0wr

meara.london@virgin.net wrote:

>
>
> Thanks to all who responded to my question.
>
> I went back and took a closer look at other editions of the Handbook,
> and at Solid State Design for the Radio Amateur (SSDRA).
>
> The Handbooks all seem to suggest that the shunt feedback networks
> using a resistor and a cap in series will somehow result in more
> negative feedback at lower frequencies. Given that capacitive
> reactance varies inversely with freq, I still can't see how this
> happens. Tim's message seems to provide one possible explanation, but
> I'm kind of surprised that I haven't seen mention of this in the ham
> literature.
>
> When SSDRA discusses shunt feedback, (Chapter 8, page 188) they have a

> resistor, a blocking cap, and an inductor all in series between the
> collector and the base in a common emmiter amp. "The inductor has the
> effect of decreasing the feedback at high frequencies, while the 470
> ohm resistor is the dominant element at low frequencies." That's easy
> to see. But without the inductor (no inductor in the Handbook
> presentations) it is hard to see how this works.
>
> Thanks again to all,
>
> 73 Bill M0HBR CU2JL N2CQR
> http://www.qsl.net/n2cqr
>
> tim gorman wrote:
>> meara.london@virgin.net wrote:
>>
>> >
>> >
>> > I'm having trouble understanding how the typical shunt feedback
>> > networks used in RF (solid state) amps work. I'm looking at the 1993
>> > ARRL Handbook. Typical common base broadband amp. For the shunt
>> > feedback (from collector to base) they have two resistors: 560 ohms in
>> > series with 3300 ohms. The 3300 ohm is bypassed by a .01 uf cap.
>> >
>> > So far so good. But then the text explains that because you have
>> > rising gain characteristics when the frequency drops you need something
>> > to reduce gain at lower frequencies. That's why the negative feedback
>> > helps.
>> >
>> > Here's where I'm having trouble: "As the operating frequency is
>> > decreased the negative feedback increases becasue the network feedback
>> > reactance becomes lower." Huh? Wouldn't that network's reactance
>> > INCREASE as frequency is lowered? The only part of it with reactance
>> > is the .01 cap, correct?
>> >
>> > Help! 73!
>> >
>> > Bill M0HBR N2CQR CU2JL
>> > http://www.qsl.net/n2cqr
>>
>> I think to actually figure this out you will need to write the gain
>> transfer equation for the amplifier. Many of the replies here are talking
>> about an RF amplifier but are analyzing the feedback at DC.
>>
>> Remember that the output of a transistor is NOT in phase with the input.
>> As the base voltage goes UP the collector voltage goes DOWN. (think of a
>> transistor used as a switch - when the base is biased off the no current
>> flows and the collector is at power supply potential - when the switch is
>> biased on then current flows and the collector is driven toward the
>> potential of the emitter -- i.e. the collector voltage goes down) For RF
>> the actual phase difference between input and output is dependent upon

>> the input and output impedances of the transistor as well as the gain
>> transfer characteristic (things like transit times of the current
>> carriers and junctions widths and all sorts of stuff figure in here).
>> *THEN* you have to consider the phase contribution of the RC network in
>> the collector to base network. At some RF frequency the collector is
>> 180deg out of phase with the input so a direct feedback link from the
>> collector to the base would be *negative*. It is quite possible that the
>> phase relationships of this particular amplifier are such that the
>> negative feedback increases as the frequency goes down.
>>
>> You would just have to write the equations and see where they take you.
>>
>> tim ab0wr

4806. Re: High Q caps for 60 Khz loop antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-26 03:53:39 UTC
From: TRABEM <>
Message-ID: <k8vtl11b66bt5jtv3bjed58fl0j23hnbsk@4ax.com>
Source record: 16638

On Tue, 25 Oct 2005 21:08:34 -0400, Bill <exray@coqui.net> wrote:

>n5tde@earthlink.net wrote:
>
>> Someone tell Trabem about polystyrene and/or NPO disc please!!!!!!!!! N5TDE
>
>Where can you buy .2uf NP0 discs?
>

And, even if we could buy them, why would we use a disc ceramic cap in
an environment that was not controlled due to stability issues?

I'm totally lost by the suggestion of a disc ceramic.

T

4807. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-26 04:20:00 UTC
From: DrDeath <drdeath555usb@yahoo.com>
Message-ID: <11lu0vit6iemo2a@corp.supernews.com>
Source record: 16640
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"Cmdr Buzz Corey" <me@that.ten> wrote in message
news:rPadnWnAaYiN1sDeRVn-pw@gbronline.com...
> DrDeath wrote:
>> "Jock." <real_classs_a@yahoo.co.uk> wrote in message
>> news:56mil11d1o9mpajvcsq8fnfocq43gv0te1@4ax.com...
>>
>>>On Fri, 21 Oct 2005 19:11:52 +0100, "The Magnum"
>>><magnum@NOSPAMmag2781.freeserve.co.uk> wrote:
>>>
>>>
>>>>Hold about a bit matey boy... Just because someone uses a CB doesnt make
>>>>them a lower class person or less intellectual than an Amateur radio
>>>>user.
>>>>They may have brains far exceeding yours on several topics, just not on
>>>>radio. Just because you know a bit about radio doesnt make you a higher
>>>>class of person... IT JUST MEANS YOU KNOW ABOUT RADIO'S..... now try
>>>>learning common sense, respect for ones fellow man and remember..
>>>>Amateur
>>>>Radio.. Just like CB.. is JUST A HOBBY...
>>>>I love the bit though where you say "it is neither my wish to insult
>>>>them"
>>>>but you manage to do it anyhow...
>>>>10-4 over and out .. or in your case QRT..
>>>
>>>Another CB-er and potential F-class adherent.
>>>
>>>(You can spot them the minute they put finger to keyboard).
>>
>>
>> Yet another reason I will never obtain a ham ticket.
>
> Good news for ham radio!
>
>> You seem to think that your little piece of paper raises your IQ.
>
> Yet with you cber IQ you couldn't pass the test even though the answers to
> the questions are available.

I have taken the sample test and passed. You only want to perpetuate the
stereotype that CB ops are stupid. All you have proved to me is how stupid
you are.

4808. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-26 04:24:40 UTC
From: DrDeath <drdeath555usb@yahoo.com>
Message-ID: <11lu184i0245b71@corp.supernews.com>
Source record: 16641
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"The Magnum" <magnum@NOSPAMmag2781.freeserve.co.uk> wrote in message
news:djlkg8$8rh$1@newsg4.svr.pol.co.uk...
>
>> > Yet another reason I will never obtain a ham ticket.
>>
>> Good news for ham radio!
>
> Yep, there will be no one left on Ham soon after all the old farts have
> died...
>
>> > You seem to think that
>> > your little piece of paper raises your IQ.
>>
>> Yet with you cber IQ you couldn't pass the test even though the answers
>> to the questions are available.
>
> Try taking an IQ test and i bet theres hardly any difference between you
> and
> most people on CB. The only test you would outshine most CBers would be
> radio related...
>
I doubt he knows as much about radio than I do. And from what I have read of
his posts, his IQ is certainly lower than my 147

4809. Re: High Q caps for 60 Khz loop antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-26 07:18:42 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11lubej9h9gtmbb@corp.supernews.com>
Source record: 16642

TRABEM wrote:
> On Tue, 25 Oct 2005 21:08:34 -0400, Bill <exray@coqui.net> wrote:
>
>
>>n5tde@earthlink.net wrote:
>>
>>
>>>Someone tell Trabem about polystyrene and/or NPO disc please!!!!!!!!! N5TDE
>>
>>Where can you buy .2uf NP0 discs?
>>
>
>
> And, even if we could buy them, why would we use a disc ceramic cap in
> an environment that was not controlled due to stability issues?
>
> I'm totally lost by the suggestion of a disc ceramic.

You shouldn't lump "ceramic cap" into a single group and assume it has one set of characteristics. There are many types of ceramic capacitors, with widely varying characteristics. The four most common groups are:

1. Hi-K. These are made with a class of ceramic having a very high dielectric constant. This results in physically small capacitors which are excellent for many RF applications such as bypassing. Their small physical size results in a high self resonant frequency for a given capacitance. The tradeoff is instability in nearly every other respect. They have a very high temperature coefficient, are sensitive to humidity and physical stress, and the capacitance varies with frequency and applied voltage. A common type is Z5U, which has a specified maximum capacitance change of +22 - 56% over the temperature range of +10 to +85 C.

2. "Temperature stable". These are made with ceramic which has considerably lower dielectric constant than used for the hi-k types. Consequently, they're larger for the same capacitance. Their temperature coefficient is much lower, and they're much less sensitive to other factors. They're good for many general purpose uses such as low- to moderate-Q filters and resonant circuits, coupling, and so forth. Q can be quite good. A common type is X7R, which has a specified maximum capacitance change of +/- 15% over the temperature range of -55 to +125 C.

3. Temperature compensating. These are much larger yet, being made from ceramics with a low and controlled temperature coefficient. They're typically very stable with respect to voltage, frequency, mechanical stress, and humidity. A common type is P2G (N150), which has a

temperature coefficient of -150 +/-30 ppm/C.

4. NPO. (Common type is C0G.) These are made from a sandwich of two temperature compensating types with equal and opposite coefficients. They have excellent Q and are very stable. They're good for use in resonant circuits including oscillator tanks, high-Q filters, and other demanding applications. Q can be very good. A common type is C0G, which has a temperature coefficient of 0 +/-30 ppm/C.

NPO capacitors are substantially larger than "temperture stable" types, and much larger than hi-k types. You won't typically find them in large values.

Roy Lewallen, W7EL

4810. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-26 14:01:04 UTC
From: KE7CYW <KE7CYW@yahoo.com>
Message-ID: <ml2vl1p1td4sahb5r0v2abnc53pm2o3u4m@4ax.com>
Source record: 16643
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Jock. <real_classs_a@yahoo.co.uk> wrote:
> On Fri, 21 Oct 2005 19:11:52 +0100, "The Magnum"
> <magnum@NOSPAMmag2781.freeserve.co.uk> wrote:
>
> >Hold about a bit matey boy... Just because someone uses a CB doesnt make
> >them a lower class person or less intellectual than an Amateur radio
> >user. They may have brains far exceeding yours on several topics, just
> >not on radio. Just because you know a bit about radio doesnt make you a
> >higher class of person... IT JUST MEANS YOU KNOW ABOUT RADIO'S..... now
> >try learning common sense, respect for ones fellow man and remember..
> >Amateur Radio.. Just like CB.. is JUST A HOBBY...
> >I love the bit though where you say "it is neither my wish to insult
> >them" but you manage to do it anyhow...
> >10-4 over and out .. or in your case QRT..
>
> Another CB-er and potential F-class adherent.
>
> (You can spot them the minute they put finger to keyboard).
>
Hey Jock, I found your picture on the web, you
look like a cock supporter.

http://static.flickr.com/4/4412967_7a90c34fe3_m.jpg

CB rules, and you hold cock.

____
Usenet Zone Free Binaries Usenet Server
More than 140,000 groups
Unlimited download
http://www.usenetzone.com to open account

4811. Re: 20meter propagation question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-26 14:08:28 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <e5M7f.13945$i%.193@fed1read07>
Source record: 16644

Unlike 6M beacons which transmit continously on a specific frequency, the NCDXF/IARU Beacon system has 18 beacons around the world transmitting on the same frequency in rotation. Please read URL: http://www.ncdxf.org/Beacon/BeaconSchedule.html

You do not need to copy the beacon ID in Morse code, programs are available to ID the beacon transmitting. The program does not read the code, rather it is time based. That is your computer clock is precisely on time and the beacons are precisely on time also. The program shows a world map and which beacon is currently transmitting

The NCDXF/IARU system is a great propagation aid real time -- world wide.

Further there are beacons systems on 14.100, 18.110, 21.150, 24.930, and 28.200 megaHertz.

--
CL -- I doubt, therefore I might be !

"an_old_friend" <konstans@hotmail.com> wrote in message news:1130263534.713168.18350@g44g2000cwa.googlegroups.com...
>
> Caveat Lector wrote:
>> You can tell where 20M is open world wide by using the NCDXF/IARU beacon
>> system
>> See URL:
>> http://www.ncdxf.org/Beacon/intro.html
>>
>> Specifically 14.100 MHz
>> If the morse code is too fast --
>
> you need to read the code if the question is the band open at all
>
> indeed I listen for beacons on 6m myself and code at any speed is too
> fast but if I can hear em esp if I can a bunch of em the band my well
> be open enough to use
>>
>> see URL:
>> http://www.ncdxf.org/Beacon/BeaconPrograms.html
>>
>> For programs that will tell which beacons are transmitting
>>
>> Be sure your computer clock is accurate to within a fraction of a
>> second --
>> See URL:
>> http://www.locutuscodeware.com/swatch.htm

>> --
>> CL -- I doubt, therefore I might be !
>>
>>
>>
>>
>>
>>
>> "J Shrum" <shrumj@madisontelco.com> wrote in message
>> news:u5qdnYCt0JA2HMDeRVn-tQ@madisontelco.com...
>> > Greetings. I've only been a ham for a couple years. Not really done
>> > anything
>> > w/ it however. Just homebrewed a thing or two, but never made any
>> > QSO's. I
>> > just acquired a 5w 20m rig (all my budget could allow).
>> > Can someone give me any tips on how to know when 20m is open? What time
>> > of
>> > year or time of day is typically good for 20?
>> > I tried looking over some MUF charts... but its greek to me at this
>> > point.
>> > I've tried googling, but unless I know exactly how to phrase my search,
>> > I'm
>> > coming up empty...
>> >
>> > Any pointers would be great.
>> > Thanks
>> > Jim
>> > KC9FFX
>> >
>

4812. Re: HF Power Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-26 15:45:08 UTC
From: Bob <k6ddx@access1.net>
Message-ID: <f-idndYb6f5iOcLenZ2dnUVZ_s6dnZ2d@iswest.net>
Source record: 16645

Dennis, KA6GDT wrote:
> Can anyone direct me to an area where I could find plans and/or directions
> to construct a HF power amplifier?
>
>
I have am amplifier that needs completion. All the parts are there but
it's only 95% done. It will put out legal limit from 10through 80
meters. If you are interested I'll give you more details.

I'm in Southern California.

73, Bob K6DDX

4813. Re: HF Power Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-26 15:59:01 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <UIN7f.13956$i%.8334@fed1read07>
Source record: 16646

Try URL:

http://ac6v.com/techref.htm#AMP

Several homebrew projects there
--
CL -- I doubt, therefore I might be !

> Dennis, KA6GDT wrote:
>> Can anyone direct me to an area where I could find plans and/or
>> directions to construct a HF power amplifier?

4814. Re: High Q caps for 60 Khz loop antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-26 16:11:07 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_435f81eb@fidonet.org>
Source record: 16647

"Bill" bravely wrote to "All" (25 Oct 05 21:08:34)
--- on the heady topic of "Re: High Q caps for 60 Khz loop antenna?"

Bi> From: Bill <exray@coqui.net>
Bi> Xref: core-easynews rec.radio.amateur.homebrew:88513

Bi> n5tde@earthlink.net wrote:

> Someone tell Trabem about polystyrene and/or NPO disc please!!!!!!!!!! N5TDE

Bi> Where can you buy .2uf NP0 discs?

Bi> -Bill

How about 10 of 0.02uF?

A*s*i*m*o*v

... "If it ain't broke, you're not tryin!" - Red Green

4815. Re: 20meter propagation question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-26 16:15:01 UTC
From: Larry Gagnon <lagagnon@fakeuniserve.com>
Message-ID: <pan.2005.10.26.16.15.01.557456@fakeuniserve.com>
Source record: 16548

On Mon, 24 Oct 2005 19:51:54 -0500, J Shrum wrote:

> Greetings. I've only been a ham for a couple years. Not really done anything
> w/ it however. Just homebrewed a thing or two, but never made any QSO's. I
> just acquired a 5w 20m rig (all my budget could allow).
> Can someone give me any tips on how to know when 20m is open? What time of
> year or time of day is typically good for 20?

Jim: 20M usually has signals readable almost ANY day from 6AM to 7PM from
all over North America and sometimes beyond. Only in the worst propagation
conditions can you not hear any signals.

I suspect one of 3 things if you are asking this question:

1) you don't get on the air enough and listen for signals
2) your antenna is very bad, untuned, or in mineshaft
3) your receiver is almost dead.

Check the band more often, check your antenna and check your receiver.

Larry VE7EA

4816. Re: 20meter propagation question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-26 18:58:46 UTC
From: J Shrum <shrumj@madisontelco.com>
Message-ID: <PY-dnYG7AfJ8TMLeRVn-sQ@madisontelco.com>
Source record: 16550

Thanks for all the replies folks... I work during the day, and haven't really been listening except later in the night... so that would explain why its so quiet at night. I took a quick listen during the day today... and oh yeah, big difference.

Thanks for the help folks..

"Larry Gagnon" <lagagnon@fakeuniserve.com> wrote in message news:pan.2005.10.26.16.15.01.557456@fakeuniserve.com...
> On Mon, 24 Oct 2005 19:51:54 -0500, J Shrum wrote:
>
>> Greetings. I've only been a ham for a couple years. Not really done
>> anything
>> w/ it however. Just homebrewed a thing or two, but never made any QSO's.
>> I
>> just acquired a 5w 20m rig (all my budget could allow).
>> Can someone give me any tips on how to know when 20m is open? What time
>> of
>> year or time of day is typically good for 20?
>
> Jim: 20M usually has signals readable almost ANY day from 6AM to 7PM from
> all over North America and sometimes beyond. Only in the worst propagation
> conditions can you not hear any signals.
>
> I suspect one of 3 things if you are asking this question:
>
> 1) you don't get on the air enough and listen for signals
> 2) your antenna is very bad, untuned, or in mineshaft
> 3) your receiver is almost dead.
>
> Check the band more often, check your antenna and check your receiver.
>
> Larry VE7EA
>

4817. Re: 20meter propagation question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-26 19:01:32 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <_nQ7f.13973$i%.2620@fed1read07>
Source record: 16551

LISTEN TO THE NCDXF/IARU BEACONS -- THEY RUN 24 HOURS A DAY

--
CL -- I doubt, therefore I might be !

"J Shrum" <shrumj@madisontelco.com> wrote in message
news:PY-dnYG7AfJ8TMLeRVn-sQ@madisontelco.com...
> Thanks for all the replies folks... I work during the day, and haven't
> really been listening except later in the night... so that would explain
> why its so quiet at night. I took a quick listen during the day today...
> and oh yeah, big difference.
>
> Thanks for the help folks..
>
>
>
> "Larry Gagnon" <lagagnon@fakeuniserve.com> wrote in message
> news:pan.2005.10.26.16.15.01.557456@fakeuniserve.com...
>> On Mon, 24 Oct 2005 19:51:54 -0500, J Shrum wrote:
>>
>>> Greetings. I've only been a ham for a couple years. Not really done
>>> anything
>>> w/ it however. Just homebrewed a thing or two, but never made any QSO's.
>>> I
>>> just acquired a 5w 20m rig (all my budget could allow).
>>> Can someone give me any tips on how to know when 20m is open? What time
>>> of
>>> year or time of day is typically good for 20?
>>
>> Jim: 20M usually has signals readable almost ANY day from 6AM to 7PM from
>> all over North America and sometimes beyond. Only in the worst
>> propagation
>> conditions can you not hear any signals.
>>
>> I suspect one of 3 things if you are asking this question:
>>
>> 1) you don't get on the air enough and listen for signals
>> 2) your antenna is very bad, untuned, or in mineshaft
>> 3) your receiver is almost dead.
>>
>> Check the band more often, check your antenna and check your receiver.
>>
>> Larry VE7EA
>>
>

>

4818. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-26 19:55:14 UTC
From: Cmdr Buzz Corey <me@that.ten>
Message-ID: <WJCdnaayK53mTcLeRVn-iA@gbronline.com>
Source record: 16549
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

DrDeath wrote:
>
> I doubt he knows as much about radio than I do. And from what I have read of
> his posts, his IQ is certainly lower than my 147
>
>
147? Yeah right.

4819. Re: High Q caps for 60 Khz loop antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-26 21:08:12 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11lvs1tc16ukv3a@corp.supernews.com>
Source record: 16552

I want to thank Tom Bruhns for sending me some corrections to my rather outdated information about NPO capacitors. First, they're no longer being made as a sandwich of two ceramic types as I said, but with a single ceramic. Second, they're now available in quite large values -- Tom points out that AVX has them up to 0.1 uF in 1812 SMT size. Finally, here's some information Tom sent from an AVX data sheet that gives some additional quantitative information about the characteristics of these parts:

C0G (NP0) is the most popular formulation of the “temperature-compensating,” EIA Class I ceramic materials. Modern C0G (NP0) formulations contain neodymium, samarium and other rare earth oxides.
C0G (NP0) ceramics offer one of the most stable capacitor dielectrics available. Capacitance change with temperature is 0 ±30ppm/°C which is less than ±0.3% Δ C from -55°C to +125°C. Capacitance drift or hysteresis for C0G (NP0) ceramics is negligible at less than ±0.05% versus up to ±2% for films. Typical capacitance change with life is less than ±0.1% for C0G (NP0), one-fifth that shown by most other dielectrics. C0G (NP0) formulations show no aging characteristics.
The C0G (NP0) formulation usually has a “Q” in excess of 1000 and shows little capacitance or “Q” changes with frequency. Their dielectric absorption is typically less than 0.6% which is similar to mica and most films.

As you can see from the characteristics, modern NPO ceramic capacitors can be used for very demanding applications, and are often the best choice.

Roy Lewallen, W7EL

Roy Lewallen wrote:

> . . .
>
> 4. NPO. (Common type is C0G.) These are made from a sandwich of two
> temperature compensating types with equal and opposite coefficients.
> They have excellent Q and are very stable. They're good for use in
> resonant circuits including oscillator tanks, high-Q filters, and other
> demanding applications. Q can be very good. A common type is C0G, which
> has a temperature coefficient of 0 +/-30 ppm/C.

>
> NPO capacitors are substantially larger than "temperture stable" types,
> and much larger than hi-k types. You won't typically find them in large
> values.

4820. Re: HF Power Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-26 23:32:22 UTC
From: "T.E.O" <rfmscpa@earthlink.net>
Message-ID: <amU7f.2279$yX2.908@newsread2.news.pas.earthlink.net>
Source record: 16553

http://www.somis.org/perfect_amp.html

"Dennis, KA6GDT" <wdwyman@comcast.net> wrote in message
news:cd2dnYCct7_j6MPenZ2dnUVZ_s6dnZ2d@comcast.com...
> Can anyone direct me to an area where I could find plans and/or directions
> to construct a HF power amplifier?
>
>

4821. Re: HF Power Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-26 23:34:24 UTC
From: "T.E.O" <rfmscpa@earthlink.net>
Message-ID: <4oU7f.2280$yX2.354@newsread2.news.pas.earthlink.net>
Source record: 16554

http://oak.cats.ohiou.edu/~postr/bapix/813amp.htm

"Dennis, KA6GDT" <wdwyman@comcast.net> wrote in message
news:cd2dnYCct7_j6MPenZ2dnUVZ_s6dnZ2d@comcast.com...
> Can anyone direct me to an area where I could find plans and/or directions
> to construct a HF power amplifier?
>
>

4822. Re: 20meter propagation question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 01:11:42 UTC
From: Dan/W4NTI <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <iPV7f.1665$AS6.301@newsread3.news.atl.earthlink.net>
Source record: 16555

Sorry Wendy... must of been a typo, right? WWV is on 15 Mhz.

Dan/W4NTI

"wendy" <wendy_williams@spamfree.com> wrote in message
news:435DAFD5.8AA536F2@spamfree.com...
> hi jim,
>
> you should be able to copy wwv at 14.000 mhz anytime,
>
> what type of antenna are you using (dipole, long wire)
> tuner also ? How high is your antenna ?
>
> 73 wendy
>
>
> J Shrum wrote:
>
>> Greetings. I've only been a ham for a couple years. Not really done
>> anything
>> w/ it however. Just homebrewed a thing or two, but never made any QSO's.
>> I
>> just acquired a 5w 20m rig (all my budget could allow).
>> Can someone give me any tips on how to know when 20m is open? What time
>> of
>> year or time of day is typically good for 20?
>> I tried looking over some MUF charts... but its greek to me at this
>> point.
>> I've tried googling, but unless I know exactly how to phrase my search,
>> I'm
>> coming up empty...
>>
>> Any pointers would be great.
>> Thanks
>> Jim
>> KC9FFX
>

4823. Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 05:09:11 UTC
From: David Thompson <thompson@mindspring.com>
Message-ID: <XhZ7f.712$2y.119@newsread2.news.atl.earthlink.net>
Source record: 16556

My sister bought me a Radio Shack Dual Heat soldering gun (150W/230W). This was to supplement
my 120 watt 45 year old Weller. This after my WW II vintage 120 iron died on me.

My main use was to solder coax connectors. The Gun seems to work Ok on soldering joints in say a SB220 amplifier. But the first thing I noticed is that the tip is much to large to fit into the area where the PL-259 outside allows you to solder that to the shield thru the wholes in the 259. No problem but if you leave the gun on too long the area of the tip gets red hot about 1/2" back from the actual tip.

My old Weller does a better but inadequate job of soldering the 259 shield.

Why does the gun allow the tip to get red hot away from the actual tip. The tip is almost new. I notice its made from a silver metal not copper as with most Weller tips. Radio Shack tells me its made by Weller
and they are not aware of the problem.

bad tip or maybe a bad winding in the gun? any ideas?

Dave K4JRB

4824. Re: Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 06:39:56 UTC
From: F8BOE <f8boe@bluemail.ch>
Message-ID: <43607616$0$5437$626a14ce@news.free.fr>
Source record: 16557

Hello,

It may sound funny, but that's why I never used a soldering gun and perhaps never will... My 25W JBC with 0.8 and 1.2 mm tips is quite fine for electronic components and connector soldering.

You should be the one who takes an 18 wheeler to pick up a beer pack. Shouldn't you? Perhaps a Mig welder could do the connector job... Hi! I hope you'll never mount connectors for other Hams without any serious DC and HF shortcut tests.

100W+ soldering irons are pretty good for plumber jobs or for desoldering fast and clean, but definitely not for your aim.

73 de F8BOE Olivier ...-.-

David Thompson wrote:

> My sister bought me a Radio Shack Dual Heat soldering gun (150W/230W).
> This was to supplement
> my 120 watt 45 year old Weller. This after my WW II vintage 120 iron died
> on me.
>
> My main use was to solder coax connectors. The Gun seems to work Ok on
> soldering joints in say a SB220 amplifier. But the first thing I noticed
> is that the tip is much to large to fit into the area where the PL-259
> outside
> allows you to solder that to the shield thru the wholes in the 259. No
> problem but if you leave the gun on too long the area of the tip gets red
> hot about 1/2" back from the actual tip.
>
> My old Weller does a better but inadequate job of soldering the 259
> shield.
>
> Why does the gun allow the tip to get red hot away from the actual tip.
> The
> tip is almost new. I notice its made from a silver metal not copper as
> with
> most Weller tips. Radio Shack tells me its made by Weller
> and they are not aware of the problem.
>
> bad tip or maybe a bad winding in the gun? any ideas?
>
> Dave K4JRB

4825. Re: Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 14:00:07 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <4360DD5F.6080400@invalid.invalid>
Source record: 16558

F8BOE wrote:
>>My main use was to solder coax connectors. The Gun seems to work Ok on

> 100W+ soldering irons are pretty good for plumber jobs or for desoldering
> fast and clean, but definitely not for your aim.

??!!

Well, maybe if Dave's doing BNCs or N connectors then a 100W+ unit is
too big. But "...of soldering the 259 shield.", PL-259s are a
completely different case. I had a 70/140W "dual-power" gun, and it
really wasn't adequate for doing PL-259s.

Managed to find a 200W+ Weller at a Lowe's store in Clarksville, and it
does the trick. You've really GOT to have that heat, a PL-259 shell is
an awfully good heat sink...

>>Why does the gun allow the tip to get red hot away from the actual tip.

Mine doesn't, though it does get hot enough to melt solder a fair
distance from the actual tip. I guess I expected that.

First thing I'd suspect, especially if you're having trouble soldering
PL-259s with a 230W gun, is that the tips aren't making adequate contact
with the secondary of the transformer, the metal tubes coming out of the
handle. At the risk of stating the obvious, those little nuts at the
end of the tubes are good and tight, right?

>tip is almost new. I notice its made from a silver metal not copper
as with most Weller tips.

The tips for mine are silver in color. I guess I figured they were
tinned copper but could be wrong.

--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

4826. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 16:03:45 UTC
From: DrDeath <drdeath555usb@yahoo.com>
Message-ID: <11m1uj3tniis6b5@corp.supernews.com>
Source record: 16559
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"Cmdr Buzz Corey" <me@that.ten> wrote in message
news:WJCdnaayK53mTcLeRVn-iA@gbronline.com...
> DrDeath wrote:
>>
>> I doubt he knows as much about radio than I do. And from what I have read
>> of his posts, his IQ is certainly lower than my 147
> 147? Yeah right.

I realize that it is hard for you to comprehend that, with me being a CBer. Challenging a belief system can be tough. Like your belief that all CBers are to stupid to pass the ham test, that we sit around all day swilling beer and saying "ten-fer good buddy". Or my favorite belief you hold, "I have a ham ticket, that makes me special."

4827. Re: Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 16:15:06 UTC
From: "Harold E. Johnson" <w4zcb@mchsi.com>
Message-ID: <e278f.519660$xm3.414290@attbi_s21>
Source record: 16560

A trick demonstrated to me by a friend in New Mexico. (I use "N"'s and it doesn't bother me, but he was putting a 259 on a piece of coax and managed to amaze me.) You use a soldering gun, but with NO tip at all! He pushed the gun sans tip into the ring where the holes for the solder to the braid are, and pulled the trigger. In very little time, the I*I*R losses had the 259 hot enough to melt solder and he flowed it into the braid. Gets the heat into the right place, Give it a try.

W4ZCB

4828. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 16:28:24 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <djqv7i$lh6$1@newsg1.svr.pol.co.uk>
Source record: 16561
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"DrDeath" <drdeath555usb@yahoo.com> wrote in message
news:11m1uj3tniis6b5@corp.supernews.com...
> "Cmdr Buzz Corey" <me@that.ten> wrote in message
> news:WJCdnaayK53mTcLeRVn-iA@gbronline.com...
> > DrDeath wrote:
> >>
> >> I doubt he knows as much about radio than I do. And from what I have
read
> >> of his posts, his IQ is certainly lower than my 147
> > 147? Yeah right.
>
> I realize that it is hard for you to comprehend that, with me being a
CBer.
> Challenging a belief system can be tough. Like your belief that all CBers
> are to stupid to pass the ham test, that we sit around all day swilling
beer
> and saying "ten-fer good buddy". Or my favorite belief you hold, "I have a
> ham ticket, that makes me special."

Why on earth would anyone want to pass an Amateur test to talk to guys like this is beyond me. At least with CB you can have a laugh and also use it sensibly without having to dedicate your whole life to the bloody thing.... Those people who look down on CB because they are amateurs really...really need to get out and experience some life..... and i dont mean down to the ham rallys to buy some more of someones junk to fill their houses with. Not all Amateurs are like this but theres a lot that are, and a lot of them sit in these newsgroups trying to prove something. Sad old farts....

4829. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 16:44:42 UTC
From: "Jock." <real_classs_a@yahoo.co.uk>
Message-ID: <uu02m1pacuecg6k3fphacaqvo5fna8lh63@4ax.com>
Source record: 16563
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

On Thu, 27 Oct 2005 11:03:45 -0500, "DrDeath" <drdeath555usb@yahoo.com> wrote:

>"Cmdr Buzz Corey" <me@that.ten> wrote in message
>news:WJCdnaayK53mTcLeRVn-iA@gbronline.com...
>> DrDeath wrote:
>>>
>>> I doubt he knows as much about radio than I do. And from what I have read
>>> of his posts, his IQ is certainly lower than my 147
>> 147? Yeah right.
>
>I realize that it is hard for you to comprehend that, with me being a CBer.
>Challenging a belief system can be tough. Like your belief that all CBers
>are to stupid to pass the ham test, that we sit around all day swilling beer
>and saying "ten-fer good buddy". Or my favorite belief you hold, "I have a
>ham ticket, that makes me special."

Any moron can pick up a microphone.

--

73 de Jock.

Old Glory - a common misspelling. Only the first "l"
is necessary.

4830. Re: Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 16:49:35 UTC
From: hhc314@yahoo.com
Message-ID: <1130431775.836010.79240@g43g2000cwa.googlegroups.com>
Source record: 16564

Guys, electronics technology and densities have changed quite a bit over the past 40 or so years.

My first two soldering tools back in the 1950s were a 100-Watt American Beauty soldering iron, and a Weller Soldering Gun. By around 1965, both were too large and bulky to do precision work on the by then modern electronic, so I purchased a 37-Watt pencil iron (an Ungar Woodburner we called it at that time) which served my needs up to roughly 1989, when I added a miniature, variable temperature soldering iron to my collection which remains in use today.

That original Weller Soldering Gun fell into disuse at least 25 years ago, except for emergency use in panic situation to light cigarettes, although I do take note of the fact that it was very useful for making quick-fix field repairs on the older, low-density, vacuum tube electronics, tinning the ends of power cords, etc.

I continue to use the 100-Watt American Beauty through this day, but only for relatively heavy job like soldering the braid on RG-8U cables to the connectors. Works fine on that application, particularly since its temperature tends to remain rather constant so it doesn't either oxidize most solders or destroy the item that the cable is being attached to.

Arguably, most of the soldering I do today is performed by my temperature controlled iron, generally at temperature settings of 625 or 720 degrees depending on the particular solder that I am using. Once or twice a year do I resort resort to the American Beauty. (It was a gift from my dad back in 1955 and remains in occasional use through this day.)

Even years back, I simply can't remember any soldering iron tip that was pure copper (except for some of those antique iron that you heated on your gas stove). Soldering iron tips are usually plated with an iron coating, and for very good reason. The iron coating slow the pitting and eventual disolution of the tip in molten solder, which in turn extends the life of the tip.

Kindest regards, Harry C.

p.s., I now recall that the earliest Weller Soldering Gun tips were bare copper, which required you to replace them at the rate of about 1 tip per week in regular daily use. Those sold today are iron coated. Still, today I know of no one using Weller Soldering Guns for electronics, however, for the arts and crafts they can be very useful.

4831. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 16:57:13 UTC
From: bigamps <bigamps@louder.still.net>
Message-ID: <JF78f.511$lg.48@news01.roc.ny>
Source record: 16565
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

DrDeath wrote:
> "Cmdr Buzz Corey" <me@that.ten> wrote in message
> news:WJCdnaayK53mTcLeRVn-iA@gbronline.com...
>
>>DrDeath wrote:
>>
>>>I doubt he knows as much about radio than I do. And from what I have read
>>>of his posts, his IQ is certainly lower than my 147
>>
>>147? Yeah right.
>
>
> I realize that it is hard for you to comprehend that, with me being a CBer.
> Challenging a belief system can be tough. Like your belief that all CBers
> are to stupid...
^^

147?

4832. Re: Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 16:58:07 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <djr0uvilq1@theodyn.ncf.ca>
Source record: 16566

Doug Smith W9WI (w9wi@invalid.invalid) writes:
>

> First thing I'd suspect, especially if you're having trouble soldering
> PL-259s with a 230W gun, is that the tips aren't making adequate contact
> with the secondary of the transformer, the metal tubes coming out of the
> handle. At the risk of stating the obvious, those little nuts at the
> end of the tubes are good and tight, right?
>
And maybe more important, the nuts can be tight but the copper is still
not making good contact. Loosening the nuts and retightening is important
in this case.

I've not bought a tip for mine in thirty years (which means I only bought
them for a couple of years). Someone gave me a yard or so of multi-strand
wire left over from a TV transmitter installation, the punchline being
that each strand was the diameter of the wire used for the soldering
gun tips. I measured the real tip, and used it as a template to cut
the wire to the needed size. It's all worked fine, and the fact
that it's not plated doesn't really matter because the tips don't cost
me a thing. That yard of wire is still supplying the tips.

Michael VE2BVW

4833. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 17:43:48 UTC
From: Cmdr Buzz Corey <me@that.ten>
Message-ID: <NaCdnWeH65OynvzeRVn-gA@gbronline.com>
Source record: 16562
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

DrDeath wrote:
> "Cmdr Buzz Corey" <me@that.ten> wrote in message
> news:WJCdnaayK53mTcLeRVn-iA@gbronline.com...
>
>>DrDeath wrote:
>>
>>>I doubt he knows as much about radio than I do. And from what I have read
>>>of his posts, his IQ is certainly lower than my 147
>>
>>147? Yeah right.
>
>
> I realize that it is hard for you to comprehend that, with me being a CBer.
> Challenging a belief system can be tough. Like your belief that all CBers
> are to stupid to pass the ham test, that we sit around all day swilling beer
> and saying "ten-fer good buddy". Or my favorite belief you hold, "I have a
> ham ticket, that makes me special."
>
>

I find that those who brag about their IQs is about all they have to brag about. I know people with IQs higher then yours who couldn't find their way to the bathroom and back without help, so what does you IQ prove? Nothing.

As far as knowing more about radio, I converted my first transmitter, a Heath DX-60 from controlled carrier AM (you even know what controlled carrier AM is without looking it up?) to high level plate modulation (you even know what high level plate modulation is without looking it up?). I once designed and built my own SSB 80-10 meter transmitter plus many other pieces of ham equipment. Also constructed a 15 meter three element beam using gamma matching (you even know what gamma matching is without looking it up?). What have you designed and built for your 'good buddy ten-fer ther' cb hobby, mister IQ?

4834. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 17:53:56 UTC
From: clifto <clifto@clifto.com>
Message-ID: <lqg733-33b.ln1@remote.clifto.com>
Source record: 16567
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

DrDeath wrote:
> I realize that it is hard for you to comprehend that, with me being a CBer.
> Challenging a belief system can be tough. Like your belief that all CBers
> are to stupid to pass the ham test, that we sit around all day swilling beer
> and saying "ten-fer good buddy".

That's downright silly. Y'all gotta have time to put the hammer down and
find y'all's selves a convoy and spot them smokeys from the rockin' chair.
Then y'all gotta test y'all's leenyars by ratchet-jawin' "Walk Walk Walk
On Yooooooooooooooo" on channels 6 through 34 simultaneously. (That
means "at the same time".)

--
If John McCain gets the 2008 Republican Presidential nomination,
my vote for President will be a write-in for Jiang Zemin.

4835. VNA and tank circuits?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 18:16:44 UTC
From: James Skalski <jskalski@yahoo.com>
Message-ID: <gQ88f.5702$0V6.3968@trndny06>
Source record: 16568

Has anyone used a VNA to set up taps on an amplifier tank circuit or
used one to set up taps on a coil in a transmatch? Maybe a small
capacitor on the anode lead instead of the finals to match capacitance
and then measure from the output of the amplifier with antenna relays in
"on" position. (no other power to the amp :)
I am thinking that the caps can be set to expected mid band capacitance
for each band. Then work on the inductor taps to get the plate impedance.
Or should I just measure the inductor and make the taps based on the
inductance measurement? It seems that if the tank circuit parts were in
place the taps would be more accurate.
I am looking for a tutorial for non engineer types. (tards :))
or a simple explanation. Step by step would be nice.
This is the hard part about making an amp? right? I mean besides the
drilling and metal cutting, and locating parts. Maybe others might be
helped as well by a good explanation.
Jim n2go

4836. Re: Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 18:17:39 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <djr5k3imp1@engnntp2.cig.mot.com>
Source record: 16569

Two good posts below, HOWEVER...

Guns, in general, should not be used for PL259s -- though W4ZCB's method is a good one. I have used this technique in the past, but don't recallspecificlly on what, just that is was a massive solderiang job. I also have a device, resistance solderer, that designed to do this and is used for doing dental soldering...and now, PL259s. This type of tool puts the full power available into the stuff being soldered. If it is enough to quickly heat the object, then it works.

In its normal mode. a gun puts the power into the whole gun "wire" and this must then transfer heat to the work through conduction - usually via a very small contact point which is an inefficent thermal conveyor. The remaining gun "wire" is accepting the vase bulk of the power and, therefore it is wasted (un-used to heat the work).

Soldering things like PL259 generally requires thermal capacity, not just temperature. "Guns" are not well suited for this work. This is accomplished with a LARGE tip. You need to get in, heat quickly and get out quickly. The large tip allows you to heat, in a shirt time, the _work_, which also has a large thermal mass, without cooling the tip appreciably. To do a good job, you should be able to heat the shell in less than something like 2 seconds, apply solder, let it flow and get out in a total of something line 5-6 seconds.

I think the gun tip-wires turn red-hot, back from the tip, because you are using the PL259 to keep the real "tip" cool and continuing to run the high current through the tip WAY too long. The power needed to maintain the tip's temperature is not enough alone. It is not really the wattage of the heater, but the thermal capacity of the large tip that gives the amount of and rate of heat transfer needed.

73, Steve, K.9,D;C'I

A trick demonstrated to me by a friend in New Mexico. (I use "N"'s and it doesn't bother me, but he was putting a 259 on a piece of coax and managed to amaze me.) You use a soldering gun, but with NO tip at all! He pushed the gun sans tip into the ring where the holes for the solder to the braid are, and pulled the trigger. In very little time, the I*I*R losses had the 259 hot enough to melt solder and he flowed it into the braid. Gets the heat into the right place, Give it a try.

W4ZCB

<hhc314@yahoo.com> wrote in message
news:1130431775.836010.79240@g43g2000cwa.googlegroups.com...
> Guys, electronics technology and densities have changed quite a bit

> over the past 40 or so years.
>
> My first two soldering tools back in the 1950s were a 100-Watt American
> Beauty soldering iron, and a Weller Soldering Gun. By around 1965, both
> were too large and bulky to do precision work on the by then modern
> electronic, so I purchased a 37-Watt pencil iron (an Ungar Woodburner
> we called it at that time) which served my needs up to roughly 1989,
> when I added a miniature, variable temperature soldering iron to my
> collection which remains in use today.
>
> That original Weller Soldering Gun fell into disuse at least 25 years
> ago, except for emergency use in panic situation to light cigarettes,
> although I do take note of the fact that it was very useful for making
> quick-fix field repairs on the older, low-density, vacuum tube
> electronics, tinning the ends of power cords, etc.
>
> I continue to use the 100-Watt American Beauty through this day, but
> only for relatively heavy job like soldering the braid on RG-8U cables
> to the connectors. Works fine on that application, particularly since
> its temperature tends to remain rather constant so it doesn't either
> oxidize most solders or destroy the item that the cable is being
> attached to.
>
> Arguably, most of the soldering I do today is performed by my
> temperature controlled iron, generally at temperature settings of 625
> or 720 degrees depending on the particular solder that I am using. Once
> or twice a year do I resort resort to the American Beauty. (It was a
> gift from my dad back in 1955 and remains in occasional use through
> this day.)
>
> Even years back, I simply can't remember any soldering iron tip that
> was pure copper (except for some of those antique iron that you heated
> on your gas stove). Soldering iron tips are usually plated with an iron
> coating, and for very good reason. The iron coating slow the pitting
> and eventual disolution of the tip in molten solder, which in turn
> extends the life of the tip.
>
> Kindest regards, Harry C.
>
> p.s., I now recall that the earliest Weller Soldering Gun tips were
> bare copper, which required you to replace them at the rate of about 1
> tip per week in regular daily use. Those sold today are iron coated.
> Still, today I know of no one using Weller Soldering Guns for
> electronics, however, for the arts and crafts they can be very useful.
>

4837. Re: Wideband RF blocking

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 18:33:48 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <djr6icjaf1@engnntp2.cig.mot.com>
Source record: 16570

A resistor alone has also been used. I have used a combination of L & R and
L with ferrite beads as well.
While the 500 ohm (10:1) guideline is a good one, teh impedance can drop
well below that before causing trouble.

ALso, the suggestion of the resistor to "dampen" a resonance is valid. You
can take the choke above self resonance this way (self resonant freq can be
in the upper part of your freq range). In the past, chokes were specially
wound to raise the self resonant freq, but for this range, I suspect there
isn't much help there.
73, Steve, K,9.D;C'I

P.S.
Paralleling caps and series'ing inductors is generally frowned upon. If
needed, parallel caps are usually separated by a bead or resistor. I've not
seen series chokes used.

"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> wrote in message
news:11lol6n6q2qsjc0@corp.supernews.com...
> In a receiver, for wideband (10-150MHz) biasing of a MMIC amplifier using
> inductors between the RF trace and the power rails, I'm finding that a
single
> inductor tends not to work so well due to (1) wanting a largish inductor
(say,
> one with 500 ohms of reactance at 10MHz in a 50 ohm system --> 8uH) but
(2)
> not going beyond the self-resonant frequency of the inductor, which of
course
> is smaller the larger the inductance (that 8uH inductor might typically
have
> an SRF of 50MHz, noticeably below the 150MHz I'm trying to achieve RF
blocking
> to!).
>
> Is there a better means of providing wideband DC biasing/RF blocking than
just
> placing a large and small inductor in series? I've run SPICE simulations
of
> this, and -- just as when you stack multiple capacitors in parallel for
wider
> RF coupling -- there are significant anti-resonances that drop the overall
> reactance of the pair of inductors to much less than 500 ohm (even less
than
> 50 ohms!) unless you're very careful in the choice of individual inductor
> SRFs, inductances, etc.

>
> Thanks,
> ---Joel Kolstad
>
>

4838. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 18:35:44 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <djr6m0jcb1@engnntp2.cig.mot.com>
Source record: 16571
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

"Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
news:3F95f.2019$dO2.694@newssvr29.news.prodigy.net...
> Hello Bill,
>
> > ...
>
> Then again a SW engineer once told me that nothing is truly analog.
> There is always that smallest digital step, the quantum.
> Regards, Joerg

Poor fella's got it bass ackward.

73, Steve, K,9;D.C'I

4839. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 18:38:29 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <djr6r5$jj9$1@engnntp2.cig.mot.com>
Source record: 16574
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

"Keith Williams" <krw@att.bizzzz> wrote in message
news:MPG.1dc0285a10282227989c49@news.individual.net...
> In article <Eti5f.8621$lN2.115@fe04.lga>, tmoranwms@charter.net
> says...
> > "Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
> > news:3F95f.2019$dO2.694@newssvr29.news.prodigy.net...
> > > Then again a SW engineer once told me that nothing is truly analog.
> > > There is always that smallest digital step, the quantum.
> >
> > So, digital is base two, and analog is base 1.6 x 10^19? ;-)
>
> Not really. Analog's bits are just smaller. ;-)
> -- Keith

That's what he said... 10^18 smaller
73, Steve, K,9.D;C'I

4840. Re: Choice of iron powder toriod?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 18:39:28 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <djr6t1$jk8$1@engnntp2.cig.mot.com>
Source record: 16573
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

"Keith Williams" <krw@att.bizzzz> wrote in message
news:MPG.1dc0529ba3517d20989c55@news.individual.net...
> In article <43568483.CCBB8C37@hotmail.com>,
> rabbitsfriendsandrelations@hotmail.com says...
> >
> >
> > Joerg wrote:
> >
> > > Still, the digital guys kept telling us "Some day we'll get there
> > > ....
> >
> > How long have they been saying that ???? ;-)
>
> We've been getting half the way there every two years or so. ;-)
>
> --
> Keith

Don-chya love it ? !

73, Steve, K9DCI

4841. Re: VNA and tank circuits?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 19:24:36 UTC
From: "Harold E. Johnson" <w4zcb@mchsi.com>
Message-ID: <UP98f.480874$_o.130534@attbi_s71>
Source record: 16572

"James Skalski" <jskalski@yahoo.com> wrote in message
news:gQ88f.5702$0V6.3968@trndny06...
> Has anyone used a VNA to set up taps on an amplifier tank circuit or used
> one to set up taps on a coil in a transmatch? Maybe a small capacitor on
> the anode lead instead of the finals to match capacitance and then measure
> from the output of the amplifier with antenna relays in "on" position. (no
> other power to the amp :)

You bet Jim, ONLY way to do it! Put the tube in the socket, place a 1/4 watt resistor plate to ground of the value of your plate load, stick the VNA on the output port (Refl mode) and tune for maximum return loss. You should readily get 40 dB to 50 dB, log the settings and you're all tuned up. (Don't forget to pull the resistor before you apply power, although if you do, it will remove itself in short order.)

You can measure the caps and place tap on the inductors where you get return loss or measure the inductor and tune the caps for RL. Use the data in the handbook for expected values for the plate load resistance transformation and whether it's a Pi or Pi-L network.

Regards
W4ZCB

4842. For the Collins collector who has everything:

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 21:21:19 UTC
From: Johnson <jdwalton@comt.net>
Message-ID: <v4adndEWAOdB3_zenZ2dnUVZ_tCdnZ2d@comcast.com>
Source record: 16575

came across this last night --

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&rd=1&item=5823287634&ssPageName=STRK:MEWA:IT

all you need is a large grey ship to mount it in.

jack

4843. Re: HF Power Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 21:26:12 UTC
From: Skipp does mostly decafe now <skippdecafeguy@yahoo.com>
Message-ID: <djrglk$il8$2@skeeter.ucdavis.edu>
Source record: 16576

Hi Dennis,

You're always welcome over on the Yahoo RFAmplifiers Group:

http://groups.yahoo.com/group/rfamplifiers

So is everyone else...

cheers,
skipp
www.radiowrench.com/sonic

: Dennis, KA6GDT <wdwyman@comcast.net> wrote:
: Can anyone direct me to an area where I could find plans and/or directions
: to construct a HF power amplifier?

4844. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 21:31:33 UTC
From: Steveo <moparholic@hotmail.com>
Message-ID: <20051027173133.767$xa@newsreader.com>
Source record: 16577
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"DrDeath" <drdeath555usb@yahoo.com> wrote:
> "Cmdr Buzz Corey" <me@that.ten> wrote in message
> news:WJCdnaayK53mTcLeRVn-iA@gbronline.com...
> > DrDeath wrote:
> >>
> >> I doubt he knows as much about radio than I do. And from what I have
> >> read of his posts, his IQ is certainly lower than my 147
> > 147? Yeah right.
>
> I realize that it is hard for you to comprehend that, with me being a
> CBer. Challenging a belief system can be tough. Like your belief that all
> CBers are to stupid to pass the ham test, that we sit around all day
> swilling beer and saying "ten-fer good buddy". Or my favorite belief you
> hold, "I have a ham ticket, that makes me special."
>
Ask him his call.

4845. Post of the week to rrcb

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 21:33:16 UTC
From: Steveo <moparholic@hotmail.com>
Message-ID: <20051027173316.222$0w_-_@newsreader.com>
Source record: 16578
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"The Magnum" <magnum@NOSPAMmag2781.freeserve.co.uk> wrote:
>> Why on earth would anyone want to pass an Amateur test to talk to guys
> like this is beyond me. At least with CB you can have a laugh and also
> use it sensibly without having to dedicate your whole life to the bloody
> thing.... Those people who look down on CB because they are amateurs
> really...really need to get out and experience some life..... and i dont
> mean down to the ham rallys to buy some more of someones junk to fill
> their houses with. Not all Amateurs are like this but theres a lot that
> are, and a lot of them sit in these newsgroups trying to prove something.
> Sad old farts....
>
IAWTP.

4846. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 21:35:32 UTC
From: Steveo <moparholic@hotmail.com>
Message-ID: <20051027173532.064$f2@newsreader.com>
Source record: 16579
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

Jock. <real_classs_a@yahoo.co.uk> wrote:
> Any moron can pick up a microphone.
>
As proved my so many. License doesn't mean squat to me or K1man. <g>

4847. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 21:37:43 UTC
From: Steveo <moparholic@hotmail.com>
Message-ID: <20051027173743.813$t5@newsreader.com>
Source record: 16580
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

Cmdr Buzz Corey <me@that.ten> wrote:
> I find that those who brag about their IQs is about all they have to
> brag about.
>
Do you ever take a time-out from your CB posts to really ponder it, JJ?

4848. looking for toughts on protable SSTV units

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-27 22:31:13 UTC
From: kb9rqz@amsat.org
Message-ID: <37l2m1h5raugrv01fhb77aadm5g1lagb04@4ax.com>
Source record: 16581

as the ownwer and using of one the Kenwoods VC-H1 a handheld all in one unit for SSTV I was wondering whta folks wants simlarly portable stuff are doing

----
Usenet Zone Free Binaries Usenet Server
More than 140,000 groups
Unlimited download
http://www.usenetzone.com to open account

4849. BFO, CW, sideband question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-28 00:19:58 UTC
From: Jaggy Taggy <outhouse@midcoast.com>
Message-ID: <BF86E6F4.B8E9%outhouse@midcoast.com>
Source record: 16582

Who decides to which side of the carrier the BFO will heterodyne a CW signal.
I mean there must be convention, otherwise we would have to find out on an individual basis, but what is this convention???

Uwe

4850. Re: 20meter propagation question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-28 03:58:36 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4361A237.72611D5F@earthlink.net>
Source record: 16583

Dan/W4NTI wrote:
>
> Sorry Wendy... must of been a typo, right? WWV is on 15 Mhz.

Unless the receiver is really out of alignment! ;-)

--
?

Michael A. Terrell
Central Florida

4851. Re: 20meter propagation question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-28 04:21:17 UTC
From: Bill <exray@coqui.net>
Message-ID: <e8cad$4361a73e$4232bd3f$26358@COQUI.NET>
Source record: 16584

Michael A. Terrell wrote:

> Dan/W4NTI wrote:
>
>>Sorry Wendy... must of been a typo, right? WWV is on 15 Mhz.
>
>
>
> Unless the receiver is really out of alignment! ;-)
>

well, the IF image on many 'lesser' general coverage rigs with 455 kc IF
would fall within a pointer width of 14000 so the OP may have been
correct with his statement.

:)

-Bill

4852. Re: BFO, CW, sideband question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-28 05:12:58 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <4361B359.6040805@invalid.invalid>
Source record: 16585

Jaggy Taggy wrote:
> Who decides to which side of the carrier the BFO will heterodyne a CW
> signal.
> I mean there must be convention, otherwise we would have to find out on an
> individual basis, but what is this convention???

A BFO will heterodyne a signal on *both* sides of the carrier. Most
modern receivers are designed to filter out the heterodyne on one side.
For CW signals, which side depends on the manufacturer. (i.e. there
is no convention!)
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

4853. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-28 06:03:08 UTC
From: DrDeath <drdeath555usb@yahoo.com>
Message-ID: <11m3fou1v521m84@corp.supernews.com>
Source record: 16586
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"Jock." <real_classs_a@yahoo.co.uk> wrote in message
news:uu02m1pacuecg6k3fphacaqvo5fna8lh63@4ax.com...
> On Thu, 27 Oct 2005 11:03:45 -0500, "DrDeath" <drdeath555usb@yahoo.com>
> wrote:
>
>>"Cmdr Buzz Corey" <me@that.ten> wrote in message
>>news:WJCdnaayK53mTcLeRVn-iA@gbronline.com...
>>> DrDeath wrote:
>>>>
>>>> I doubt he knows as much about radio than I do. And from what I have
>>>> read
>>>> of his posts, his IQ is certainly lower than my 147
>>> 147? Yeah right.
>>
>>I realize that it is hard for you to comprehend that, with me being a
>>CBer.
>>Challenging a belief system can be tough. Like your belief that all CBers
>>are to stupid to pass the ham test, that we sit around all day swilling
>>beer
>>and saying "ten-fer good buddy". Or my favorite belief you hold, "I have a
>>ham ticket, that makes me special."
>
> Any moron can pick up a microphone.

Same with a keyboard.

4854. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-28 06:18:07 UTC
From: DrDeath <drdeath555usb@yahoo.com>
Message-ID: <11m3gl19ubk2259@corp.supernews.com>
Source record: 16587
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"Cmdr Buzz Corey" <me@that.ten> wrote in message
news:NaCdnWeH65OynvzeRVn-gA@gbronline.com...
> DrDeath wrote:
>> "Cmdr Buzz Corey" <me@that.ten> wrote in message
>> news:WJCdnaayK53mTcLeRVn-iA@gbronline.com...
>>
>>>DrDeath wrote:
>>>
>>>>I doubt he knows as much about radio than I do. And from what I have
>>>>read of his posts, his IQ is certainly lower than my 147
>>>
>>>147? Yeah right.
>>
>>
>> I realize that it is hard for you to comprehend that, with me being a
>> CBer. Challenging a belief system can be tough. Like your belief that all
>> CBers are to stupid to pass the ham test, that we sit around all day
>> swilling beer and saying "ten-fer good buddy". Or my favorite belief you
>> hold, "I have a ham ticket, that makes me special."
>
> I find that those who brag about their IQs is about all they have to brag
> about. I know people with IQs higher then yours who couldn't find their
> way to the bathroom and back without help, so what does you IQ prove?
> Nothing.

I only pointed it out to show that you believe those that use cb radio and
those with no ham ticket are intellectually inferior. So yes, I proved that
quite clearly.

>
> As far as knowing more about radio, I converted my first transmitter, a
> Heath DX-60 from controlled carrier AM (you even know what controlled
> carrier AM is without looking it up?) to high level plate modulation (you
> even know what high level plate modulation is without looking it up?). I
> once designed and built my own SSB 80-10 meter transmitter plus many other
> pieces of ham equipment. Also constructed a 15 meter three element beam
> using gamma matching (you even know what gamma matching is without looking
> it up?). What have you designed and built for your 'good buddy ten-fer
> ther' cb hobby, mister IQ?

I don't need to look up any of those items.
I am in the process of building a ssb radio to match the linear I built last
year. Though I am certain I spend a great deal less time working on those
types of projects as I have other interests in my life.

4855. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-28 06:22:43 UTC
From: DrDeath <drdeath555usb@yahoo.com>
Message-ID: <11m3gtmnn90m2f4@corp.supernews.com>
Source record: 16588
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"Steveo" <moparholic@hotmail.com> wrote in message
news:20051027173133.767$xa@newsreader.com...
> "DrDeath" <drdeath555usb@yahoo.com> wrote:
>> "Cmdr Buzz Corey" <me@that.ten> wrote in message
>> news:WJCdnaayK53mTcLeRVn-iA@gbronline.com...
>> > DrDeath wrote:
>> >>
>> >> I doubt he knows as much about radio than I do. And from what I have
>> >> read of his posts, his IQ is certainly lower than my 147
>> > 147? Yeah right.
>>
>> I realize that it is hard for you to comprehend that, with me being a
>> CBer. Challenging a belief system can be tough. Like your belief that all
>> CBers are to stupid to pass the ham test, that we sit around all day
>> swilling beer and saying "ten-fer good buddy". Or my favorite belief you
>> hold, "I have a ham ticket, that makes me special."
>>
> Ask him his call.

OK Hey Cmdr Buzz Corey, whats your call?

4856. Re: BFO, CW, sideband question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-28 12:11:18 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <Gzo8f.281640$084.253205@attbi_s22>
Source record: 16589

My FT1000MP mark V allows either USB or LSB CW reception, according to front panel push buttons.

Bill W0IYH

"Doug Smith W9WI" <w9wi@invalid.invalid> wrote in message news:4361B359.6040805@invalid.invalid...
> Jaggy Taggy wrote:
>> Who decides to which side of the carrier the BFO will heterodyne a CW
>> signal.
>> I mean there must be convention, otherwise we would have to find out on
>> an
>> individual basis, but what is this convention???
>
> A BFO will heterodyne a signal on *both* sides of the carrier. Most
> modern receivers are designed to filter out the heterodyne on one side.
> For CW signals, which side depends on the manufacturer. (i.e. there is no
> convention!)
> --
> Doug Smith W9WI
> Pleasant View (Nashville), TN EM66
> http://www.w9wi.com
>

4857. Re: BFO, CW, sideband question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-28 13:34:49 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <GNp8f.14121$i%.722@fed1read07>
Source record: 16590

When in the CW mode, My Kenwood TS-870 defaults to the USB, by pushing CW REV, it goes to LSB
Handy when in a DX pileup, the split is a few KHz up and the big guns are obliterating the weak DX station

--
CL -- I doubt, therefore I might be !

"Jaggy Taggy" <outhouse@midcoast.com> wrote in message news:BF86E6F4.B8E9%outhouse@midcoast.com...
> Who decides to which side of the carrier the BFO will heterodyne a CW
> signal.
> I mean there must be convention, otherwise we would have to find out on an
> individual basis, but what is this convention???
>
> Uwe
>

4858. Re: BFO, CW, sideband question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-28 13:45:21 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1130507121.872430.44070@z14g2000cwz.googlegroups.com>
Source record: 16591

> Who decides to which side of the carrier the BFO will
> heterodyne a CW signal.

For many SSB+CW transceivers, the maker of the transceiver decided on a default sideband at manufacture time. Usually USB for rigs that are capable of both sidebands.

For the oldest SSB equipment you don't get a choice of sideband: 14MHz and above comes out on USB, 7MHz and below come out on LSB, due to the 9MHz IF + 5MHz VFO scheme.

> I mean there must be convention, otherwise
> we would have to find out on an individual basis

It doesn't matter as long as you're consistent between your TX and RX, AND you make sure you're inside your band.

With most (all?) modern synthesized transceivers the frequency on the display is that of the CW transmission in CW mode, but on older SSB+CW rigs there was an offset (between a few hundred Hz and a few kHz) between the dial and the actual CW transmission frequency (which was in the sideband - the dial was calibrated to the suppressed carrier frequency in USB/LSB). The offset was usually mentioned in the manual (or in fancier rigs with RIT/XIT could be dialed in).

Tim.

4859. Re: 20meter propagation question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-28 14:48:04 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <djtdn4ic1@theodyn.ncf.ca>
Source record: 16592

Bill (exray@coqui.net) writes:
> Michael A. Terrell wrote:
>
>> Dan/W4NTI wrote:
>>
>>>Sorry Wendy... must of been a typo, right? WWV is on 15 Mhz.
>>
>>
>>
>> Unless the receiver is really out of alignment! ;-)
>>
>
> well, the IF image on many 'lesser' general coverage rigs with 455 kc IF
> would fall within a pointer width of 14000 so the OP may have been
> correct with his statement.
>
> :)
>
> -Bill

And of course, the receivers that had such bad image rejection tended to
have lousy dial calibration too.

Michael VE2BVW

4860. Re: 20meter propagation question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-28 15:02:30 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <djtei6$3gq$4@puck.litech.org>
Source record: 16593

Michael Black <et472@freenet.carleton.ca> wrote:

> Bill (exray@coqui.net) writes:
>> Michael A. Terrell wrote:
>>
>>> Dan/W4NTI wrote:
>>>
>>>>Sorry Wendy... must of been a typo, right? WWV is on 15 Mhz.
>>>
>>>
>>>
>>> Unless the receiver is really out of alignment! ;-)
>>>
>>
>> well, the IF image on many 'lesser' general coverage rigs with 455 kc IF
>> would fall within a pointer width of 14000 so the OP may have been
>> correct with his statement.
>>
>> :)
>>
>> -Bill

> And of course, the receivers that had such bad image rejection tended to
> have lousy dial calibration too.

As in "WWV comes in from 14.35 to 15.60, roughly."

I had one of those.

--
(About Cobalt): They're not servers. They're Fisher-Price toys with
delusions of grandeur. One of these days, I'm expecting someone to enter
my office with a pull-along version of the Qube. playing a silly little
tune as it rolls through the door... -- Chris King, in the Monastery

4861. Re: best material for turning a closet into a Faraday cage

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-28 15:10:50 UTC
From: novatech@eskimo.com
Message-ID: <djtf1q$cb9$1@eskinews.eskimo.com>
Source record: 16594

"SignalFerret" <signalferret@verizon.net> writes:

>Check this article out.

>www.qsl.net/n9zia/wireless/pdf/julaug1998-p64.pdf

[...]

>Come to think of it, of all the screen rooms, and sheet metal shielded rooms
>I've ever been in the biggest problem was ventilation.

>Robert N3LGC

You can get aluminum or copper window screen material and they work really
well without affecting ventilation much.

--
Steven D. Swift, novatech@eskimo.com, http://www.novatech-instr.com
NOVATECH INSTRUMENTS, INC. P.O. Box 55997
206.301.8986, fax 206.363.4367 Seattle, Washington 98155 USA

4862. Re: Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-28 17:23:55 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrndm4nlb.20vf.ben@saturn.home.ben.com>
Source record: 16595

On 2005-10-27, David Thompson <thompson@mindspring.com> wrote:
> My main use was to solder coax connectors. The Gun seems to work Ok on

For big soldering jobs like this I have a "Craftsman Professional Dual Heat Soldering Gun". This is not the standard "big soldering gun". It's got a 1/4" straight tip and it's very light. This will readily connect several 10ga copper wires (which are fantastic heatsinks).

http://www.sears.com/sr/javasr/product.do?pid=00927320000

--
Ben Jackson
<ben@ben.com>
http://www.ben.com/

4863. A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-28 18:04:48 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1130522688.763854.113650@g44g2000cwa.googlegroups.com>
Source record: 16596
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,

competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B

licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

4864. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-28 22:50:59 UTC
From: hexter@blazenet.net
Message-ID: <11m5aqjf77uufed@corp.supernews.com>
Source record: 16597
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

In article <1130522688.763854.113650@g44g2000cwa.googlegroups.com>,
aiyr.r.bean@lycos.co.uk says...
>
>What is Ham Radio?

Do you have some point to prove here you ignorant bandwidth waster?
What kind of asswipe constantly posts the same dribble when in fact
newsgroup articles are archived?

What is Polymath?

He is a self important asshole who's self assumed duty is to educate
folks about that which he knows nothing but only quotes things he has
heard or read. No actual brain activity belongs to PolyDouche.

Why do you constantly keep this up?? You prove you are to newsgroups
the very thing you hate most about others.

Why waste the space on this newsgroup, and why waste the bandwidth???
If you want something to play with stick your hands in your pocket and
play. You are the lowest form of life that exists.

You Polymath are truely worthless, no one here learns from your constant
post of the same dribble and in fact no self respectable ham would act
in the way you do, proving you are among the most childish of the very
CB'ers you seem to hate.

Suck me, blow us, or just blow away!! Fuck your useless posts!!!
Go talk politics with the WalMartians at your local WalMart.

Do you have nothing better to do than post the same worthless note?
Are you that lonely and disfunctional? You don't even rate as high
on the evolutionary scale as the idiots of 3898khz.

You have made a name for yourself indeed Polymath the biggest asshole
known to any newsgroup.

Tell us of anything electronic or ham related that you ever built. Give
us something of value. You can't and you know it and it pisses you off
to look at such a worthless asshole in the mirror each and every morning
and the worst part is tomorrow isn't looking any better.

Take your worthless post, print ten thousand copies and shove one up
your ass each morning while you contemplate your own suicide. If you
lack the methods and means to such an end I'll be the first in line to
by you a complete suicide do-it-yourself kit.

Opinions expressed here are my own but reflected by the entire newgroup
and anyone else with 2 or more functioning brain cells.

Piss off pal and take your idiotic plagerised post with you.

4865. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-28 23:25:06 UTC
From: From the shack of G1LVN <gareth.paley@gmail.invalid.com>
Message-ID: <djuc0i$k4r$1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 16498
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Gudmundur" <hexter@blazenet.net> wrote in message
news:11m5aqjf77uufed@corp.supernews.com...

please don't cross post this is what happened our regular cross poster on
uk.radio.amateur

http://tinyurl.com/5mcwk

It gets worse:

http://tinyurl.com/cdudd

--
drei unt siebzig deG1LVN
http://www.outpimp.com/?x=481566961
----
read rfc1855.txt first and
remove .invalid to reply

4866. Re: Pulsing LEDs for higher efficiency

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 02:30:36 UTC
From: nothermark <trash@gnomex.cotse.net>
Message-ID: <obn5m1l5jf3dh5gkri8gkggojeeaoss4lm@4ax.com>
Source record: 16499

On Wed, 12 Oct 2005 19:28:03 -0400, "Tom Coates"
<tecoatesHatesSpam@comcast.net> wrote:

>I want to build some emergency lighting equipment using LEDs and 12V. A
>friend told me that it is possible to get more light per Watt by pulsing the
>LED to instantaneous levels well above its average ratings.
>
>Is this true, if you include power consumed in the pulsing circuit?
>
>If it is, can anyone suggest a simple and cheap circuit and the appropriate
>operating values?
>
>The reason for the 12V requirement is that I'm also working on a solar
>charger for my transceiver batteries and want to use the same charger for
>the lighting batteries.
>
>Suggestions would be appreciated.
>
>Tom, N3IJ
>

take a look at the new crop of 1W LED flashlights that are on the
market. A lot of very white light from these modules. No need to
bother with trying t get intensity, something like 8 hours off 3 AAA
batteries.

4867. Re: BFO, CW, sideband question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 03:49:25 UTC
From: Jaggy Taggy <outhouse@midcoast.com>
Message-ID: <BF88698C.BDE6%outhouse@midcoast.com>
Source record: 16500

I started this thread because there is a bit of confusion in my head
regarding where the signal is, where the carrier is and what is indicated on
my radio dial.

And by the way, I do have an older radio, a Kenwood TS 830, not a modern
radio. My radio-display shifts on transmit to a frequency 800 Hz higher than
what was displayed on receive.

So I assume it displays the carrier frequency on transmit, while on receive
it displays the heterodyned frequency, which on my radio happens to be
lower, but as some indicated in this group, this is an arbitrary choice made
by the people at Kenwood.

The ARRL CW transmissions frequencies, for example, seem to be given for the
carrier which is not what my radio displays (my radio displays 800HZ lower
on receive) and therefore I need to adjust my radio to a different frequency
than what is advertised.

This is confusing to me.

It is also confusing me that I can't receive SSB on the lower bands using
USB (and a slight retune), I need to use LSB.
I don't know why since I learned that the two sidebands contain the same
info.

And the more I think about it the more I realize that I don't really
understand this whole topic very well...

Uwe

On 10/28/05 9:45 AM, in article
1130507121.872430.44070@z14g2000cwz.googlegroups.com, "Tim Shoppa"
<shoppa@trailing-edge.com> wrote:

>> Who decides to which side of the carrier the BFO will
>> heterodyne a CW signal.
>
> For many SSB+CW transceivers, the maker of the transceiver decided on a
> default sideband at manufacture time. Usually USB for rigs that are
> capable of both sidebands.
>
> For the oldest SSB equipment you don't get a choice of sideband:
> 14MHz and above comes out on USB, 7MHz and below come out on LSB, due
> to the 9MHz IF + 5MHz VFO scheme.
>
>> I mean there must be convention, otherwise
>> we would have to find out on an individual basis

>
> It doesn't matter as long as you're consistent between your TX and RX,
> AND you make sure you're inside your band.
>
> With most (all?) modern synthesized transceivers the frequency on the
> display is that of the CW transmission in CW mode, but on older SSB+CW
> rigs there was an offset (between a few hundred Hz and a few kHz)
> between the dial and the actual CW transmission frequency (which was in
> the sideband - the dial was calibrated to the suppressed carrier
> frequency in USB/LSB). The offset was usually mentioned in the manual
> (or in fancier rigs with RIT/XIT could be dialed in).
>
> Tim.
>

4868. Re: BFO, CW, sideband question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 04:05:17 UTC
From: Bill <exray@coqui.net>
Message-ID: <69a7b$4362f4ff$4232bdbf$27241@COQUI.NET>
Source record: 16501

Jaggy Taggy wrote:

>
> And by the way, I do have an older radio, a Kenwood TS 830, not a modern
> radio. My radio-display shifts on transmit to a frequency 800 Hz higher than
> what was displayed on receive.

The 'true' CW frequency would be that of zero-beat as opposed to where
you 'hear' the signal. The rig assumes that you are listening to a beat
note offset by about 800 Hz and compensates accordingly on transmit.
>
> So I assume it displays the carrier frequency on transmit, while on receive
> it displays the heterodyned frequency, which on my radio happens to be
> lower, but as some indicated in this group, this is an arbitrary choice made
> by the people at Kenwood.

I think we're saying the same thing.
>
>>
> It is also confusing me that I can't receive SSB on the lower bands using
> USB (and a slight retune), I need to use LSB.
> I don't know why since I learned that the two sidebands contain the same
> info.

Alas, a SSB station is only transmitting one of the sidebands! This by
convention is LSB on 40 and below and USB on 20 or above. If a station
WERE to xmt USB on 75 meters, for instance, you would have to use the
USB position and would not be able to detect it in LSB.

-Bill

4869. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 04:31:12 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1130560272.304565.325300@o13g2000cwo.googlegroups.com>
Source record: 16504
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

You would seem to be one of the Childish Broadcasters (CBers)
warned against in the article.

Shame on you.

Stupid boy.

Gudmundur wrote:
> In article <1130522688.763854.113650@g44g2000cwa.googlegroups.com>,
> aiyr.r.bean@lycos.co.uk says...
> >
> >What is Ham Radio?
>
>
> Do you have some point to prove here you ignorant bandwidth waster?
> What kind of asswipe constantly posts the same dribble when in fact
> newsgroup articles are archived?
>
> What is Polymath?
>
> He is a self important asshole who's self assumed duty is to educate
> folks about that which he knows nothing but only quotes things he has
> heard or read. No actual brain activity belongs to PolyDouche.
>
> Why do you constantly keep this up?? You prove you are to newsgroups
> the very thing you hate most about others.
>
> Why waste the space on this newsgroup, and why waste the bandwidth???
> If you want something to play with stick your hands in your pocket and
> play. You are the lowest form of life that exists.
>
> You Polymath are truely worthless, no one here learns from your constant
> post of the same dribble and in fact no self respectable ham would act
> in the way you do, proving you are among the most childish of the very
> CB'ers you seem to hate.
>
> Suck me, blow us, or just blow away!! Fuck your useless posts!!!
> Go talk politics with the WalMartians at your local WalMart.
>
> Do you have nothing better to do than post the same worthless note?
> Are you that lonely and disfunctional? You don't even rate as high
> on the evolutionary scale as the idiots of 3898khz.
>
> You have made a name for yourself indeed Polymath the biggest asshole

> known to any newsgroup.
>
> Tell us of anything electronic or ham related that you ever built. Give
> us something of value. You can't and you know it and it pisses you off
> to look at such a worthless asshole in the mirror each and every morning
> and the worst part is tomorrow isn't looking any better.
>
> Take your worthless post, print ten thousand copies and shove one up
> your ass each morning while you contemplate your own suicide. If you
> lack the methods and means to such an end I'll be the first in line to
> by you a complete suicide do-it-yourself kit.
>
> Opinions expressed here are my own but reflected by the entire newgroup
> and anyone else with 2 or more functioning brain cells.
>
> Piss off pal and take your idiotic plagerised post with you.

4870. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 04:53:47 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1130561627.408477.47620@z14g2000cwz.googlegroups.com>
Source record: 16505
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

In a public and international discussion group, it is
ALWAYS open for others to publish their own FAQs.

That they do not and merely resort to the abusive
behaviour proscribed in my FAQ suggests that my FAQ
is correct.

Polymath wrote:
> You would seem to be one of the Childish Broadcasters (CBers)
> warned against in the article.
>
> Shame on you.
>
> Stupid boy.

4871. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 05:10:40 UTC
From: Cmdr Buzz Corey <me@that.ten>
Message-ID: <mpmdnd58QYc6aP_eRVn-vA@gbronline.com>
Source record: 16502
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

DrDeath wrote:
>
>
> I don't need to look up any of those items.
> I am in the process of building a ssb radio to match the linear I built last
> year.

Sure you are.

4872. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 05:14:32 UTC
From: Cmdr Buzz Corey <me@that.ten>
Message-ID: <QtadncqrxfwMa__eRVn-2Q@gbronline.com>
Source record: 16503
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

DrDeath wrote:

> I don't need to look up any of those items.
> I am in the process of building a ssb radio to match the linear I built last
> year. Though I am certain I spend a great deal less time working on those
> types of projects as I have other interests in my life.
>
>

Care to give some details like what method of SSB generation this here
radio will use? Will this be a transmitter or tranceiver? What will the
IF frequency be? To go with your linear? So you are just another law
breaking cber I see.

4873. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 05:22:18 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1130563338.614187.198000@z14g2000cwz.googlegroups.com>
Source record: 16506
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

In addition, if you disagree with what I post, and do
not wish to see it, then it is a simple matter for you
to resort to use of your kill-file. Responding in the
rather silly and infantile manner in which you did
makes you seem to contribute in the very manner which
you would otherwise proscribe.

If you have a reasonable - and reasoned - response as
to what you think Ham Radio is, or is not, then publish it
here. That is, indeed, what an international forum such as
this is all about.

You would seem to be one of the Childish Broadcasters (CBers)
warned against in the article.

Shame on you.

Stupid boy.

> Gudmundur wrote:
> > In article <1130522688.763854.113650@g44g2000cwa.googlegroups.com>,
> > aiyr.r.bean@lycos.co.uk says...
> > >
> > >What is Ham Radio?
> >
> >
> > Do you have some point to prove here you ignorant bandwidth waster?
> > What kind of asswipe constantly posts the same dribble when in fact
> > newsgroup articles are archived?
> >
> > What is Polymath?
> >
> > He is a self important asshole who's self assumed duty is to educate
> > folks about that which he knows nothing but only quotes things he has
> > heard or read. No actual brain activity belongs to PolyDouche.
> >
> > Why do you constantly keep this up?? You prove you are to newsgroups
> > the very thing you hate most about others.
> >
> > Why waste the space on this newsgroup, and why waste the bandwidth???
> > If you want something to play with stick your hands in your pocket and
> > play. You are the lowest form of life that exists.
> >
> > You Polymath are truely worthless, no one here learns from your constant
> > post of the same dribble and in fact no self respectable ham would act

> > in the way you do, proving you are among the most childish of the very
> > CB'ers you seem to hate.
> >
> > Suck me, blow us, or just blow away!! Fuck your useless posts!!!
> > Go talk politics with the WalMartians at your local WalMart.
> >
> > Do you have nothing better to do than post the same worthless note?
> > Are you that lonely and disfunctional? You don't even rate as high
> > on the evolutionary scale as the idiots of 3898khz.
> >
> > You have made a name for yourself indeed Polymath the biggest asshole
> > known to any newsgroup.
> >
> > Tell us of anything electronic or ham related that you ever built. Give
> > us something of value. You can't and you know it and it pisses you off
> > to look at such a worthless asshole in the mirror each and every morning
> > and the worst part is tomorrow isn't looking any better.
> >
> > Take your worthless post, print ten thousand copies and shove one up
> > your ass each morning while you contemplate your own suicide. If you
> > lack the methods and means to such an end I'll be the first in line to
> > by you a complete suicide do-it-yourself kit.
> >
> > Opinions expressed here are my own but reflected by the entire newgroup
> > and anyone else with 2 or more functioning brain cells.
> >
> > Piss off pal and take your idiotic plagerised post with you.

4874. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 05:25:32 UTC
From: Peter <bra&#65533;nbuster@lineone.net>
Message-ID: <43630f8d.0@entanet>
Source record: 16510
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"Polymath" <aiyr.r.bean@lycos.co.uk> wrote...
> Unbeknown to me, this thread had already been cross-posted to
> the CB groups, and I would have removed that cross-posting
> had I been aware of it.

Why, so that you can abuse people behind their back? What would be the point
of replying to someone, but cutting out the group that the OP uses?

> In respect of that, I apologise if my remarks have caused
> any offence to the CB community.

I would bet that, if this was cross-posted to *real" tech groups, many qualified
engineers would also be offended by your suggestion that you are a "higher"
level of person.

> However, I do not withdraw my
> remarks - they are my opinion as to the relative
> standing of Radio Hams and of CB Radio
> enthusiasts where the playing-field is that of Radio
> Hams.

Playing field? So this is nothing more than a game to you, see who can cause the
most offence.

Your problem is that you are blaming the wrong people.
Maybe this is all just an excuse, a cover for your hatred of CB, nothing to do with
Amateur rules. Otherwise you would direct your comments and anger at those
making the changes.

> However, having said that, the material quoted below
> serves, I think, to illustrate quite well the
> intellectual standing of CB Radio enthusiasts
> upon which I have commented.....

You write a message which anyone of at least average intelligence will know will offend
certain groups of people, then pretend to be shocked when some respond angrily. You
may be a Ham, but that doesn't mean you can act.

Before putting the angry response down to "CB mentality", take a look through the Google
archives at all the serious abuse sent to newsgroups by some licensed Amateurs.
Six of one, half a dozen of the other.

Regards,

Peter.

4875. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 05:25:34 UTC
From: Peter <bra&#65533;nbuster@lineone.net>
Message-ID: <43630f8e.0@entanet>
Source record: 16509
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"Polymath" <aiyr.r.bean@lycos.co.uk> wrote...
> Because although CBers are in a different intellectual
> class to Radio Hams, it is neither my wish to insult
> them nor to enter into a discourse with them.

NO...
It IS your intention to insult them, just behind their backs so you run less risk of them replying. Your post was not really intended as an "FAQ", it was purely a relatively "safe" release for your personal anger.

Wuss.

> CBers have the right to besport their habits in the
> appropriate place as do all the lower classes, which
> in this context is rrcb (and urrcb).

If you must start seeing this as a class system, look up "Amateur" in a dictionary. Please consider the meaning of the word before suggesting that an "Amateur" is above the professionals who design and build equipment to the standards set by Governments, standards far above that required by an *amateur* producing equipment for his own personal use.

> > >A CB Radio hobbyist, on the other hand, sees no difference between
> > >a Ham Radio licence and a CB Radio licence. To him, they are
> > >sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
> > >tries to classify himself as the equal of the Radio
> > >Ham when, in fact, he is nothing of the kind. A sure sign of
> > >a CB Radio hobbyist is if he holds, or has ever held, a licence
> > >issued under the gangrenous degeneration that is the
> > >M3/CB Fools' Licence scheme.
> > >
> > >-----ooooo-----
> > >
> > >One group of people who claim to be of the standard of
> > >Radio Hams but who are in reality nothing more than an
> > >apology for the failure of a CBer are those class B
> > >licensees who falsely proclaimed that they were against
> > >the use of a Morse Test to control access to the HF
> > >bands, until, that is, a test was introduced at their
> > >intellectual level, the intellectual level of 6-year-olds.
> > >
> > >6 year-olds simply lack the mathematical tool kit to
> > >enable them to handle even the simplest algebraic manipulation
> > >for Ohm's Law and thus, the disgraceful Class Ber's in
> > >the aforementioned category are not Radio Hams by any stretch

> > >of the imagination!

Comparing, as you call them, "disgraceful Class Ber's" to 6 year old children is clearly intended to insult people.

Please think before displaying such ignorance and stupidity by blaming CBers for the rules...
they have absolutely NO CONTROL over such matters. CBers neither set the rules nor claim to represent "members", that woukld be Ofcom and the RSGB.

CBers do NOT see Amateur and CB as "sisters", it is people like the RSGB, the RA and Ofcom and
a certain magazine publisher who see it that way and make decisions to mix, combine and change
rules and formats.
Any sensible CBer would prefer to keep Amateur and CB separate, as they are separate services
for totally different purposes.

If you must get so angry, do yourself a couple of favours...
1. Blame and whine at the correct people, those able to make the changes.
2. Watch your blood pressure, OM.

I agree with keeping the Amateur requirements higher. I agree that it is now too simple, and has been for some years. I believe that Amateur radio should be for those with a real interest in radio, and tests should be set to allow those people through - not to get the licence figures up.
But it's pointless blaming people for taking what is on offer, sitting the test required to get their licence.

Regards,

Peter.

4876. Re: BFO, CW, sideband question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 05:43:44 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <43630C0E.1080204@invalid.invalid>
Source record: 16507

Jaggy Taggy wrote:
> I started this thread because there is a bit of confusion in my head
> regarding where the signal is, where the carrier is and what is indicated on
> my radio dial.

Join the crowd<grin>...

> It is also confusing me that I can't receive SSB on the lower bands using
> USB (and a slight retune), I need to use LSB.
> I don't know why since I learned that the two sidebands contain the same
> info.

Ah. What you learned about was DSB, not SSB.

In a regular AM (Dual Sideband) transmission the two sidebands indeed
contain the same info and you can tune either one. (or in most cases, both)

But what hams use is SSB, Single Sideband. One of the two sidebands is
filtered out, only one is transmitted.

It is traditional for amateurs to transmit the lower sideband below
10MHz and the upper sideband above 10MHz. Hence, you need to use LSB to
receive SSB signals on the low bands -- the upper sideband simply
doesn't exist on these signals. And vice-versa on the higher bands.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

4877. Re: BFO, CW, sideband question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 05:46:22 UTC
From: Jaggy Taggy <outhouse@midcoast.com>
Message-ID: <BF8884F5.C396%outhouse@midcoast.com>
Source record: 16508

> Alas, a SSB station is only transmitting one of the sidebands! This by
> convention is LSB on 40 and below and USB on 20 or above. If a station
> WERE to xmt USB on 75 meters, for instance, you would have to use the
> USB position and would not be able to detect it in LSB.
>
> -Bill

Right Bill, but why. Could I not retune my receiver so that I would catch
the transmitted sideband with my "LSB window"?

I guess from experience the answer is no, and that is also what you said,
but what is the reason??

Uwe

4878. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 06:11:23 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1130566283.006551.224450@o13g2000cwo.googlegroups.com>
Source record: 16511
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

There is no abuse intended in the identification of Ham
Radio and CB Radio as being disparate activities.

I do not hate CB, just as I do not hate other activities
which are as equally irrelevant to Ham Radio - needlework,
gardening, football, and the M3/CB Fools' Licence scheme.

Peter wrote:
> Why, so that you can abuse people behind their back? What would be the point
> of replying to someone, but cutting out the group that the OP uses?
> I would bet that, if this was cross-posted to *real" tech groups, many qualified
> engineers would also be offended by your suggestion that you are a "higher"
> level of person.
> Playing field? So this is nothing more than a game to you, see who can cause the
> most offence.
> Your problem is that you are blaming the wrong people.
> Maybe this is all just an excuse, a cover for your hatred of CB, nothing to do with
> Amateur rules. Otherwise you would direct your comments and anger at those
> making the changes.
> You write a message which anyone of at least average intelligence will know will offend
> certain groups of people, then pretend to be shocked when some respond angrily. You
> may be a Ham, but that doesn't mean you can act.
> Before putting the angry response down to "CB mentality", take a look through the Google
> archives at all the serious abuse sent to newsgroups by some licensed Amateurs.
> Six of one, half a dozen of the other.

4879. Re: BFO, CW, sideband question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 06:29:39 UTC
From: Bill <exray@coqui.net>
Message-ID: <1821e$436316d6$4232bdbf$6261@COQUI.NET>
Source record: 16512

Jaggy Taggy wrote:

>>Alas, a SSB station is only transmitting one of the sidebands! This by
>>convention is LSB on 40 and below and USB on 20 or above. If a station
>>WERE to xmt USB on 75 meters, for instance, you would have to use the
>>USB position and would not be able to detect it in LSB.
>>
>>-Bill
>
>
>
> Right Bill, but why. Could I not retune my receiver so that I would catch
> the transmitted sideband with my "LSB window"?
>
> I guess from experience the answer is no, and that is also what you said,
> but what is the reason??
>
> Uwe
>

Visualize a LSB signal as having the carrier frequency at 7000 kcs (or more precisely, phantom carrier). The audio sidebands tune down to 6997. A USB signal on the same freq has the audio sidebands from 7000 to 7003.

To tune to an SSB signal (and have it intelligible) you have to tune to the phantom carrier freq. You can't fool the rcvr by going 3kc hi or low and switching sidebands. Yes, the signal is there - to wit you can hear it - but you can't detect it.

Why? Think about how BFO injection works. Take a fixed freq BFO of 7000 in this case for simplicity. 7000 beating against an USB audio sideband at 7001 gives you a bit of 1 kc audio information. Repeat the same with an audio sideband at 7002...you get the 2kc audio information. If you try to fool the radio by tuning to 7003 and selecting LSB, yes you have duplicated the bandpass from 7003-7000 but all that audio information is now inverted.

In most rigs nowadays there's a single filter of about 2-3kc width that is used for both sidebands. When you select USB or LSB you're simply moving the bfo freq from one edge to the other.

Thats all an oversimplification but does it make sense?

-Bill

4880. Re: BFO, CW, sideband question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 06:53:02 UTC
From: Wor <damir.brcko@zg.htnet.hr>
Message-ID: <djv68l$ou3$1@bagan.srce.hr>
Source record: 16513

Hi!
Just to make things more complex (or simple). When you tune from LSB to USB you also change the frequency of BFO, putting it on one side or another of the IF filter. If you listen to LSB on USB position you can put the simulated carrier frequency on the right place, but signal is out of IF passband.
Sorry for my bad English. Hope you understand.
Damir 9A3IV

4881. Cheap Repeater Controller???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 07:06:30 UTC
From: Bill <bcrann1@hotmail.com>
Message-ID: <IbF8f.8354$ki7.678793@news20.bellglobal.com>
Source record: 16514

I am in the process of building a 2M repeater. I have everything except for a controller. I am looking for a cheap controller or a circuit to build my own. I don't need anything fancy. Also is there any PC Controller software besides EchoStation?

Bill

4882. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 08:26:06 UTC
From: Spike <Aero.Spike@Technologies.invalid>
Message-ID: <8cc6m11qjr1g479cn5lc7hj52hg1spnjl0@4ax.com>
Source record: 16515
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Polymouth wrote:

>> it is ALWAYS open for others to publish their own FAQs.

Well, here's a Frequently Posted Rubbish (FPR) to start things off:

Ham Radio (sic) is full of myths.

Do not be taken in by them, no matter how badly expressed.

The following is a collection of items that have been claimed as facts by supporters of UK 'ham radio' (sic), that needed correcting in order not to mislead the uncritical reader

Bookmark for future reference, as these items tend to recur.

New items added. This is Version V. It replaces all other Versions.

[ ] In the UK, no repeat no licence of any kind is necessary to specify, design, construct, modify, repair, own, or (under some circumstances) test an Amateur transmitter.

[ ] A pass in a current examination for a UK Amateur Licence qualifies the successful candidate for the issue of a UK Licence. Holders of the appropriate levels of licence are permitted to operate transmitting equipment that is not subject to a formal approvals procedure, and to carry out technical investigations. A qualification for a Licence, or the Licence itself, is not, repeat not, a qualification to specify, design, construct, modify, repair, or own transmitting equipment. See above.

[ ] Before sunrise on Friday, September 1st, 1939, Germany attacked Poland at 4:45am, when the Battleship "Schleswig-Holstein", on a so-called goodwill visit, opened fire on the Polish naval depot and garrison at Westeplatte. World War II had begun. An hour later, first German units crossed the Polish border. Britain entered the war two days later. She did not repeat not start WWII.

[ ] Because the 'dimensions' of both sides of the Radar Range Equation need a term having the units of square metres in order to balance, references to ratios of these terms expressed in terms of decibels does not repeat not imply that they are in themselves a ratio of powers.

[ ] FM can be demodulated by an AM receiver using the 'Slope Detection' method. Placing an NBFM signal entirely within a channel in a channelised AM receiver is not repeat not Slope Detection.

[ ] A company's Returns Policy is not repeat not an admission that it deliberately produces shoddy goods, no matter how well wrapped at the time of purchase.

[ ] An IP Address in the headers of one's posts is not repeat not Secret Information.

[ ] An exemplary driver is not repeat not one who makes an obscene gesture to show that the other driver is an idiot.

[ ] An exemplary driver is not repeat not one who repeats an obscene gesture to confirm that the other driver is an idiot.

[ ] XRC is not repeat not a suitable method of differentiating between the 80 percent of metals that have FCC crystal structure.

[ ] Millimetre-waves are not repeat not generated by 'nuclear emissions'.

[ ] The length of the day on this planet is not repeat not 23H20.

[ ] A spring/damper model is not repeat not a mechanical analogue of a capacitor/inductor.

[ ] Dehumidifiers do not repeat not work by absorbing heat.

[ ] Gas Company piping is not repeat not blue in colour.

[ ] 1 deciBel is not repeat not equal to 10 Bels.

---

from
Aero Spike

4883. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 10:15:44 UTC
From: Steveo <moparholic@hotmail.com>
Message-ID: <20051029061544.320$Ru@newsreader.com>
Source record: 16516
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

Cmdr Buzz Corey <me@that.ten> wrote:
> DrDeath wrote:
>
> > I don't need to look up any of those items.
> > I am in the process of building a ssb radio to match the linear I built
> > last year. Though I am certain I spend a great deal less time working
> > on those types of projects as I have other interests in my life.
> >
> >
>
> Care to give some details like what method of SSB generation this here
> radio will use?
>
Care to tell us your call sign, buzzard?

4884. A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 10:28:15 UTC
From: Polymath <mysteron@mailblocks.com>
Message-ID: <1130581695.118149.40220@g47g2000cwa.googlegroups.com>
Source record: 16517
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Some interesting details about 'Polymouth'

http://tinyurl.com/cdudd

http://tinyurl.com/5mcwk

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to

be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B
licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

4885. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 10:50:09 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1130583009.229261.45330@g43g2000cwa.googlegroups.com>
Source record: 16518
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Notham Hull is second only to Brian Reay in obsession
with me (and therefore in envy of me by Brian Reay's
arguments) that he resorts to a Japanese ISP to
get round kill files.

What it is to be AN INCURABLE CBER!

Both gentlmen were dismal failures in that they were
either too lazy or too stupid, or both, to be able
to tackle and then pass a 12WPM Morse Test that
otherwise-unqualified self-taught 14-year-olds
were taking in their stride.

Too late - neither will ever be known as a "Class A"
licensee no matter how much they might preen themselves
on being "Full" licensees.

Failures both, and both on international public record as such!

Polymath wrote:
> Some interesting details about 'Polymouth'
>
> http://tinyurl.com/cdudd
>
> http://tinyurl.com/5mcwk
>
>
> What is Ham Radio?
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.
>
> Ham Radio awakens in its aficionados a whole-life
> fascination with all things technical and gives
> an all-abiding curiosity to improve one's scientific
> knowledge. It's a great swimming pool, please dive in!
>
> This excitement causes a wish to share the experience
> with ones fellow man, and shows itself in the
> gentlemanly traditions of Ham Radio.
>

> Radio Hams are in a unique privileged position in that
> they can construct and operate their own equipment! No-one
> else has this privilege. Users, such as broadcasters,
> the po lice and armed farces, CBers and mobile phone
> users have to purchase ready-made gear. Manufacturers
> are not licensed to operate their gear. Radio Hams
> are qualified to design, build and then
> operate their own pieces of equipment. They do this
> with gusto, and also repair and modify their own
> equipment. This is a privilege well worth the effort
> to gain, and one to be jealously guarded.
>
> The excitement that drives a Radio Ham starts with
> relatively simple technologies at first, perhaps making
> his own Wimshurst machine and primary cells. Small pieces
> of test equipment follow, possibly multimeters and signal
> generators. Then comes receivers and transmitters. It is with
> the latter that communication with like-minded technically
> motivated people takes off. The scope for technical
> development grows with the years
> and now encompasses DSP and DDS. There is also a great deal
> of excitement in the areas of computer programming to
> be learnt and applied.
>
> The technical excitement motivates Radio Hams to compete
> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.
>
> -----OOOOO----
>
> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large
> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
> repaired; they are not interested in technical discussion
> and sneer at those who are; they have no idea how
> their radios work inside and have no wish to find out;
> they are free with rather silly personal insults;
> they have not satisfied any technical qualification
> and their licences prevent the use of
> self-designed-and-built equipment.
>
> These CB types engage in the competitive activities
> with their Cheque-Book-purchased off-the-shelf radios
> in a forlorn effort to prove that they are Radio Hams.
>

> No _REAL_ Radio Hams are deceived by such people!
>
> -----ooooo-----
>
> One infallible way to disambiguate the CB Radio Hobbyist
> from the _REAL_ Radio Ham is to solicit their view of the
> difference between CB Radio and Ham Radio. A Radio Ham will
> perceive Ham Radio to be a technical pursuit and will
> perceive CB Radio to be a social communications facility
> no different in essence to a land-line telephone or a
> GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
> could also hold a CB licence safe in the knowledge that
> such a licence says no more about him than having a land-line
> telephone, whilst continuing to regard Ham Radio as a separate
> technical pursuit.
>
> A CB Radio hobbyist, on the other hand, sees no difference between
> a Ham Radio licence and a CB Radio licence. To him, they are
> sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
> tries to classify himself as the equal of the Radio
> Ham when, in fact, he is nothing of the kind. A sure sign of
> a CB Radio hobbyist is if he holds, or has ever held, a licence
> issued under the gangrenous degeneration that is the
> M3/CB Fools' Licence scheme.
>
> -----ooooo-----
>
> One group of people who claim to be of the standard of
> Radio Hams but who are in reality nothing more than an
> apology for the failure of a CBer are those class B
> licensees who falsely proclaimed that they were against
> the use of a Morse Test to control access to the HF
> bands, until, that is, a test was introduced at their
> intellectual level, the intellectual level of 6-year-olds.
>
> 6 year-olds simply lack the mathematical tool kit to
> enable them to handle even the simplest algebraic manipulation
> for Ohm's Law and thus, the disgraceful Class Ber's in
> the aforementioned category are not Radio Hams by any stretch
> of the imagination!
>
> Remember - A sure sign of a CB Radio hobbyist is if he holds,
> or has ever held, a licence issued under the gangrenous
> degeneration that is the M3/CB Fools' Licence scheme!

4886. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 10:52:38 UTC
From: realradioham <realradioham@tiscali.co.uk>
Message-ID: <43635474$1_2@mk-nntp-2.news.uk.tiscali.com>
Source record: 16519
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Polymath" <mysteron@mailblocks.com> wrote in message
news:1130581695.118149.40220@g47g2000cwa.googlegroups.com...
> Some interesting details about 'Polymouth'
>
> http://tinyurl.com/cdudd
>
> http://tinyurl.com/5mcwk
>
>
>
The above bad press has done nothing but harm to the public perception of
ham radio. Are you proud of your behaviour????

RRH

4887. Re: BFO, CW, sideband question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 11:42:05 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <SN6dnfdoQoFOwv7eRVn-ug@bright.net>
Source record: 16520

Actually, I think the convention is LSB below 9 MHz and USB above 9 MHz. That comes from the fact that most old rigs used 9 MHz as the I.F. Doesn't really matter though since our voice bands are 40M and 20M (CW only on 30M), so by convention, we use LSB on 40M and below and USB on 20M and above. However, one can reverse this if one desires. It will just confuse new people when they try to tune you in and wonder why they can't get you tuned in...

Scott
N0EDV

Doug Smith W9WI wrote:
> Jaggy Taggy wrote:
>

>
> It is traditional for amateurs to transmit the lower sideband below
> 10MHz and the upper sideband above 10MHz. Hence, you need to use LSB to
> receive SSB signals on the low bands -- the upper sideband simply
> doesn't exist on these signals. And vice-versa on the higher bands.

4888. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 12:40:54 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <dY-dnd-CFNJL8P7eRVn-oQ@giganews.com>
Source record: 16521
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Polymath wrote:
> Notham Hull is second only to Brian Reay in obsession
> with me (and therefore in envy of me by Brian Reay's
> arguments) that he resorts to a Japanese ISP to
> get round kill files.
>

Gareth once again demonstrates just how much he knows about the internet...

And I'm afraid you shouldn't have messed with me, I don't forget...
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

4889. Re: BFO, CW, sideband question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 12:43:09 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <x7K8f.283670$084.68522@attbi_s22>
Source record: 16522

Modern radios such as the FT1000MP Mk V automatically change the internal local oscillator frequencies so that USB, LSB and CW appear on the same indicated signal frequency, which is what we want. In CW we get a certain pitch frequency such as 500 Hz (not zero beat) at the signal frequency. The value of this pitch frequency can be changed from the front panel by the operator to suit his preference.

In my homebrew rcvr I use the CW USB setting only. As I tune up the band I hear the high pitch of a signal first and it then decreases pitch as I continue to tune up the band (my preference). I use a single xtal filter frequency for USB/LSB and a single xtal filter frequency for CW. The BFO xtal frequency and the VFO frequency counter digital readout (not the actual VFO frequency itself) are automatically changed to their correct values in LSB, CW or USB mode. In CW mode I then have a 500 Hz beat note, which is what I want, not zero beat, and the CW BFO xtal is then the correct value for CW USB.

For a brief description of my homebrew rcvr see QRZ.COM, W0IYH.

Bill W0IYH

"Wor" <damir.brcko@zg.htnet.hr> wrote in message
news:djv68l$ou3$1@bagan.srce.hr...
> Hi!
> Just to make things more complex (or simple). When you tune from LSB to
> USB
> you also change the frequency of BFO, putting it on one side or another of
> the IF filter. If you listen to LSB on USB position you can put the
> simulated carrier frequency on the right place, but signal is out of IF
> passband.
> Sorry for my bad English. Hope you understand.
> Damir 9A3IV
>
>

4890. Re: BFO, CW, sideband question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 13:35:51 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <43637AB4.30009@invalid.invalid>
Source record: 16523

Scott wrote:
> Actually, I think the convention is LSB below 9 MHz and USB above 9 MHz.
> That comes from the fact that most old rigs used 9 MHz as the I.F.
> Doesn't really matter though since our voice bands are 40M and 20M (CW
> only on 30M), so by convention, we use LSB on 40M and below and USB on
> 20M and above. However, one can reverse this if one desires. It will
> just confuse new people when they try to tune you in and wonder why they
> can't get you tuned in...

Yeah, and more than once I've scratched my head about what type of voice encryption someone was using in the middle of 20 meters before it dawned on me to try listening on LSB<grin>!

The 10MHz figure is somewhat arbitrary since indeed there are no amateur voice frequencies between 7.3 and 14.1MHz - and commercial services don't follow our LSB/USB convention.

As I understood it, the decision to use different sidebands in the two spectrum areas came from the design of some early SSB equipment. If you used a 9MHz IF and a 5.0-5.5MHz VFO, you could cover both 80 and 20 meters without having to mess with heterodyne oscillators. But since you'd be using addition on 20 vs. subtraction on 80, the sidebands would flip.

(there's GOT to be a better way to say that but it's too darned early in the morning!)

At the time either there wasn't a phone band yet on 40 or phone privileges there were very new & SSBers didn't care that much about it. 15 was also very new or non-existant, and I suspect most SSBers didn't believe anyone had a receiver stable enough to receive SSB on 28MHz!
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

4891. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 13:46:17 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <djvuff$5ln$1@news7.svr.pol.co.uk>
Source record: 16524
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"Cmdr Buzz Corey" <me@that.ten> wrote in message
news:mpmdnd58QYc6aP_eRVn-vA@gbronline.com...
> DrDeath wrote:
> >
> >
> > I don't need to look up any of those items.
> > I am in the process of building a ssb radio to match the linear I built
last
> > year.
>
> Sure you are.

Why? cant you afford to buy one??

4892. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 13:47:23 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <djvuhhhhi1@news6.svr.pol.co.uk>
Source record: 16525
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

> Care to give some details like what method of SSB generation this here
> radio will use? Will this be a transmitter or tranceiver? What will the
> IF frequency be? To go with your linear? So you are just another law
> breaking cber I see.

Does this mean you think all CB'ers are law breakers???

4893. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 16:12:14 UTC
From: EL84 <el84@nospam.aol.com>
Message-ID: <3shlb4Fo0sp9U1@individual.net>
Source record: 16526
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1130583009.229261.45330@g43g2000cwa.googlegroups.com...
> that he resorts to a Japanese ISP to
> get round kill files.
>
Oh dear, I see geography is not a strong point of yours either, how long has
Taipei been part of Japan. Check again soft arse, working in that Japanese
labour camp is brainwashing you.

4894. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 16:42:34 UTC
From: "jim.gm4dhj" <jim.gm4dhj@ntlworld.com>
Message-ID: <_DN8f.7718$sA4.4104@newsfe2-win.ntli.net>
Source record: 16527
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

> And I'm afraid you shouldn't have messed with me, I don't forget...
> --
> huLLy

yes you do......

4895. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 16:54:00 UTC
From: "Jock." <real_classs_a@yahoo.co.uk>
Message-ID: <28a7m1llsmgsbjhrrbv55935nn0and8kie@4ax.com>
Source record: 16528
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sat, 29 Oct 2005 17:12:14 +0100, "EL84" <el84@nospam.aol.com> wrote:

>Oh dear, I see geography is not a strong point of yours either, how long has
>Taipei been part of Japan.

It used to be part of Japan ...

--

73 de Jock.

"You will always find that those who are most apt to
boast of national merit, have little or no merit of
their own to depend on". - Oliver Goldsmith.

4896. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 16:56:52 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <TuqdnaNPmP9JNP7enZ2dnUVZ_tGdnZ2d@giganews.com>
Source record: 16529
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

jim.gm4dhj wrote:
>> And I'm afraid you shouldn't have messed with me, I don't forget...
>> --
>> huLLy
>
> yes you do......

Oh no I don't!
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

4897. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 16:57:21 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <gcednSAI9qJsNP7eRVn-hQ@giganews.com>
Source record: 16530
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Jock. wrote:
> On Sat, 29 Oct 2005 17:12:14 +0100, "EL84" <el84@nospam.aol.com>
> wrote:
>
>> Oh dear, I see geography is not a strong point of yours either, how
>> long has Taipei been part of Japan.
>
> It used to be part of Japan ...

My ISP or my news provider is nowhere near that part of the world!
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

4898. Re: Cheap Repeater Controller???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 17:00:45 UTC
From: johan aeq <pe1aeq@amsat.og>
Message-ID: <71819$4363ac6c$52ad139c$30039@news.versatel.nl>
Source record: 16531

Sorry,
i had a program thar did just the steering you need.
It worked via the soundcard of the computer.
if i can find it i will give you the url.
It also worked as a "parrot repeater".
Greetings Johan PE1AEQ

"Bill" <bcrann1@hotmail.com> schreef in bericht
news:IbF8f.8354$ki7.678793@news20.bellglobal.com...
> I am in the process of building a 2M repeater. I have everything except
for
> a controller. I am looking for a cheap controller or a circuit to build
my
> own. I don't need anything fancy. Also is there any PC Controller
software
> besides EchoStation?
>
> Bill
>
>

4899. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 17:31:18 UTC
From: "jim.gm4dhj" <jim.gm4dhj@ntlworld.com>
Message-ID: <GlO8f.7805$sA4.5924@newsfe2-win.ntli.net>
Source record: 16533
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"huLLy" <thisainthamradio@aol.com> wrote in message
news:TuqdnaNPmP9JNP7enZ2dnUVZ_tGdnZ2d@giganews.com...
> jim.gm4dhj wrote:
>>> And I'm afraid you shouldn't have messed with me, I don't forget...
>>> --
>>> huLLy
>>
>> yes you do......
>
> Oh no I don't!
> --
> huLLy

I don't ...you do......

4900. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 17:42:45 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <2eadnRoZ1r8EKf7enZ2dnUVZ_tCdnZ2d@giganews.com>
Source record: 16534
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

jim.gm4dhj wrote:

> I don't ...you do......

I hope you're not going on about that tuner.

As you've given up, it would have been a waste of time now, wouldn't it?
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

4901. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 17:49:44 UTC
From: "jim.gm4dhj" <jim.gm4dhj@ntlworld.com>
Message-ID: <YCO8f.23675$65.4812@newsfe6-win.ntli.net>
Source record: 16535
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"huLLy" <thisainthamradio@aol.com> wrote in message
news:2eadnRoZ1r8EKf7enZ2dnUVZ_tCdnZ2d@giganews.com...
> jim.gm4dhj wrote:
>
>> I don't ...you do......
>
> I hope you're not going on about that tuner.
>
> As you've given up, it would have been a waste of time now, wouldn't it?
> --
> huLLy

what tuner ? .....

4902. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 17:55:14 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <uqqdnZVn27IeKv7eRVn-hA@giganews.com>
Source record: 16536
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

```
jim.gm4dhj wrote:
> "huLLy" <thisainthamradio@aol.com> wrote in message
> news:2eadnRoZ1r8EKf7enZ2dnUVZ_tCdnZ2d@giganews.com...
>> jim.gm4dhj wrote:
>>
>>> I don't ...you do......
>>
>> I hope you're not going on about that tuner.
>>
>> As you've given up, it would have been a waste of time now, wouldn't
>> it? --
>> huLLy
>
> what tuner ? .....

Never attempt a coherent argument with an incoherent scotsman
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925
```

4903. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 18:19:32 UTC
From: Cmdr Buzz Corey <me@that.ten>
Message-ID: <a6adnYBSCIIWM_7enZ2dnUVZ_s6dnZ2d@gbronline.com>
Source record: 16532
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

The Magnum wrote:
>>Care to give some details like what method of SSB generation this here
>>radio will use? Will this be a transmitter or tranceiver? What will the
>>IF frequency be? To go with your linear? So you are just another law
>>breaking cber I see.
>
>
> Does this mean you think all CB'ers are law breakers???
>
>

No, not all chicken banders are law breakers, but a very large portion are.

If Dr IQ is running an external linear he certainly is. If he is going
to build a cb transmitter, which will not be type accepted and put it on
the air he certainly will be.

4904. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 18:33:31 UTC
From: "jim.gm4dhj" <jim.gm4dhj@ntlworld.com>
Message-ID: <%fP8f.37338$S_1.34666@newsfe5-win.ntli.net>
Source record: 16537
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"huLLy" <thisainthamradio@aol.com> wrote in message
news:uqqdnZVn27IeKv7eRVn-hA@giganews.com...
> jim.gm4dhj wrote:
>> "huLLy" <thisainthamradio@aol.com> wrote in message
>> news:2eadnRoZ1r8EKf7enZ2dnUVZ_tCdnZ2d@giganews.com...
>>> jim.gm4dhj wrote:
>>>
>>>> I don't ...you do......
>>>
>>> I hope you're not going on about that tuner.
>>>
>>> As you've given up, it would have been a waste of time now, wouldn't
>>> it? --
>>> huLLy
>>
>> what tuner ? .....
>
> Never attempt a coherent argument with an incoherent scotsman
> --
> huLLy
> Mobile phone 07976 123278
> ICQ 136-987-925
>

4905. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 18:34:12 UTC
From: "jim.gm4dhj" <jim.gm4dhj@ntlworld.com>
Message-ID: <EgP8f.37339$S_1.33443@newsfe5-win.ntli.net>
Source record: 16538
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

```
"huLLy" <thisainthamradio@aol.com> wrote in message
news:uqqdnZVn27IeKv7eRVn-hA@giganews.com...
> jim.gm4dhj wrote:
>> "huLLy" <thisainthamradio@aol.com> wrote in message
>> news:2eadnRoZ1r8EKf7enZ2dnUVZ_tCdnZ2d@giganews.com...
>>> jim.gm4dhj wrote:
>>>
>>>> I don't ...you do......
>>>
>>> I hope you're not going on about that tuner.
>>>
>>> As you've given up, it would have been a waste of time now, wouldn't
>>> it? --
>>> huLLy
>>
>> what tuner ? .....
>
> Never attempt a coherent argument with an incoherent scotsman
> --
> huLLy
```

what tuner ? ......

4906. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 18:44:51 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1130611491.796763.25040@g49g2000cwa.googlegroups.com>
Source record: 16539
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Your offering below, riddled as it is with childish
insults illustrates well that you are a CBer.

Peter wrote:
> NO...
> It IS your intention to insult them, just behind their backs so you run less risk
> of them replying. Your post was not really intended as an "FAQ", it was purely
> a relatively "safe" release for your personal anger.
> Wuss.
> If you must start seeing this as a class system, look up "Amateur" in a dictionary.
> Please consider the meaning of the word before suggesting that an "Amateur" is
> above the professionals who design and build equipment to the standards set by
> Governments, standards far above that required by an *amateur* producing
> equipment for his own personal use.
> Comparing, as you call them, "disgraceful Class Ber's" to 6 year old children is clearly
> intended to insult people.
> Please think before displaying such ignorance and stupidity by blaming CBers for the
rules...
> they have absolutely NO CONTROL over such matters. CBers neither set the rules nor claim
to
> represent "members", that woukld be Ofcom and the RSGB.
> CBers do NOT see Amateur and CB as "sisters", it is people like the RSGB, the RA and
Ofcom and
> a certain magazine publisher who see it that way and make decisions to mix, combine and
change
> rules and formats.
> Any sensible CBer would prefer to keep Amateur and CB separate, as they are separate
services
> for totally different purposes.
> If you must get so angry, do yourself a couple of favours...
> 1. Blame and whine at the correct people, those able to make the changes.
> 2. Watch your blood pressure, OM.
> I agree with keeping the Amateur requirements higher. I agree that it is now too
> simple, and has been for some years. I believe that Amateur radio should be for those
> with a real interest in radio, and tests should be set to allow those people through -
not
> to get the licence figures up.
> But it's pointless blaming people for taking what is on offer, sitting the test required
to
> get their licence.

4907. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 19:41:03 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dk0j8slet1@news7.svr.pol.co.uk>
Source record: 16540
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"Cmdr Buzz Corey" <me@that.ten> wrote in message
news:a6adnYBSCIIWM_7enZ2dnUVZ_s6dnZ2d@gbronline.com...
> The Magnum wrote:
> >>Care to give some details like what method of SSB generation this here
> >>radio will use? Will this be a transmitter or tranceiver? What will the
> >>IF frequency be? To go with your linear? So you are just another law
> >>breaking cber I see.
> >
> >
> > Does this mean you think all CB'ers are law breakers???
> >
> >
>
> No, not all chicken banders are law breakers, but a very large portion
are.
>
> If Dr IQ is running an external linear he certainly is. If he is going
> to build a cb transmitter, which will not be type accepted and put it on
> the air he certainly will be.

Type approved.... hmm, its a bit of a strange one that ... which makes me
think "type approved" for Amateur is something home made from bits of
anything.... not tested by anyone... just soldered together by an Amateur so
it must be perfect ...right? No spurious emmisions or any interference
because the person cobbling it together is an Amateur..... Now no
disrespect here is aimed at Amateurs, just some of the laws governing the
hobby seem to be crazy. Amateurs building their own kit and having it tested
via some professional body before use i can accept.... but does that ticket
mean you can build your own "boots" and use it no matter how bad it may be
made? It seems so..... sod type approval eh. Or were you just relating to
"licence conditions"
I know a few Amateurs who are law breakers too. Using their illegally
adapted Amateur equipment to listen in to CB frequencies i believe is a NO
NO, unless you have a CB licence... to which would Amateurs actually bother
to get a CB licence? Are the radios actually legal to use on the CB bands??
i dont know 100% so i ask the question. We all do things from time to time
that are deemed illegal.... so your statement on "No, not all chicken
banders are law breakers, but a very large portion are" could be said
against any group of people.

Whats your opinion on M3's? Do you encorage them or see them as a stain on
Amateur radio? Im just curious by the way.

Regards,
Graham

4908. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 20:43:58 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1130618638.849629.218260@o13g2000cwo.googlegroups.com>
Source record: 16542
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Also known as the M3/CB Fools' Licence - any 6 year old, having
no previous knowledge or experience of Ham Radio can attend a
weekend course and leave on the Monday with a licence.

The scheme is a complete joke and held in widespread
derision by any self-respecting _REAL_ Brit Radio Ham.

No 6 year old has the mathematical toolset to deal with
even the most simple of algebraic transpositions that are
necessary to deal with problems involvng Ohm's Law.

The M3 is a CB licence, nothing more, nothing less.

It's purpose is to fill the coffers of a Brit publishing
company, the RSCB - The Radio Society for Citizen's Band.

Cmdr Buzz Corey wrote:
> I must confess I haven't acquainted myself with M3's. Is this a test
> free amateur license?

4909. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 20:50:03 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <5vqdnbys6tnhff7enZ2dnUVZ_tCdnZ2d@giganews.com>
Source record: 16543
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Polymath wrote:

> It's purpose is to fill the coffers of a Brit publishing
> company, the RSCB - The Radio Society for Citizen's Band.
>

It's 'its' you fuckwit!
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

4910. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 20:51:09 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <T4qdndhugIojff7eRVn-vw@giganews.com>
Source record: 16544
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

huLLy wrote:
> Polymath wrote:
>
>> It's purpose is to fill the coffers of a Brit publishing
>> company, the RSCB - The Radio Society for Citizen's Band.
>>
>
> It's 'its' you fuckwit!

and Citizens' Band... what a poor disgrace you are to our worldwide
associates..
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

4911. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 21:12:27 UTC
From: Polymath <aiyr.r.bean@lyos.co.uk>
Message-ID: <ebp7m1h4r4f6eg2v9m1sm5bljg2ek0u5hl@4ax.com>
Source record: 16545
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"huLLy" <thisainthamradio@aol.com> wrote:
> Polymath wrote:
>
> > It's purpose is to fill the coffers of a Brit publishing
> > company, the RSCB - The Radio Society for Citizen's Band.
> >
>
> It's 'its' you fuckwit!
>
Thanks for correcting me....I'm a dumbass.

G4SDW

Usenet Zone Free Binaries Usenet Server
More than 140,000 groups
Unlimited download
http://www.usenetzone.com to open account

4912. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 21:20:31 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <75udnQc6IugCev7eRVn-tg@giganews.com>
Source record: 16546
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Polymath wrote:
> "huLLy" <thisainthamradio@aol.com> wrote:
>> Polymath wrote:
>>
>>> It's purpose is to fill the coffers of a Brit publishing
>>> company, the RSCB - The Radio Society for Citizen's Band.
>>>
>>
>> It's 'its' you fuckwit!
>>
> Thanks for correcting me....I'm a dumbass.
>
The real Polymath doesn't know his arse from his elbow..
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

4913. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 21:39:22 UTC
From: Cmdr Buzz Corey <me@that.ten>
Message-ID: <t9SdnSFdvdD_QP7eRVn-tg@gbronline.com>
Source record: 16541
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

The Magnum wrote:
> "Cmdr Buzz Corey" <me@that.ten> wrote in message
> news:a6adnYBSCIIWM_7enZ2dnUVZ_s6dnZ2d@gbronline.com...
>
>>The Magnum wrote:
>>
>>>>Care to give some details like what method of SSB generation this here
>>>>radio will use? Will this be a transmitter or tranceiver? What will the
>>>>IF frequency be? To go with your linear? So you are just another law
>>>>breaking cber I see.
>>>
>>>
>>>Does this mean you think all CB'ers are law breakers???
>>>
>>>
>>
>>No, not all chicken banders are law breakers, but a very large portion
>
> are.
>
>>If Dr IQ is running an external linear he certainly is. If he is going
>>to build a cb transmitter, which will not be type accepted and put it on
>>the air he certainly will be.
>
>
> Type approved.... hmm, its a bit of a strange one that ... which makes me
> think "type approved" for Amateur is something home made from bits of
> anything.... not tested by anyone... just soldered together by an Amateur so
> it must be perfect ...right? No spurious emmisions or any interference
> because the person cobbling it together is an Amateur..... Now no
> disrespect here is aimed at Amateurs, just some of the laws governing the
> hobby seem to be crazy. Amateurs building their own kit and having it tested
> via some professional body before use i can accept.... but does that ticket
> mean you can build your own "boots" and use it no matter how bad it may be
> made? It seems so..... sod type approval eh. Or were you just relating to
> "licence conditions"

Maybe the rules are different where you are, but in the US amateurs can
construct any of their equipment, but it *is their responsibility* to
test it and make sure it operates legally. If it doesn't they can be
held accountable by the FCC. Granted, there are few today, due to lack
of technical knowledge that can do that. It wasn't that long ago
however, that finding a ham station completely constructed by the

amateur wasn't uncommon or often surplus military gear would be modified
for use on the amateur bands. With the plug-and-talk equipment of today,
easier test with given answers that can be memorized, the technical
expertise of the amateur is sadly lacking

> I know a few Amateurs who are law breakers too. Using their illegally
> adapted Amateur equipment to listen in to CB frequencies i believe is a NO
> NO, unless you have a CB licence...

In the US any ham or anyone else can legally listen in on cb frequencies.

> to which would Amateurs actually bother
> to get a CB licence?

Since there is no requirement here for a cb license I don't suppose any
amateur would bother.

> Are the radios actually legal to use on the CB bands??

Only radios that are type accepted for cb use are legal to use on the cb
bands. There is a problem here with imported radios that have 'expanded'
channels that will also operate on the 10 meter ham band. These radios
are not 'type certified' for cb use and they are purchased by unlicensed
persons and are often used on the 10 meter band. Some time back it was a
popular thing for amateurs to take cb radios and convert them for use on
the 10 meter band, just change the crystals, peak up the circuits and
you had a nice little mobile 10 meter radio. Once modified as such the
radios were no longer type certified nor legal for cb use but perfectly
legal for amateur use.

> i dont know 100% so i ask the question. We all do things from time to time
> that are deemed illegal.... so your statement on "No, not all chicken
> banders are law breakers, but a very large portion are" could be said
> against any group of people.

True, but there is a much larger percentage of illegal operation on the
cb band than on the amateur bands, at least here in the US. And we have
the 'freebanders' who for some strange reason think they have the right
to operate on the frequencies between the upper end of the cb band and
the lower end of 10 meters plus just about anywhere else they chose.
>
> Whats your opinion on M3's? Do you encorage them or see them as a stain on
> Amateur radio? Im just curious by the way.

I must confess I haven't acquainted myself with M3's. Is this a test
free amateur license?

4914. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 23:01:02 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dk0v07pjq1@newsg2.svr.pol.co.uk>
Source record: 16547
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"Cmdr Buzz Corey" <me@that.ten> wrote in message
news:t9SdnSFdvdD_QP7eRVn-tg@gbronline.com...
> The Magnum wrote:
> > "Cmdr Buzz Corey" <me@that.ten> wrote in message
> > news:a6adnYBSCIIWM_7enZ2dnUVZ_s6dnZ2d@gbronline.com...
> >
> >>The Magnum wrote:
> >>
> >>>>Care to give some details like what method of SSB generation this here
> >>>>radio will use? Will this be a transmitter or tranceiver? What will
the
> >>>>IF frequency be? To go with your linear? So you are just another law
> >>>>breaking cber I see.
> >>>
> >>>
> >>>Does this mean you think all CB'ers are law breakers???
> >>>
> >>>
> >>
> >>No, not all chicken banders are law breakers, but a very large portion
> >
> > are.
> >
> >>If Dr IQ is running an external linear he certainly is. If he is going
> >>to build a cb transmitter, which will not be type accepted and put it on
> >>the air he certainly will be.
> >
> >
> > Type approved.... hmm, its a bit of a strange one that ... which makes
me
> > think "type approved" for Amateur is something home made from bits of
> > anything.... not tested by anyone... just soldered together by an
Amateur so
> > it must be perfect ...right? No spurious emmisions or any interference
> > because the person cobbling it together is an Amateur..... Now no
> > disrespect here is aimed at Amateurs, just some of the laws governing
the
> > hobby seem to be crazy. Amateurs building their own kit and having it
tested
> > via some professional body before use i can accept.... but does that
ticket
> > mean you can build your own "boots" and use it no matter how bad it may
be

> > made? It seems so..... sod type approval eh. Or were you just relating
to
> > "licence conditions"
>
> Maybe the rules are different where you are, but in the US amateurs can
> construct any of their equipment, but it *is their responsibility* to
> test it and make sure it operates legally. If it doesn't they can be
> held accountable by the FCC. Granted, there are few today, due to lack
> of technical knowledge that can do that. It wasn't that long ago
> however, that finding a ham station completely constructed by the
> amateur wasn't uncommon or often surplus military gear would be modified
> for use on the amateur bands. With the plug-and-talk equipment of today,
> easier test with given answers that can be memorized, the technical
> expertise of the amateur is sadly lacking

Ive seen a few of the ex military gear on my frequent walks around the radio
rally meetings held in the UK at various times of the year. Ive even seen
small tanks for sale :o)

> > I know a few Amateurs who are law breakers too. Using their illegally
> > adapted Amateur equipment to listen in to CB frequencies i believe is a
NO
> > NO, unless you have a CB licence...
>
> In the US any ham or anyone else can legally listen in on cb frequencies.
>
> > to which would Amateurs actually bother
> > to get a CB licence?
>
> Since there is no requirement here for a cb license I don't suppose any
> amateur would bother.
>
> > Are the radios actually legal to use on the CB bands??
>
> Only radios that are type accepted for cb use are legal to use on the cb
> bands. There is a problem here with imported radios that have 'expanded'
> channels that will also operate on the 10 meter ham band. These radios
> are not 'type certified' for cb use and they are purchased by unlicensed
> persons and are often used on the 10 meter band. Some time back it was a
> popular thing for amateurs to take cb radios and convert them for use on
> the 10 meter band, just change the crystals, peak up the circuits and
> you had a nice little mobile 10 meter radio. Once modified as such the
> radios were no longer type certified nor legal for cb use but perfectly
> legal for amateur use.

Indeed. But what i was getting at was Amateur radios that can access the CB
bands not CB's themselves. I know in the UK if an amateur wants to converse
on the 27MHz CB band he needs a CB licence.. his Amateur licence doesnt
cover him/her for it. (or whether thats just M3 im not sure) Im sure someone
will let us know.

> > i dont know 100% so i ask the question. We all do things from time to
time
> > that are deemed illegal.... so your statement on "No, not all chicken
> > banders are law breakers, but a very large portion are" could be said
> > against any group of people.
>
> True, but there is a much larger percentage of illegal operation on the
> cb band than on the amateur bands, at least here in the US. And we have
> the 'freebanders' who for some strange reason think they have the right
> to operate on the frequencies between the upper end of the cb band and
> the lower end of 10 meters plus just about anywhere else they chose.
> >
> > Whats your opinion on M3's? Do you encorage them or see them as a stain
on
> > Amateur radio? Im just curious by the way.
>
> I must confess I haven't acquainted myself with M3's. Is this a test
> free amateur license?

In the UK its a simple test (which only an idiot would fail) to get people started on the Amateur bands. I think the main frequencies being 2m. Im not sure where else they can go but its limited compaired to a full amateur and the powers less. Most UK Amateurs are horrified that their airspace is being invaded by these "CB type lowlife" (their words not mine) which suprises me as i firmly believe anyone gaining their M3 licence would go on to Intermediate... etc not stop there so i cant see why the "old hams" arent encoraging them rather than belittling them.
http://rsgb.org.uk/beginners/ under foundation

Regards,
Graham

4915. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-29 23:34:56 UTC
From: "Jock." <real_classs_a@yahoo.co.uk>
Message-ID: <jn18m1dbft25gtviiae5k49n54828ekkqs@4ax.com>
Source record: 16448
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sat, 29 Oct 2005 23:47:24 +0100, Nedlar <Sam@Techno.invalid> wrote:

>On Sat, 29 Oct 2005 21:50:03 +0100, "huLLy" <thisainthamradio@aol.com>
>wrote:
>
>
>>It's 'its' you fuckwit!
>
>Why don't you correct your CB chum Magnum?
>His postings are typical of the semi-literate, brain-dead CBr.

Yes, but he's a Yank. Illiteracy is expected of them.

--

73 de Jock.

"You will always find that those who are most apt to
boast of national merit, have little or no merit of
their own to depend on". - Oliver Goldsmith.

4916. Re: Cheap Repeater Controller???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 00:44:46 UTC
From: Bill <bcrann1@hotmail.com>
Message-ID: <PHU8f.8606$ki7.742129@news20.bellglobal.com>
Source record: 16449

Thanks

Bill

"johan aeq" <pe1aeq@amsat.og> wrote in message
news:71819$4363ac6c$52ad139c$30039@news.versatel.nl...
> Sorry,
> i had a program thar did just the steering you need.
> It worked via the soundcard of the computer.
> if i can find it i will give you the url.
> It also worked as a "parrot repeater".
> Greetings Johan PE1AEQ
>
> "Bill" <bcrann1@hotmail.com> schreef in bericht
> news:IbF8f.8354$ki7.678793@news20.bellglobal.com...
>> I am in the process of building a 2M repeater. I have everything except
> for
>> a controller. I am looking for a cheap controller or a circuit to build
> my
>> own. I don't need anything fancy. Also is there any PC Controller
> software
>> besides EchoStation?
>>
>> Bill
>>
>>
>
>

4917. Re: Ham radio kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 00:59:23 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <PVU8f.5313$7s1.3181@fe04.lga>
Source record: 16450

Jatin

There are all sorts of kit vendors out there. www.qrqrci.org has quite an extensive list. But I would agree with Lector, if the price of the Elecraft doesn't scare you off, it is a really great radio ... any one of them.

Notice that they are really for different users. The KX1 is designed to be "trail-friendly". By that they mean not only small and light, but convenient if you are sitting on a log. The K1 is a nice portable rig, and with the internal tuner and batteries, it is a great hotel-room or picnic table rig. The K2 is more of a base rig, although lots and lots of folks use them portable. To many people, the K2 is the "ultimate" rig.

..

"Jatin" <TripleDerby100-ng@yahoo.com> wrote in message
news:gnP6f.3543$D13.3524@newssvr11.news.prodigy.com...
> Thanks. Just what I was looking for!
>
> Jatin
> ==========
>
>
>
>
> Caveat Lector wrote:
>> Lots of Ham Radio kits available at URL:
>> http://ac6v.com/kits.htm#HAM
>>
>> Many different vendors
>>
>> If you can afford it and have the time -- try an Elecraft -- great
>> transceiver
>> http://www.elecraft.com/
>>

4918. Re: 20meter propagation question...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 01:17:15 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <zaV8f.5317$7s1.847@fe04.lga>
Source record: 16451

Jim

20 meters is mostly a daytime band, especially now that we are near the bottom of the sunspot cycle. What that means, though, is daylight at midpath, and on 20, paths tend to be long (even for QRP). So if the sun is overhead say, 500 miles from you, there is a decent chance of hearing something.

Depending on how far up in 9-land you are, 20 may close fairly early. However, up here in the frozen north, there is often over the pole propagation that seems to open up an hour or two after the band "closes".

If you listen during the day, you will hear the signals shift from the east to the west with the sun. When all you can hear is California, the band will probably be closing soon. But then again, depending on all sorts of vagaries, it may soon be time to listen for Hawaii, Japan or Australia.

Don't be afraid to make a call. On 20 CW, 5 watts is more than enough. 20 is a fairly quiet band, and QRP signals don't get absorbed the way they do on the lower frequencies. Once I tried a contest at a half a watt, and my QSO rates were barely different than at 5 which in turn really weren't noticably different than 100. They did fall off as I started to approach a tenth, though. This is with a dipole at about 30 feet - nothing fancy.

Early morning is nice for Europe. Midday the states. Sunset look for South America.

If you keep an eye on the propagation numbers, here are a few clues. The "flux" as it applies to 20 really has to do with how CLOSE you can talk. You will find that contacts closer than about 500 miles are tough on 20 unless the flux is high. A high flux might also help 20 stay open a little longer after the sun sets. The K index jumping tends to indicate that we have taken a hit from a burp the sun has made. An intial rapid rise will mean the bands will be very noisy for a short while, but in an hour or two propagation will suddenly get very good for a little while. Then, a few days later, we -might- get hit with the follow on, which will essentially shut things down for a day. Whether we get hit depends on the exact place on the sun that burped. The initial radiation blast travels very quickly to earth, and the matter that follows takes a lot longer. Thats why the multi-day delay. The initial radiation blast causes the earth's magnetic field to rock and roll for a few hours, which is why the noise. When it settles down, though, the ionosphere is ionized as if the flux were high. Then when the matter reaches earth (if it does) it will badly distort the magnetic field for a day or sometimes more, making for very bad conditions.

If you can find some writings by Paul Harden, read them. This guy has lots
of great stuff on propagation.

..

"J Shrum" <shrumj@madisontelco.com> wrote in message
news:u5qdnYCt0JA2HMDeRVn-tQ@madisontelco.com...
> Greetings. I've only been a ham for a couple years. Not really done
> anything
> w/ it however. Just homebrewed a thing or two, but never made any QSO's. I
> just acquired a 5w 20m rig (all my budget could allow).
> Can someone give me any tips on how to know when 20m is open? What time of
> year or time of day is typically good for 20?
> I tried looking over some MUF charts... but its greek to me at this point.
> I've tried googling, but unless I know exactly how to phrase my search,
> I'm
> coming up empty...
>
> Any pointers would be great.
> Thanks
> Jim
> KC9FFX
>

4919. Thanks RRAH and Communications Concepts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 01:30:02 UTC
From: k4yz@aol.com
Message-ID: <1130635802.375671.123360@z14g2000cwz.googlegroups.com>
Source record: 16452

Greetings All...

A couple of weeks ago I posted a request for help for a schematic for an Astron power supply. I got over 20 responses...!

Thanks to all!

I also thought I'd tell everyone of the great service I got from Communications Concepts in Beaverton, Ohio, when I was looking for the part I needed to fix the supply. They were quick to answer my e-mail, and when I ordered the part, it was here in two days via priority mail. They also didn't try to whack me with "minimum order" stuff.

Thanks again....

73

Steve, K4YZ
Winchester, TN

4920. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 01:42:40 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1dcdc4ee80c97ed69896fb@news-central.giganews.com>
Source record: 16453
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

In article <1130618638.849629.218260@o13g2000cwo.googlegroups.com>,
aiyr.r.bean@lycos.co.uk says...
> Also known as the M3/CB Fools' Licence - any 6 year old, having
> no previous knowledge or experience of Ham Radio can attend a
> weekend course and leave on the Monday with a licence.
>

So, Polymath, what have you homebrewed lately?

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

4921. Re: Ham radio kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 02:44:44 UTC
From: Jatin <TripleDerby100-ng@yahoo.com>
Message-ID: <wsW8f.9972$tV6.8142@newssvr27.news.prodigy.net>
Source record: 16454

xpyttl wrote:
> Jatin
>
> There are all sorts of kit vendors out there. www.qrqrci.org has quite an
> extensive list. But I would agree with Lector, if the price of the Elecraft
> doesn't scare you off, it is a really great radio ... any one of them.

Is there a typo in the url that you mentioned? I couldn't connect to it.

> Notice that they are really for different users. The KX1 is designed to be
> "trail-friendly". By that they mean not only small and light, but
> convenient if you are sitting on a log. The K1 is a nice portable rig, and
> with the internal tuner and batteries, it is a great hotel-room or picnic
> table rig. The K2 is more of a base rig, although lots and lots of folks
> use them portable. To many people, the K2 is the "ultimate" rig.

I am considering Elecraft, hopefully that would be a Christmas gift :)

Jatin
==========

4922. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 04:28:07 UTC
From: Cmdr Buzz Corey <me@that.ten>
Message-ID: <AbydnSX4Q62zoPnenZ2dnUVZ_s-dnZ2d@gbronline.com>
Source record: 16455
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

huLLy wrote:
> huLLy wrote:
>
>>Polymath wrote:
>>
>>
>>>It's purpose is to fill the coffers of a Brit publishing
>>>company, the RSCB - The Radio Society for Citizen's Band.
>>>
>>
>>It's 'its' you fuckwit!
>
>
> and Citizens' Band... what a poor disgrace you are to our worldwide
> associates..

I would say the language you use makes you a much poorer disgrace to our world wide associates than his misuse of an '.

4923. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 04:31:12 UTC
From: Cmdr Buzz Corey <me@that.ten>
Message-ID: <AbydnST4Q617oPnenZ2dnUVZ_s-dnZ2d@gbronline.com>
Source record: 16456
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Nedlar wrote:
> On Sat, 29 Oct 2005 21:50:03 +0100, "huLLy" <thisainthamradio@aol.com>
> wrote:
>
>
>
>>It's 'its' you fuckwit!
>
>
> Why don't you correct your CB chum Magnum?
> His postings are typical of the semi-literate, brain-dead CBr.

I think Magnum ask some very valid questions and makes some very valid
points.

4924. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 04:47:25 UTC
From: Cmdr Buzz Corey <me@that.ten>
Message-ID: <8tCdnYWiK-4r3PnenZ2dnUVZ_s2dnZ2d@gbronline.com>
Source record: 16457
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

The Magnum wrote:

>
> Most UK Amateurs are horrified that their airspace is being
> invaded by these "CB type lowlife" (their words not mine) which suprises me
> as i firmly believe anyone gaining their M3 licence would go on to
> Intermediate... etc not stop there

Yes, one would think so. That is what our Novice license was for, an entry type of license, nothing real hard on the test, only 5wpm for code, limited power and not all frequency privileges.

> so i cant see why the "old hams" arent
> encoraging them rather than belittling them.

It seems that is often the position taken not by just 'old hams' today, but by some of those who do upgrade. Kinda like how as a freshman in high-school you were looked down on by upper-classmen. It didn't use to be that way. When I had my Novice ticket, I probably worked more General and higher class licensees on the Novice bands because they would come to the Novice frequencies and work us, sending code slowly and carefully to encourage us to get proficient enough to upgrade. Amateur radio used to be very gentlemanly, still is for the most part but seems amateur radio has begun to reflect much of today's rude society.

4925. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 06:12:03 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1130652723.377465.241960@g44g2000cwa.googlegroups.com>
Source record: 16458
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Not-Ham" Hull is otherwise known as "THE INCURABLE CBER",
one of the CBers-Masquerading-As-Radio-Hams who infest this NG.

Some years ago he was abusing his employer's computer system
to heap offensive and insulting remarks at me, an abuse to
which I took exception and complained. Not-Ham has proved himself
to be infantile in the extreme by maintaining a temper-tantrum
on the matter for years on end. If only he could see that
I saved him from himself......in today's world, such abuse
of an employer's computer system is a sacking offence!

But then, that's the brain of a Childish Broadcaster (CBer)
for you!

Cmdr Buzz Corey wrote:
> huLLy wrote:
> > huLLy wrote:
> >
> >>Polymath wrote:
> >>
> >>
> >>>It's purpose is to fill the coffers of a Brit publishing
> >>>company, the RSCB - The Radio Society for Citizen's Band.
> >>>
> >>
> >>It's 'its' you fuckwit!
> >
> >
> > and Citizens' Band... what a poor disgrace you are to our worldwide
> > associates..
>
> I would say the language you use makes you a much poorer disgrace to our
> world wide associates than his misuse of an '.

4926. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 07:02:43 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1130652899.917020.112230@o13g2000cwo.googlegroups.com>
Source record: 16459
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

An interesting challenge. But, since you raised it,
you first!

Over to you.....

John Miles wrote:
> In article <1130618638.849629.218260@o13g2000cwo.googlegroups.com>,
> aiyr.r.bean@lycos.co.uk says...
> > Also known as the M3/CB Fools' Licence - any 6 year old, having
> > no previous knowledge or experience of Ham Radio can attend a
> > weekend course and leave on the Monday with a licence.
>
> So, Polymath, what have you homebrewed lately?

4927. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 07:16:25 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <nMmdneFyItDX7vneRVn-2g@giganews.com>
Source record: 16460
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Nedlar wrote:
> On Sat, 29 Oct 2005 21:50:03 +0100, "huLLy" <thisainthamradio@aol.com>
> wrote:
>
>
>> It's 'its' you fuckwit!
>
> Why don't you correct your CB chum Magnum?
> His postings are typical of the semi-literate, brain-dead CBr.

'Magnum' has never made jumped up claims to his own self importance.
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

4928. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 07:17:52 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <3Omdna7hO48_7vneRVn-pQ@giganews.com>
Source record: 16461
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

John Miles wrote:
> In article <1130618638.849629.218260@o13g2000cwo.googlegroups.com>,
> aiyr.r.bean@lycos.co.uk says...
>> Also known as the M3/CB Fools' Licence - any 6 year old, having
>> no previous knowledge or experience of Ham Radio can attend a
>> weekend course and leave on the Monday with a licence.
>>
>
> So, Polymath, what have you homebrewed lately?
>

Has he been banned from the off-license?

--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

4929. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 07:21:18 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <AeSdnX4NoaLy6fneRVn-iw@giganews.com>
Source record: 16462
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Polymath wrote:
>
> Some years ago he was abusing his employer's computer system
> to heap offensive and insulting remarks at me, an abuse to
> which I took exception and complained.

I find it amazing that you can remember that, but can't remember being a
member of a Christian bell ringing group, owning a CB license et al...
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

4930. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 07:32:29 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <P7Kdna3LcJ2M6vnenZ2dnUVZ_tGdnZ2d@giganews.com>
Source record: 16463
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

huLLy wrote:
> Polymath wrote:
>>
>> Some years ago he was abusing his employer's computer system
>> to heap offensive and insulting remarks at me, an abuse to
>> which I took exception and complained.
>
> I find it amazing that you can remember that, but can't remember
> being a member of a Christian bell ringing group, owning a CB license
> et al...

I seem to remember I was castigating you for your god-awful remarks re the deathd of the Soham girls, so totally justified. Luckily, your email (pleading for me to be sacked), was laughed out of IT. You were spotted like the insane fool you are, in about 10 seconds.

Remember, dear readers, that only one person on the entire newsgroup, has ever been arrested for internet harrassment. I bet you can't think who that might be...

Draw your own conclusions.
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

4931. Re: BFO, CW, sideband question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 12:44:04 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <2YudneP3CMRKIvneRVn-iQ@bright.net>
Source record: 16464

Yup, you've got it!

Now for the $64,000 question (which will only buy about 21,000 gallons of gas these days!)...With these modern rigs, if I want to answer someone calling CQ on CW, how do I adjust my radio to be on exactly the same frequency as they are calling on (to conserve spectrum for other operators)??? My "old" TS-520 has a "Tune" position, which sets the bfo frequency exactly to the I.F. frequency (I don't have the service manual in front of me, but follow the logic here). As I tune the radio (with the VFO) in this TUNE position, when I have the VFO set to provide zero beat, I will be right on his frequency since my BFO is running at the I.F. frequency (9 MHz) and the combination of the far end transmitter frequency and MY VFO frequency gives an I.F. output at 9 Mhz, so the difference in frequency is zero. Whent I then return my switch from the "Tune" position to the CW position, it shifts the BFO 800 Hz in SOME direction (up or down, I can't remember and I don't really care!). Now his signal mixed with my VFO and my now shifted BFO (which is now running at 9.0008 MHz, for example) provides a tone of 800 Hz. Easy!

My "new" TS-690S doesn't have a TUNE position. The manual says to tune for a tone frequency of 800 Hz (or whatever you have the "CW Tone" frequency programmed into the radio). My question is how the $#@% do I know when I have an 800 Hz tone coming out of my radio? Do they really expect me to have a freq. counter hooked up to the speaker? I have overcome this by setting the RIT to display either 800 Hz up or down (can't remember which right now), turn on the RIT, zero beat they guy, turn off the RIT and then I will be on his frequency. I find it's easier to CALL CQ and let the other guy worry about getting on MY frequency ;)

Scott
N0EDV

Doug Smith W9WI wrote:

>
> As I understood it, the decision to use different sidebands in the two
> spectrum areas came from the design of some early SSB equipment. If you
> used a 9MHz IF and a 5.0-5.5MHz VFO, you could cover both 80 and 20
> meters without having to mess with heterodyne oscillators. But since
> you'd be using addition on 20 vs. subtraction on 80, the sidebands would
> flip.
>
> (there's GOT to be a better way to say that but it's too darned early in
> the morning!)

4932. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 14:18:47 UTC
From: Nimrod <neil.imrod@gmail.com>
Message-ID: <1130681927.319703.185620@g44g2000cwa.googlegroups.com>
Source record: 16465
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Polymath wrote:
> An interesting challenge. But, since you raised it,
> you first!
>
> Over to you.....
>
> John Miles wrote:
> > In article <1130618638.849629.218260@o13g2000cwo.googlegroups.com>,
> > aiyr.r.bean@lycos.co.uk says...
> > > Also known as the M3/CB Fools' Licence - any 6 year old, having
> > > no previous knowledge or experience of Ham Radio can attend a
> > > weekend course and leave on the Monday with a licence.
> >
> > So, Polymath, what have you homebrewed lately?

Gareth, John is well known for his homebrew achievements. Look at his
website.

The ball is most definitely now in your court.

What have you homebrewed?

Neil

4933. Re: Ham radio kits

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 14:46:50 UTC
From: John DeGood <nu3e@arrl.net>
Message-ID: <ls6dna7uLp5lQfnenZ2dnUVZ_tGdnZ2d@comcast.com>
Source record: 16466

>> There are all sorts of kit vendors out there. www.qrqrci.org has
>> quite an extensive list. But I would agree with Lector, if the price
>> of the Elecraft doesn't scare you off, it is a really great radio ...
>> any one of them.
>
>
> Is there a typo in the url that you mentioned? I couldn't connect to it.

I suspect he meant:

http://www.qrparci.org/

John

4934. wanted: Cardwell-Johnson capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 14:47:13 UTC
From: James Skalski <jskalski@yahoo.com>
Message-ID: <R159f.6046$lg7.5020@trndny02>
Source record: 16467

I need a Cardwell Johnson 153-6-1 air variable
36-496pF 3500VDC
Please state condition and price.
Jim n2go

4935. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 15:18:44 UTC
From: "John L. Sielke" <w2agnNOSPAM@w2agn.net>
Message-ID: <4364E454.4010402@w2agn.net>
Source record: 16468
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Polymath wrote:
> Your offering below, riddled as it is with childish
> insults illustrates well that you are a CBer.
>
> Peter wrote:
>
>>NO...
>>It IS your intention to insult them, just behind their backs so you run less risk
>>of them replying. Your post was not really intended as an "FAQ", it was purely
>>a relatively "safe" release for your personal anger.
>>Wuss.

Polymath,

Just thought I would let you know, since almost all your replies come from the CB crowd, that at least on this side of the pond, someone agrees with you. The continuing "dumbing down" of license requirements will be the death of Ham Radio. Unfortunatley, it's a side effect of the overall dumbing down of the entire educational system. Teachers are not allowed to flunk a student, or even criticize, for fear that the poor student's "self esteem" will suffer. If a student makes a gross error, the response is, "I can see where you get your answer, and it is very good, how about considering some alternatives?" Instead of, "Sorry, you're wrong, go read the f*cking book!"

Keep it up, don't let the ignorant bastard get you down.

John W2AGN (unlike most of your gutless responders, not afraid to identify myself)

4936. Re: BFO, CW, sideband question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 15:29:42 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <4364E6E3.9030208@invalid.invalid>
Source record: 16469

Scott wrote:
> Now for the $64,000 question (which will only buy about 21,000 gallons
> of gas these days!)...With these modern rigs, if I want to answer
> someone calling CQ on CW, how do I adjust my radio to be on exactly the
> same frequency as they are calling on (to conserve spectrum for other
> operators)???

Newer rigs tie the sidetone to the offset, so that if you zero-beat the sidetone with received signals you're transmitting on the same frequency as the other guy. In most rigs if you close the key without putting the rig in transmit (i.e., break-in is off) you'll get a sidetone without muting the receiver, allowing you to zero-beat the sidetone.

Older rigs often had a "SPOT" button which keyed up low-power transmitter stages to allow you to zero-beat the transmitter against received signals. My FT1000MP also has such a button - I'm sure the electronics behind it are very different but its purpose and function are the same as in the old rigs.

To be honest I don't worry about it. After 30 years of CW operating I'm pretty good at getting it right!
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

4937. Re: BFO, CW, sideband question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 18:02:55 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1130695375.199831.246350@g14g2000cwa.googlegroups.com>
Source record: 16470

Scott wrote:
> My "new" TS-690S doesn't have a TUNE position. The manual says to tune
> for a tone frequency of 800 Hz (or whatever you have the "CW Tone"
> frequency programmed into the radio). My question is how the $#@% do I
> know when I have an 800 Hz tone coming out of my radio?

The sidetone you hear when you key down is going to be pretty close
to the 800Hz offset you need. So just tune the other guy until he
sounds roughly the same note.

> Do they really
> expect me to have a freq. counter hooked up to the speaker?

Gees, give guys a 8-digit frequency counter and they think they
have to be tuned to 1Hz to work somebody else. Most of my rigs
had more than 800Hz of chirp when I bought them :-).

Tim.

4938. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 19:20:47 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1130700047.544198.241690@z14g2000cwz.googlegroups.com>
Source record: 16471
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

John,

Thank-you for your kind words. It must be difficult,
however to navigate through the QRM of false Polymaths
who are infesting this NG. (I note that a rather silly
and infantile CBer has already replied to you as Polymath)

For some reason, despite taking a stance of encouraging
all comers to exert themselves and join in what is an
exciting technical pursuit, I am plagued with quite
a few mental defectives who forge postings, amongst other
things. I really do not understand the infantile mentality
of them, for, if they were to put the same effort into
pursuing Ham Radio that they do into their childish attacks,
they'd find life much more rewarding!

There was something from you in my in-tray, however
I delete all unsolicited emails - if something comes
up as the result of the NG then the place to discuss
it is in the NG.

Thanks again and 73.

John L. Sielke wrote:
> Polymath wrote:
> > Your offering below, riddled as it is with childish
> > insults illustrates well that you are a CBer.
> > Peter wrote:
> >>NO...
> >>It IS your intention to insult them, just behind their backs so you run less risk
> >>of them replying. Your post was not really intended as an "FAQ", it was purely
> >>a relatively "safe" release for your personal anger.
> >>Wuss.
>
>
> Polymath,
> Just thought I would let you know, since almost all your replies come from the
> CB crowd, that at least on this side of the pond, someone agrees with you. The
> continuing "dumbing down" of license requirements will be the death of Ham
> Radio. Unfortunatley, it's a side effect of the overall dumbing down of the
> entire educational system. Teachers are not allowed to flunk a student, or even
> criticize, for fear that the poor student's "self esteem" will suffer. If a
> student makes a gross error, the response is, "I can see where you get your
> answer, and it is very good, how about considering some alternatives?" Instead
> of, "Sorry, you're wrong, go read the f*cking book!"

>
> Keep it up, don't let the ignorant bastard get you down.
>
> John W2AGN (unlike most of your gutless responders, not afraid to identify myself)

4939. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-30 19:28:25 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1130700505.367909.159330@f14g2000cwb.googlegroups.com>
Source record: 16472
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Polymath wrote:
> John,
>
> Thank-you for your kind words. It must be difficult,
> however to navigate through the QRM of false Polymaths
> who are infesting this NG. (I note that a rather silly
> and infantile CBer has already replied to you as Polymath)
>
> For some reason, despite taking a stance of encouraging
> all comers to exert themselves and join in what is an
> exciting technical pursuit, I am plagued with quite
> a few mental defectives who forge postings, amongst other
> things. I really do not understand the infantile mentality
> of them, for, if they were to put the same effort into
> pursuing Ham Radio that they do into their childish attacks,
> they'd find life much more rewarding!

if you think you "FAQ" is refelctive of a stance of "encouraging all
comers to exert themselves and join in what is an exciting technical
pursuit" then I must say you even more screwed than most of OT posting
about Code code uber alles
>

4940. Re: Shunt feedback in broadband RF amps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-31 06:43:07 UTC
From: meara.london@virgin.net
Message-ID: <1130740987.959950.273460@g47g2000cwa.googlegroups.com>
Source record: 16473

Tim: Thanks again for your help, and thanks again to all the others
who've replied to my question.

I see what you are saying. I reached back to Terman's description of
these kinds of feedback netwoks in tube circuits. I think he describes
just what you are presenting (but I think your presentation is
clearer!)

Obviously I'm still struggling with some very basic amplifier issues.
Am I correct in thinking that shunt feedback would have a number of
different advantages in a common emitter transistor amp? Looks to me
like the feedback network would give the designer the chance to:
1). Manipulate the input and output impedances
2). Counteract the tendency of the amp to "take off" becasue of the
rising gain characteristic (as frequency is lowered).
3). Reduce any distortion (IMD) generated in the amplifier itself.

I'm most shaky on #3. Am I correct in thinking that if you have some
sort of spur or IMD product generated in the amp itelf (say in the
collector circuit)the negative feedback provided by the shunt tends to
nock some (most? all?) of this distortion down?

Thanks, 73
Bill M0HBR N2CQR CU2JL
http://www.qsl.net/n2cqr

tim gorman wrote:
> Again, the common emitter amplifier gives you 180deg of phase change. If
> this were to be applied directly to the base of the transistor through only
> a resistor, you would get direct cancellation at a level determnined by the
> size of the resistor. The feedback network throws in a phase change
> proportional to the tangent of the reactance and the resistance part of the
> network. I think the tangent function for the feedback will look something
> like:
>
> w(k1) / [k2 + w(k3)]
>
> where w is the radian freq. and k1, k2, and k3 are constants made up of R1,
> R2, and C. k1 = C(R2)**2 or something like that.
>
> As the freq goes up the phase change gets larger - i.e. it moves the phase
> difference between the collector and the base away from 180deg., which
> means less negative feedback. The maximum phase change contribution from
> the RC network would be 45deg as w gets very, very large (arctan 1 = 45).
> As the frequency goes down, the phase change contribution from the RC
> circuit gets to be smaller and smaller which means the feedback moves

> closer and closer to being 180deg - which means more negative feedback. (as
> w approaches zero arctan 0 = 0)
>
> This is probably only good for RF frequencies. Say, above 1Mhz. I would have
> to actually write out the transfer characteristic and graph it to see
> exactly what happens. Conceptually, it makes sense though.
>
> tim ab0wr
>
>
>
> meara.london@virgin.net wrote:
>
> >
> >
> > Thanks to all who responded to my question.
> >
> > I went back and took a closer look at other editions of the Handbook,
> > and at Solid State Design for the Radio Amateur (SSDRA).
> >
> > The Handbooks all seem to suggest that the shunt feedback networks
> > using a resistor and a cap in series will somehow result in more
> > negative feedback at lower frequencies. Given that capacitive
> > reactance varies inversely with freq, I still can't see how this
> > happens. Tim's message seems to provide one possible explanation, but
> > I'm kind of surprised that I haven't seen mention of this in the ham
> > literature.
> >
> > When SSDRA discusses shunt feedback, (Chapter 8, page 188) they have a
> > resistor, a blocking cap, and an inductor all in series between the
> > collector and the base in a common emmiter amp. "The inductor has the
> > effect of decreasing the feedback at high frequencies, while the 470
> > ohm resistor is the dominant element at low frequencies." That's easy
> > to see. But without the inductor (no inductor in the Handbook
> > presentations) it is hard to see how this works.
> >
> > Thanks again to all,
> >
> > 73 Bill M0HBR CU2JL N2CQR
> > http://www.qsl.net/n2cqr
> >
> > tim gorman wrote:
> >> meara.london@virgin.net wrote:
> >>
> >> >
> >> >
> >> > I'm having trouble understanding how the typical shunt feedback
> >> > networks used in RF (solid state) amps work. I'm looking at the 1993
> >> > ARRL Handbook. Typical common base broadband amp. For the shunt
> >> > feedback (from collector to base) they have two resistors: 560 ohms in

> >> > series with 3300 ohms. The 3300 ohm is bypassed by a .01 uf cap.
> >> >
> >> > So far so good. But then the text explains that because you have
> >> > rising gain characteristics when the frequency drops you need something
> >> > to reduce gain at lower frequencies. That's why the negative feedback
> >> > helps.
> >> >
> >> > Here's where I'm having trouble: "As the operating frequency is
> >> > decreased the negative feedback increases becasue the network feedback
> >> > reactance becomes lower." Huh? Wouldn't that network's reactance
> >> > INCREASE as frequency is lowered? The only part of it with reactance
> >> > is the .01 cap, correct?
> >> >
> >> > Help! 73!
> >> >
> >> > Bill M0HBR N2CQR CU2JL
> >> > http://www.qsl.net/n2cqr
> >>
> >> I think to actually figure this out you will need to write the gain
> >> transfer equation for the amplifier. Many of the replies here are talking
> >> about an RF amplifier but are analyzing the feedback at DC.
> >>
> >> Remember that the output of a transistor is NOT in phase with the input.
> >> As the base voltage goes UP the collector voltage goes DOWN. (think of a
> >> transistor used as a switch - when the base is biased off the no current
> >> flows and the collector is at power supply potential - when the switch is
> >> biased on then current flows and the collector is driven toward the
> >> potential of the emitter -- i.e. the collector voltage goes down) For RF
> >> the actual phase difference between input and output is dependent upon
> >> the input and output impedances of the transistor as well as the gain
> >> transfer characteristic (things like transit times of the current
> >> carriers and junctions widths and all sorts of stuff figure in here).
> >> *THEN* you have to consider the phase contribution of the RC network in
> >> the collector to base network. At some RF frequency the collector is
> >> 180deg out of phase with the input so a direct feedback link from the
> >> collector to the base would be *negative*. It is quite possible that the
> >> phase relationships of this particular amplifier are such that the
> >> negative feedback increases as the frequency goes down.
> >>
> >> You would just have to write the equations and see where they take you.
> >>
> >> tim ab0wr

4941. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-31 07:55:22 UTC
From: Peter <bra&#65533;nbuster@lineone.net>
Message-ID: <4369a712.0@entanet>
Source record: 16490
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"Cmdr Buzz Corey" <me@that.ten> wrote...
>
> No, not all chicken banders are law breakers, but a very large portion are.

For some reason, I am beginning to feel hungry.

Catch you later, I'm off for a large portion of chicken...

Regards,

Peter.

4942. Re: Shunt feedback in broadband RF amps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-31 14:11:25 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <289cm1tajo90dbe0auh3e451kp41h0d08f@4ax.com>
Source record: 16474

On 30 Oct 2005 22:43:07 -0800, meara.london@virgin.net wrote:

>Tim: Thanks again for your help, and thanks again to all the others
>who've replied to my question.
>
>I see what you are saying. I reached back to Terman's description of
>these kinds of feedback netwoks in tube circuits. I think he describes
>just what you are presenting (but I think your presentation is
>clearer!)
>
>Obviously I'm still struggling with some very basic amplifier issues.
>Am I correct in thinking that shunt feedback would have a number of
>different advantages in a common emitter transistor amp? Looks to me
>like the feedback network would give the designer the chance to:
>1). Manipulate the input and output impedances
>2). Counteract the tendency of the amp to "take off" becasue of the
>rising gain characteristic (as frequency is lowered).
>3). Reduce any distortion (IMD) generated in the amplifier itself.
>
>I'm most shaky on #3. Am I correct in thinking that if you have some
>sort of spur or IMD product generated in the amp itelf (say in the
>collector circuit)the negative feedback provided by the shunt tends to
>nock some (most? all?) of this distortion down?

#3)
Negative feedback of any kind then to make a circuit with nonlinear
action (however small it may be) more linear. IMD (InterModulation
Distortion) is a mixing action from nolinearity that occurs when two
signals are passing through an amplifier that has distortion, less
distortion, less IMD.

Allison
KB!GMX

4943. WTB: M32(A) Module for Wavetek 3001

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-31 15:11:45 UTC
From: Manuel Presnitz <mpy@gmx.net>
Message-ID: <3smqhhFoukrpU1@news.dfncis.de>
Source record: 16475
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.amateur.homebrew

I am searching a working M32 or M32A Module for the Wavetek 3001 Signal Generator.

Or if you have an entire Wavetek 3001 that you may not be using, or wish to dispose of, I'm interested, too - at a reasonable price.

Please contact me, if you can help: mpy@gmx.net

Thanks in advance,
Manuel DO1MPY

4944. Permeability tuned inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-31 21:39:53 UTC
From: Paul van Dam <p.h.m.van.dam@hccnet.nl>
Message-ID: <436680ee$0$11070$e4fe514c@news.xs4all.nl>
Source record: 16476

Looking for a source of permeability tuned inductors.

Don't know wether these are still manufactured these days.
25 years ago most high end VFO's (or PTO's) had these inductors, eg Collins,
Drake etc.
Also heavily used in construction of analog car radio's.

Regards,

Paul van Dam, PA7UL

4945. Re: Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-10-31 23:48:44 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <XdOdnfmtC9n9MPvenZ2dnUVZ8qednZ2d@pipex.net>
Source record: 16477

For 'high power' soldering , I use a butane (cigarette lighter) gas
soldering iron with kathalytic burner.
Temperature can be adjusted by changing gas flowrate .
I use an iron made in Ireland ,make Portasol .High power tip/burner can do
up to 100 watts which is more than adequate to solder (PL259) plugs. Also
very suitable to make small enclosures from scrap printed circuit board
Very handy also for outdoor use .....since the tool is self-contained.
Nowadays there are a number of makes to choose from.
I would never use an electric soldering gun.

Frank GM&#65533;CSZ / KN6WH
==========
"F8BOE" <f8boe@bluemail.ch> wrote in message
news:43607616$0$5437$626a14ce@news.free.fr...
> Hello,
>
> It may sound funny, but that's why I never used a soldering gun and
> perhaps
> never will... My 25W JBC with 0.8 and 1.2 mm tips is quite fine for
> electronic components and connector soldering.
>
> You should be the one who takes an 18 wheeler to pick up a beer pack.
> Shouldn't you? Perhaps a Mig welder could do the connector job... Hi!
> I hope you'll never mount connectors for other Hams without any serious DC
> and HF shortcut tests.
>
> 100W+ soldering irons are pretty good for plumber jobs or for desoldering
> fast and clean, but definitely not for your aim.
>
> 73 de F8BOE Olivier ...-.-
>
>
>
> David Thompson wrote:
>
>> My sister bought me a Radio Shack Dual Heat soldering gun (150W/230W).
>> This was to supplement
>> my 120 watt 45 year old Weller. This after my WW II vintage 120 iron
>> died
>> on me.
>>
>> My main use was to solder coax connectors. The Gun seems to work Ok on
>> soldering joints in say a SB220 amplifier. But the first thing I noticed
>> is that the tip is much to large to fit into the area where the PL-259

>> outside
>> allows you to solder that to the shield thru the wholes in the 259. No
>> problem but if you leave the gun on too long the area of the tip gets red
>> hot about 1/2" back from the actual tip.
>>
>> My old Weller does a better but inadequate job of soldering the 259
>> shield.
>>
>> Why does the gun allow the tip to get red hot away from the actual tip.
>> The
>> tip is almost new. I notice its made from a silver metal not copper as
>> with
>> most Weller tips. Radio Shack tells me its made by Weller
>> and they are not aware of the problem.
>>
>> bad tip or maybe a bad winding in the gun? any ideas?
>>
>> Dave K4JRB
>

4946. Defibrillator caps for ham use?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-01 01:12:56 UTC
From: James Skalski <jskalski@yahoo.com>
Message-ID: <siz9f.5733$cg6.5357@trndny04>
Source record: 16478

Has anyone use a oil filled cap from a debrillator for a high voltage amplifier? What are the differences in this cap?

Jim n2go

4947. Re: Shunt feedback in broadband RF amps

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-01 02:29:58 UTC
From: tim gorman <tgorman2@cox.net>
Message-ID: <6vj6kd.3nb.ln@tg6124.ab0wr.net>
Source record: 16479

meara.london@virgin.net wrote:

>
>
> Tim: Thanks again for your help, and thanks again to all the others
> who've replied to my question.
>
> I see what you are saying. I reached back to Terman's description of
> these kinds of feedback netwoks in tube circuits. I think he describes
> just what you are presenting (but I think your presentation is
> clearer!)
>
> Obviously I'm still struggling with some very basic amplifier issues.
> Am I correct in thinking that shunt feedback would have a number of
> different advantages in a common emitter transistor amp? Looks to me
> like the feedback network would give the designer the chance to:
> 1). Manipulate the input and output impedances
> 2). Counteract the tendency of the amp to "take off" becasue of the
> rising gain characteristic (as frequency is lowered).
> 3). Reduce any distortion (IMD) generated in the amplifier itself.
>
> I'm most shaky on #3. Am I correct in thinking that if you have some
> sort of spur or IMD product generated in the amp itelf (say in the
> collector circuit)the negative feedback provided by the shunt tends to
> nock some (most? all?) of this distortion down?
>
> Thanks, 73
> Bill M0HBR N2CQR CU2JL
> http://www.qsl.net/n2cqr
>
>
>

Bill,

Negative feedback can be used to help fix input and output impedances. You have to be careful with shunt type negative feedback to make sure you don't have any regions where the phase change becomes 0deg. This can happen when you have both capacitive and inductive reactances in the circuit. That is one reason parasitic oscillations happen at very high frequencies. Even connecting wires on resistors can look like inductors at very high frequencies.

As far as negative feedback having an impact on distortion, you must be very careful to identify what kinds of distortion you are speaking of and have a

good feel for what the feedback networks are doing. Negative feedback, improperly designed, can cause audio amplifiers to not be "flat" across the audio spectrum. This can be considered to be distortion.

Negative feedback, improperly applied can cause gain compression, e.g. in an RF Linear Amplifier, which distorts the dynamic range of the applied modulation causing a distortion which impacts intelligibility.

IMD distortion is typically caused by a non-linear device. Since a transistor is an inherently non-linear device (it is based on "diode" junctions) at low voltage levels since it acts like an on-off switch, there will always be some level of IMD that negative feedback won't help.

Where negative feedback *can* help is in keeping a Class A amplifier operating in the Class A region. This will minimize IMD. If you get an amplifier out of the Class A region, there is bound to be some IMD. If you are running a Class B amplifier in push-pull this is a "psuedo" Class A amplifier and negative feedback that would keep each amplifer right at cutoff for the negative part of the input would help minimize IMD distortion. If you are running a Class C amplifier, negative feedback won't help much because you are running a non-linear amplifer to begin with.

Hope this helps.

tim ab0wr

4948. Standard GX3000 Programming???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-01 05:24:45 UTC
From: Bill <bcrann1@hotmail.com>
Message-ID: <d_C9f.3781$J14.193229@news20.bellglobal.com>
Source record: 16480

Can anyone tell me how to change the programming of a GX3000 with a standard EPROM programmer. I had the instructions but lost them during a move. It was something like take the frequency multiply by 45?? convert to hex and add an zero??? Something along those lines. Thanks in advance.

Bill

4949. OT:polly weave?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-01 19:14:00 UTC
From: deBaser <Not_Telling@someisp.com>
Message-ID: <1130872258.51603.0@doris.uk.clara.net>
Source record: 16481

Hi Im looking for a supplier of a steel cable called Polly Weave in the UK.
Running a Google did to help

Any help appreciated

deBaser
reply in ng only

4950. HamPoll Polling Station

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-02 02:05:21 UTC
From: Charles Brabham <n5pvl@sbcglobal.net>
Message-ID: <y9V9f.8793$7h7.6930@newssvr21.news.prodigy.com>
Source record: 16482

HamPoll is here in order to give amateurs a chance to speak for themselves, and in time to provide reasonably accurate and significant polling data on a variety of issues related to the amateur radio service.

You are welcome to browse the polling data we have, but we especially encourage US amateurs visiting here to register with thier callsign and vote in the HamPoll Polling Station.

Whether you come to browse, to discuss or submit new polls, or to tender your vote, be sure to visit regularly as new polls are included from time to time, and the poll data changes as more hams participate day to day.

Stop by at: http://www.hampoll.com

4951. Re: Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-02 08:33:49 UTC
From: Ian White G/GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <a5wuD$GtnHaDFAH0@ifwtech.co.uk>
Source record: 16483

Highland Ham wrote:
>"F8BOE" <f8boe@bluemail.ch> wrote in message
>news:43607616$0$5437$626a14ce@news.free.fr...
>> Hello,
>>
>> It may sound funny, but that's why I never used a soldering gun and
>> perhaps
>> never will... My 25W JBC with 0.8 and 1.2 mm tips is quite fine for
>> electronic components and connector soldering.
>>
>> You should be the one who takes an 18 wheeler to pick up a beer pack.
>> Shouldn't you? Perhaps a Mig welder could do the connector job... Hi!
>> I hope you'll never mount connectors for other Hams without any serious DC
>> and HF shortcut tests.
>>
>> 100W+ soldering irons are pretty good for plumber jobs or for desoldering
>> fast and clean, but definitely not for your aim.
>>
>> 73 de F8BOE Olivier ...-.-

>For 'high power' soldering , I use a butane (cigarette lighter) gas
>soldering iron with kathalytic burner.
>Temperature can be adjusted by changing gas flowrate .
>I use an iron made in Ireland ,make Portasol .High power tip/burner can do
>up to 100 watts which is more than adequate to solder (PL259) plugs. Also
>very suitable to make small enclosures from scrap printed circuit board
>Very handy also for outdoor use .....since the tool is self-contained.
>Nowadays there are a number of makes to choose from.
>I would never use an electric soldering gun.

Neither would I. A normal small iron can be used for soldering large
objects, if they are pre-heated with a hot-air ("paint stripper") gun.

To solder a PL259, for example, pre-heat the plug body with the gun
until it's good and hot, but still some way below the melting point of
solder. Then put the gun down, and switch to your regular 25/45W iron
for the actual soldering. The solder will now melt quickly and easily.

Try it - it's so much easier than using a monster iron or an electric
soldering gun.

--
73 from Ian G/GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

4952. Re: Defibrillator caps for ham use?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-02 09:00:29 UTC
From: Ian White G/GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <S1wsADItAIaDFAWw@ifwtech.co.uk>
Source record: 16484

James Skalski wrote:
>Has anyone use a oil filled cap from a debrillator for a high voltage
>amplifier? What are the differences in this cap?
>
>Jim n2go

Defibrillator caps are only rated for energy storage, and are not designed or rated to handle AC ripple current. Voltage ratings of defib or photoflash capacitors are likely to be given as "...kVP" and there will be no ripple current marking.

AG6K gives further information on his website:
http://www.somis.org/D-amplifiers3.html

Follow Rich's recommendation: test the capacitor first with low-voltage alternating current, and if it doesn't get warm, operate it substantially below the maximum voltage rating. However, my own experience has been that such "kVP-rated" capacitors may work fine for a few years and then suddenly fail short-circuit. I've lost two that way, and wouldn't use them any more.

--
73 from Ian G/GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

4953. W: datasheet to NEC LD4389A TWT

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-02 12:20:08 UTC
From: ramppa <rami.vainio.on@maps.ik.fi>
Message-ID: <uc2af.8711$u93.3915@reader1.news.jippii.net>
Source record: 16489
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components

Hi, I'm looking datasheet to older traveling wave tube, manufactured by NEC, model is LD4389A. I have full amplifier with power supply+schematics, but no data for tube. Amplifier gives over 10W in 10368MHz, but I don't know what is safe level to helix current and how much tube can be punished:)

Ramppa

--
Rami Vainio OH2LIY
EMAIL : ramppa.spam@no.iki.fi
PHONE : +358 45 6700 462

4954. Re: HamPoll Polling Station

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-02 13:44:02 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <4JudnUP1eY80X_XeRVnyvw@pipex.net>
Source record: 16485

> Charles Brabham" n5pvl wrote :
> HamPoll is here in order to give amateurs a chance to speak for
> themselves,
> and in time to provide reasonably accurate and significant polling data on
> a
> variety of issues related to the amateur radio service.
>
> You are welcome to browse the polling data we have, but we especially
> encourage US amateurs visiting here to register with thier callsign and
> vote
> in the HamPoll Polling Station.
>
> Whether you come to browse, to discuss or submit new polls, or to tender
> your vote, be sure to visit regularly as new polls are included from time
> to
> time, and the poll data changes as more hams participate day to day.
>
> Stop by at: http://www.hampoll.com
==========
Since the above has very little if anything to do with homebrewing = home
constrution of amateur radio related equipment , I would suggest to persue
it through other more relevant NGs.

Frank GM0CSZ / KN6WH

4955. Re: High Q caps for 60 Khz loop antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-02 14:19:49 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <ZbadnSGmV9-aVvXenZ2dnUVZ8qCdnZ2d@pipex.net>
Source record: 16486

Tnx Roy for the factual info below.

Frank GM0CSZ / KN6WH
==
> You shouldn't lump "ceramic cap" into a single group and assume it has one
> set of characteristics. There are many types of ceramic capacitors, with
> widely varying characteristics. The four most common groups are:
>
> 1. Hi-K. These are made with a class of ceramic having a very high
> dielectric constant. This results in physically small capacitors which are
> excellent for many RF applications such as bypassing. Their small physical
> size results in a high self resonant frequency for a given capacitance.
> The tradeoff is instability in nearly every other respect. They have a
> very high temperature coefficient, are sensitive to humidity and physical
> stress, and the capacitance varies with frequency and applied voltage. A
> common type is Z5U, which has a specified maximum capacitance change of
> +22 - 56% over the temperature range of +10 to +85 C.
>
> 2. "Temperature stable". These are made with ceramic which has
> considerably lower dielectric constant than used for the hi-k types.
> Consequently, they're larger for the same capacitance. Their temperature
> coefficient is much lower, and they're much less sensitive to other
> factors. They're good for many general purpose uses such as low- to
> moderate-Q filters and resonant circuits, coupling, and so forth. Q can be
> quite good. A common type is X7R, which has a specified maximum
> capacitance change of +/- 15% over the temperature range of -55 to +125 C.
>
> 3. Temperature compensating. These are much larger yet, being made from
> ceramics with a low and controlled temperature coefficient. They're
> typically very stable with respect to voltage, frequency, mechanical
> stress, and humidity. A common type is P2G (N150), which has a temperature
> coefficient of -150 +/-30 ppm/C.
>
> 4. NPO. (Common type is C0G.) These are made from a sandwich of two
> temperature compensating types with equal and opposite coefficients. They
> have excellent Q and are very stable. They're good for use in resonant
> circuits including oscillator tanks, high-Q filters, and other demanding
> applications. Q can be very good. A common type is C0G, which has a
> temperature coefficient of 0 +/-30 ppm/C.
>
> NPO capacitors are substantially larger than "temperture stable" types,
> and much larger than hi-k types. You won't typically find them in large
> values.
>

> Roy Lewallen, W7EL

4956. Re: VNA and tank circuits?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-02 14:40:49 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <A6CdnduJX41sUvXeRVnytg@pipex.net>
Source record: 16487

I have used a MFJ259 antenna analyser to set up amplifier tank circuits,
with the valves (tubes) left in place (but obviously without any power
applied to the unit)
Also antenna matching units (I prefer NOT to use the word 'tuner') can be
set-up very easily with the above instrument.
I consider the MFJ259 an excellent instrument for radio 'amateurs' ,
suitable for lots of applications.

Frank GM0CSZ / KN6WH

============================

> Has anyone used a VNA to set up taps on an amplifier tank circuit or used
> one to set up taps on a coil in a transmatch? Maybe a small capacitor on
> the anode lead instead of the finals to match capacitance and then measure
> from the output of the amplifier with antenna relays in "on" position. (no
> other power to the amp :)
> I am thinking that the caps can be set to expected mid band capacitance
> for each band. Then work on the inductor taps to get the plate impedance.
> Or should I just measure the inductor and make the taps based on the
> inductance measurement? It seems that if the tank circuit parts were in
> place the taps would be more accurate.
> I am looking for a tutorial for non engineer types. (tards :))
> or a simple explanation. Step by step would be nice.
> This is the hard part about making an amp? right? I mean besides the
> drilling and metal cutting, and locating parts. Maybe others might be
> helped as well by a good explanation.
> Jim n2go

4957. FS: HB cabinets de W7ZFB

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-02 15:29:08 UTC
From: msix@nmia.com
Message-ID: <5f267$4368db44$402a802f$14359@nmia.allthenewsgroups.com>
Source record: 16488

NIB Bud SB-2143 steel shadow cabinet, panel recessed 1 inch,
15.5Wx9Dx6H, medium blue/gray hammertone, back and bottom
removeable, alum front panel primed gray for painting a
contrasting color. Takes Bud AC-409 13x7x2 chassis. $20

Modern stylish top of the line LMB enclosures...
See info and drawings of the LMB line at www.lmbheeger.com

New unused alum LMB CO-1 cabinet with matching LMB chassis.
Contoured perforated case, recessed front panel, hinged top.
Gray with ivory trim, dark gray front panel.
CO-1 14.5Wx13Dx6.5H, CO-1-1 chassis 13x11x2. $70

New unused alum LMB CO-2. Style as above, 12Wx10Dx6.5H.
Takes LMB CO-2-1 11x8x2 chassis. $45

New unused alum LMB CO-3. Style as above, no hinged top.
5.5Wx7Dx3H. $10

Nice used alum LMB CO-3. Style as above, no hinged top.
Front has pot, switch and pilot light mounted.
Rear has 3 BNC jacks and fuse mounted. $8

Plus postage
73 John W7ZFB - Always good in QRZ
n

4958. Re: Defibrillator caps for ham use?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-03 19:34:53 UTC
From: eternalsquire@comcast.net
Message-ID: <1131046493.237518.134290@o13g2000cwo.googlegroups.com>
Source record: 16491

I can just see it now....

eeeeEEEEE!!! CLEAR!!!! BAM!!! dah di dah di
eeeeEEEEE!!! CLEAR!!!! BAM!!!! dah dah di dah

:)

The Eternal Squire

4959. common phase DDS?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-03 19:41:31 UTC
From: eternalsquire@comcast.net
Message-ID: <1131046890.957368.30760@g14g2000cwa.googlegroups.com>
Source record: 16492

Do you think people would like to have a DDS VFO whose frequency and phase were both direcly related to a common time/frequency standard like WWV? That is, two people anywhere in the world using the VFO could make a signal having exactly the same phase as measured at the transmitter. I would adjust for lightspeed lag using a GPS receiver.

I am thinking this could be useful for coherent CW work.

Opinions?

The Eternal Squire

4960. Battery quality/life/efficiency/MostBangForTheBuck/whatever

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-03 19:46:08 UTC
From: mcalhoun@ksu.edu
Message-ID: <dkdpe0$mln@unix1.cc.ksu.edu>
Source record: 16493

Has anyone investigated the quality/life/efficiency/MostBangForTheBuck/
whatever of ordinary AA (or other) cells? I recently saw the following
in a local store:

(I determined COST as the price for the most-economical
blister-pack divided by the number of cells in that pack.)

$ COST
EACH MANUFACTURER BRAND NAME OTHER CLAIM
------ ------------ ---------- ------------------------------
0.4435 Duracell CopperTop
0.4435 Energizer Max
0.81 Energizer Titanium
0.2875 Rayovac Alkaline Same Performance, Better Price
0.235 Rayovac Heavy Duty
0.36 (StoreBrand) Ever Alive

2.105 Energizer Lithium
2.4575 Energizer Rechargable
2.2425 Rayovac Rechargable
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

4961. Re: common phase DDS?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-03 20:02:25 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1131048145.259018.238090@o13g2000cwo.googlegroups.com>
Source record: 16494

> Do you think people would like to have a DDS
> VFO whose frequency and phase were both
> direcly related to a common time/frequency
> standard like WWV?

Well, no existing communication standards require independent phase coherence between transmitter and receiver, for the simple reason that the path length is randomly fluctuating (and there is also multipath).

As an example, if it's 3000 miles from me to you, the actual path for HF communications is going to be somewhere between 3100 miles (a single bounce) and 3300 miles (several bounces and a little sideways jog) or more. With wavelengths like 20meters or 40meters, that 200 miles represents many many wavelengths.

Tim.

4962. Re: Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-03 20:44:08 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dkdsqocsl1@engnntp2.cig.mot.com>
Source record: 16497

Very good Ian.. I shold have remembered this. A good way to solder ceramic substrated PA modules, as well. I have a hot plate.

However, with the PL259, you may have an issue with the coax dielectric melting. That's why I recommended teh high heat capacity, get-in-and-get-out process. Or the PL259 dielectric. I see mostly cheapies selling @ hamfests - Teflon's OK, though, no?.

73, Steve, ,K.9;D'C

73, Steve, K9DCI
"Ian White G/GM3SEK" <gm3sek@ifwtech.co.uk> wrote in message news:a5wuD$GtnHaDFAH0@ifwtech.co.uk...
> Highland Ham wrote:
> >"F8BOE" <f8boe@bluemail.ch> wrote in message
> >news:43607616$0$5437$626a14ce@news.free.fr...
> >> Hello,
> >>
> >> It may sound funny, but that's why I never used a soldering gun and
> >> perhaps
> >> never will... My 25W JBC with 0.8 and 1.2 mm tips is quite fine for
> >> electronic components and connector soldering.
> >>
> >> You should be the one who takes an 18 wheeler to pick up a beer pack.
> >> Shouldn't you? Perhaps a Mig welder could do the connector job... Hi!
> >> I hope you'll never mount connectors for other Hams without any serious DC
> >> and HF shortcut tests.
> >>
> >> 100W+ soldering irons are pretty good for plumber jobs or for desoldering
> >> fast and clean, but definitely not for your aim.
> >>
> >> 73 de F8BOE Olivier ...-.-
>
> >For 'high power' soldering , I use a butane (cigarette lighter) gas
> >soldering iron with kathalytic burner.
> >Temperature can be adjusted by changing gas flowrate .
> >I use an iron made in Ireland ,make Portasol .High power tip/burner can do
> >up to 100 watts which is more than adequate to solder (PL259) plugs. Also
> >very suitable to make small enclosures from scrap printed circuit board
> >Very handy also for outdoor use .....since the tool is self-contained.
> >Nowadays there are a number of makes to choose from.

> >I would never use an electric soldering gun.
>
>
> Neither would I. A normal small iron can be used for soldering large
> objects, if they are pre-heated with a hot-air ("paint stripper") gun.
>
> To solder a PL259, for example, pre-heat the plug body with the gun
> until it's good and hot, but still some way below the melting point of
> solder. Then put the gun down, and switch to your regular 25/45W iron
> for the actual soldering. The solder will now melt quickly and easily.
>
> Try it - it's so much easier than using a monster iron or an electric
> soldering gun.
>
>
> --
> 73 from Ian G/GM3SEK 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.co.uk/g3sek

4963. Battery PS for Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-03 20:51:58 UTC
From: amarcpassy@gmail.com
Message-ID: <1131051118.795396.271760@g14g2000cwa.googlegroups.com>
Source record: 16495

I'm building a PS for my shack, and the receive only current draw of all of my equipment is in the 2A range. QST a few years ago had a great charger/battery circuit where the PS/charger generated up to 500ma and, depending on the voltage state of the battery (he used a SLA) would apply the charger voltage, limited to 500 ma (minus anything used for running equipment, about 220 ma max for him) to the attached battery in an increasing duty cycle as battery voltage went down. When he transmitted, his load was about 2A, and it would come out of the battery.

I'd like to do something similar, but larger. I'd like to build a charger/PS capable of supplying about 3A max, and use a deep-cycle marine battery as a reserve supply. Are there any circuits out there that allow a battery charger to run on a battery that can possibly be operating?

Thanks.

Marc

4964. Re: common phase DDS?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-03 21:19:54 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11mkvr51b580j2c@corp.supernews.com>
Source record: 16496

<eternalsquire@comcast.net> wrote in message
news:1131046890.957368.30760@g14g2000cwa.googlegroups.com...
> Do you think people would like to have a DDS VFO whose frequency and
> phase were both direcly related to a common time/frequency standard
> like WWV? That is, two people anywhere in the world using the VFO
> could make a signal having exactly the same phase as measured at the
> transmitter. I would adjust for lightspeed lag using a GPS receiver.

If you already have a GPS receiver, you can lock to their time code -- this is already commonly done in, e.g., cell phone base stations to keep everyone in sync as you move between cell sites. It's also a popular way to get a cheap, high precision 10MHz reference clock for spectrum analyzers and other lab gear -- TAPR has an inexpensive board that does this.

---Joel Kolstad

4965. Re: Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-03 21:58:15 UTC
From: Ian White G/GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <t9GjiCq3foaDFAwN@ifwtech.co.uk>
Source record: 16398

Steve Nosko wrote:
>Very good Ian.. I shold have remembered this. A good way to solder ceramic
>substrated PA modules, as well. I have a hot plate.
>
>However, with the PL259, you may have an issue with the coax dielectric
>melting.
>Or the PL259 dielectric. I see mostly cheapies
>selling @ hamfests - Teflon's OK, though, no?.
>

I think you may have the wrong impression of this. It isn't the same as using hot air or a hotplate to do the actual soldering.

In this case you're only using the hot-air gun to give the connector body a moderate temperature boost of maybe 100-150C. It's still the iron that melts the solder - the difference being that you can now use your regular 25/45W iron.

The worst that happens with solid polyethylene dielectric is that it softens; but then it hardens again. If the coax dielectric melts and runs, you've heated the whole thing way too much, and for way too long.

The dielectric inside the plug is even less of a problem. If it doesn't melt when you solder the center pin, it will also handle moderate heating of the connector body.

So in practice there aren't any problems.

>"Ian White G/GM3SEK" <gm3sek@ifwtech.co.uk> wrote in message
>news:a5wuD$GtnHaDFAH0@ifwtech.co.uk...
>> Highland Ham wrote:
>> >"F8BOE" <f8boe@bluemail.ch> wrote in message
>> >news:43607616$0$5437$626a14ce@news.free.fr...
>> >> Hello,
>> >>
>> >> It may sound funny, but that's why I never used a soldering gun and
>> >> perhaps
>> >> never will... My 25W JBC with 0.8 and 1.2 mm tips is quite fine for
>> >> electronic components and connector soldering.
>> >>
>> >> You should be the one who takes an 18 wheeler to pick up a beer pack.
>> >> Shouldn't you? Perhaps a Mig welder could do the connector job... Hi!
>> >> I hope you'll never mount connectors for other Hams without any serious
>DC
>> >> and HF shortcut tests.
>> >>

>> >> 100W+ soldering irons are pretty good for plumber jobs or for
>desoldering
>> >> fast and clean, but definitely not for your aim.
>> >>
>> >> 73 de F8BOE Olivier ...-.-
>>
>> >For 'high power' soldering , I use a butane (cigarette lighter) gas
>> >soldering iron with kathalytic burner.
>> >Temperature can be adjusted by changing gas flowrate .
>> >I use an iron made in Ireland ,make Portasol .High power tip/burner can
>do
>> >up to 100 watts which is more than adequate to solder (PL259) plugs.
>Also
>> >very suitable to make small enclosures from scrap printed circuit board
>> >Very handy also for outdoor use .....since the tool is self-contained.
>> >Nowadays there are a number of makes to choose from.
>> >I would never use an electric soldering gun.
>>
>>
>> Neither would I. A normal small iron can be used for soldering large
>> objects, if they are pre-heated with a hot-air ("paint stripper") gun.
>>
>> To solder a PL259, for example, pre-heat the plug body with the gun
>> until it's good and hot, but still some way below the melting point of
>> solder. Then put the gun down, and switch to your regular 25/45W iron
>> for the actual soldering. The solder will now melt quickly and easily.
>>
>> Try it - it's so much easier than using a monster iron or an electric
>> soldering gun.
>>
>>
>> --
>> 73 from Ian G/GM3SEK 'In Practice' columnist for RadCom (RSGB)
>> http://www.ifwtech.co.uk/g3sek
>
>

--
73 from Ian G/GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

4966. Re: Battery quality/life/efficiency/MostBangForTheBuck/whatever

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-04 00:08:56 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11ml9kr9dfi6dce@corp.supernews.com>
Source record: 16399

The problem with making comparisons is that the power you can get out of most types of primary (non-rechargeable) cells depends heavily on a lot of factors, such as:

-- Current drain
-- Duty cycle
-- Temperature
-- End voltage

In addition, some devices such as many GPS receivers have switching regulators, which drain the battery at a near constant power rate. Others drain at a nearly constant current rate, and still others with more like a resistive load. Each type of cell behaves differently under each condition.

Only a few rules of thumb can be put forth:

1. For heavy drain applications such as photoflash or an HT, alkalines last many times longer than "heavy duty" carbon-zinc types, so the latter is seldom an economical choice for those applications. Likewise for applications with moderate but constant drain such as a GPS receiver. Carbon-zinc is probably more economical (unless you use alkalines from Costco or other discount store) for light-drain, intermittent use such as a radio. Flashlights aren't light drain, but do fairly well with carbon-zinc if used only occasionally. But I don't use carbon-zinc for anything.

2. You're unlikely to see cell life increase anywhere near in proportion to cost by using "titanium" or other "premium" alkaline cells -- their special characteristics are mostly created in the marketing department. If in doubt, consult the manufacturer's data sheet, readily available on the web.

3. Modern NiMH cells have about the same capacity as alkaline cells -- more at very high currents --, and the capacity is quite constant over a wide range of discharge conditions. A down side is the high self-discharge rate -- they're not a good choice for something like a flashlight that's used only occasionally.

4. I've never found a good use for the rechargeable alkalines. Their capacity drops with each recharge and with increased current. At higher currents, the capacity decrease is even faster. NiMH or primary alkaline has been a better choice every time I've done a careful comparison.

5. The 1.5 volt primary lithium cells have more capacity than either alkaline or NiMH, especially better than alkaline at high currents. They're very light weight, have a long shelf life, and are excellent at

low temperatures. But they cost like the dickens. I keep a couple of them in my emergency kit when backpacking or cross-country skiing as a backup for GPS or flashlight, but don't use them regularly.

I've tested a good number of various alkaline AA cells at constant current loads of around 200 mA, and found only minor and inconsistent capacity differences among brands and types. Consequently, I usually use the ones I buy at Costco for about 25 cents each.

If you have a particular application in mind, check the data sheet for the performance under the conditions you anticipate. Then you pays your money and makes your choice.

Roy Lewallen, W7EL

mcalhoun@ksu.edu wrote:
> Has anyone investigated the quality/life/efficiency/MostBangForTheBuck/
> whatever of ordinary AA (or other) cells? I recently saw the following
> in a local store:
>
> (I determined COST as the price for the most-economical
> blister-pack divided by the number of cells in that pack.)
>
> $ COST
> EACH MANUFACTURER BRAND NAME OTHER CLAIM
> ------ ------------ ---------- ------------------------------
> 0.4435 Duracell CopperTop
> 0.4435 Energizer Max
> 0.81 Energizer Titanium
> 0.2875 Rayovac Alkaline Same Performance, Better Price
> 0.235 Rayovac Heavy Duty
> 0.36 (StoreBrand) Ever Alive
>
> 2.105 Energizer Lithium
> 2.4575 Energizer Rechargable
> 2.2425 Rayovac Rechargable

4967. WTB

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-04 00:24:37 UTC
From: ab5mm@9plus.net
Message-ID: <dke9nh0264u@enews3.newsguy.com>
Source record: 16400

I need a filament transformer for a home-brew project. 120 or 240Vac
primary and 18 to 20 amp secondary. If you have one or know where to
obtain same, please e-mail. tnx/73
Steve
ab5mm@9plus.net

4968. Re: WTB

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-04 01:23:23 UTC
From: Bill <exray@coqui.net>
Message-ID: <372b8$436ab810$4232be79$8468@COQUI.NET>
Source record: 16401

ab5mm@9plus.net wrote:

> I need a filament transformer for a home-brew project. 120 or 240Vac
> primary and 18 to 20 amp secondary. If you have one or know where to
> obtain same, please e-mail. tnx/73
> Steve
> ab5mm@9plus.net

What secondary voltage?

-Bill

4969. Re: common phase DDS?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-04 03:22:42 UTC
From: eternalsquire@comcast.net
Message-ID: <1131074562.118742.138810@g44g2000cwa.googlegroups.com>
Source record: 16402

Well actually, the project I had in mind was to take the 60 khz WWVB signal and use diode harmonic multipliers to create a clock in the gigahertz range. I would then use this clock as the input to a DDS system. I could use the GPS to calculate lightspeed delay between the VFO and the WWVB to determine compensating phase lag.

This could be good for synchronizing the transmit and receive ends of a digital communication, improving the signal to noise ratio.

The Eternal Squire

4970. Re: common phase DDS?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-04 03:52:02 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <436ADB26.2020109@nettally.com>
Source record: 16403

It would be very useful. Keep in mind that all oscillators in the system would need to be coherent so a heterodyne conversion transceiver design would need to have any other LO's synched as well.

An idea that I have had is the prize for transatlantic 2 meter DX. If multiple stations stateside had same coherent carrier and were keyed (or modulated) coherently, there would be space diversity in the transmitted signal.

Joe K4SAT

eternalsquire@comcast.net wrote:

>Do you think people would like to have a DDS VFO whose frequency and
>phase were both direcly related to a common time/frequency standard
>like WWV? That is, two people anywhere in the world using the VFO
>could make a signal having exactly the same phase as measured at the
>transmitter. I would adjust for lightspeed lag using a GPS receiver.
>
>I am thinking this could be useful for coherent CW work.
>
>Opinions?
>
>The Eternal Squire
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"

"All Righty Then"

4971. Battery quality/life/efficiency/MostBangForTheBuck/whatever

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-04 05:11:01 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_436ae53b@fidonet.org>
Source record: 16404

"mcalhoun@ksu.edu" bravely wrote to "All" (03 Nov 05 13:46:08)
--- on the heady topic of "Battery quality/life/efficiency/MostBangForTheBuck/whatever"

mc> From: mcalhoun@ksu.edu
mc> Xref: core-easynews rec.radio.amateur.homebrew:88699

mc> Has anyone investigated the
mc> quality/life/efficiency/MostBangForTheBuck/ whatever of ordinary AA (or
mc> other) cells? I recently saw the following in a local store:

mc> (I determined COST as the price for the most-economical
mc> blister-pack divided by the number of cells in that pack.)

mc> $ COST
mc> EACH MANUFACTURER BRAND NAME OTHER CLAIM
mc> ------ ------------ ---------- ------------------------------
mc> 0.4435 Duracell CopperTop
mc> 0.4435 Energizer Max
mc> 0.81 Energizer Titanium
mc> 0.2875 Rayovac Alkaline Same Performance, Better Price
mc> 0.235 Rayovac Heavy Duty
mc> 0.36 (StoreBrand) Ever Alive

mc> 2.105 Energizer Lithium
mc> 2.4575 Energizer Rechargable
mc> 2.2425 Rayovac Rechargable
mc> --
mc> --Myron A. Calhoun.

Have a look at AAA's for a chuckle. If we compare them by mass, one
gets 4 times less in AAA's (2 cells) than in AA's (4 cells) for the
same price. The battery makers must be giggling all the way to the
bank over this one. Howver, my remote control doesn't care if it is a
fine vintage Union Carbide or a China special. That will have an
effect eventually, especially in lost jobs.

A*s*i*m*o*v

... I came, I saw, I got sidetracked, I forgot why I was here.

4972. Re: Battery quality/life/efficiency/MostBangForTheBuck/whatever

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-04 05:11:03 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_436ae53c@fidonet.org>
Source record: 16405

"Roy Lewallen" bravely wrote to "All" (03 Nov 05 16:08:56)
--- on the heady topic of "Re: Battery
quality/life/efficiency/MostBangForTheBuck/whatever"

RL> From: Roy Lewallen <w7el@eznec.com>
RL> Antenna Software Xref: core-easynews rec.radio.amateur.homebrew:88706

RL> The problem with making comparisons is that the power you can get out
RL> of most types of primary (non-rechargeable) cells depends heavily on a
RL> lot of factors, such as:

RL> -- Current drain
RL> -- Duty cycle
RL> -- Temperature
RL> -- End voltage

There is another factor I've discovered for a cell's usage in audio
applications such as a battery powered portable mixer or especially an
electret microphone. Alkaline cells seem to be plagued with pops and
ticks while carbon cells are dead quiet in comparison. Since most
electret mics have very simple electronics with no voltage regulation,
the battery must be extremely quiet. Unfortunately I don't have the
numbers on hand to document my experience but this is just to comment
that sometimes there are other factors (noise) which may make a cell
type more desirable for very specific applications. For example
electric guitar players are sticklers for the type of square 9 volt
batteries that go into their vintage pedals.

A*s*i*m*o*v

... May you find the light and walk the mountain tops.

4973. Re: common phase DDS?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-04 10:32:35 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <7NGaf.9750$N73.7491@trnddc04>
Source record: 16406

I think you'll have to find a way to synchronize the startup ('reset')of all the DDS's. If you don't, they'll all start clocking at different times. The output doesn't come for some number of clock cycles later, depending on what's loaded into the counters. Because of this, you'll have "phase lock" but not "phase coincidence". Synchronizing DDS's is described by Analog Devices in an appp-note on generating quadrature signals using 2 DDS chips.

Joe
W3JDR

<eternalsquire@comcast.net> wrote in message
news:1131074562.118742.138810@g44g2000cwa.googlegroups.com...
> Well actually, the project I had in mind was to take the 60 khz WWVB
> signal and use diode harmonic multipliers to create a clock in the
> gigahertz range. I would then use this clock as the input to a DDS
> system. I could use the GPS to calculate lightspeed delay between
> the VFO and the WWVB to determine compensating phase lag.
>
> This could be good for synchronizing the transmit and receive ends of a
> digital communication, improving the signal to noise ratio.
>
> The Eternal Squire
>

4974. Swap. NEW ARRL ANTENNA BOOK 20ed.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-04 12:51:47 UTC
From: Mike Kulyk <mkulyk@optonline.net>
Message-ID: <HPIaf.50007$rE2.27398@fe10.lga>
Source record: 16407
Cross-posted to: rec.radio.swap,rec.radio.amateur.swap,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

This is a new ARRL Antenna Book , cd and all.. never opened.

FOR ARRL Handbook.. New or one -2 years old.. Hardcover preferred..

Mike WB2GLW

4975. Re: WTB Filament Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-04 14:45:15 UTC
From: ab5mm@9plus.net
Message-ID: <dkfs55026n9@enews2.newsguy.com>
Source record: 16409

Sorry about that! The secondary needs to be 10Vac. tnx Bill...

4976. The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-04 15:00:39 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1131116439.255278.104600@g43g2000cwa.googlegroups.com>
Source record: 16408
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,

competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B

licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

4977. Re: common phase DDS?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-04 15:24:03 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1131117843.238495.5290@z14g2000cwz.googlegroups.com>
Source record: 16410

eternalsquire@comcast.net wrote:
> Well actually, the project I had in mind was to take the 60 khz WWVB
> signal and use diode harmonic multipliers to create a clock in the
> gigahertz range. I would then use this clock as the input to a DDS
> system. I could use the GPS to calculate lightspeed delay between
> the VFO and the WWVB to determine compensating phase lag.
>
> This could be good for synchronizing the transmit and receive ends of a
> digital communication, improving the signal to noise ratio.

Wow... multiplying a very noisy 60kHz WWVB signal up to the gigahertz
using diode multipliers. Astonishing. Unless you live in the shadow
of Boulder CO, WWVB will be so noisy that after multiplication
you just have a huge broad hash of frequencies. It's buried in the
hash of noise most of the time anyway. And here on the East
Coast, WWVB reception is only barely usable for a few hours in the very
early AM (and not even that if there's a broadband LF noise source
anywhere in the vicinity.)

Receiving WWV (2.5, 5, 10, 15, and 20MHz) or WWVH is not quite so
problematic (usually in the continental US one of those frequencies
is receivable) but still not easy. And in say Asia or Europe or
South America most of those frequencies will not be open most of the
time, and there are local time/freq stations on those same frequencies
often. But multiplying what is usually a noisy carrier up to the
GHz via diode multipliers is still completely unthinkable.

What *is* done is to lock a high-stability OCXO to a time/freq
standard. This is often used for extremely-narrow-bandwidth moonbounce
communications for example. In the past decade almost all of this
is done by locking to GPS satellites, but if WWV or WWVB is receivable
at both ends this has been done too.

You do have the right spirit (low-bandwidth-for-low-noise requires
an accurate frequency standard) but multiplying WWVB into the GHz
using diode multipliers is decidedly *not* the way to do it. OCXO's
are cheap and GPS receivers are cheap and GPS is receivable everywhere
around the world and PLL's are so easy to do, so that's what
we use now. Before that PLLing a crystal oscillator to WWV/WWVB (
even if the PLL was a guy's ear listening for zero-beat and a
screwdriver
to tweak the oscillator fine-tuning) was
reasonable but there you're up against propogation and varying
path-length much of the time.

4978. Re: common phase DDS?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-04 17:27:08 UTC
From: eternalsquire@comcast.net
Message-ID: <1131125228.327446.292290@g43g2000cwa.googlegroups.com>
Source record: 16411

Then how come wall clocks based on WWVB work so well anywhere in CONUS?

4979. Re: common phase DDS?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-04 17:48:05 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11mn7qch55cv09f@corp.supernews.com>
Source record: 16412

<eternalsquire@comcast.net> wrote in message
news:1131125228.327446.292290@g43g2000cwa.googlegroups.com...
> Then how come wall clocks based on WWVB work so well anywhere in CONUS?

They don't -- there are plenty of places in the U.S. where it takes a fair amount of experimentation to get them to sync at all. Most of them 'listen' in the wee hours of the morning when propagation tends to be better too. And finally, even if they do only manage to sync up 'once in a while' (say every week or two), they still perform much better than a typical wall clock.

4980. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-04 18:10:09 UTC
From: Krusty <nospam@please.com>
Message-ID: <5uNaf.1870$8R6.408@newsfe1-gui.ntli.net>
Source record: 16413
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1131116439.255278.104600@g43g2000cwa.googlegroups.com...
> What is Ham Radio?
<snip>

Ahh, I can almost smelll the meths from here....looks like he chose another
fine vintage from Wilko's finest....

4981. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-04 18:54:40 UTC
From: Frank Gilliland <w&#65533;renut@NOSPAM&#65533;cehouse.net>
Message-ID: <9jbnm1tne70t07vanlm9gdcm0i5hgq732d@4ax.com>
Source record: 16414
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

On 4 Nov 2005 07:00:39 -0800, "Polymath" <aiyr.r.bean@lycos.co.uk>
wrote in <1131116439.255278.104600@g43g2000cwa.googlegroups.com>:

>What is Ham Radio?

Do you mean the Amateur Radio Service?

>Ham Radio

Amateur radio.....

> is a technical pursuit for those who
>are interested in the science of radio wave
>propagation and who are also interested in the
>way that their radios function. It has a long-standing
>tradition of providing a source of engineers who
>are born naturals.

It also includes an interest in communication, that being the primary
purpose for -using- a radio.

>Ham Radio

Amateur radio.....

> awakens in its aficionados a whole-life
>fascination with all things technical and gives
>an all-abiding curiosity to improve one's scientific
>knowledge. It's a great swimming pool, please dive in!
>
>This excitement causes a wish to share the experience
>with ones fellow man, and shows itself in the
>gentlemanly traditions of Ham Radio.

.....Amateur Radio.

>Radio Hams

Radio Amateurs.....

> are in a unique privileged position in that
>they can construct and operate their own equipment! No-one
>else has this privilege. Users, such as broadcasters,
>the po lice and armed farces, CBers and mobile phone
>users have to purchase ready-made gear.

Wrong. As a BE I have designed, constructed and operated two broadcast
transmitters. Anyone can build and operate equipment for any purpose

provided the equipment meets government criteria and has been
certificated (or otherwise authorized), and the operator has the
proper license or authorization.

And under those rules, Part 15 (as well as the UK equivalent) gives
hobbyists the opportunity to build and operate their own equipment
-without- a license at much lower power. That's not necessarily a bad
thing; those who have challenged the limitations of the 1750m band
have made significant technical advancements that have spilled over
into the field of Amateur radio. Part 15 also allows broadcasting with
very low power; broadcasting is prohibited for Amateurs except in very
special circumstances.

> Manufacturers
>are not licensed to operate their gear.

Wrong. They -MUST- hold a license or proper authorization to operate
their equipment for the simple reason that it must be tested.

> Radio Hams

Radio Amateurs.....

>are qualified to design, build and then
>operate their own pieces of equipment.

Wrong. An Amateur license does not QUALIFY them to design or build
anything. ANYONE can design and build their own equipment. Amateurs
are AUTHORIZED to OPERATE their own equipment, and then ONLY if the
equipment meets certain technical standards as set forth under the
rules regulating Amateur radio.

> They do this
>with gusto, and also repair and modify their own
>equipment. This is a privilege well worth the effort
>to gain, and one to be jealously guarded.

Yet it is a privilege that is not exclusive to Amateur radio.

>The excitement that drives a Radio Ham

..... a Radio Amateur.....

> starts with
>relatively simple technologies at first, perhaps making
>his own Wimshurst machine and primary cells.

YIKES!!! A Wimshurst machine is an RFI nightmare -- definitely -NOT-
on the list of preferred devices for use in Amateur radio.

> Small pieces
>of test equipment follow, possibly multimeters and signal
>generators. Then comes receivers and transmitters. It is with
>the latter that communication with like-minded technically
>motivated people takes off. The scope for technical

>development grows with the years
>and now encompasses DSP and DDS. There is also a great deal
>of excitement in the areas of computer programming to
>be learnt and applied.

Gee, where's Gunny Dudly the Spelling Cop?

>The technical excitement motivates Radio Hams

.....Radio Amateurs.....

> to compete
>with each other to determine who has designed and manufactured
>the best-quality station. This competitiveness is found in DXing,
>competitions and fox-hunts.
>
>-----OOOOO----
>
>However, beware! A Ham Radio licence

.....Amateur Radio "license".....

> is such a
>desirable thing to have that there are large
>numbers of people who wish to be thought of
>as Radio Hams

.....Radio Amateurs.....

> when, in fact, they are nothing
>of the kind! Usually such people are a
>variation of the CB Radio hobbyist; they buy their
>radios off the shelf and send them back to be
>repaired; they are not interested in technical discussion
>and sneer at those who are; they have no idea how
>their radios work inside and have no wish to find out;
>they are free with rather silly personal insults;
>they have not satisfied any technical qualification
>and their licences prevent the use of
>self-designed-and-built equipment.

Notwithstanding the negative connotations, you described CB radio very
well. The Citizen's Band is -intended- for people who want to buy
their radios off the shelf -- not caring about how they work or any
other technical aspects beyond basic functionality. It's a plug-n-play
radio service. And no license is required (in the US).

>These CB types engage in the competitive activities
>with their Cheque-Book-purchased off-the-shelf radios
>in a forlorn effort to prove that they are Radio Hams.
>
>No _REAL_ Radio Hams

.....Radio Amateurs.....

> are deceived by such people!

Neither are any "_REAL_" CBers.

>-----ooooo-----
>
>One infallible way to disambiguate the CB Radio Hobbyist
>from the _REAL_ Radio Ham

.....Radio Amateur.....

> is to solicit their view of the
>difference between CB Radio and Ham Radio.

.....Amateur Radio.

> A Radio Ham

A Radio Amateur.....

> will
>perceive Ham Radio

.....Amateur Radio....

> to be a technical pursuit and will
>perceive CB Radio to be a social communications facility
>no different in essence to a land-line telephone or a
>GSM mobile in the hands of a 6-year-old. Thus a Radio Ham

.....Radio Amateur.....

>could also hold a CB licence safe in the knowledge that
>such a licence says no more about him than having a land-line
>telephone, whilst continuing to regard Ham Radio

.....Amateur Radio.....

> as a separate
>technical pursuit.
>
>A CB Radio hobbyist, on the other hand, sees no difference between
>a Ham Radio licence

.....an Amateur Radio license.....

> and a CB Radio licence. To him, they are
>sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
>tries to classify himself as the equal of the Radio
>Ham

.....Radio Amateur.....

> when, in fact, he is nothing of the kind. A sure sign of
>a CB Radio hobbyist is if he holds, or has ever held, a licence
>issued under the gangrenous degeneration that is the
>M3/CB Fools' Licence scheme.

....."gangrenous degeneration"? And you think -CBers- have an attitude
problem?

>-----ooooo-----
>
>One group of people who claim to be of the standard of
>Radio Hams

.....Radio Amateurs.....

> but who are in reality nothing more than an
>apology for the failure of a CBer are those class B
>licensees who falsely proclaimed that they were against
>the use of a Morse Test to control access to the HF
>bands, until, that is, a test was introduced at their
>intellectual level, the intellectual level of 6-year-olds.
>
>6 year-olds simply lack the mathematical tool kit to
>enable them to handle even the simplest algebraic manipulation
>for Ohm's Law and thus, the disgraceful Class Ber's in
>the aforementioned category are not Radio Hams

.....Radio Amateurs.....

> by any stretch
>of the imagination!
>
>Remember - A sure sign of a CB Radio hobbyist is if he holds,
>or has ever held, a licence issued under the gangrenous
>degeneration that is the M3/CB Fools' Licence scheme!

BTW, there -is- a FAQ for Amateur radio: it's called "The Radio
Amateur's Handbook".

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

4982. A different FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-04 21:02:20 UTC
From: eternalsquire@comcast.net
Message-ID: <1131138140.860248.93140@f14g2000cwb.googlegroups.com>
Source record: 16415

Amateur Radio Frequently Asked Questions:

1) What is Amateur Radio?

In its most general sense the term Amateur Radio covers a very wide range of activities initiated by a group of people for the public good both short term and long term on a purely non-profit and non-commercial basis, using frequencies provided by a nation upon which that group performs its activities. Such a group is known as a nation's Amateur Radio Service.

2) Why Amateur Radio?

A great many national governments recognize the necessity for forming a body of volunteers existing entirely outside the commerical telecommunications infrastructure who are permitted to use radio frequencies. The necessity comes out of at least the following motivations: (a) the ability to form auxillary communications for public safety and welfare less subject to regional outage in the face of disaster, unrest, or other emergencies affecting normal communications (b) encouraging spread of scientific and technological literacy throughout the population via self training, (c) encouraging innovation in the state of the art of communications technology or in the basic sciences on which that technology is based, (d) encouraging goodwill between countries through informal communications between citizens of those respective countries with no payments needing to be made to a common carrier.

3) Who is eligible to operate an Amateur Radio?

Typically any citizen of a country whose laws create an Amateur Radio Service, who can pass a skills test in any or all of theory, regulations, or telegraphy which may be required for the safe operation of an amateur station on the frequencies granted for such operation. The skills test is usually basic for minimum priviledges and intensive for maximum priviledges. The skills test is usually administered either by a government official or by a panel of volunteers appointed by that official. Upon passing the skills test a license to operate is granted to that citizen.

4) Can children operate an Amateur Radio?

In the United States and many other countries there is no minimum age requirement for a minor citizen to be licensed to operate an amateur radio.

5) Who is ineligible to operate an Amateur Radio?

Typically anyone ever convicted of a felony of any kind, although this bar can be waived on a case by case basis through a legal hearing. Also, typically anyone whose license grant to operate had been revoked through a substantial violation of that nation's amateur radio regulations, and again, this bar can be waived on a case by case basis through a legal hearing.

6) What equipment can be legally used for operation?

In most countries any licensed amateur radio operator can build equipment either directly from electronic components or may adapt existing telecommunications equipment to transceive on frequencies designated for amateur radio. In other, more authoritarian countries, equipment may be held in keeping by a nation's government in designated club buildings. In countries governed under a civil law framework rather than a common law framework, a one-time or periodic tax may need to be paid to the government for each transmitter or receiver to be authorized for use by that citizen.

7) How much power can be legally used for operation?

Each nation can choose maximum legal power either on the basis of license priviledge, propogation or interference characteristics of the band in question, or safety considerations such as bodily RF exposure. Power limits could range from 5 watts to 2000 watts.

8) What communications can be conducted over amateur radio?

Typically only communications relating to public safety, statements of a personal nature, or technical conversations. Further, personal conversations may not involve material considered obscene or indecent as based on the standards of the nation of whom the citizen is a part. More authoritarian countries may place additional restrictions such as the banning of any communications containing political content or opinion. Limited one way communications are permitted, usually pertaining to telegraphy practice or to call outs for the purpose of initiating a two way conversation. Communications may generally not be intentionally obscured or encrypted, any published or commonly utilized language or protocol is considered acceptable for this purpose. One-way continuous broadcasting of news or music is typically prohibited.

9) Can unlicensed people ever operate an amateur radio?

In limited cases, yes. a) In genuine emergencies dangerous to life or limb, or potentially so, unlicensed people may use the signals MAYDAY or PAN respectively to call out for help or to warn away on any radio frequency, not just amateur radio frequencies. b) Anyone can operate an amateur radio under the direct supervision of an amateur radio operator using the priviledges of that supervisor. c) Anyone can use a frequency for micropower use so long as the frequency is not expressedly prohibited for such use. Power limits can be quite severe but they are adequate for use in demonstration, education, or research and development within the home or laboratory.

It is a myth that any person can transmit or broadcast unlicensed in international waters. Typically jurisdiction banning unlicensed operation extends either through the flag of the vessel containing the radio, or through the citizenship of the person transmitting.

10) How is amateur radio different from other competing informal radio operation?

Some countries do authorize citizen, family, or remote control radio services restricted to the use of government type-accepted equipment having fixed frequency channels, limited power, limited antenna size and/or height, and limited maximum distance.

Amateur radio is distinguished from these services by virtue of its special characteristics: a) potentially unlimited range, b) no restrictions to type-accepted equipment, c) transmission may take place anywhere within the designated band, d) international communications are allowed.

11) How is amateur radio different from experimental radio?

Some nations do offer upon application a legal grant for a limited number of people to operate telegraphy, voice, or telemetry upon bands or frequencies having interesting characteristcs. These bands or frequencies may later become adopted as part of the bands authrorized for amateur operation.

12) Is there a banned countries list?

Not at present. During the Cold War the United States and some other democratic nations did indeed publish a short list of totalitarian states and other states sponsoring terrorism with whom there was no legitimate purpose other than espionage for international communications, even as amateur radio operators. Such blockades are no longer in force. Instead, amateurs may not communicate with private citizens of other countries who have an objection to amateur radio. For all practical purposes this means the only country with whom amateur radio operators may not communicate with is North Korea, as that country is a totalitarian state that does not permit amateur radio.

4983. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-04 21:39:32 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <51lnm1pddpiph0ei9081g8ouhajt17721u@4ax.com>
Source record: 16416
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

Polymouth wrote:

>>Radio Hams are in a unique privileged position in that
>>they can construct and operate their own equipment! No-one
>>else has this privilege.

[ ] In the UK, no repeat no licence of any kind is necessary to specify, design, construct, modify, repair, own, or (under some circumstances) test an Amateur transmitter.

[ ] A pass in a current examination for a UK Amateur Licence qualifies the successful candidate for the issue of a UK Licence. Holders of the appropriate levels of licence are permitted to operate transmitting equipment that is not subject to a formal approvals procedure, and to carry out technical investigations. A qualification for a Licence, or the Licence itself, is not, repeat not, a qualification to specify, design, construct, modify, repair, or own transmitting equipment.

from
Aero Spike

4984. Re: Battery PS for Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-04 23:24:53 UTC
From: mcalhoun@ksu.edu
Message-ID: <dkgqk5$cab@unix2.cc.ksu.edu>
Source record: 16419

>I'm building a PS for my shack, and the receive only current draw of
>all of my equipment is in the 2A range. QST a few years ago had a
>great charger/battery circuit where the PS/charger generated up to
>500ma and, depending on the voltage state of the battery (he used a
>SLA) would apply the charger voltage, limited to 500 ma (minus anything
>used for running equipment, about 220 ma max for him) to the attached
>battery in an increasing duty cycle as battery voltage went down. When
>he transmitted, his load was about 2A, and it would come out of the
>battery.

>I'd like to do something similar, but larger....

Even simpler (and the way I do it): look up "float charging". Adjust
output of whatever regulated and reverse-protected DC power supply you
have handy to the proper "float voltage" of your battery (I use a plain
ol' car battery, not even a "deep cycle", as one of my HF radios starts
FM-ing when the battery drops to about 11 volts, so the increased capacity
of a deep cycle battery is totally wasted) and connect it and your
equipment across the battery!

When battery is low and equipment is off, battery is charged.
When battery is high and equipment is off, battery quits charging.
No special "charge controller" or other electronics beyond that
already in most DC power supplies is/are needed.

One can also use an "automatic" charger which cycles on and off as
necessary to keep the battery charged, but this will probably cost more
because most junk boxes probably aren't as well supplied with automatic
chargers as they are with regulated DC power supplies. But they are NOT
particularly expensive; Wal-Mart use to sell a 1.5-amp version to mount
under the hood of a car for about $25-30.

The radio (and two emergency lights) in my shack have been powered by
either of the above two ways for over 25 years.

The only two times I've had to use some kind of "charge controller"
were when the sourse was a:
* wind generator - when the wind blew, it created whatever voltage
was necessary to force about 15 amps into whatever was connected!
(I used a zener and a few transistors -- two of them big! -- to
"dump" excess current into two 100-watt 1-ohm resistors.
* solar panel - except that my panel only produced about 2 amps in
bright sunlight, the sun shown much more often than the wind blew,
so this was basically the same problem: dump excess current.

Incidentally, for not-too-big DC power supplies, I've not found it
particularly necessary for them to be very "pure" DC; a 60-amp-hour
car battery acts like a pretty-big filter capacitor!

--Myron, W0PBV.
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

4985. Re: Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-04 23:26:02 UTC
From: yzordderrex@verizon.net
Message-ID: <1131146762.783222.263940@g44g2000cwa.googlegroups.com>
Source record: 16417

I bought a Weller gun recently to unsolder some can capacitors from a steel chassis. I was totally dissapointed when I got home and unpacked the gun. This gun is not the same as my daddy had about 40 years ago. It was a cheap piece of shit. I tried with all my might to get that thing to work. The tip was flimsy, the set screws to connect the tip were flimsy and the two tubes that come out were so flimsy that they would short themselves out whenever a little bit of pressure was put on the tip. I tried boosting the voltage into the gun until the core was humming real good. With about 140v into the thing the plastic handle was too hot to touch and I could see smoke coming out of the handle. I took it back and told the guy at the True-value store it didn't work and smelt funny when I used it. I told him I thought the secondary was shorted. Heheh.

4986. Re: Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-04 23:36:22 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dkgr9m$l79$1@engnntp2.cig.mot.com>
Source record: 16420

Nope. I got it, but I see your point. The issue I was thinking of was the fact that the hot air "pre-heat" will still take longer than a high heat-capacity tip, thus allowing more opportunity (time) for the dielectric to soften and deform if it isn't held well, without stress applied. I think RG-8 size is probably less of a problem. RG-58 tends to easily allow the center conductor to travel if given the opportunity.

My hot plate also only "warms" the ceramic so, when touched with the iron for the heat-to-solder phase, it doesn't do that almost imperceptible TINK! from the almost invisible crack across the ceramic due to an all to large temp gradient.

How long do you take in the warming phase before doing the actual heat-to-solder phase?

I have a professional resistance (dental brace) soldering machine (by K9PGN - SK) and it is considered tops on methods...by some, of course.

73, Steve, K9DCI

"Ian White G/GM3SEK" <gm3sek@ifwtech.co.uk> wrote in message news:t9GjiCq3foaDFAwN@ifwtech.co.uk...
> Steve Nosko wrote:
> >Very good Ian.. I shold have remembered this. A good way to solder ceramic
> >substrated PA modules, as well. I have a hot plate.
> >
> >However, with the PL259, you may have an issue with the coax dielectric
> >melting.
> >Or the PL259 dielectric. I see mostly cheapies
> >selling @ hamfests - Teflon's OK, though, no?.
> >
>
> I think you may have the wrong impression of this. It isn't the same as
> using hot air or a hotplate to do the actual soldering.
>
> In this case you're only using the hot-air gun to give the connector
> body a moderate temperature boost of maybe 100-150C. It's still the iron
> that melts the solder - the difference being that you can now use your
> regular 25/45W iron.
>
> The worst that happens with solid polyethylene dielectric is that it
> softens; but then it hardens again. If the coax dielectric melts and
> runs, you've heated the whole thing way too much, and for way too long.
>
> The dielectric inside the plug is even less of a problem. If it doesn't

> melt when you solder the center pin, it will also handle moderate
> heating of the connector body.
>
> So in practice there aren't any problems.
>
>
> >"Ian White G/GM3SEK" <gm3sek@ifwtech.co.uk> wrote in message
> >news:a5wuD$GtnHaDFAH0@ifwtech.co.uk...
> >> Highland Ham wrote:
> >> >"F8BOE" <f8boe@bluemail.ch> wrote in message
> >> >news:43607616$0$5437$626a14ce@news.free.fr...
> >> >> Hello,
> >> >>
> >> >> It may sound funny, but that's why I never used a soldering gun and
> >> >> perhaps
> >> >> never will... My 25W JBC with 0.8 and 1.2 mm tips is quite fine for
> >> >> electronic components and connector soldering.
> >> >>
> >> >> You should be the one who takes an 18 wheeler to pick up a beer
pack.
> >> >> Shouldn't you? Perhaps a Mig welder could do the connector job...
Hi!
> >> >> I hope you'll never mount connectors for other Hams without any
serious
> >DC
> >> >> and HF shortcut tests.
> >> >>
> >> >> 100W+ soldering irons are pretty good for plumber jobs or for
> >desoldering
> >> >> fast and clean, but definitely not for your aim.
> >> >>
> >> >> 73 de F8BOE Olivier ...-.-
> >> >
> >> >For 'high power' soldering , I use a butane (cigarette lighter) gas
> >> >soldering iron with kathalytic burner.
> >> >Temperature can be adjusted by changing gas flowrate .
> >> >I use an iron made in Ireland ,make Portasol .High power tip/burner
can
> >do
> >> >up to 100 watts which is more than adequate to solder (PL259) plugs.
> >Also
> >> >very suitable to make small enclosures from scrap printed circuit
board
> >> >Very handy also for outdoor use .....since the tool is
self-contained.
> >> >Nowadays there are a number of makes to choose from.
> >> >I would never use an electric soldering gun.
> >>
> >>
> >> Neither would I. A normal small iron can be used for soldering large

> >> objects, if they are pre-heated with a hot-air ("paint stripper") gun.
> >>
> >> To solder a PL259, for example, pre-heat the plug body with the gun
> >> until it's good and hot, but still some way below the melting point of
> >> solder. Then put the gun down, and switch to your regular 25/45W iron
> >> for the actual soldering. The solder will now melt quickly and easily.
> >>
> >> Try it - it's so much easier than using a monster iron or an electric
> >> soldering gun.
> >>
> >>
> >> --
> >> 73 from Ian G/GM3SEK 'In Practice' columnist for RadCom (RSGB)
> >> http://www.ifwtech.co.uk/g3sek
> >
> >
>
> --
> 73 from Ian G/GM3SEK 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.co.uk/g3sek

4987. Re: High Q caps for 60 Khz loop antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-04 23:37:12 UTC
From: yzordderrex@verizon.net
Message-ID: <1131147432.039064.300540@g44g2000cwa.googlegroups.com>
Source record: 16418

Yep, a bunch of NPO in parallel is a good way to go. Polystyrene is
nice too. BTW you can get some very impressive amounts of capacitance
out of multilayer ceramic capacitors.

73
NEO

4988. Re: Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-05 01:03:27 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <S4-dnTHigJRKmfHeRVnytA@pipex.net>
Source record: 16421

Suggest you buy a butane (cigarette lighter gas) soldering iron with
adjustable gas flow to change temperature.
These irons come with different kathalytic burner bits and have a capacity
of well over 100 Watts equivalent.
Electric soldering guns are prone to failure and don't sink much heat into
the object to be soldered.

Frank GM0CSZ / KN6WH
==========
>I bought a Weller gun recently to unsolder some can capacitors from a
> steel chassis. I was totally dissapointed when I got home and unpacked
> the gun. This gun is not the same as my daddy had about 40 years ago.
> It was a cheap piece of shit. I tried with all my might to get that
> thing to work. The tip was flimsy, the set screws to connect the tip
> were flimsy and the two tubes that come out were so flimsy that they
> would short themselves out whenever a little bit of pressure was put on
> the tip. I tried boosting the voltage into the gun until the core was
> humming real good. With about 140v into the thing the plastic handle
> was too hot to touch and I could see smoke coming out of the handle. I
> took it back and told the guy at the True-value store it didn't work
> and smelt funny when I used it. I told him I thought the secondary was
> shorted. Heheh.
>

4989. Re: Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-05 01:30:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11mo2phrkp7va17@corp.supernews.com>
Source record: 16422

Hm, everybody has his own solution. I happily use an old Weller gun or small butane torch for putting a PL-259 onto an RG-8 size cable, as I have for decades. I keep the cable straight so the center conductor ends up where it belongs when the insulation cools. I never use PL-259s for RG-58 or RG-59 size cable anymore -- I always use BNC instead. I've got a box full of adapters to use whenever I need to connect to anything else. Both BNC connectors and BNC-to-anything adapters are readily available on eBay. Actually, I don't use RG-8 size cable very often, and recently I've been putting N connectors on it when I do.

Roy Lewallen, W7EL

4990. Re: Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-05 02:43:29 UTC
From: Maude Herr-Chodt <maude@herr.chodt.org>
Message-ID: <dkh68eork0@pita.alt.net>
Source record: 16423

I use my old Wen model 450 gun with a 45A7 heavy duty soldering tip. This combination is powerful enough to solder the old fashioned galvanized roof spouting if necessary.
John, N9JG
http://tinyurl.com/9cpcf

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:11mo2phrkp7va17@corp.supernews.com...
> Hm, everybody has his own solution. I happily use an old Weller gun or
> small butane torch for putting a PL-259 onto an RG-8 size cable, as I have
> for decades. I keep the cable straight so the center conductor ends up
> where it belongs when the insulation cools. I never use PL-259s for RG-58
> or RG-59 size cable anymore -- I always use BNC instead. I've got a box
> full of adapters to use whenever I need to connect to anything else. Both
> BNC connectors and BNC-to-anything adapters are readily available on eBay.
> Actually, I don't use RG-8 size cable very often, and recently I've been
> putting N connectors on it when I do.
>
> Roy Lewallen, W7EL

4991. Re: Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-05 05:11:05 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_436c39b0@fidonet.org>
Source record: 16424

"Roy Lewallen" bravely wrote to "All" (04 Nov 05 17:30:23)
--- on the heady topic of "Re: Problem with soldering gun"

RL> From: Roy Lewallen <w7el@eznec.com>
RL> Xref: core-easynews rec.radio.amateur.homebrew:88731

RL> Hm, everybody has his own solution. I happily use an old Weller gun or
RL> small butane torch for putting a PL-259 onto an RG-8 size cable, as I
RL> have for decades. I keep the cable straight so the center conductor
RL> ends up where it belongs when the insulation cools. I never use
RL> PL-259s for RG-58 or RG-59 size cable anymore -- I always use BNC
RL> instead. I've got a box full of adapters to use whenever I need to
RL> connect to anything else. Both BNC connectors and BNC-to-anything
RL> adapters are readily available on eBay. Actually, I don't use RG-8
RL> size cable very often, and recently I've been putting N connectors on
RL> it when I do.
RL> Roy Lewallen, W7EL

If you want some *real* heat, rip the carbon rods out of a couple of C
or D batteries. Cut just one wire of a bedside table lamp in the middle.
Strip the ends and wrap one wire around one carbon rod and the same
with the other on the remaining rod. Hold the rod ends clamped by
wooden clothes pins so that the wires are pressed into the rod. Keep
the rods apart and plug in the lamp. Turn on the lamp, then bring the
rods close together. You should develop a nice arc that will blind you
momentarily and leave you seeing blue spots for a few hours. However,
the arc will have been hotter than the surface of the Sun. But you can
melt paper clips and glass marbles with it. A welders mask may help
with the spotty vision.

Disclaimer: Do not try this in the shower. Objects may appear blurrier
than they really are temporarily but perhaps permanently. Results may
vary with the wattage of the bedside table lamp.

A*s*i*m*o*v

... This product has been cruelly tested on cute little furry animals.

4992. Re: common phase DDS?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-05 06:53:34 UTC
From: Jim <kill-spam@no-spam.org>
Message-ID: <Avadnd3AsMlvy_HeRVn-sA@comcast.com>
Source record: 16425

<eternalsquire@comcast.net> wrote in message
news:1131074562.118742.138810@g44g2000cwa.googlegroups.com...
> Well actually, the project I had in mind was to take the 60 khz WWVB
> signal and use diode harmonic multipliers to create a clock in the
> gigahertz range. I would then use this clock as the input to a DDS
> system. I could use the GPS to calculate lightspeed delay between
> the VFO and the WWVB to determine compensating phase lag.
>
> This could be good for synchronizing the transmit and receive ends of a
> digital communication, improving the signal to noise ratio.
>
> The Eternal Squire
>

I think you'd have a difficult problem with the variable phase due to
multipath causing shifting path length between both ends of the digital
communication.

That is why systems may use time based coherancy for data start and stop
times, and so on, but do not bother to try for radio carrier frequency phase
coherant systems.

Jim
N6BIU

4993. Re: Cheap Repeater Controller???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-05 07:03:45 UTC
From: Leif Holmgren <nobody@nowhere.com>
Message-ID: <436C5951.8060604@nowhere.com>
Source record: 16426

How cheap is cheap?

What is nothing fancy?

Is the use of a PC a requirement?

I'm in the process of building a controller myself. Check this link for
current status:

http://home.swipnet.se/sm4rpq/elec/slcrc/slcrc.html

I'd say you get away with something around 5-15$ depending on you
junkboxes size.

Warning, there are some dead links on it and no diagrams yet.

/Leif

Bill wrote:
> I am in the process of building a 2M repeater. I have everything except for
> a controller. I am looking for a cheap controller or a circuit to build my
> own. I don't need anything fancy. Also is there any PC Controller software
> besides EchoStation?
>
> Bill
>
>

4994. Source for PLL and Divider Chips?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-05 07:32:18 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <ZeudnQh9Bs-f_fHeRVn-gw@comcast.com>
Source record: 16427

Does anybody have a cheap source, in the USA, for the MC12179 or MC12179D PLL chip? If not is there a replacement available? Also does anybody know if there is a 24 pin DIP version of the 74HC4059 chip and who sells it?

73 de
Leland C. Scott
KC8LDO

4995. Re: Cheap Repeater Controller???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-05 09:41:56 UTC
From: CA <no@mail.com>
Message-ID: <E7%af.149980$dP1.507691@newsc.telia.net>
Source record: 16428

35 USD for the NHRC-2 kit
http://www.nhrc.net/nhrc-2/

http://svxlink.sourceforge.net/

http://members.aol.com/repeaterlogic/

http://www.metronic.nu/rlm/

73
SM6PXJ

"Bill" <bcrann1@hotmail.com> skrev i meddelandet
news:IbF8f.8354$ki7.678793@news20.bellglobal.com...
>I am in the process of building a 2M repeater. I have everything except
>for a controller. I am looking for a cheap controller or a circuit to
>build my own. I don't need anything fancy. Also is there any PC
>Controller software besides EchoStation?
>
> Bill
>

4996. Re: Battery PS for Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-05 12:01:32 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <-sqdnRUjQbR0A_HenZ2dnUVZ_tKdnZ2d@bright.net>
Source record: 16429

It's not necessary to provide a "dump" for a charge controller when a solar panel is used for charging (at least the ones we use at work don't require a dump). It appears the charge controller shorts the "array" connections and the panels circulate their "short circuit current" around the array loop.

Scott
N0EDV

> The only two times I've had to use some kind of "charge controller"
> were when the sourse was a:
> * wind generator - when the wind blew, it created whatever voltage
> was necessary to force about 15 amps into whatever was connected!
> (I used a zener and a few transistors -- two of them big! -- to
> "dump" excess current into two 100-watt 1-ohm resistors.
> * solar panel - except that my panel only produced about 2 amps in
> bright sunlight, the sun shown much more often than the wind blew,
> so this was basically the same problem: dump excess current.
>
> Incidentally, for not-too-big DC power supplies, I've not found it
> particularly necessary for them to be very "pure" DC; a 60-amp-hour
> car battery acts like a pretty-big filter capacitor!
>
> --Myron, W0PBV.

4997. Pulling crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-05 13:16:02 UTC
From: Apparatus <apparatus.home@lycos.com>
Message-ID: <1131196562.702038.225900@g49g2000cwa.googlegroups.com>
Source record: 16430

Hi,

I am working on building a VCO for FSK with 850 Hz separation between mark and space. I am building it using a 16.000 MHz 32pf parallel load crystal. I am pulling the crystal via a varactor to implement the FSK. However, the amplitude between mark and space is an unacceptable 10 dB with about 700 Hz of shift. Any ideas on how to pull the crystal without changing the amplitude of the mark and space frequencies considerably?

A bit about my circuit: have an 8 - 50 pF tuning cap across pins 6 and 7; a 22pF cap shunts pin 7. The crystal shunts pin 6. A 100nF DC block cap separates pin 6 from the 8 - 29 pF (3 to 10 V reverse bias) varactor. A 1mH inductor isolates AC from the varactor biasing.

I tried adding 1uH of inductance in series with the crystal. This moved the oscillation frequency up, but the amplitude problem remained. I tried putting the varactor across the tuning cap. This configuration exhibited the same amplitude shift problem, but shifted the frequency up rather than down. I tried combining the two shifts via two varactors and a JFET to invert the biases, one across the crystal (as originally) and one across the tuning cap. This didn't work well (very noisy spectrum).

Any ideas as to what could be the problem and how to fix it?

Cheers,
Chris

4998. Re: Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-05 14:21:43 UTC
From: w4sef@bellsouth.net
Message-ID: <436cbfae.1187562@newsgroups.bellsouth.net>
Source record: 16431

No Way would I ever use a 25 watt soldering iron to do pl 259s like
that F8 guy does..... wonder how many poor pl 259 connections he has
and does not even know it?

Steve W4SEF

On Thu, 27 Oct 2005 05:09:11 GMT, "David Thompson"
<thompson@mindspring.com> wrote:

>My sister bought me a Radio Shack Dual Heat soldering gun (150W/230W). This
>was to supplement
>my 120 watt 45 year old Weller. This after my WW II vintage 120 iron died
>on me.
>
>My main use was to solder coax connectors. The Gun seems to work Ok on
>soldering joints in say a SB220 amplifier. But the first thing I noticed is
>that the tip is much to large to fit into the area where the PL-259 outside
>allows you to solder that to the shield thru the wholes in the 259. No
>problem but if you leave the gun on too long the area of the tip gets red
>hot about 1/2" back from the actual tip.
>
>My old Weller does a better but inadequate job of soldering the 259 shield.
>
>Why does the gun allow the tip to get red hot away from the actual tip. The
>tip is almost new. I notice its made from a silver metal not copper as with
>most Weller tips. Radio Shack tells me its made by Weller
>and they are not aware of the problem.
>
>bad tip or maybe a bad winding in the gun? any ideas?
>
>Dave K4JRB
>
>

4999. Re: Battery PS for Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-05 14:27:52 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <X_2dnRaMPpX9XPHeRVnyrg@pipex.net>
Source record: 16432

The comment below is valid if there are only solar panels involved.
However ,when these are used in combination with a wind generator a current dump is required.
My battery operated station has its batteries charged by this combination of sources.
The home brew charger comprises a zener referenced comparator (741 opamp) driving a number of power transistors ,with the rest of the load being a number of car head light bulbs.
When the batteries are fully charged ,all current generated is dumped .its resulting heat making a minor contribution to shack heating.

Frank GM0CSZ / KN6WH

==========

> It's not necessary to provide a "dump" for a charge controller when a
> solar panel is used for charging (at least the ones we use at work don't
> require a dump). It appears the charge controller shorts the "array"
> connections and the panels circulate their "short circuit current" around
> the array loop.
>
> Scott
> N0EDV
>
>
>> The only two times I've had to use some kind of "charge controller"
>> were when the sourse was a:
>> * wind generator - when the wind blew, it created whatever voltage
>> was necessary to force about 15 amps into whatever was connected!
>> (I used a zener and a few transistors -- two of them big! -- to
>> "dump" excess current into two 100-watt 1-ohm resistors.
>> * solar panel - except that my panel only produced about 2 amps in
>> bright sunlight, the sun shown much more often than the wind blew,
>> so this was basically the same problem: dump excess current.
>>
>> Incidentally, for not-too-big DC power supplies, I've not found it
>> particularly necessary for them to be very "pure" DC; a 60-amp-hour
>> car battery acts like a pretty-big filter capacitor!
>>
>> --Myron, W0PBV.

5000. Re: Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-05 14:44:19 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <-uKdnY4HEoyhWPHeRVnyuA@pipex.net>
Source record: 16433

> No Way would I ever use a 25 watt soldering iron to do pl 259s like
> that F8 guy does..... wonder how many poor pl 259 connections he has
> and does not even know it?
==========
Perhaps is it useful to mention that PL259 type of connectors for 3/8inch
(10mm) OD coax are available with a cable entry as per a standard
N-connector eg a metal braid sleeve with rubber cable compression ring.
The only soldering required is for the centre pin.
The ones I use are of a high quality ,having a gold-plated centre pin . They
are made in Taiwan ; the UK price some time ago was GBP 3.00 (US$ 5.50) .
Perhaps a bit expensive but well worth buying.

Frank GM&#65533;CSZ / KN6WH

5001. Re: Pulling crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-05 16:05:50 UTC
From: hhc314@yahoo.com
Message-ID: <1131206750.500940.261680@f14g2000cwb.googlegroups.com>
Source record: 16434

Chris, when you capacitively "pull" an Xtal, you lower the Q of the tuned circuit hence the amplitude of oscillation varies with the capacitive loading on the Xtal.

This is not so much a problem as a natural effect that requires compensation.

Arguably the easiest way to compensate for this is to simply drive a switching transistor or IC into saturation throughout the range of amplitude variations that the oscillator experiences. Essentially, you're buffering using a quasi Schmidt Trigger arrangement, which produces a constant amplitude output.

I believe that the problem that you'll eventually face is how to keep your 850-Hz shift constant and centered. When I was active in FSK TTY, my solution was to incorporate a monitor scope with filters into my VCO, plus provide real-time adjustable shift and centering adjustments.

Hope this helps.

Harry C. (ex K2JEZ)

5002. Re: Pulling crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-05 16:24:30 UTC
From: hhc314@yahoo.com
Message-ID: <1131207869.974446.124100@g47g2000cwa.googlegroups.com>
Source record: 16435

Chris, here's a question for you. (I'm assuming that you are working with FSK TTY.)

Is the classic 850-Hz shift still the current standard as it was during the 1960s when I was still involved in TTY? I had thought that it had been reduced to something like 75-Hz during the 70s due to the problems with propagation path differences over a 850-Hz frequency spread.

Also, back in the mid-60s, it was sort of presumed that AFSK would soon replace FSK... Did that ever actually happen?

By the way, in those days we tested our terminal units by printing NSS transmissions for hour after hour. You could then visually scan down the pages of printed code groups to determine how often your system produced a glitch.

I was then among the more fortunate, because I owned a Model 26 TTY, a model 14 Transmitter/Distributor, plus the holy of all holys, a Model 14 typing reperforator. Today all of these have been replaced by computers! :-) Still, hearing those old machines hammer and click away provided much more gratification than does a computer!

Have fun, Harry C.

5003. Re: Pulling crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-05 17:17:09 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <cvppm195smb25a7ms8vc0eehvg6dmbsi5j@4ax.com>
Source record: 16436

On 5 Nov 2005 05:16:02 -0800, "Apparatus" <apparatus.home@lycos.com>
wrote:

>Hi,
>
>I am working on building a VCO for FSK with 850 Hz separation between
>mark and space. I am building it using a 16.000 MHz 32pf parallel load
>crystal. I am pulling the crystal via a varactor to implement the FSK.
>However, the amplitude between mark and space is an unacceptable 10 dB
>with about 700 Hz of shift. Any ideas on how to pull the crystal
>without changing the amplitude of the mark and space frequencies
>considerably?
>
>A bit about my circuit: have an 8 - 50 pF tuning cap across pins 6 and
>7; a 22pF cap shunts pin 7. The crystal shunts pin 6. A 100nF DC block
>cap separates pin 6 from the 8 - 29 pF (3 to 10 V reverse bias)
>varactor. A 1mH inductor isolates AC from the varactor biasing.
>
>I tried adding 1uH of inductance in series with the crystal. This moved
>the oscillation frequency up, but the amplitude problem remained. I
>tried putting the varactor across the tuning cap. This configuration
>exhibited the same amplitude shift problem, but shifted the frequency
>up rather than down. I tried combining the two shifts via two varactors
>and a JFET to invert the biases, one across the crystal (as originally)
>and one across the tuning cap. This didn't work well (very noisy
>spectrum).
>
>Any ideas as to what could be the problem and how to fix it?
>
>Cheers,
>Chris

I'd look at your circuit. Thats a very large change for a small shift
at 16mhz. Nominally I'd expect only a tiny change at 16mhz and no
where near 10db. From what you say it sould like your using
a NE/SE602 or similar as the osc and it may be the constants
you are using are off. it also may be that the varactor you using
is getting foward biased and that will alter the oscillartor output.

For a simple shift a series cap and a diode switch is adaquate for
a shift like that. To dial it in the cap can be variable. There are
plenty of published circuits that already do this in various CW
tranceiver designs for RX to TX shift (sidetone too).

An alternate is live with it and add a limiting stage after it
(74HC04s) to take out the amplitude change.

Allison

5004. Re: Pulling crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-05 17:21:41 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <FS5bf.4542$2y.4339@newsread2.news.atl.earthlink.net>
Source record: 16437

<hhc314@yahoo.com> wrote in message
news:1131207869.974446.124100@g47g2000cwa.googlegroups.com...
> Chris, here's a question for you. (I'm assuming that you are working
> with FSK TTY.)
>
> Is the classic 850-Hz shift still the current standard as it was during
> the 1960s when I was still involved in TTY? I had thought that it had
> been reduced to something like 75-Hz during the 70s due to the problems
> with propagation path differences over a 850-Hz frequency spread.
>
> Also, back in the mid-60s, it was sort of presumed that AFSK would soon
> replace FSK... Did that ever actually happen?
>

I don't know when the 170 hz shift took over for most use. It was being used about 25 years ago on the low bands for most of the users when I first started rtty.

FSK is still all that is allowed on the low bands. Today it is generated by using a SSB transmitter in the SLB mode and feeding in audio tones. This generates a signal that is the same comming out of the transmitter as a FSK transmitter. That is possiable due to the way a ssb transmitter works. If the same rig was switched to AM or FM them it would be AFSK.

YOu can go here and download some programs that you can use on the computer to do the digital modes. As I mentioned above by feeding the audio tones into the mic or audio input of a ssb transmitter you will be generating FSK eventhough it might not seem so.

http://www.muenster.de/~welp/sb.htm

One of the best free programs to get started with in rtty is the MMTTY program.

5005. Re: Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-05 17:34:07 UTC
From: Ian White G/GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <mS5RZBMP0ObDFA6x@ifwtech.co.uk>
Source record: 16439

Steve Nosko wrote:
>Nope. I got it, but I see your point. The issue I was thinking of was the
>fact that the hot air "pre-heat" will still take longer than a high
>heat-capacity tip, thus allowing more opportunity (time) for the dielectric
>to soften and deform if it isn't held well, without stress applied. I think
>RG-8 size is probably less of a problem. RG-58 tends to easily allow the
>center conductor to travel if given the opportunity.
>
It doesn't seem to be a problem with either size of cable, largely
because the dielectric doesn't get hot enough to melt and become runny,
and also because the center conductor isn't trying to move off-center
anyway.

>My hot plate also only "warms" the ceramic so, when touched with the iron
>for the heat-to-solder phase, it doesn't do that almost imperceptible
>TINK! from the almost invisible crack across the ceramic due to an all to
>large temp gradient.
>
Ah, now I see what you're using it for.

>How long do you take in the warming phase before doing the actual
>heat-to-solder phase?
>
About 10-20 seconds with a 2kW hot-air gun.... but that obviously
depends on a lot of other variables, particularly the power of the
electric iron to follow.

My worry with many of the "big iron" methods is that it's very hard to
be sure you have a good solder joint, all the way down the sides of the
hole. More often, I suspect it makes a good joint to the braid but a
cold joint to the sides of the hole. This may look OK, but the plug of
solder may eventually work loose in the hole.

--
73 from Ian G/GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

5006. Re: Cheap Repeater Controller???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-05 17:40:12 UTC
From: johan aeq <pe1aeq@amsat.og>
Message-ID: <8066f$436cf036$52ad139c$11542@news.versatel.nl>
Source record: 16438

Hello,
i have found the site...
http://rivat.chez-alice.fr/soft/simplex/readme.txt
I hope you can use this program...

"Leif Holmgren" <nobody@nowhere.com> schreef in bericht
news:436C5951.8060604@nowhere.com...
> How cheap is cheap?
>
> What is nothing fancy?
>
> Is the use of a PC a requirement?
>
> I'm in the process of building a controller myself. Check this link for
> current status:
>
> http://home.swipnet.se/sm4rpq/elec/slcrc/slcrc.html
>
> I'd say you get away with something around 5-15$ depending on you
> junkboxes size.
>
> Warning, there are some dead links on it and no diagrams yet.
>
> /Leif
>
> Bill wrote:
> > I am in the process of building a 2M repeater. I have everything except
for
> > a controller. I am looking for a cheap controller or a circuit to build
my
> > own. I don't need anything fancy. Also is there any PC Controller
software
> > besides EchoStation?
> >
> > Bill
> >
> >
>

5007. Re: Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-05 19:36:06 UTC
From: Bill <exray@coqui.net>
Message-ID: <c341c$436d09ab$4232be11$22849@COQUI.NET>
Source record: 16440

Ian White G/GM3SEK wrote:

>
> My worry with many of the "big iron" methods is that it's very hard to
> be sure you have a good solder joint, all the way down the sides of the
> hole. More often, I suspect it makes a good joint to the braid but a
> cold joint to the sides of the hole. This may look OK, but the plug of
> solder may eventually work loose in the hole.
>
>
A handy trick is to enlarge the holes with a drill or reamer or to make them slightly oblong with a small triangular file. I've seen some connectors with an oblong opening as standard. It does make for easier soldering.

-Bill

5008. Re: Pulling crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-05 21:03:45 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <R69bf.2974$6M6.872@trnddc04>
Source record: 16441

Chris,
You didn't say what you're using for th active element...you only gave pin numbers. Can you elaborate?

Joe
W3JDR

"Apparatus" <apparatus.home@lycos.com> wrote in message
news:1131196562.702038.225900@g49g2000cwa.googlegroups.com...
> Hi,
>
> I am working on building a VCO for FSK with 850 Hz separation between
> mark and space. I am building it using a 16.000 MHz 32pf parallel load
> crystal. I am pulling the crystal via a varactor to implement the FSK.
> However, the amplitude between mark and space is an unacceptable 10 dB
> with about 700 Hz of shift. Any ideas on how to pull the crystal
> without changing the amplitude of the mark and space frequencies
> considerably?
>
> A bit about my circuit: have an 8 - 50 pF tuning cap across pins 6 and
> 7; a 22pF cap shunts pin 7. The crystal shunts pin 6. A 100nF DC block
> cap separates pin 6 from the 8 - 29 pF (3 to 10 V reverse bias)
> varactor. A 1mH inductor isolates AC from the varactor biasing.
>
> I tried adding 1uH of inductance in series with the crystal. This moved
> the oscillation frequency up, but the amplitude problem remained. I
> tried putting the varactor across the tuning cap. This configuration
> exhibited the same amplitude shift problem, but shifted the frequency
> up rather than down. I tried combining the two shifts via two varactors
> and a JFET to invert the biases, one across the crystal (as originally)
> and one across the tuning cap. This didn't work well (very noisy
> spectrum).
>
> Any ideas as to what could be the problem and how to fix it?
>
> Cheers,
> Chris
>

5009. Re: Cheap Repeater Controller???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-06 07:18:58 UTC
From: Bill <bcrann@hotmail.com>
Message-ID: <q7ibf.20766$LF3.1184553@news20.bellglobal.com>
Source record: 16442

I just need something for $50 or less to give me a hang timer and time-out timer. A CW ID would be a bonus. No a PC is not required. You controller seems it may do the job. Is it complete yet?

Bill

"Leif Holmgren" <nobody@nowhere.com> wrote in message news:436C5951.8060604@nowhere.com...
> How cheap is cheap?
>
> What is nothing fancy?
>
> Is the use of a PC a requirement?
>
> I'm in the process of building a controller myself. Check this link for
> current status:
>
> http://home.swipnet.se/sm4rpq/elec/slcrc/slcrc.html
>
> I'd say you get away with something around 5-15$ depending on you
> junkboxes size.
>
> Warning, there are some dead links on it and no diagrams yet.
>
> /Leif
>
> Bill wrote:
>> I am in the process of building a 2M repeater. I have everything except
>> for a controller. I am looking for a cheap controller or a circuit to
>> build my own. I don't need anything fancy. Also is there any PC
>> Controller software besides EchoStation?
>>
>> Bill
>

5010. Re: Cheap Repeater Controller???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-06 07:20:41 UTC
From: Bill <bcrann@hotmail.com>
Message-ID: <09ibf.20767$LF3.1184626@news20.bellglobal.com>
Source record: 16443

Thanks for the links. I didn't know you could get a NHRC-2 kit for that
price. I think I may try svxlink as well.

Bill

"CA" <no@mail.com> wrote in message
news:E7%af.149980$dP1.507691@newsc.telia.net...
> 35 USD for the NHRC-2 kit
> http://www.nhrc.net/nhrc-2/
>
> http://svxlink.sourceforge.net/
>
> http://members.aol.com/repeaterlogic/
>
> http://www.metronic.nu/rlm/
>
> 73
> SM6PXJ
>
>
> "Bill" <bcrann1@hotmail.com> skrev i meddelandet
> news:IbF8f.8354$ki7.678793@news20.bellglobal.com...
>>I am in the process of building a 2M repeater. I have everything except
>>for a controller. I am looking for a cheap controller or a circuit to
>>build my own. I don't need anything fancy. Also is there any PC
>>Controller software besides EchoStation?
>>
>> Bill
>>
>
>

5011. Re: Cheap Repeater Controller???

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-06 07:22:13 UTC
From: Bill <bcrann@hotmail.com>
Message-ID: <saibf.20768$LF3.1184753@news20.bellglobal.com>
Source record: 16444

Thanks. That looks very simple use. Looks good. May give it a try. I
have lots to choose from.

Bill

"johan aeq" <pe1aeq@amsat.og> wrote in message
news:8066f$436cf036$52ad139c$11542@news.versatel.nl...
> Hello,
> i have found the site...
> http://rivat.chez-alice.fr/soft/simplex/readme.txt
> I hope you can use this program...
>
>
> "Leif Holmgren" <nobody@nowhere.com> schreef in bericht
> news:436C5951.8060604@nowhere.com...
>> How cheap is cheap?
>>
>> What is nothing fancy?
>>
>> Is the use of a PC a requirement?
>>
>> I'm in the process of building a controller myself. Check this link for
>> current status:
>>
>> http://home.swipnet.se/sm4rpq/elec/slcrc/slcrc.html
>>
>> I'd say you get away with something around 5-15$ depending on you
>> junkboxes size.
>>
>> Warning, there are some dead links on it and no diagrams yet.
>>
>> /Leif
>>
>> Bill wrote:
>> > I am in the process of building a 2M repeater. I have everything
>> > except
> for
>> > a controller. I am looking for a cheap controller or a circuit to
>> > build
> my
>> > own. I don't need anything fancy. Also is there any PC Controller
> software
>> > besides EchoStation?
>> >
>> > Bill

>> >
>> >
>>
>
>

5012. Re: Pulling crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-06 08:19:44 UTC
From: Apparatus <apparatus.home@lycos.com>
Message-ID: <1131265184.734953.51540@o13g2000cwo.googlegroups.com>
Source record: 16445

Thank you all for your informative replies.

Turns out I had two problems. One was that my scope probe capacitance (30pF) was loading the oscillation. However, the spectrum analyzer is sensitive enough though that if I simply place the probe close to the oscillator, the radiated signal from the oscillator is picked up.

The second problem was my bench, for I tried the antenna probe trick before without success. I had the solder joints on my board touching the ESD protection mat that was acting like a semi-conductive surface I think. Once I placed the board on spacers the issue resolved itself.

I now get about 2kHz of tuning over 9V with 2.8dB of amplitude change (this includes a slightly non-linear region of the varactor in the last 2-3 volts). Selecting an 850 Hz interval and applying a 100 Hz modulating square wave produces a beautifully symmetric FSK spectrum.

Cheers,
Chris

5013. Re: Battery PS for Shack

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-06 12:32:38 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <MPydndjUH9gCavDeRVn-gQ@bright.net>
Source record: 16446

Hi Frank,

OK, I see. I made an assumption on my part that you meant only one or
the other (solar or wind) was being used. So, what you are saying is
that one charge controller is being used with two sources attached to
it? If so, I would agree...

Scott
N0EDV

Highland Ham wrote:
> The comment below is valid if there are only solar panels involved.
> However ,when these are used in combination with a wind generator a current
> dump is required.
> My battery operated station has its batteries charged by this combination of
> sources.
> The home brew charger comprises a zener referenced comparator (741 opamp)
> driving a number of power transistors ,with the rest of the load being a
> number of car head light bulbs.
> When the batteries are fully charged ,all current generated is dumped .its
> resulting heat making a minor contribution to shack heating.
>
> Frank GM0CSZ / KN6WH
>
> ==========================
>
>
>>It's not necessary to provide a "dump" for a charge controller when a
>>solar panel is used for charging (at least the ones we use at work don't
>>require a dump). It appears the charge controller shorts the "array"
>>connections and the panels circulate their "short circuit current" around
>>the array loop.
>>
>>Scott
>>N0EDV
>>
>>
>>
>>>The only two times I've had to use some kind of "charge controller"
>>>were when the sourse was a:
>>> * wind generator - when the wind blew, it created whatever voltage
>>> was necessary to force about 15 amps into whatever was connected!
>>> (I used a zener and a few transistors -- two of them big! -- to
>>> "dump" excess current into two 100-watt 1-ohm resistors.
>>> * solar panel - except that my panel only produced about 2 amps in

>>> bright sunlight, the sun shown much more often than the wind blew,
>>> so this was basically the same problem: dump excess current.
>>>
>>>Incidentally, for not-too-big DC power supplies, I've not found it
>>>particularly necessary for them to be very "pure" DC; a 60-amp-hour
>>>car battery acts like a pretty-big filter capacitor!
>>>
>>>--Myron, W0PBV.
>
>
>

5014. 100W PA ITT MACKAY SSB6100

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-06 14:01:10 UTC
From: Mario Bros <rocco.calbe@tin.it>
Message-ID: <436e0ca0$0$6008$4fafbaef@reader4.news.tin.it>
Source record: 16447

Hello OM,
I am trying the schematics of the 100W final amplifier of the ITT MACKAY
Marine RadioThelephone SSB6100.
You it is possible to help me in some way?
I say to you infinite thanks.

73's de IK6GQC Rocco

5015. Re: Battery quality/life/efficiency/MostBangForTheBuck/whatever

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-06 14:10:23 UTC
From: nothermark <trash@gnomex.cotse.net>
Message-ID: <a63sm11169jhd44ncob2jgieh5a3adromj@4ax.com>
Source record: 16298

On Fri, 04 Nov 2005 05:11:01 GMT, "Asimov"
<Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote:

>"mcalhoun@ksu.edu" bravely wrote to "All" (03 Nov 05 13:46:08)
> --- on the heady topic of "Battery quality/life/efficiency/MostBangForTheBuck/whatever"
>
> mc> From: mcalhoun@ksu.edu
> mc> Xref: core-easynews rec.radio.amateur.homebrew:88699
>
> mc> Has anyone investigated the
> mc> quality/life/efficiency/MostBangForTheBuck/ whatever of ordinary AA (or
> mc> other) cells? I recently saw the following in a local store:
>
> mc> (I determined COST as the price for the most-economical
> mc> blister-pack divided by the number of cells in that pack.)
>
> mc> $ COST
> mc> EACH MANUFACTURER BRAND NAME OTHER CLAIM
> mc> ------ ------------ ---------- ----------------------------
> mc> 0.4435 Duracell CopperTop
> mc> 0.4435 Energizer Max
> mc> 0.81 Energizer Titanium
> mc> 0.2875 Rayovac Alkaline Same Performance, Better Price
> mc> 0.235 Rayovac Heavy Duty
> mc> 0.36 (StoreBrand) Ever Alive
>
> mc> 2.105 Energizer Lithium
> mc> 2.4575 Energizer Rechargable
> mc> 2.2425 Rayovac Rechargable
> mc> --
> mc> --Myron A. Calhoun.
>
>
>Have a look at AAA's for a chuckle. If we compare them by mass, one
>gets 4 times less in AAA's (2 cells) than in AA's (4 cells) for the
>*same* price. The battery makers must be giggling all the way to the
>bank over this one. Howver, my remote control doesn't care if it is a
>fine vintage Union Carbide or a China special. That will have an
>effect eventually, especially in lost jobs.
>
> A*s*i*m*o*v
>
>... I came, I saw, I got sidetracked, I forgot why I was here.

From a manufacturer's point of view AA and AAA probably cost about the same. Small long tubes are harder to draw and fill without rejects. What really annoys me is the way designers are pushing toward AAA in LED flashlights and small portable radios to keep the weight/size down. I would much rather have AA.

5016. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-06 14:55:54 UTC
From: Bill Sohl <billsohl@mindspring.com>
Message-ID: <_Pobf.4907$2y.3846@newsread2.news.atl.earthlink.net>
Source record: 16299
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

"Spike" <Aero.Spike@S&T.invalid> wrote in message
news:51lnm1pddpiph0ei9081g8ouhajt17721u@4ax.com...
>
> Polymouth wrote:
>
>>>Radio Hams are in a unique privileged position in that
>>>they can construct and operate their own equipment! No-one
>>>else has this privilege.
>
> [ ] In the UK, no repeat no licence of any kind is necessary to
> specify, design, construct, modify, repair, own, or (under some
> circumstances) test an Amateur transmitter.

That is essentially true also for the US. The amateur license is
ONLY needed for "on-the-air" operation of a transmitter.
In contrast, anyone can construct and operate a reciever.

> [ ] A pass in a current examination for a UK Amateur Licence qualifies
> the successful candidate for the issue of a UK Licence. Holders of the
> appropriate levels of licence are permitted to operate transmitting
> equipment that is not subject to a formal approvals procedure, and to
> carry out technical investigations. A qualification for a Licence, or
> the Licence itself, is not, repeat not, a qualification to specify,
> design, construct, modify, repair, or own transmitting equipment.

I think that can be generally said as true also for the US.

Cheers,
Bill K2UNK

5017. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-06 16:20:26 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <hqasm110vl3bk7cicjsbe87rb9k03g1af4@4ax.com>
Source record: 16300
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

Bill Sohl wrote:

>
>"Spike" <Aero.Spike@S&T.invalid> wrote
>
>> Polymouth wrote:
>>
>>>>Radio Hams are in a unique privileged position in that
>>>>they can construct and operate their own equipment! No-one
>>>>else has this privilege.
>>
>> [ ] In the UK, no repeat no licence of any kind is necessary to
>> specify, design, construct, modify, repair, own, or (under some
>> circumstances) test an Amateur transmitter.
>
>That is essentially true also for the US. The amateur license is
>ONLY needed for "on-the-air" operation of a transmitter.
>In contrast, anyone can construct and operate a reciever.

Yes, it's a reasonably common theme that seems to have been totally
missed by this chap. It makes one wonder if he has a full grasp of his
Licence conditions

>> [ ] A pass in a current examination for a UK Amateur Licence qualifies
>> the successful candidate for the issue of a UK Licence. Holders of the
>> appropriate levels of licence are permitted to operate transmitting
>> equipment that is not subject to a formal approvals procedure, and to
>> carry out technical investigations. A qualification for a Licence, or
>> the Licence itself, is not, repeat not, a qualification to specify,
>> design, construct, modify, repair, or own transmitting equipment.
>
>I think that can be generally said as true also for the US.
>
>Cheers,
>Bill K2UNK

The other thing to be aware of is that this chap, in this sock-puppet
and his innumerable previous ones, has alternately decried e.g contest
operating as being the act of a "CBer", and then swung completely
about and used it as a justification for the description of a 'radio
ham'. I've lost count now of how many times this circle has been gone
round. It must make anyone who is keen on becoming a 'radio ham' very
confused, as the fundamental basis on which it is built changes so
often!

from
Aero Spike

5018. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-06 17:18:51 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dkldtm$72s$1@news7.svr.pol.co.uk>
Source record: 16301
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

"Spike" <Aero.Spike@S&T.invalid> wrote in message
news:hqasm110vl3bk7cicjsbe87rb9k03g1af4@4ax.com...
>
> Bill Sohl wrote:
>
> >
> >"Spike" <Aero.Spike@S&T.invalid> wrote
> >
> >> Polymouth wrote:
> >>
> >>>>Radio Hams are in a unique privileged position in that
> >>>>they can construct and operate their own equipment! No-one
> >>>>else has this privilege.
> >>
> >> [ ] In the UK, no repeat no licence of any kind is necessary to
> >> specify, design, construct, modify, repair, own, or (under some
> >> circumstances) test an Amateur transmitter.
> >
> >That is essentially true also for the US. The amateur license is
> >ONLY needed for "on-the-air" operation of a transmitter.
> >In contrast, anyone can construct and operate a reciever.
>
> Yes, it's a reasonably common theme that seems to have been totally
> missed by this chap. It makes one wonder if he has a full grasp of his
> Licence conditions
>
> >> [ ] A pass in a current examination for a UK Amateur Licence qualifies
> >> the successful candidate for the issue of a UK Licence. Holders of the
> >> appropriate levels of licence are permitted to operate transmitting
> >> equipment that is not subject to a formal approvals procedure, and to
> >> carry out technical investigations. A qualification for a Licence, or
> >> the Licence itself, is not, repeat not, a qualification to specify,
> >> design, construct, modify, repair, or own transmitting equipment.
> >
> >I think that can be generally said as true also for the US.
> >
> >Cheers,
> >Bill K2UNK
>
> The other thing to be aware of is that this chap, in this sock-puppet
> and his innumerable previous ones, has alternately decried e.g contest
> operating as being the act of a "CBer", and then swung completely
> about and used it as a justification for the description of a 'radio

> ham'. I've lost count now of how many times this circle has been gone
> round. It must make anyone who is keen on becoming a 'radio ham' very
> confused, as the fundamental basis on which it is built changes so
> often!
>
> from
> Aero Spike

I wonder where the law stands as far as CB radio's go. Are CB's allowed to be repaired by the average CB'er who has the knowledge or are they only repairable by a qualified technician of some kind. I ask along the lines of the UK but would find the answer for America just as interesting.

Regards,
Graham

5019. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-06 17:37:01 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <ckfsm1li70gu4tej6ov6k1tfo2mcd8qcu4@4ax.com>
Source record: 16302
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

The Magnum wrote:

>I wonder where the law stands as far as CB radio's go. Are CB's allowed to
>be repaired by the average CB'er who has the knowledge or are they only
>repairable by a qualified technician of some kind. I ask along the lines of
>the UK but would find the answer for America just as interesting.

I can't answer your question, but perhaps this is one of those cases
where it is better not to ask, but to carry on as before. Having a
piece of gear repaired by a certified authority will probably cost
more than buying a new one....

from
Aero Spike

5020. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-06 17:44:29 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dklfdp$jk2$1@news6.svr.pol.co.uk>
Source record: 16303
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

"Spike" <Aero.Spike@S&T.invalid> wrote in message
news:ckfsm1li70gu4tej6ov6k1tfo2mcd8qcu4@4ax.com...
>
> The Magnum wrote:
>
> >I wonder where the law stands as far as CB radio's go. Are CB's allowed
to
> >be repaired by the average CB'er who has the knowledge or are they only
> >repairable by a qualified technician of some kind. I ask along the lines
of
> >the UK but would find the answer for America just as interesting.
>
> I can't answer your question, but perhaps this is one of those cases
> where it is better not to ask, but to carry on as before. Having a
> piece of gear repaired by a certified authority will probably cost
> more than buying a new one....
>
> from
> Aero Spike

Thanks for that, quick answer too :o)
I would agree about the cost from a Certified Authority as most CB's in the
UK are only worth between $26 - $52 and the repair bill from a qualified
"tech" would be more than this... and would they indeed bother as they could
make far more money with the same effort repairing other items more
valuable...
I was just curious as to the legallity of repairing a CB. I wasnt admitting
to anything.. honest .... ;o)
Regards,
Graham

5021. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-06 18:26:14 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <khism191mjcd9jtlhrk8jt2gsp7r125c3k@4ax.com>
Source record: 16304
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

The Magnum wrote:

>I was just curious as to the legallity of repairing a CB. I wasnt admitting
>to anything.. honest .... ;o)

LOL!

Unfortunately, Amateur Radio has seen increasing restrictions placed
on it due to people seeking 'clarification' from the authorities,
rather than enjoying freedom given by the sometimes loosely-worded
regulations....

from
Aero Spike

5022. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-06 20:18:18 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dkloe7$f39$1@news7.svr.pol.co.uk>
Source record: 16305
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

"Spike" <Aero.Spike@S&T.invalid> wrote in message
news:khism191mjcd9jtlhrk8jt2gsp7r125c3k@4ax.com...
>
> The Magnum wrote:
>
> >I was just curious as to the legallity of repairing a CB. I wasnt
admitting
> >to anything.. honest .... ;o)
>
> LOL!
>
> Unfortunately, Amateur Radio has seen increasing restrictions placed
> on it due to people seeking 'clarification' from the authorities,
> rather than enjoying freedom given by the sometimes loosely-worded
> regulations....
>
> from
> Aero Spike

Sounds good to me, now wheres my hammer and screwdriver.. im sure theres an
extra half watt in there somewhere ;o)

5023. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-06 20:45:58 UTC
From: PowerHouse Communications <PowerHouse@PrivateBox.Net>
Message-ID: <CXtbf.9915$7s1.1097@fe04.lga>
Source record: 16306
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

"The Magnum" <magnum@NOSPAMmag2781.freeserve.co.uk> wrote in message
news:dkldtm$72s$1@news7.svr.pol.co.uk...
> I wonder where the law stands as far as CB radio's go. Are CB's allowed to
> be repaired by the average CB'er who has the knowledge or are they only
> repairable by a qualified technician of some kind. I ask along the lines
of
> the UK but would find the answer for America just as interesting.
>

I'm not sure why this thread is even being cross-posted into a CB group, but
to answer your question, in the US, the radio must be serviced by a
qualified, licensed individual. That is the "legal" way of doing it anyway.
It doesn't happen very often, but that is another story for another time...

5024. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-06 22:25:13 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <dpvbf.5770$m81.1857@newsread1.news.atl.earthlink.net>
Source record: 16307
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

> I'm not sure why this thread is even being cross-posted into a CB group,
but
> to answer your question, in the US, the radio must be serviced by a
> qualified, licensed individual. That is the "legal" way of doing it
anyway.
> It doesn't happen very often, but that is another story for another
time...
>
>

Get a new rule book like one that is newer than say about 10 or so years.
The CB radios in the US has not required a license to repair them in many
years. The GROL is the replacement for the 1st and 2 nd class licenses that
used to be required to repair many transmitters. For about 95 % of the
transmitters in the US it is now worthless and not needed. Some companies
may require it as they think they are getting someone that may know
something. Now it is only needed for :

****
General Radiotelephone Operator License (GROL) is required to adjust
maintain, or internally repair FCC licensed radiotelephone transmitters in
the aviation, maritime and international fixed public radio services. It
conveys all of the operating authority of the MROP.

It is required to operate the following:

any maritime land radio station or compulsorily equipped ship radiotelephone
station operating with more than 1500 watts of peak envelope power;

voluntarily equipped ship and aeronautical (including aircraft) stations
with more than 1000 watts of peak envelope power

****

Go here for more info on the licenses that are now issued.

http://www.narte.org/h/fccabout.asp

5025. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-06 22:46:56 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dkm150$qa5$1@newsg1.svr.pol.co.uk>
Source record: 16308
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

"PowerHouse Communications" <PowerHouse@PrivateBox.Net> wrote in message
news:CXtbf.9915$7s1.1097@fe04.lga...
>
> "The Magnum" <magnum@NOSPAMmag2781.freeserve.co.uk> wrote in message
> news:dkldtm$72s$1@news7.svr.pol.co.uk...
> > I wonder where the law stands as far as CB radio's go. Are CB's allowed
to
> > be repaired by the average CB'er who has the knowledge or are they only
> > repairable by a qualified technician of some kind. I ask along the lines
> of
> > the UK but would find the answer for America just as interesting.
> >
>
> I'm not sure why this thread is even being cross-posted into a CB group,
but

Because its a question about CB's ??????????

> to answer your question, in the US, the radio must be serviced by a
> qualified, licensed individual. That is the "legal" way of doing it
anyway.
> It doesn't happen very often, but that is another story for another
time...

Thanks for that. So the theory i get so far is anyone can build an Amateur
radio but they cant "repair" a CB radio.... lol.. it is a crazy world

5026. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-07 00:37:03 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <Pkxbf.5807$m81.1059@newsread1.news.atl.earthlink.net>
Source record: 16309
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

> Thanks for that. So the theory i get so far is anyone can build an Amateur
> radio but they cant "repair" a CB radio.... lol.. it is a crazy world
>
>

See comments above about license not needed any more for CB repair in the US.

It used to be the Amateur tests were about on par with the comercial class licenses. The main differance was just the regulatory rules and not the electrical part. That was about 1972 when I passed the 1 st class license. The way they are now anyone with a good memory can pass the tests. My wife passed the Technichan class about 1987 or 88 just by memorizing the Q&A pool. She doesn't know or care about the technical part of radio.

5027. odd variable capacitor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-07 13:10:15 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <XmIbf.13980$Zv5.4652@newssvr25.news.prodigy.net>
Source record: 16310
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,sci.electronics.components

Please take a look at
alt.binaries.schematics.electronic

tnx

--

73
Hank WD5JFR

5028. FA: BUNNELL TELEGR. SOUNDER-WORKING

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-07 14:25:33 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <xtJbf.30905$qk4.898@bgtnsc05-news.ops.worldnet.att.net>
Source record: 16311
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Antique J H Bunnell telegrapher's sounder in working condition + other stuff too. See at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking heytubeguy

5029. Re: Swap. NEW ARRL ANTENNA BOOK 20ed.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-07 15:03:25 UTC
From: hhc314@yahoo.com
Message-ID: <1131375805.899177.263780@g14g2000cwa.googlegroups.com>
Source record: 16312
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Mike, are you buying or selling?
It's not clear from your post.

If you are selling, what are the prices you're asking?

Harry C.

5030. Re: Battery quality/life/efficiency/MostBangForTheBuck/whatever

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-07 15:39:26 UTC
From: hhc314@yahoo.com
Message-ID: <1131377966.562233.245430@f14g2000cwb.googlegroups.com>
Source record: 16313

I generally stock up on Energizer batteries by buying them in the bulk pack from Home Depot.

For AA Energizer Max Alkaline cells, a package of 36 is $9.75 or $0.27 each. AAA, C, D and 9-volt batteries are similarly discounted. Home Depot seems like an odd place to purchase batteries, still they have the best prices by a wide margin.

I've personally had bad experiences with Duracell Copper Tops (very erratic cell life when used in series), so I switched to Energizer and have never seen that problem again.

let me clarify what I mean by a bad experience. My hand-held Lorain receiver uses (IIRC) 9 AA cells connected in series. Using Duracells, I've twice had one of the 9 batteries prematurely fail, with the remaining 8 only partially discharged. Consequently you replace all 9 cells. The first time this happened I was just sitting on my boat playing with the Lorain. The second time it happened was in the middle of a line squall while 4-miles or so offshore of Cape Ann in Massachusetts. When I asked the Lorain to take me home, it faltered and quit due to the premature failure of one of the Duracell batteries at a time when I was nearly knee deep in water in the boat's cockpit (it's a 23' Hutchins Compac cruising sailboat). As a result, I was damn lucky to reach the shelter of the Annisquam River while believing I was entering the inlet to Plum Island Sound at Ipswich under nearly zero visibility conditions.

It surfices to say that I will never again purchase a Duracell battery. They are not reliable. Energizer seems to be.

Just my experience, which I thought that I should share with others.

Harry C.

5031. Re: Battery quality/life/efficiency/MostBangForTheBuck/whatever

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-07 17:35:33 UTC
From: dougmc@frenzy.com
Message-ID: <FfMbf.74495$Bf7.48948@tornado.texas.rr.com>
Source record: 16314

In article <11ml9kr9dfi6dce@corp.supernews.com>,
Roy Lewallen <w7el@eznec.com> wrote:

| Only a few rules of thumb can be put forth:
|
| 1. For heavy drain applications such as photoflash or an HT, alkalines
| last many times longer than "heavy duty" carbon-zinc types, so the
| latter is seldom an economical choice for those applications. Likewise
| for applications with moderate but constant drain such as a GPS
| receiver. Carbon-zinc is probably more economical (unless you use
| alkalines from Costco or other discount store)

... well, if you're looking for the most bang-for-your-buck, you
SHOULD be getting the non name brand alkalines :)

Personally, I've not found carbon-zinc batteries to be more
economical, unless you're not actually using them.

| But I don't use carbon-zinc for anything.

Me neither.

| 3. Modern NiMH cells have about the same capacity as alkaline cells

In my experience, the alkaline cells have higher capacities, about
twice as high.

| more at very high currents -- and the capacity is quite constant
| over a wide range of discharge conditions.

And this is very true. The alkalines suffer greatly if you discharge
at a high rate, where the NiMH cells do just fine.

| A down side is the high self-discharge rate -- they're not a good
| choice for something like a flashlight that's used only
| occasionally.

Yup. NiCd cells are better, but still nowhere near as good as
alkaline or lithium cells with regard to self discharge rates.

--
Doug McLaren, dougmc@frenzy.com
`Ever heard of .cshrc? That's a city in Bosnia. Right?' -- Discussion in
comp.os.linux.misc on the intuitiveness of commands

5032. Re: Battery quality/life/efficiency/MostBangForTheBuck/whatever

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-07 19:23:38 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1131391418.216925.65650@f14g2000cwb.googlegroups.com>
Source record: 16315

Even with moderately high self-discharge rates, I'm finding NiMH AAs to be a good solution for most applications where I use AAs. I just cycle them through the recharger occasionally. I have enough extras, and recharging is so fast, that it's not a problem to me if I forget and let a set discharge to where I have to put in a new set. Noteable exceptions: very low drain devices like smoke detectors and remote control transmitters that will run for a year or more on alkalines. Digital cameras, particularly, show off the advantages of the NiMHs: alkalines just don't cut it in mine (unuseable after five or ten pictures, compared with dozens for one charge on NiMHs), though I've heard that the alkalines specially designed for digital cameras are at least useable.

There's a lot of misinformation about batteries of various kinds out there. I've found http://www.batteryuniversity.com/ to be an easy to understand source of generally very good information about a lot of different types of batteries. It mostly covers rechargables, but there's some info about alkalines in there.

A friend who uses alkalines in his insulin pump told me he was surprised to find that, in that particular application, he's seeing a significant difference between standard Duracell and Energizer alkaline AAs. "Your mileage may vary."

Cheers,
Tom

5033. Re: Curtis 8044 keyer chip

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-07 20:07:45 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <buWdncUizv-LKfLeRVn-oA@comcast.com>
Source record: 16316

"AG4QC" <Joel@cyberbest.com> wrote in message
news:Sjf7f.47$Gp3.237712@news.sisna.com...
> Thanks to everyone.. I called MFJ and they didn't have a replacement
> chip... This is for a 422 keyer I bought off E-Bay Of course, it was
> suppose to be working .. But it had a blown keyer chip.. It's on it's way
> back for a refund.. <shrug>
>
> Yeah, I used the K-10 chip in a QRP rig a while ago. They have a nice
> product and it's small.. Actually I have the battery version of the K-12,
> (using a watch battery) mounted in a mouse that I use for QRP.. Talk about
> cool and easy to do!...
>
> Joe AG4QC

Well MFJ did not tell you the whole story (typical of them BTW)

They do have the Curtis 8045ABM (28-pin chip) that can be adopted to the
product. Some older 8044 chips (14-pin) do appear from time to time.

gb

5034. Re: Curtis 8044 keyer chip

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-07 20:08:53 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <PfOdnSpNOtzEKfLenZ2dnUVZ_v6dnZ2d@comcast.com>
Source record: 16317

"WildBlue" <Joel@cyberbest.com> wrote in message
news:QoQ6f.45$XE2.313475@news.sisna.com...
>I have been looking high and low for a Curtis 8044 (16 pin) Keyer chip. I
>can't seem to find one anywhere..
>
> Anyone have any ideas?
>
> Joe
> AG4QC
MFJ / Curtis 8045ABM Key on a Chip Applications notes
http://www.mfjenterprises.com/man/pdf/CK-8045ABM.pdf

w9gb

5035. Re: Battery quality/life/efficiency/MostBangForTheBuck/whatever

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-07 20:33:09 UTC
From: clifto <clifto@clifto.com>
Message-ID: <69q443-r6d.ln1@remote.clifto.com>
Source record: 16319

K7ITM wrote:
> A friend who uses alkalines in his insulin pump told me he was
> surprised to find that, in that particular application, he's seeing a
> significant difference between standard Duracell and Energizer alkaline
> AAs. "Your mileage may vary."

I've always had horrible luck with Duracells. Every five years or so I go out and buy another set to remind myself of this, but the results are never different.

Harry G. mentions getting good prices on Energizers at Home Depot. Seems like the HD stores around here never ever have the good deals I read about from other people on the 'net; batteries there are about the same price as Walgreen's around here. People talk about borrowing free tools to replace cartridges in Moen faucets and then getting free replacements at HD; ours will sell us a plastic tool for $18 and then we get to decide which size cartridge is appropriate, at full retail price, of course. But the (local?) Menard's chain usually has Ray-O-Vac AA's at 30 for $9.99, and I get great life out of them, nearly as good as the Energizers for about half the price.

Roy Lewallen mentions Costco; they haven't had their particular brand (40 for $10) for literally years here, all they sell is Duracells now and they want 25% more than Menard's and the Ray-O-Vacs.

Doug McLaren mentioned his experience that alkalines have higher capacities than rechargeables, but I'm finding that my new Eveready 2500 mAH NiMH batteries compete quite well with a fresh set of Energizers. KenRockwell.com lists alkalines at 2700 to 3135 mAH, sounds reasonable.

--
If John McCain gets the 2008 Republican Presidential nomination,
my vote for President will be a write-in for Jiang Zemin.

5036. Re: Battery quality/life/efficiency/MostBangForTheBuck/whatever

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-07 20:35:32 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <_TObf.17590$i%.12187@fed1read07>
Source record: 16318

Of possible interest
The Great Battery Shootout! by Dave Etchells

URL:
http://www.imaging-resource.com/ACCS/BATTS/BATTS.HTM

--
CL -- I doubt, therefore I might be !

"K7ITM" <k7itm@msn.com> wrote in message
news:1131391418.216925.65650@f14g2000cwb.googlegroups.com...
> Even with moderately high self-discharge rates, I'm finding NiMH AAs to
> be a good solution for most applications where I use AAs. I just cycle
> them through the recharger occasionally. I have enough extras, and
> recharging is so fast, that it's not a problem to me if I forget and
> let a set discharge to where I have to put in a new set. Noteable
> exceptions: very low drain devices like smoke detectors and remote
> control transmitters that will run for a year or more on alkalines.
> Digital cameras, particularly, show off the advantages of the NiMHs:
> alkalines just don't cut it in mine (unuseable after five or ten
> pictures, compared with dozens for one charge on NiMHs), though I've
> heard that the alkalines specially designed for digital cameras are at
> least useable.
>
> There's a lot of misinformation about batteries of various kinds out
> there. I've found http://www.batteryuniversity.com/ to be an easy to
> understand source of generally very good information about a lot of
> different types of batteries. It mostly covers rechargables, but
> there's some info about alkalines in there.
>
> A friend who uses alkalines in his insulin pump told me he was
> surprised to find that, in that particular application, he's seeing a
> significant difference between standard Duracell and Energizer alkaline
> AAs. "Your mileage may vary."
>
> Cheers,
> Tom
>

5037. Re: common phase DDS?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-07 20:47:43 UTC
From: clifto <clifto@clifto.com>
Message-ID: <g4r443-k9d.ln1@remote.clifto.com>
Source record: 16320

eternalsquire@comcast.net wrote:
> Then how come wall clocks based on WWVB work so well anywhere in CONUS?

To my knowledge they don't use the WWVB carrier as a frequency reference,
like this DDS scheme appears to do.

--
If John McCain gets the 2008 Republican Presidential nomination,
my vote for President will be a write-in for Jiang Zemin.

5038. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-07 20:58:47 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dkof61qng1@news6.svr.pol.co.uk>
Source record: 16321
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

"Ralph Mowery" <rmowery28146@earthlink.net> wrote in message
news:Pkxbf.5807$m81.1059@newsread1.news.atl.earthlink.net...
> > Thanks for that. So the theory i get so far is anyone can build an
Amateur
> > radio but they cant "repair" a CB radio.... lol.. it is a crazy world
> >
> >
>
> See comments above about license not needed any more for CB repair in the
> US.
>
> It used to be the Amateur tests were about on par with the comercial
class
> licenses. The main differance was just the regulatory rules and not the
> electrical part. That was about 1972 when I passed the 1 st class
license.
> The way they are now anyone with a good memory can pass the tests. My
wife
> passed the Technichan class about 1987 or 88 just by memorizing the Q&A
> pool. She doesn't know or care about the technical part of radio.

I would guess a fair amount dont really care about the technical side or would want to build their own radio and linear. You would have to be pretty dedicated for that. I would also guess at most Amateurs are happy just talking legally with a licence and a stock bought radio and antenna. Not that theres anything wrong with that, it just depends on how serious you take the hobby. Like the M3 foundation licence. It suits a lot of people who are.. disillusioned with CB and want to go Amateur but not really wishing to get so involved with the whole technical side of things. There are some good M3 people out there whatever the old school say, but i agree they will never be on a par with a full licence holder but is that such a terrible thing.

5039. High-insulation 1:1 wideband transformer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-07 22:00:56 UTC
From: SpamHog <n1jpr@hotmail.com>
Message-ID: <1131400856.737888.155950@g49g2000cwa.googlegroups.com>
Source record: 16322

I have a T2FD antenna for 5-20 MHz next to a good ground point,
and I'd like to make the lead-in coax DC-insulated
to lessen the risk from a lightning strike.

I would line to put in a wideband RF transformer with
1) primary connected to the antenna coax and the ground
2) secondary connected to the lead-in coax, w/o any DC connection at
all.

This is a low power / RX installation, and a bit of loss should not be
a problem. There are already a few neon lamps in the T2FD balun, and
I'll add a spark gap at the primary.

I am very tempted to use either a toroid or a couple of ferrite rods
with 1:1 windings made of... spark plug wire?! The stuff takes 30kV
pulses without even blinking, If I use non-resistive type, an
appropriate container, and keep it all dry, breakdown voltage between
incoming and outgoing coax could exceed 50kV. A low-ohm, low-Z
grounding could help ensure that it's not easily exceeded.

Hopefully, very little pulse energy would come my way.

Any thoughts?
Any pointers to plans for high-insulation RF transformers?

5040. Sentry projects in Elementary Electronics Magazine.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-07 22:08:44 UTC
From: novatech@eskimo.com
Message-ID: <dkoj9cden1@eskinews.eskimo.com>
Source record: 16323
Cross-posted to: sci.electronics.basics,rec.radio.amateur.homebrew

While cleaning out this weekend, I found a small collection of
printed circuit boards that I got from Elementary Electronics 1967-68.
They're not really worth anything, but it would be fun to know what
they are. I can't find them using Google. The dates are scratched on
the boards and the names are part of the etch.

1: Sentry Multivibrator, May 1968
2: Sentry Lo-Frequency Oscillator, March 1968
3: Sentry Hi-Lo Bander, July 1968
4: Looks like a wireless mic, no name (has 9V, ANT, SW and MIC on
the etch), Sentry, Nov 1967

These were distributed via blister pack (IRC).

Just curious.

Steve.
--
Steven D. Swift, novatech@eskimo.com, http://www.novatech-instr.com
NOVATECH INSTRUMENTS, INC. P.O. Box 55997
206.301.8986, fax 206.363.4367 Seattle, Washington 98155 USA

5041. Re: High-insulation 1:1 wideband transformer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-07 23:20:21 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <I-idndjOt748ffLeRVn-hw@adelphia.com>
Source record: 16324

SpamHog wrote:
> I have a T2FD antenna for 5-20 MHz next to a good ground point,
> and I'd like to make the lead-in coax DC-insulated
> to lessen the risk from a lightning strike.
>
> I would line to put in a wideband RF transformer with
> 1) primary connected to the antenna coax and the ground
> 2) secondary connected to the lead-in coax, w/o any DC connection at
> all.
>
> This is a low power / RX installation, and a bit of loss should not be
> a problem. There are already a few neon lamps in the T2FD balun, and
> I'll add a spark gap at the primary.
>
> I am very tempted to use either a toroid or a couple of ferrite rods

A good RF ferrite toroid would out perform the rods, especially at the
low frequency end.

Perhaps something like the FT-240-43 on this page:
http://www.surplussales.com/FerToro/FerToro-1.html

> with 1:1 windings made of... spark plug wire?! The stuff takes 30kV
> pulses without even blinking, If I use non-resistive type, an
> appropriate container, and keep it all dry, breakdown voltage between
> incoming and outgoing coax could exceed 50kV. A low-ohm, low-Z
> grounding could help ensure that it's not easily exceeded.
>
> Hopefully, very little pulse energy would come my way.
>
> Any thoughts?
> Any pointers to plans for high-insulation RF transformers?
>
The silicone wire made for the high voltage connections to cathode ray
tubes is smaller per voltage rating than ignition wire, I think.
It is generally more flexible, also.

Something like:
http://www.surplussales.com/Wire-Cable/HVWire-1.html

If you have a fair ground at the antenna, I doubt you need more than
5kV rated wire, since the arc would have to pierce two wires, and the
instantaneous breakdown voltage is quite a bit more than the rating of
the wire.

5042. Re: Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-07 23:33:10 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dkoo7msve1@engnntp2.cig.mot.com>
Source record: 16327

<yzordderrex@verizon.net> wrote in message
news:1131146762.783222.263940@g44g2000cwa.googlegroups.com...
> I bought a Weller gun recently to unsolder some can capacitors from a
> steel chassis. I was totally dissapointed ...

Well of course. Even with my 40 year ole Weller it would be a bad idea.
Guns are for small work only-- always was, always will be.

Steve N.

5043. Re: Problem with soldering gun

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-07 23:36:13 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dkoodd$t2b$1@engnntp2.cig.mot.com>
Source record: 16326

This is important. There are TWO things to consider. Wattage and heat capacity. Small tips have low heat capacity. A 100W old fashioned "big birtha", the kind with the 1/2 inch diameter, 2-1/2 inch long tip will out perform ANY "gun" when trying to do large work. You need that stored up heat to heat a large thing.

Steve N.

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message news:S4-dnTHigJRKmfHeRVnytA@pipex.net...
> Suggest you buy a butane (cigarette lighter gas) soldering iron with
> adjustable gas flow to change temperature.
> These irons come with different kathalytic burner bits and have a capacity
> of well over 100 Watts equivalent.
> Electric soldering guns are prone to failure and don't sink much heat into
> the object to be soldered.
>
> Frank GM0CSZ / KN6WH
> ==
> >I bought a Weller gun recently to unsolder some can capacitors from a
> > steel chassis. I was totally dissapointed

5044. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-07 23:49:16 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <0KRbf.6157$m81.2342@newsread1.news.atl.earthlink.net>
Source record: 16325
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

>
> I would guess a fair amount dont really care about the technical side or
> would want to build their own radio and linear. You would have to be
pretty
> dedicated for that. I would also guess at most Amateurs are happy just
> talking legally with a licence and a stock bought radio and antenna. Not
> that theres anything wrong with that, it just depends on how serious you
> take the hobby. Like the M3 foundation licence. It suits a lot of people
who
> are.. disillusioned with CB and want to go Amateur but not really wishing
to
> get so involved with the whole technical side of things. There are some
good
> M3 people out there whatever the old school say, but i agree they will
never
> be on a par with a full licence holder but is that such a terrible thing.
>

I don't have any problem with the ones that just want to talk. There are many good hams in public service providing communications for emergencies. I know one ham that got his license many years ago so he could fly his radio controled airplane and use 6 meters where there were few others using that frequency.

I do wish that the test could be hands on for a few simple things such as installing a coax connector and and using a simple SWR meter. Also it should be required to have a ARRL handbook or equivilent in the shack. Would not even have to be a new one, but one 10 years old would be ok. Not that many would really read it but it could answer some simple questions.

5045. Re: common phase DDS?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-08 00:11:29 UTC
From: novatech@eskimo.com
Message-ID: <dkoqfheul1@eskinews.eskimo.com>
Source record: 16328

clifto <clifto@clifto.com> writes:

>eternalsquire@comcast.net wrote:
>> Then how come wall clocks based on WWVB work so well anywhere in CONUS?

>To my knowledge they don't use the WWVB carrier as a frequency reference,
>like this DDS scheme appears to do.

Tracking the carrier would require the clock receiver to be on all the time. All the clocks I have, including my DCF77 unit, read the time code and set the clock. If the signal is weak, they keep trying for 5 minutes or so. The most common is every 4 hours. They then free run from an on-board crystal between sets.

With the upgrade to WWVB, there is at least one period in the whole US were the code can be recovered. This is a lot easier than recovering the carrier. Clocks only display seconds, and sometimes only minutes, so gettting the code right is pretty easy. When you first set up a clock or change the battery, it might take a diurnal period to get the time set.

Over the years I have noticed misreads-- 1 minute off, or 1 hour off-- which are corrected at next read period.

Steve.

--
Steven D. Swift, novatech@eskimo.com, http://www.novatech-instr.com
NOVATECH INSTRUMENTS, INC. P.O. Box 55997
206.301.8986, fax 206.363.4367 Seattle, Washington 98155 USA

5046. Re: Battery quality/life/efficiency/MostBangForTheBuck/whatever

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-08 00:23:05 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11mvrvaqm6l117a@corp.supernews.com>
Source record: 16329

clifto wrote:
> . . .
> Doug McLaren mentioned his experience that alkalines have higher
> capacities than rechargeables, but I'm finding that my new Eveready
> 2500 mAH NiMH batteries compete quite well with a fresh set of Energizers.
> KenRockwell.com lists alkalines at 2700 to 3135 mAH, sounds reasonable.

The capacity of alkaline cells is much more dependent on discharge rate than that of NiMH cells. Note the capacities of alkalines shown at the bottom of the list at http://www.imaging-resource.com/ACCS/BATTS/BATTS.HTM. With the 5 ohm load used for those tests, the alkalines have less than 800 mAh capacity. The capacities you quote would be obtainable only at much lower current drains. But I didn't look carefully at the page to see if he used a different cutoff voltage for the alkalines. A NiMH cell is just about fully discharged when its voltage reaches 1.0 volt, so that's a common cutoff voltage for testing and using NiMH cells. But an alkaline cell still has considerable energy remaining at that voltage -- a device has to function properly down to 0.9 volt, or at high drain more like 0.8 volt per cell to extract all the energy from it.

This is yet one more confounding factor in trying to compare cells of different chemistries. Performance depends heavily on the particular application and conditions of use, so a single answer to which is best, or even which has the greater capacity, simply isn't possible.

You don't need to take my word for any of this -- data sheets for common cells are readily available on the web, and it takes only a few minutes and a bit of poking on a calculator to discover this from the curves.

Roy Lewallen, W7EL

5047. Re: Battery quality/life/efficiency/MostBangForTheBuck/whatever

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-08 01:10:21 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <436FFB49.8000201@nettally.com>
Source record: 16330

Harry;
9 cells is really an odd (no pun intended) number of cells. Are you sure that all were from the same date code. For example an 8 pack is a common purchase, so if you take 8 from one pack and the 9th from another, you might have an older cell in the bunch. Secondly, I have seen several products that mechanically chafe the battery wrapper. If this happens a cell will short out and overheat.

My family and I were in NYC the week of the big blackout , we left just before it happened!. As it happens. I bought some copper top batteries from a street vendor 12 for a buck. I got to the hotel and my son noticed they were chinese imitations called "powercells". They weighed in at about a third of a duracell and lasted about 20%!! I bet there were some unhappy campers in Manhattan when those batteries gave out!

Joe

hhc314@yahoo.com wrote:

>snip
>
>

>let me clarify what I mean by a bad experience. My hand-held Lorain
>receiver uses (IIRC) 9 AA cells connected in series. Using Duracells,
>I've twice had one of the 9 batteries prematurely fail, with the
>remaining 8 only partially discharged. Consequently you replace all 9
>cells.
>
>
snip

>Harry C.
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"

"Follow The Money"

5048. Re: odd variable capacitor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-08 03:37:04 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <A3Vbf.14387$Zv5.4404@newssvr25.news.prodigy.net>
Source record: 16331
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,sci.electronics.components

After checking out the patent no. 1626391, I misread the number previously.
It was patent in 1927 so I guess it was for TRF receivers, giving them a
wider tuning range and perhaps a neater dial cal. Does anyone recall who
might have used them?
tnx

--

73
Hank WD5JFR
"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
news:XmIbf.13980$Zv5.4652@newssvr25.news.prodigy.net...
> Please take a look at
> alt.binaries.schematics.electronic
>
> tnx
>
>
> --
>
> 73
> Hank WD5JFR
>
>
>
>

5049. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-08 08:11:18 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <56n0n1l3sndpim3jvoinp83jdt4g7n333g@4ax.com>
Source record: 16332
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

Ralph Mowery wrote:

>Also it
>should be required to have a ARRL handbook or equivilent in the shack.
>Would not even have to be a new one, but one 10 years old would be ok. Not
>that many would really read it but it could answer some simple questions.

My Handbook (not ARRL) is much older, but I wasn't aware of any change
in the physics in the interim. Why choose ten years? The Admiralty
handbook is still relevant - and can answer questions - even if the
units have changed. You appear to be a newcomer.

from
Aero Spike

5050. Re: High-insulation 1:1 wideband transformer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-08 08:58:39 UTC
From: SpamHog <n1jpr@hotmail.com>
Message-ID: <1131440319.510182.69200@g44g2000cwa.googlegroups.com>
Source record: 16333

Thank you John! I hadn't thought about CRT wire!
It surely is more flexible, which is necessary for threading
several turns through a toroid.

I happen to have the right toroid on hand, I'll get the wire.

Hmmm... I could also look at the curbs for discarded TV sets,
but I don't like the risk of getting zapped by residual charges.

5051. Re: High-insulation 1:1 wideband transformer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-08 09:24:42 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <fon0n1lvndqg91mrj9r5ictgmv1oijov3i@4ax.com>
Source record: 16334

On 7 Nov 2005 14:00:56 -0800, "SpamHog" <n1jpr@hotmail.com> wrote:

>I am very tempted to use either a toroid or a couple of ferrite rods
>with 1:1 windings made of... spark plug wire?! The stuff takes 30kV
>pulses without even blinking, If I use non-resistive type, an
>appropriate container, and keep it all dry, breakdown voltage between
>incoming and outgoing coax could exceed 50kV. A low-ohm, low-Z
>grounding could help ensure that it's not easily exceeded.

The real question is the grounding impedance.

You might even be able to measure the grounding resistance at DC or 50/60 Hz, but measuring the grounding impedance at a few hundred kHz might be a bit problematic. Assuming the direct lightning hit is about 10-30 kA, a grounding impedance of only 1 ohm would create a potential difference of 10-30 kV.

I do not know your mains wiring practises, but assuming that a separate mains grounding electrode is used for each house, the grounding impedance should be measured between the antenna ground and house ground. If not, the grounding impedance should be measured against some distant point.

Assuming that the house has a separate grounding electrode and your antenna will get a hit, which is conducted to ground. Due to the finite ground resistance, the house grounding electrode will move to an elevated potential (several kV) compared to the surrounding (mains neutral, telephone and CATV).

Thus, I think that the 50 kV isolation between your antenna and receiver is more than enough and I would guess that more damage would be caused due to the mains neutral, telephone and CATV connections to your equipment.

Paul OH3LWR

5052. Naval connection? You qualify for RNARS membership!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-08 12:02:10 UTC
From: Mike <mike@my1biz.com>
Message-ID: <dkq442bd1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 16335

Membership of the Royal Naval Amateur Radio Society (RNARS) is open to all who have an
interest in any facet of amateur radio and who are serving or who have served in the following:

Royal Navy
Royal Marines
Royal Naval Reserve
Royal Marine Reserve
Women's Royal Naval Service
Royal Naval Auxiliary Service
Royal Fleet Auxiliary
Merchant Navy
Sea Cadets Corps
Nautical Training Corps
MOD (Navy)
Commonwealth and Foreign Navies

NON-MEMBERS can purchase RNARS commodities.

Details and membership application form is available online at
http://www.rnars.org.uk

5053. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-08 12:47:10 UTC
From: PowerHouse Communications <PowerHouse@PrivateBox.Net>
Message-ID: <t61cf.871$GT3.448@fe02.lga>
Source record: 16336
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

"The Magnum" <magnum@NOSPAMmag2781.freeserve.co.uk> wrote in message
news:dkm150$qa5$1@newsg1.svr.pol.co.uk...
>
> "PowerHouse Communications" <PowerHouse@PrivateBox.Net> wrote in message
> news:CXtbf.9915$7s1.1097@fe04.lga...
> >
> > "The Magnum" <magnum@NOSPAMmag2781.freeserve.co.uk> wrote in message
> > news:dkldtm$72s$1@news7.svr.pol.co.uk...
> > > I wonder where the law stands as far as CB radio's go. Are CB's
allowed
> to
> > > be repaired by the average CB'er who has the knowledge or are they
only
> > > repairable by a qualified technician of some kind. I ask along the
lines
> > of
> > > the UK but would find the answer for America just as interesting.
> > >
> >
> > I'm not sure why this thread is even being cross-posted into a CB group,
> but
>
> Because its a question about CB's ??????????
>

No, not your question, the whole thread, which was a rant about "Ham Radio".
Had nothing to do with CB, except for a brief reference.

5054. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-08 13:25:13 UTC
From: PowerHouse Communications <PowerHouse@PrivateBox.Net>
Message-ID: <4G1cf.60878$RG4.18241@fe05.lga>
Source record: 16337
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

"Ralph Mowery" <rmowery28146@earthlink.net> wrote in message
news:dpvbf.5770$m81.1857@newsread1.news.atl.earthlink.net...
> > I'm not sure why this thread is even being cross-posted into a CB group,
> but
> > to answer your question, in the US, the radio must be serviced by a
> > qualified, licensed individual. That is the "legal" way of doing it
> anyway.
> > It doesn't happen very often, but that is another story for another
> time...
> >
> >
>
> Get a new rule book like one that is newer than say about 10 or so years.
> The CB radios in the US has not required a license to repair them in many
> years. The GROL is the replacement for the 1st and 2 nd class licenses
that
> used to be required to repair many transmitters. For about 95 % of the
> transmitters in the US it is now worthless and not needed. Some
companies
> may require it as they think they are getting someone that may know
> something. Now it is only needed for :
>

OK, if you want to get technical, a "license" per-say is not needed, though they still need to be "certified as technically qualified to perform transmitter maintenance and repair duties in the private land mobile services and fixed services by an organization or committee representative of users in those services." - Reference FCC Part 95, Section 95.424 subsection "b".

And as the question that was asked, in relation to the US:
"Are CB's allowed to be repaired by the average CB'er who has the knowledge or are they only repairable by a qualified technician of some kind[?]"
The answer to the first part of the question is still NO, and the second part is still, YES. The "average CB'er who has the knowledge" can NOT service their own CB, legally. They would need to be "certified" to do so "by an organization or committee representative of users in [the CB service]."

5055. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-08 17:18:53 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dkqmlj$24u$1@newsg2.svr.pol.co.uk>
Source record: 16338
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

"Ralph Mowery" <rmowery28146@earthlink.net> wrote in message
news:0KRbf.6157$m81.2342@newsread1.news.atl.earthlink.net...
> >
> > I would guess a fair amount dont really care about the technical side or
> > would want to build their own radio and linear. You would have to be
> pretty
> > dedicated for that. I would also guess at most Amateurs are happy just
> > talking legally with a licence and a stock bought radio and antenna. Not
> > that theres anything wrong with that, it just depends on how serious you
> > take the hobby. Like the M3 foundation licence. It suits a lot of people
> who
> > are.. disillusioned with CB and want to go Amateur but not really
wishing
> to
> > get so involved with the whole technical side of things. There are some
> good
> > M3 people out there whatever the old school say, but i agree they will
> never
> > be on a par with a full licence holder but is that such a terrible
thing.
> >
>
> I don't have any problem with the ones that just want to talk. There are
> many good hams in public service providing communications for emergencies.
> I know one ham that got his license many years ago so he could fly his
radio
> controled airplane and use 6 meters where there were few others using that
> frequency.
>
> I do wish that the test could be hands on for a few simple things such as
> installing a coax connector and and using a simple SWR meter. Also it
> should be required to have a ARRL handbook or equivilent in the shack.
> Would not even have to be a new one, but one 10 years old would be ok.
Not
> that many would really read it but it could answer some simple questions.

I quite agree. I also personally think to obtain a CB licence (UK im talking
here) there should be a small test.. nothing complicated, just wiring on a
PL259 correctly and how to use a SWR meter (as you say for Amateur too).
Thats two basic things ive seen either ignored or very badly done.. ie.
someone twisting the inner and outer of the co-ax together and shoving it
through the hole in the PL.... then they wonder why the radio they just
bought off you wont get out.... or someone say..swred an antenna?? whats

that then?? sheesh..
Exceedingly unlikely now as to all intents and purposes the CB band isnt of interest to the authorities that be.
Oh well..............

5056. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-08 17:23:01 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dkqmtb$fb7$1@news6.svr.pol.co.uk>
Source record: 16339
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

"PowerHouse Communications" <PowerHouse@PrivateBox.Net> wrote in message
news:t61cf.871$GT3.448@fe02.lga...
>
> "The Magnum" <magnum@NOSPAMmag2781.freeserve.co.uk> wrote in message
> news:dkm150$qa5$1@newsg1.svr.pol.co.uk...
> >
> > "PowerHouse Communications" <PowerHouse@PrivateBox.Net> wrote in message
> > news:CXtbf.9915$7s1.1097@fe04.lga...
> > >
> > > "The Magnum" <magnum@NOSPAMmag2781.freeserve.co.uk> wrote in message
> > > news:dkldtm$72s$1@news7.svr.pol.co.uk...
> > > > I wonder where the law stands as far as CB radio's go. Are CB's
> allowed
> > to
> > > > be repaired by the average CB'er who has the knowledge or are they
> only
> > > > repairable by a qualified technician of some kind. I ask along the
> lines
> > > of
> > > > the UK but would find the answer for America just as interesting.
> > > >
> > >
> > > I'm not sure why this thread is even being cross-posted into a CB
group,
> > but
> >
> > Because its a question about CB's ??????????
> >
>
> No, not your question, the whole thread, which was a rant about "Ham
Radio".
> Had nothing to do with CB, except for a brief reference.

Oh right.... mind you theres that much Ham stuff on the website is it a
problem? I just read it with some interest and ask points that i think might
be relevent. Theres more stuff about liars and army service on this group
though for some reason. That i dont get.
Regards,
Graham

5057. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-08 23:44:39 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <HLacf.6892$AS6.1773@newsread3.news.atl.earthlink.net>
Source record: 16340
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

"Spike" <Aero.Spike@S&T.invalid> wrote in message
news:56n0n1l3sndpim3jvoinp83jdt4g7n333g@4ax.com...
>
> Ralph Mowery wrote:
>
> >Also it
> >should be required to have a ARRL handbook or equivilent in the shack.
> >Would not even have to be a new one, but one 10 years old would be ok.
Not
> >that many would really read it but it could answer some simple questions.
>
> My Handbook (not ARRL) is much older, but I wasn't aware of any change
> in the physics in the interim. Why choose ten years? The Admiralty
> handbook is still relevant - and can answer questions - even if the
> units have changed. You appear to be a newcomer.
>
> from
> Aero Spike

The 10 year number for the book was just one out of the air. Older would
have been just fine. My first ARRL hand book was bought in 1966. I did
not get a ham license untuil about 1972. Had a 1 st class radiotelephone
license around the same time. I have only used RTTY with an old mechanical
unit, been keeping up a repeater for close to 30 years, I did write a rtty
program for an old 8080 processor when I got tired of hearing the noise,
used a few of the newer digital modes with the computer, worked a few of the
OSCARs, active on 144 and 432 ssb. I do work some of the low bands also.
Guess that still makes me a newcomer to many.

5058. Re: odd variable capacitor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-09 03:13:52 UTC
From: haynes@alumni.uark.edu
Message-ID: <QPdcf.6064$2y.358@newsread2.news.atl.earthlink.net>
Source record: 16341
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,sci.electronics.components

There was an article in Antique Radio Classified some years ago that
made me aware of capacitors with tapered plates.

You can look up that patent online www.uspto.gov, click on search
under patents, click on patent number search, put in the number,
and when it tells you click on images. You have to have a tiff viewer
plugin in your web browser to read them. That particular patent seems
to apply to a capacitor with flat plates, so perhaps there was a pending
patent on the tapered plates.

A variable capacitor with semicircular plates and the axis of rotation
going through the middle and flat plates gives of course a linear
relationship between capacitance and angular rotation. By altering the
plate shape a bit and moving the axis of rotation off-center you can
get a capacitor that tunes straight-line wavelength. Wavelength is
proportional to the square root of capacitance. In the early days of
radio wavelength was often specified instead of frequency.

You can make a variable capacitor that is straight-line frequency, which
rotation has to be proportional to the reciprocal of the square root of
capacitance. With flat plates this requires a fairly radical plate
shape, with the axis of rotation very far off center. As a result there
has to be a lot of empty space for those long narrow plates to swing around.
I'll post a picture of one of these to that binaries group.

So a way to get around the odd plate shape and the space it occupies
is to use plates of tapered thickness. It would be nice if you got
straight-line something, but even if you don't you have something
where the stations are more spread out than they are with straight
line capacitance.

I have an old TRF receiver of the vintage of multiple knobs and 01A tubes
that uses capacitors like this.
--

jhhaynes at earthlink dot net

5059. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-09 08:39:13 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <tnc3n119f60om21k7ap3p8d6v0gb48fimc@4ax.com>
Source record: 16342
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

Ralph Mowery wrote:

>
>"Spike" <Aero.Spike@S&T.invalid> wrote:
>
>> My Handbook (not ARRL) is much older, but I wasn't aware of any change
>> in the physics in the interim. Why choose ten years? The Admiralty
>> handbook is still relevant - and can answer questions - even if the
>> units have changed. You appear to be a newcomer.
>
>The 10 year number for the book was just one out of the air.

The problem with that is it essentially means that every now and then,
in order to keep within the licence terms, one has to purchase a book.

Here in the UK we have problems with an organisation that has put
itself in the position of 'representing all UK amateurs', and which
sells books. It clearly does not do the former, and merely to add to
its coffers as part of the licencing conditions is a battle which it
has recently fought and looks like losing heavily.

>Older would have been just fine.
>My first ARRL hand book was bought in 1966.

Then why specify a time limit? Or even to have such a book in the
first place?

>I did
>not get a ham license untuil about 1972. Had a 1 st class radiotelephone
>license around the same time. I have only used RTTY with an old mechanical
>unit, been keeping up a repeater for close to 30 years, I did write a rtty
>program for an old 8080 processor when I got tired of hearing the noise,
>used a few of the newer digital modes with the computer, worked a few of the
>OSCARs, active on 144 and 432 ssb. I do work some of the low bands also.
>Guess that still makes me a newcomer to many.

There is nothing wrong with your Amateur CV. The issue - at least for
us in the UK - is the grasping self-interest of the 'national
society', which has been so clearly revealed by recent events, and to
which your proposal would add succour; that was really the point of my
post.

from
Aero Spike

5060. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-09 10:20:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11n3jc8jkp8qce6@corp.supernews.com>
Source record: 16343
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

How come all the self-proclaimed "real amateurs" huffing and puffing on this thread sign their postings only with a "handle" and not a call sign? Are they really amateurs at all?

Roy Lewallen, W7EL

5061. Re: High-insulation 1:1 wideband transformer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-09 11:17:47 UTC
From: SpamHog <n1jpr@hotmail.com>
Message-ID: <1131535067.157988.28320@g14g2000cwa.googlegroups.com>
Source record: 16344

Paul,

You make some interesting points.

>> The real question is the grounding impedance.
>> measuring the grounding impedance at a few hundred kHz
>> might be a bit problematic.

Most sources claim the energy is concentrated between DC and a few tens of kHz. This means that impedance is an issue, but not a terrible one. Typical faraday cages (few make lightning "rods" anymore...) are anything but low impedance, yet thick enough to take 100kA without melting.

>> Assuming the direct lightning hit is about 10-30 kA,
>> a grounding impedance of only 1 ohm would create
>> a potential difference of 10-30 kV.

Right. Perhaps even worse on the high end of the spectrum.

>> the grounding impedance should be measured
>> between the antenna ground and house ground.

This reminds me of a web page from your corner of Europe:
http://www.kolumbus.fi/oh5iy/back/Ham%20Radio.html

The take-home point is that one wants all sensitive equipment (and people) to be on a high-insulation, high-impedance branch of a multipath graph, while bolt energy is offered a low-insulation, low-impedance branch to run through.

There are interesting implications:
>> Assuming that the house has a separate grounding electrode [...]
>> due to the finite ground resistance, the house grounding electrode
>> will move to an elevated potential (several kV) compared to the surrounding
>> mains neutral, telephone and CATV).

Not necessarily. If grounds are separate, inter-groundpoint resistance will if anything decrease the risk of such an transient. If there was a single grounding point, and ground resistance were high, there would be a greater risk of the grounding point becoming a source of common mode transient towards the land lines.

In my case, my shack is at the ground floor of a 9-story building, the antenna is on top, and all grounds are pretty heavy duty and bonded - but not low impedance. The risk for the land lines would be about the same w/ or w/o my puny 20m-long T2FD. (The Other Guy has a 35ft self supporting lattice with tribander, 4x15 @ 144, 3x32 @ 430, 2m dish @

1296, weather turnstyle, 40/80 dipoles, collinear @ 144, and a 6m moonbounce dish @ 430. When I added the T2FD nobody noticed).

As for the DC block, I think I found the right container and location. A 1 - meter PVC pipe that will hang horizontally under a roof edge less than 2m from the flue lines. Pipe and coax can tiptoe away from the chimney in a environment that stays dry when it rains.

5062. Re: High-insulation 1:1 wideband transformer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-09 11:28:31 UTC
From: SpamHog <n1jpr@hotmail.com>
Message-ID: <1131535711.402451.270170@o13g2000cwo.googlegroups.com>
Source record: 16345

I forgot to mention... the grounding is via two massive, parallel
steel flue lines, each a foot in diameter, that drop straight to a big
pig-iron furnace underground, all bonded to the common building ground.

5063. Re: High-insulation 1:1 wideband transformer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-09 14:42:11 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <lb14n11ai99o01lk11mmkdk1t1q3j7nl2g@4ax.com>
Source record: 16346

On 9 Nov 2005 03:17:47 -0800, "SpamHog" <n1jpr@hotmail.com> wrote:

>In my case, my shack is at the ground floor of a 9-story building, the
>antenna is on top, and all grounds are pretty heavy duty and bonded -
>but not low impedance.

I had assumed that you lived on the ground level and had the antenna
feed point somewhere further in the garden.

In your actual case, assuming that the separate grounding wires come
directly down from the roof and connected to the grounding of your
apartment at the ground level and assuming that the lightning bolt
rise time would be 1 kA/us. A thick wire has an inductance about 1
uH/m, thus, there would be a voltage gradient about 1 kV/m along the
grounding wire. If the antenna system grounding wire from the roof is
30 m long, the isolation transformer primary side potential would be
30 kV above the building neutral bar and also 30 kV above your
apartment potential as well as 30 kV above the isolation transformer
secondary. The building ground bar potential will be somewhere above
the average potential of the surrounding countryside.

With 50 kV isolation at the transformer, nearly 2 kA/us rise times
could be tolerated. To reduce the grounding wire inductance, several
grounding wires would be required well separated from each other.

Paul OH3LWR

5064. Re: High-insulation 1:1 wideband transformer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-09 14:42:18 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <og14n11ejsff0gjrbcllm59dc97ii2qk36@4ax.com>
Source record: 16347

On 9 Nov 2005 03:28:31 -0800, "SpamHog" <n1jpr@hotmail.com> wrote:

>I forgot to mention... the grounding is via two massive, parallel
>steel flue lines, each a foot in diameter, that drop straight to a big
>pig-iron furnace underground, all bonded to the common building ground.

That should reduce the inductance considerably and thus the antenna
structure would be much closer to the building grounding bar potential
during a lightning hit.

Paul OH3LWR

5065. Re: Source for PLL and Divider Chips?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-09 17:34:13 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1131557653.889859.8600@o13g2000cwo.googlegroups.com>
Source record: 16348

I've seen the 4059 on yhe Pilips site, still very much alive. try to
find out who sells Philips. I'd guess it's Digikey
Saandy, 4Z5KS

5066. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-09 23:29:58 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <WDvcf.7209$AS6.1550@newsread3.news.atl.earthlink.net>
Source record: 16349
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

```
> >
>
> OK, if you want to get technical, a "license" per-say is not needed,
though
> they still need to be "certified as technically qualified to perform
> transmitter maintenance and repair duties in the private land mobile
> services and fixed services by an organization or committee representative
> of users in those services." - Reference FCC Part 95, Section 95.424
> subsection "b".
>
> And as the question that was asked, in relation to the US:
> "Are CB's allowed to be repaired by the average CB'er who has the
knowledge
> or are they only repairable by a qualified technician of some kind[?]"
> The answer to the first part of the question is still NO, and the second
> part is still, YES. The "average CB'er who has the knowledge" can NOT
> service their own CB, legally. They would need to be "certified" to do so
> "by an organization or committee representative of users in [the CB
> service]."
>

Don't leave out the word "should". It does not say MUST.
```

5067. Re: odd variable capacitor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-10 01:13:08 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <E8xcf.14972$q%.2754@newssvr12.news.prodigy.com>
Source record: 16350
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,sci.electronics.components

Jim
Who made your TRF with this cap and are the dials calibrated, if so f or
wavelength?
tnx

--

73
Hank WD5JFR
"Jim Haynes" <haynes@alumni.uark.edu> wrote in message
news:QPdcf.6064$2y.358@newsread2.news.atl.earthlink.net...
> There was an article in Antique Radio Classified some years ago that
> made me aware of capacitors with tapered plates.
>
> You can look up that patent online www.uspto.gov, click on search
> under patents, click on patent number search, put in the number,
> and when it tells you click on images. You have to have a tiff viewer
> plugin in your web browser to read them. That particular patent seems
> to apply to a capacitor with flat plates, so perhaps there was a pending
> patent on the tapered plates.
>
> A variable capacitor with semicircular plates and the axis of rotation
> going through the middle and flat plates gives of course a linear
> relationship between capacitance and angular rotation. By altering the
> plate shape a bit and moving the axis of rotation off-center you can
> get a capacitor that tunes straight-line wavelength. Wavelength is
> proportional to the square root of capacitance. In the early days of
> radio wavelength was often specified instead of frequency.
>
> You can make a variable capacitor that is straight-line frequency, which
> rotation has to be proportional to the reciprocal of the square root of
> capacitance. With flat plates this requires a fairly radical plate
> shape, with the axis of rotation very far off center. As a result there
> has to be a lot of empty space for those long narrow plates to swing
> around.
> I'll post a picture of one of these to that binaries group.
>
> So a way to get around the odd plate shape and the space it occupies
> is to use plates of tapered thickness. It would be nice if you got
> straight-line something, but even if you don't you have something
> where the stations are more spread out than they are with straight
> line capacitance.
>

> I have an old TRF receiver of the vintage of multiple knobs and 01A tubes
> that uses capacitors like this.
> --
>
> jhhaynes at earthlink dot net
>

5068. Re: Battery quality/life/efficiency/MostBangForTheBuck/whatever

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-10 05:31:40 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11n5mpv9t1rqk5a@corp.supernews.com>
Source record: 16351

clifto wrote:
> . . .
> Roy Lewallen mentions Costco; they haven't had their particular brand
> (40 for $10) for literally years here, all they sell is Duracells now
> and they want 25% more than Menard's and the Ray-O-Vacs.
> . . .

That's too bad. I just got back from Costco, where I found their store brand Kirkland AA alkalines at $9.59 for 48. They also had Duracells, 16 for $8.19.

Roy Lewallen, W7EL

5069. Tube Bench Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-10 05:33:08 UTC
From: west <westley@tampabay.rr.com>
Message-ID: <oYAcf.344$FW4.196@tornado.tampabay.rr.com>
Source record: 16352

I need to buy or build a bench power supply to test & design various tube equipment (audio & ham). I would like it to be something like a Heathkit HP-23 with voltage & current meters. The major problem with the supplies I've come across such as the HP-23, is that the B+ current is appx. 100ma. The bias & filament supplies are OK, but at times I need around 400ma for the B+ out. Is there such a PS available, perhaps with tube regulation & rectification or do I need to build from scratch? Any answers will be most appreciated.

Cordially,
west
AF4GC

5070. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-10 05:40:36 UTC
From: eternalsquire@comcast.net
Message-ID: <1131601236.250700.67440@o13g2000cwo.googlegroups.com>
Source record: 16353
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

There are two extremely legitimate reason for using a nym on the net,
even if one is a ham: privacy and safety. Need I say more?

5071. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-10 10:09:01 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11n67208m80jfd9@corp.supernews.com>
Source record: 16354
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

eternalsquire@comcast.net wrote:
> There are two extremely legitimate reason for using a nym on the net,
> even if one is a ham: privacy and safety. Need I say more?

Shame and embarrassment are two others.

Roy Lewallen, W7EL

5072. Re: odd variable capacitor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-10 11:03:58 UTC
From: Art <arthurgernberg@comcast.net>
Message-ID: <64ednWvUC-aCtO7eRVn-vQ@comcast.com>
Source record: 16355
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,sci.electronics.components

Hallicrafter, Telefunken, Nordmende, etc all used similar caps in their TRF recievers, as did ARC5,ARC 7, and quite a few of the communication transcievers used in the late 30's early 40's. I had operational ARC 5 and ARC 7 with the external Antenna Tuning box in the late 50's. Made nice QRP devices excepting the QRM generated.
73 AJ (Retired QRP Pain!!)
"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
news:E8xcf.14972$q%.2754@newssvr12.news.prodigy.com...
> Jim
> Who made your TRF with this cap and are the dials calibrated, if so f or
> wavelength?
> tnx
>
> --
>
> 73
> Hank WD5JFR
> "Jim Haynes" <haynes@alumni.uark.edu> wrote in message
> news:QPdcf.6064$2y.358@newsread2.news.atl.earthlink.net...
>> There was an article in Antique Radio Classified some years ago that
>> made me aware of capacitors with tapered plates.
>>
>> You can look up that patent online www.uspto.gov, click on search
>> under patents, click on patent number search, put in the number,
>> and when it tells you click on images. You have to have a tiff viewer
>> plugin in your web browser to read them. That particular patent seems
>> to apply to a capacitor with flat plates, so perhaps there was a pending
>> patent on the tapered plates.
>>
>> A variable capacitor with semicircular plates and the axis of rotation
>> going through the middle and flat plates gives of course a linear
>> relationship between capacitance and angular rotation. By altering the
>> plate shape a bit and moving the axis of rotation off-center you can
>> get a capacitor that tunes straight-line wavelength. Wavelength is
>> proportional to the square root of capacitance. In the early days of
>> radio wavelength was often specified instead of frequency.
>>
>> You can make a variable capacitor that is straight-line frequency, which
>> rotation has to be proportional to the reciprocal of the square root of
>> capacitance. With flat plates this requires a fairly radical plate
>> shape, with the axis of rotation very far off center. As a result there
>> has to be a lot of empty space for those long narrow plates to swing

>> around.
>> I'll post a picture of one of these to that binaries group.
>>
>> So a way to get around the odd plate shape and the space it occupies
>> is to use plates of tapered thickness. It would be nice if you got
>> straight-line something, but even if you don't you have something
>> where the stations are more spread out than they are with straight
>> line capacitance.
>>
>> I have an old TRF receiver of the vintage of multiple knobs and 01A tubes
>> that uses capacitors like this.
>> --
>>
>> jhhaynes at earthlink dot net
>>
>
>

5073. Re: Tube Bench Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-10 12:06:48 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <D9CdnVr9aq1Bqu7enZ2dnUVZ8qqdnZ2d@pipex.net>
Source record: 16356

"west" <westley@tampabay.rr.com> wrote in message
news:oYAcf.344$FW4.196@tornado.tampabay.rr.com...
>I need to buy or build a bench power supply to test & design various tube
> equipment (audio & ham). I would like it to be something like a Heathkit
> HP-23 with voltage & current meters. The major problem with the supplies
> I've come across such as the HP-23, is that the B+ current is appx. 100ma.
> The bias & filament supplies are OK, but at times I need around 400ma for
> the B+ out. Is there such a PS available, perhaps with tube regulation &
> rectification or do I need to build from scratch? Any answers will be most
> appreciated.
==========
An excellent design for a HV power supply unit can be found in QEX July
/August 1999 pages 50 -55
"A regulated 2400V power supply" ,by Al Williams VE6AWX

Even if you don't need such a high DC voltage ,the design is universal and
the output voltage is adjustable.
The design includes 2 SCRs in the transformer's primary winding circuit ,
with DC feedback resulting in a very stable DC supply voltage under large
load variations . Another feature is the 'soft' start preventing large
surge currents.
The author uses the unit to supply 2x813 tubes in a RF amp. requiring up to
1kW of power , with the no-load voltage of 2400V-DC dropping to 2397V when
load is 1kW.

Frank GM0CSZ / KN6WH

5074. Re: Tube Bench Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-10 13:17:05 UTC
From: Johnson <jdwalton@comt.net>
Message-ID: <-qqdnShVfM3K2-7eRVn-oA@comcast.com>
Source record: 16357

If you don't want to DIY it, consider using a Sorensen -- some of their HV switching supplies are incredibly inexpensive on EBay. You can also look for the older Lambda and Kepco supplies with 6550 or 6L6 pass elements -- the one pictured on the link below will do 300 ma -- voltage is controlled by a variac -- you have to look both at the Business+Industrial section of the Bay as well as "Vintage Electronics".

http://www.tech-diy.com/images/lambda2.jpg

I use this microprocessor controlled power supply modification for the Heath IP-17 -- but I figured out the compensation network so it is now beautifully regulated:
http://www.tech-diy.com/MCTracer_no_pix_files/HV_MCU_webversion.htm

you can (and should) increase the current capacity for the big IRFPG40's by paralleling several units (with appropriate modifications) so that they operate in the SOA. One is not enough for your application.

"west" <westley@tampabay.rr.com> wrote in message
news:oYAcf.344$FW4.196@tornado.tampabay.rr.com...
> I need to buy or build a bench power supply to test & design various tube
> equipment (audio & ham). I would like it to be something like a Heathkit
> HP-23 with voltage & current meters. The major problem with the supplies
> I've come across such as the HP-23, is that the B+ current is appx. 100ma.
> The bias & filament supplies are OK, but at times I need around 400ma for
> the B+ out. Is there such a PS available, perhaps with tube regulation &
> rectification or do I need to build from scratch? Any answers will be most
> appreciated.
>
> Cordially,
> west
> AF4GC
>
>

5075. Controller for handheld scanner

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-10 16:21:25 UTC
From: Ceriel Nosforit <firstname@saunalahti.fi>
Message-ID: <pan.2005.11.10.16.21.24.906032@saunalahti.fi>
Source record: 16358
Cross-posted to: rec.radio.amateur.homebrew,alt.electronics

Heya,

I'm going to build a controller for an IC-R5 handheld radio scanner for a computer science (digitech) project. The idea is to be able to type in the frequency I want in my computer and then have an electric motor dial in that frequency on my scanner. I'll be using a stepping motor and some controller the circuit design of which seems to be a homebrew of the polytechnic school I attend. What I'll be doing is programming the logic of the controller and writing a computer application for Linux which tells the controller what to do.

My question is; do you know of any projects similar to this? I'm mostly looking for inspiration and pitfalls to avoid. Any comments and insight you might have is most welcome.

Now the following part probably isn't relevant here, but I just wanted to tell what I intended to do with it.

On the computer-side of this I intend to have some more advanced functions. My program will be able to accept a list or range of frequencies and then tell the controller to dial them in order.
The headphone output of the scanner is sent to the microphone jack on the computer. My program 'listens' for any sound and if it find a signal it stops telling the controller to dial frequencies, freezing on the signal. Since the scanner has an automatic function (Auto squelch) to be silent when there's no signal and only make sound when there is a signal, this isn't very difficult to do.
The audio is sent to speech recognition software, and if something intelligible comes out it listens and logs what it hears. If there is nothing intelligible there, it tells the controller to keep dialing. Alternatively it could listen for digital transmissions and attempt to decode what digital mode it is in, and log the output of that.
There's no end to the things I could do with this thing, but primarily I intend to have the logs written to the root window of my desktop, creating a cool effect that will earn me geek points like crazy. =)
Attacking number stations to unveil matters of national security is just a side-project. Eheh.

(Please note that I'm X-posting this, but I'll still be checking both groups for replies so feel free to post to only one of them.)

--
Nosforit

5076. Re: Battery quality/life/efficiency/MostBangForTheBuck/whatever

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-10 21:03:27 UTC
From: clifto <clifto@clifto.com>
Message-ID: <06pc43-8ep.ln1@remote.clifto.com>
Source record: 16359

Roy Lewallen wrote:
> clifto wrote:
>> Roy Lewallen mentions Costco; they haven't had their particular brand
>> (40 for $10) for literally years here, all they sell is Duracells now
>> and they want 25% more than Menard's and the Ray-O-Vacs.
>
> That's too bad. I just got back from Costco, where I found their store
> brand Kirkland AA alkalines at $9.59 for 48. They also had Duracells, 16
> for $8.19.

Yep. Used to go for the Kirkland units at just about that price; they disappeared from our local Costco a few years back. I'm thinking their Duracells are right around that price too, but (1) I don't buy Duracells and (2) that's over 50 cents per battery when I can get 30 Ray-O-Vacs for $9.99 any day of the week at Menard's. Sometimes even better at Menard's; the last batch of AAs I bought were 12 for $2.59 with a $2 rebate on up to two packs, or just under a nickel per Ray-O-Vac.

Back when I got the Kirklands regularly, they were about half the cost of the name brands I was finding and had a little better than half the lifetime, not a bad deal at all.

--
If John McCain gets the 2008 Republican Presidential nomination,
my vote for President will be a write-in for Jiang Zemin.

5077. Re: Tube Bench Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-10 21:14:12 UTC
From: hhc314@yahoo.com
Message-ID: <1131657252.025698.74890@g49g2000cwa.googlegroups.com>
Source record: 16360

I own a Heathkit IP-17 which had identical rating to the HP-23 that you have. For higher amounts of current, I cobbled together the combination of a Variac, a salvaged TV set power transformer, bridge rectifier, and filter capacitors to do the job.

Although unregulated, it performed its job well for many years.

Sorenson and other firms manufacture large, regulated power supplies that will do arguably better work, but even used these generally command a price of several hundred dollar, compared to the $30 or so that I invested in my home built variable voltage supply.

Try periodically checking on eBay.

Good luck. Harry C.

5078. Re: Tube Bench Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-10 21:19:33 UTC
From: hhc314@yahoo.com
Message-ID: <1131657573.499364.6150@g44g2000cwa.googlegroups.com>
Source record: 16361

Johnson posted:

http://www.tech-diy.com/images/lambda2.jpg

Ummm... Nice work!

Harry C.

5079. Calling all TV repair men - VSP9427 wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-10 21:34:11 UTC
From: Steve Drury <g6alu@tiscali.co.uk.remove>
Message-ID: <4373bcd0$1_2@mk-nntp-2.news.uk.tiscali.com>
Source record: 16362

I'm trying to locate a VSP9427B I/C manufactured by Micronas, it's used as a front end video decoder in wide screen TV. Does any one know what make and model uses the chip? I'm looking for one to build a frame store (freeze frame etc) for amateur TV use.

Cheers,
Steve G6ALU

~~~~~ Return address g6alu@tiscali.co.uk.remove - remove the .remove!~~~~~
~~~~~

5080. Trio TS-780 Repair

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-10 21:36:42 UTC
From: MerLin <mrcord81@nextgen.net.mt>
Message-ID: <1131658602.855490.163890@z14g2000cwz.googlegroups.com>
Source record: 16363

Hello all,

I just got a Trio TS-780, however there is no RF power on Transmit. At first i thought that PA stage was damaged however i also noticed that the ON AIR Led and Antenna Switch are not energised in Transmit Mode. Receiver is working perfrectly. Can anyone supply me with detailed schematics for this Transciever and whether anyone has seen this fault on similar transceivers?

Thanks

Mario

5081. Re: High-insulation 1:1 wideband transformer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-10 21:44:13 UTC
From: hhc314@yahoo.com
Message-ID: <1131659053.581071.66700@f14g2000cwb.googlegroups.com>
Source record: 16364

A common lightning protection technique used in many commercial radio stations is simply to wind maybe 50 turn of the coax around a 6 or 8" carpet tube or PVC pipe, then ground the shield on the coax as it leaves the bottom of the coil. Often but not always we would put a spark gap to ground at the top of our so called "lightning choke". A similar technique was employed to protect the "sampling loop" coax feeders. The only thing that we used transformer lightning isolation for was the tower lighting circuits (our tower lighting transformers were large guys of conventional core construction, but with the secondary winding isolated by about about 2" of air spacing in all directions).

Each of our 4 225-ft towers sat on an insulator to isolate them from ground, with a spark 1/4-inch spacing spark gap with two massive 2" balls connected to the ground system. The only problem that we ever had with this setup was that in the summer, occasionaly a large insect would venture into one of the spark gaps and be instantly carbonized by the r.f. being transmitted -- triggering automatic shutdown of the transmitter in the process. When this happened, one of the operating engineers would have to divine which of the four towers was shorted, then fly like lightning itself with a flat file in hand to the tower and clear the problem (while hoping that no one would take it upon themselves to reset the transmitter while he was making repairs)!

Ahh, the fun days (NOT)!

Harry C.

5082. Re: Tube Bench Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-10 21:50:48 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <dl0fbo$e96$1@theodyn.ncf.ca>
Source record: 16365

(hhc314@yahoo.com) writes:
> I own a Heathkit IP-17 which had identical rating to the HP-23 that you
> have. For higher amounts of current, I cobbled together the combination
> of a Variac, a salvaged TV set power transformer, bridge rectifier, and
> filter capacitors to do the job.
>
> Although unregulated, it performed its job well for many years.
>
There have been a few threads recently about regulated tube supplies,
and each time I see them, I keep wanting to post "but most supplies in
the days of tubes were not regulated".

It's almost as if people have lost that fact, so used to solid state
where regulation is the norm, though regulation there often means
a different thing. Now it's used to get a low impedance out of the power
supply, or because the devices are finicky over a wide range of voltages (or
outright can be damaged by too much voltage, as in the case of ttl). Of
course, three terminal regulators made it easy to add regulation to
just about any sold state design decades ago.

But of course, for most consumer equipment there were no regulators (though
that may mean little since there was little consumer electronics around
the house up till about forty years ago) If there was regulation it
was a VR tube, and for a specific stage or stages, liked an oscillator
stage that would change frequency with voltage variation, rather than making
the whole supply regulated.

It was in the lab that most regulated supplies were seen. All that
test equipment is a prime example. You wanted reproduceability for
that DC coupled scope, so you'd want it well regulated.

I guess in the lab you'd see variable voltage regulated supplies but
that would have been the key place.

Michael VE2BVW

5083. Re: Tube Bench Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-10 23:52:46 UTC
From: hhc314@yahoo.com
Message-ID: <1131666766.703617.11460@g14g2000cwa.googlegroups.com>
Source record: 16366

Michael, excellent point all.

Years back I used Lambda regulated H.V. supplies in the workplace, but only for critical application in experimental physics apparatus where the accuracy and stability of the voltage had an important impact on our research. (I still own a comercially produced 0-5 Kv regulated supply, whose use is largely limited to powering photomultiplier tubes used in nuclear research applications.)

Like you, I don't recall voltage regulation ever playing a significant role in vacuum tube electronics, except for those instance that you mention using VR tubes (as in my Hallicrafters SX-71 receiver to stabilize the local oscillator). Still, stabilizing that sucker required much more effort than simpy a VR tube!

Sadly, I gave away the original Variac adjustable power supply to a student that had greater need for it than myslef. Then too, very little of the vacuum tube work I do today requires more than a few mils which My Heatkit IP-17 supplies.

Kindest regards, Harry C.

5084. Re: Source for PLL and Divider Chips?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-11 00:58:05 UTC
From: Steveo <moparholic@hotmail.com>
Message-ID: <20051110195805.444$Xq@newsreader.com>
Source record: 16367

"Leland C. Scott" <kc8ldo@arrl.net> wrote:
> Does anybody have a cheap source, in the USA, for the MC12179 or MC12179D
> PLL chip? If not is there a replacement available? Also does anybody know
> if there is a 24 pin DIP version of the 74HC4059 chip and who sells it?
>
> 73 de
> Leland C. Scott
> KC8LDO
>
Try this:

http://tinyurl.com/dm4bn

5085. Re: Trio TS-780 Repair

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-11 01:25:19 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <h9adnWMX5cmbbu7eRVn-jA@comcast.com>
Source record: 16368

"MerLin" <mrcord81@nextgen.net.mt> wrote in message
news:1131658602.855490.163890@z14g2000cwz.googlegroups.com...
> Hello all,
>
> I just got a Trio TS-780, however there is no RF power on Transmit. At
> first i thought that PA stage was damaged however i also noticed that
> the ON AIR Led and Antenna Switch are not energised in Transmit Mode.
> Receiver is working perfrectly. Can anyone supply me with detailed
> schematics for this Transciever and whether anyone has seen this fault
> on similar transceivers?
>
> Thanks
>
> Mario
>

Mario -

Always have a 50 ohm dummy load attached for testing.

Check the T/R (Transmit/Receive) relay in the RF section of the radio.
Is it working?

Kenwood/Trio TS-870 Repair Notes (check for shorted capacitor)
http://www.mods.dk/view.php?ArticleId=3094

Kenwood/Trio TS-780 Owner and Service manuals are here:
http://www.mods.dk/view.php?ListManuals=kenwood

Greg
w9gb

5086. Re: odd variable capacitor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-11 04:33:54 UTC
From: haynes@alumni.uark.edu
Message-ID: <SaVcf.7676$AS6.7074@newsread3.news.atl.earthlink.net>
Source record: 16369
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,sci.electronics.components

In article <E8xcf.14972$q%.2754@newssvr12.news.prodigy.com>,
Henry Kolesnik <kolesnik@sbcglobal.net> wrote:
>
>Jim
>Who made your TRF with this cap and are the dials calibrated, if so f or
>wavelength?
>tnx

Well, it's a mystery. There is no manufacturer's name on it anywhere. And
all the parts are from various well-known parts vendors (except no labels
on the coils). There are several theories:
Might be a home-built set - if so, it's incredibly well done, including
an engraved front panel
Might be built from a kit - but then you'd think the kit manufacturer
would have put a name on it somewhere.
Might be a factory-built set for some department-store chain that was
to attach their own brand label, tho there is no evidence that one
ever was attached.
Might be a factory-built set and the maker is deliberately non-identified
to avoid paying royalties on the Neutrodyne patents. Which could also
apply to a kit. I read some early superhets were sold as kits to get
around paying patent royalties.
Someone suggested a fly-by-night manufacturer, who would come into a
village with a wagon load of receivers, and secretly bring another
wagon with a transmitter. The transmitter would assure they had a
good signal while they were selling the receivers; and once they were
all sold they could move on. However this receiver is certainly not
shoddily constructed.

Any other theories?
--

jhhaynes at earthlink dot net

5087. Re: odd variable capacitor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-11 04:34:44 UTC
From: haynes@alumni.uark.edu
Message-ID: <EbVcf.7679$AS6.3569@newsread3.news.atl.earthlink.net>
Source record: 16370
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,sci.electronics.components

In article <E8xcf.14972$q%.2754@newssvr12.news.prodigy.com>,
Henry Kolesnik <kolesnik@sbcglobal.net> wrote:
>Jim
>Who made your TRF with this cap and are the dials calibrated, if so f or
>wavelength?
>tnx
The dials are not calibrated in frequency or wavelength. They look like
National vernier dials, calibrated 0-100.
--

jhhaynes at earthlink dot net

5088. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-11 07:37:52 UTC
From: eternalsquire@comcast.net
Message-ID: <1131694672.489954.115870@g44g2000cwa.googlegroups.com>
Source record: 16371
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

But there is no such thing as true UK cuisine, it is all bangers and wellingtons and steak and kidney pie washed down with lots and lots and lots of Guiness.

But enough about Brits, who are otherwise creators of fine cars, time traveler shows, absurdist sitcoms, and who invented the art of sarcasm.

The Eternal Squire

5089. Re: odd variable capacitor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-11 12:44:51 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <7n0df.15196$q%.10041@newssvr12.news.prodigy.com>
Source record: 16372
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,sci.electronics.components

I never heard of the transmitter scam before and I would think that people
would have wanted to hear their favorite 2 or 3 stations. I wonder how they
did the scam?
Hank
"Jim Haynes" <haynes@alumni.uark.edu> wrote in message
news:SaVcf.7676$AS6.7074@newsread3.news.atl.earthlink.net...
> In article <E8xcf.14972$q%.2754@newssvr12.news.prodigy.com>,
> Henry Kolesnik <kolesnik@sbcglobal.net> wrote:
>>
>>Jim
>>Who made your TRF with this cap and are the dials calibrated, if so f or
>>wavelength?
>>tnx
>
> Well, it's a mystery. There is no manufacturer's name on it anywhere.
> And
> all the parts are from various well-known parts vendors (except no labels
> on the coils). There are several theories:
> Might be a home-built set - if so, it's incredibly well done, including
> an engraved front panel
> Might be built from a kit - but then you'd think the kit manufacturer
> would have put a name on it somewhere.
> Might be a factory-built set for some department-store chain that was
> to attach their own brand label, tho there is no evidence that one
> ever was attached.
> Might be a factory-built set and the maker is deliberately
> non-identified
> to avoid paying royalties on the Neutrodyne patents. Which could
> also
> apply to a kit. I read some early superhets were sold as kits to get
> around paying patent royalties.
> Someone suggested a fly-by-night manufacturer, who would come into a
> village with a wagon load of receivers, and secretly bring another
> wagon with a transmitter. The transmitter would assure they had a
> good signal while they were selling the receivers; and once they were
> all sold they could move on. However this receiver is certainly not
> shoddily constructed.
>
> Any other theories?
> --
>
> jhhaynes at earthlink dot net

>

5090. 1936 vintage rig

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-11 13:47:14 UTC
From: MadEngineer <glenn.b.dixon@gmail.com>
Message-ID: <1131716834.266593.323410@f14g2000cwb.googlegroups.com>
Source record: 16373

Hi All,

My father, W7GEG, got his ticket in 1936 when he was in high school. Like many others, he built his first rig. His transmitter was based on an 809 tube and had plug-in coils to switch bands. His receiver was a three-tube regenerative, but he doesn't remember the tube types. He worked mainly 40 meters. According to my dad, both designs were very popular at the time.

The rig worked the first time, and was a thrilling experience for him. "I probably wouldn't have gone into a technical career had the radio not worked," he told me. He holds a PhD in physics.

Can any old-timers out there help me with any information regarding what he might have built? I thought I might try to either find or build a similar rig as a gift, or at least present him with the plans the equipment was based on.

Thanks, 73,
Glenn Dixon AC7ZN

5091. FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-11 14:38:23 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1131719903.005850.10610@g14g2000cwa.googlegroups.com>
Source record: 16374
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,

competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B

licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

5092. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-11 14:45:32 UTC
From: Dave <g3vfp@blueyonder.co.uk>
Message-ID: <g82df.14883$Xz1.708@fe2.news.blueyonder.co.uk>
Source record: 16375
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Thank you Mr Bean, an interesting read :-)

Dave

Polymath wrote:
> What is Ham Radio?
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.
>
> Ham Radio awakens in its aficionados a whole-life
> fascination with all things technical and gives
> an all-abiding curiosity to improve one's scientific
> knowledge. It's a great swimming pool, please dive in!
>
> This excitement causes a wish to share the experience
> with ones fellow man, and shows itself in the
> gentlemanly traditions of Ham Radio.
>
> Radio Hams are in a unique privileged position in that
> they can construct and operate their own equipment! No-one
> else has this privilege. Users, such as broadcasters,
> the po lice and armed farces, CBers and mobile phone
> users have to purchase ready-made gear. Manufacturers
> are not licensed to operate their gear. Radio Hams
> are qualified to design, build and then
> operate their own pieces of equipment. They do this
> with gusto, and also repair and modify their own
> equipment. This is a privilege well worth the effort
> to gain, and one to be jealously guarded.
>
> The excitement that drives a Radio Ham starts with
> relatively simple technologies at first, perhaps making
> his own Wimshurst machine and primary cells. Small pieces
> of test equipment follow, possibly multimeters and signal
> generators. Then comes receivers and transmitters. It is with
> the latter that communication with like-minded technically
> motivated people takes off. The scope for technical
> development grows with the years
> and now encompasses DSP and DDS. There is also a great deal

> of excitement in the areas of computer programming to
> be learnt and applied.
>
> The technical excitement motivates Radio Hams to compete
> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.
>
> -----OOOOO----
>
> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large
> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
> repaired; they are not interested in technical discussion
> and sneer at those who are; they have no idea how
> their radios work inside and have no wish to find out;
> they are free with rather silly personal insults;
> they have not satisfied any technical qualification
> and their licences prevent the use of
> self-designed-and-built equipment.
>
> These CB types engage in the competitive activities
> with their Cheque-Book-purchased off-the-shelf radios
> in a forlorn effort to prove that they are Radio Hams.
>
> No _REAL_ Radio Hams are deceived by such people!
>
> -----ooooo-----
>
> One infallible way to disambiguate the CB Radio Hobbyist
> from the _REAL_ Radio Ham is to solicit their view of the
> difference between CB Radio and Ham Radio. A Radio Ham will
> perceive Ham Radio to be a technical pursuit and will
> perceive CB Radio to be a social communications facility
> no different in essence to a land-line telephone or a
> GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
> could also hold a CB licence safe in the knowledge that
> such a licence says no more about him than having a land-line
> telephone, whilst continuing to regard Ham Radio as a separate
> technical pursuit.
>
> A CB Radio hobbyist, on the other hand, sees no difference between
> a Ham Radio licence and a CB Radio licence. To him, they are
> sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
> tries to classify himself as the equal of the Radio
> Ham when, in fact, he is nothing of the kind. A sure sign of

> a CB Radio hobbyist is if he holds, or has ever held, a licence
> issued under the gangrenous degeneration that is the
> M3/CB Fools' Licence scheme.
>
> -----ooooo-----
>
> One group of people who claim to be of the standard of
> Radio Hams but who are in reality nothing more than an
> apology for the failure of a CBer are those class B
> licensees who falsely proclaimed that they were against
> the use of a Morse Test to control access to the HF
> bands, until, that is, a test was introduced at their
> intellectual level, the intellectual level of 6-year-olds.
>
> 6 year-olds simply lack the mathematical tool kit to
> enable them to handle even the simplest algebraic manipulation
> for Ohm's Law and thus, the disgraceful Class Ber's in
> the aforementioned category are not Radio Hams by any stretch
> of the imagination!
>
> Remember - A sure sign of a CB Radio hobbyist is if he holds,
> or has ever held, a licence issued under the gangrenous
> degeneration that is the M3/CB Fools' Licence scheme!
>

5093. Re: odd variable capacitor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-11 15:02:04 UTC
From: K3HVG <jeepp@adelphia.net>
Message-ID: <7N-dnQcQ_oFbLOneRVn-gg@adelphia.com>
Source record: 16376
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,sci.electronics.components

I have an Allen-Cardwell cap with a plate set that looks sort of like a French curve. It appears irridited (gold-looking color?) and came from a test set of some sort, but its been too long ago to remember...hi!

5094. Re: 1936 vintage rig

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-11 15:10:30 UTC
From: hanavin@stimpy.eecis.udel.edu
Message-ID: <dl2c96hm1@dewey.udel.edu>
Source record: 16377

In article <1131716834.266593.323410@f14g2000cwb.googlegroups.com>,
MadEngineer <glenn.b.dixon@gmail.com> wrote:
>Hi All,
>

>
>Can any old-timers out there help me with any information regarding
>what he might have built? I thought I might try to either find or
>build a similar rig as a gift, or at least present him with the plans
>the equipment was based on.
>
>Thanks, 73,
>Glenn Dixon AC7ZN
>

I'm Not really an old timer yet :) but you can get the complete
QST's from 1930-1939 on CDROM from the ARRL. That'll
be a nice gift, Im sure there
are plans in there to build a similar rig..

73

5095. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-11 17:53:12 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dl2lpqcrr1@news8.svr.pol.co.uk>
Source record: 16378
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

<eternalsquire@comcast.net> wrote in message
news:1131694672.489954.115870@g44g2000cwa.googlegroups.com...
> But there is no such thing as true UK cuisine, it is all bangers and
> wellingtons and steak and kidney pie washed down with lots and lots and
> lots of Guiness.
>
> But enough about Brits, who are otherwise creators of fine cars, time
> traveler shows, absurdist sitcoms, and who invented the art of sarcasm.
>
> The Eternal Squire

I thought Guinness was the drink of the Irish... I personally cant stand the stuff, surely its a "nice cup of tea"... Steak and Kidney is Rank...Much better mince beef and onion, or chicken and mushroom where it comes to pies... As for fine cars?? that surely is sarcasm ;o) .... "you have learned well young Jedi"...
Regards,
Graham

5096. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-11 17:54:07 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1131731647.609112.91470@g49g2000cwa.googlegroups.com>
Source record: 16379
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Polymath wrote:
> What is Ham Radio?
>
you suose you could enlighten us what you get out posting a reporting
this drivel!

5097. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-11 17:58:22 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dl2m3g$d3o$1@news8.svr.pol.co.uk>
Source record: 16380
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

<lucifer@eternal-flames.gov> wrote in message
news:k9m8n1h57d4dkdgrk2ffn42jq8c8os9ren@4ax.com...
> On 10 Nov 2005 23:37:52 -0800, eternalsquire@comcast.net wrote:
>
> >But there is no such thing as true UK cuisine, it is all bangers and
> >wellingtons and steak and kidney pie washed down with lots and lots and
> >lots of Guiness.
>
> But the beer - Guinness or otherwise - must be warm.
> Any vegetables must be boiled long enough for whatever taste/texture
> they originally had, to be completely lost - including the salads -
> and the meat must be so messed about with that you can't tell if it
> was steak or kidney.
>
> Nick - Who actually likes the people living that side of the pond.

Messed about with?? normally they come in chunks of pure cut steak but the
kidney... uuurgh.. hate it in any shape or form. If your speaking from
experience you must have visited some really dodgy restaurants while you
were over here. As far as salads go.. they arent cooked they are simply
washed and put on the plate. Fancy boiling a salad.. lol...
Graham... who also likes "most" Americans ;o)

5098. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-11 18:08:14 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <2M6dnTyLK-ONQ-nenZ2dnUVZ_t2dnZ2d@giganews.com>
Source record: 16381
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

an old friend wrote:
> Polymath wrote:
>> What is Ham Radio?
>>
> you suose you could enlighten us what you get out posting a reporting
> this drivel!

Just cancel it. Shall I tell you how to do that?
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

5099. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-11 19:29:55 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <4374f11e.21260931@news.blueyonder.co.uk>
Source record: 16382

On Thu, 10 Nov 2005 02:09:01 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Shame and embarrassment are two others.
>
>Roy Lewallen, W7EL

You got in one Rod :-)

Peter, G3PHO

5100. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-11 19:38:44 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <4376f24b.21562134@news.blueyonder.co.uk>
Source record: 16383
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

On Fri, 11 Nov 2005 14:45:32 GMT, Dave <g3vfp@blueyonder.co.uk> wrote:

>Thank you Mr Bean, an interesting read :-)
>
>Dave

I know you jest with the praise Dave but why quote Bean's diatribe again in full? Many of us have kill filed Bean in the hope we never see any of his stuff again so it comes as a shock to the system to see his verbal;garbage once more... it hasn't changed in years.

I won' t see Beanie's reply to this post as he's in my kill file but I guess it will contain the words " You behave like a child... grow up OM!" He has macro keys on his computer to generate most of this stuff..

73

Peter, G3PHO

5101. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-11 19:58:08 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <4375f163.21329670@news.blueyonder.co.uk>
Source record: 16384
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

On 10 Nov 2005 23:37:52 -0800, eternalsquire@comcast.net wrote:

>But there is no such thing as true UK cuisine, it is all bangers and
>wellingtons and steak and kidney pie washed down with lots and lots and
>lots of Guiness.

Guiness is NOT a UK drink... those Irish folk invented that, begorrah!

The UK national drink is tea , made with milk, hot water (and tea of course)... none of the iced tea you Texans seem to like. :-)

Steak and kidney pie is actually better washed down with one of the Aussie lagers!

Peter, G3PHO

5102. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-11 21:35:11 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dl32q7phh1@newsg3.svr.pol.co.uk>
Source record: 16385
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

"Lancer" <lancer@rock..com> wrote in message
news:4374fb62.20112312@2355323778...
> On Fri, 11 Nov 2005 19:58:08 GMT, microwaves@blueyonder.co.uk (Peter)
> wrote:
>
> >On 10 Nov 2005 23:37:52 -0800, eternalsquire@comcast.net wrote:
> >
> >>But there is no such thing as true UK cuisine, it is all bangers and
> >>wellingtons and steak and kidney pie washed down with lots and lots and
> >>lots of Guiness.
> >
> >
> >Guiness is NOT a UK drink... those Irish folk invented that, begorrah!
> >
> >The UK national drink is tea , made with milk, hot water (and tea of
> >course)... none of the iced tea you Texans seem to like. :-)
> >
> >Steak and kidney pie is actually better washed down with one of the
> >Aussie lagers!
> >
> >Peter, G3PHO
>
> Isn't Ireland a part of the U.K?

Southern Ireland isnt. And most of Northern Ireland would disagree too....

5103. Call for Entries: Home Meadmakers Competition, Feb 2006 IMA Meadfest

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-11 21:56:36 UTC
From: Oskaar <oskaar@gotmead.com>
Message-ID: <ns8df.5671$Vw5.5321@fe04.news.easynews.com>
Source record: 16386

Hi All,

I'm posting this in this brewing group because I know that there are many brewers who also make wine and mead.

I'm looking to get an idea of how many people are planning on entering the competition. Please let us know if you'll be entering any meads. As mentioned above the meads will be judged by commercial mead makers, BJCP certifed Judges and other mead-centric folks.

The competition is Feb. 10 - 11 2006 in Boulder, CO.

If you have questions about the competition or are uncertain about how to enter, this is the place to find out.

For more information go to:

http://www.meadfest.com

Thanks for your time and consideration

Oskaar, your friendly Home Meadmaker Competition Committee Chairman

5104. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-11 21:59:47 UTC
From: eternalsquire@comcast.net
Message-ID: <1131746387.182467.214000@z14g2000cwz.googlegroups.com>
Source record: 16387
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

This reminds me of a funny story:

Once upon a time there was a retired amateur going on a DX-pedition to the South Seas in the spring of '78 who set up his equipment and started operating... unfortunately a terrorist group decided he was an worthwhile target and overran his station. Last thing we heard on SSB was W4<garble> calling Mayday, Mayday, Mayday! <hiss> <static>. A few weeks later a forensics team found nothing but charred wood and bones. The leader of the team reported back to the coroner: "Looks like an old southern ham got roasted at Easter".

The Eternal Squire

5105. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 00:32:50 UTC
From: DrDeath <drdeath555usb@yahoo.com>
Message-ID: <11nae1jjnfdrg0f@corp.supernews.com>
Source record: 16388
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

<eternalsquire@comcast.net> wrote in message
news:1131694672.489954.115870@g44g2000cwa.googlegroups.com...
> But there is no such thing as true UK cuisine, it is all bangers and
> wellingtons and steak and kidney pie washed down with lots and lots and
> lots of Guiness.
>
> But enough about Brits, who are otherwise creators of fine cars, time
> traveler shows, absurdist sitcoms, and who invented the art of sarcasm.
>
> The Eternal Squire
>

Don't forget they invented the Lucas electrical system (I owned an MGB) and
whitworth tools (I also currently own a pre-unit Triumph).LOL

5106. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 00:41:03 UTC
From: DrDeath <drdeath555usb@yahoo.com>
Message-ID: <11naeh4b9em7eba@corp.supernews.com>
Source record: 16389
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

<lucifer@eternal-flames.gov> wrote in message
news:k9m8n1h57d4dkdgrk2ffn42jq8c8os9ren@4ax.com...
> On 10 Nov 2005 23:37:52 -0800, eternalsquire@comcast.net wrote:
>
>>But there is no such thing as true UK cuisine, it is all bangers and
>>wellingtons and steak and kidney pie washed down with lots and lots and
>>lots of Guiness.
>
> But the beer - Guinness or otherwise - must be warm.
> Any vegetables must be boiled long enough for whatever taste/texture
> they originally had, to be completely lost - including the salads -
> and the meat must be so messed about with that you can't tell if it
> was steak or kidney.
>
> Nick - Who actually likes the people living that side of the pond.
>

Warm beer sucks, but throughout history that is the way it has always been
consumed.
I like the people living on that side of the pond. Have they done something
personal to you that you hate an entire country?

5107. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 00:44:52 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1131756292.407379.290780@f14g2000cwb.googlegroups.com>
Source record: 16390
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

You behave like a 5-year-old

Peter wrote:
> I know you jest with the praise Dave but why quote Bean's diatribe
> again in full? Many of us have kill filed Bean in the hope we never
> see any of his stuff again so it comes as a shock to the system to see
> his verbal;garbage once more... it hasn't changed in years.
> I won' t see Beanie's reply to this post as he's in my kill file but I
> guess it will contain the words " You behave like a child... grow up
> OM!" He has macro keys on his computer to generate most of this
> stuff..

5108. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 01:18:06 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1131758286.288051.122480@o13g2000cwo.googlegroups.com>
Source record: 16391
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Andre Craddock, M0SWB, proves that he continues to
be an INCURABLE CBER through the medium of his
Childish Broadcast (CB).....

Infantile and abusive......is there any difference between an M0
callsign and one of those issued under the gangrenous degeneration
that is the M3/CB Fools' Licence scheme? Seemingly not.

Krusty wrote:
> "Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
> news:1131116439.255278.104600@g43g2000cwa.googlegroups.com...
> > What is Ham Radio?
> <snip>
>
> Ahh, I can almost smelll the meths from here....looks like he chose another
> fine vintage from Wilko's finest....

5109. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 01:30:13 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1131759013.090249.164400@o13g2000cwo.googlegroups.com>
Source record: 16392
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

I don't know what a "real amateur" is and I, for one, have never
claimed to be such.

However, after a number of years of contributing to Usenet under
my own name and callsign, my family was subjected to malicious
and threatening letters sent by Stephen G Bryan G0SGB in 1998,
a matter for which the plods were involved.

His criminal activities followed on from an abusive, insulting,
infantile
and obsessive tirade by him in this NG, seemingly because he was
intolerant of those who disagreed with his CBers' activity of WABbing.

Such threatening behaviour drives one underground, and also serves
to illustrate, perhaps, the difference between a _REAL_ Radio Ham
and a CBer-Masquerading-As-A-Radio-Ham?

Roy Lewallen wrote:
> How come all the self-proclaimed "real amateurs" huffing and puffing on
> this thread sign their postings only with a "handle" and not a call
> sign? Are they really amateurs at all?
>
> Roy Lewallen, W7EL

5110. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 02:28:06 UTC
From: eternalsquire@comcast.net
Message-ID: <1131762486.157192.39830@o13g2000cwo.googlegroups.com>
Source record: 16393

I don't have a problem with shame or embarrassment, I'm quite shameless and I'm only embarrassed while during my carrier detector diode into a heat emitting diode :)

But seriously, I think it a very bad idea for the FCC to continue to publish names and addresses of licensed hams. Especially if a predator ham develops a taste for minors. That, by the way, is now one good reason to ban minors from having ham licenses... for thier own safety. Sorry kids.

The Eternal Squire

5111. FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 02:32:54 UTC
From: eternalsquire@comcast.net
Message-ID: <1131762774.584136.56120@o13g2000cwo.googlegroups.com>
Source record: 16394

Amateur Radio Frequently Asked Questions:

1) What is Amateur Radio?

In its most general sense the term Amateur Radio covers a very wide range of activities initiated by a group of people for the public good both short term and long term on a purely non-profit and non-commercial basis, using frequencies provided by a nation upon which that group performs its activities. Such a group is known as a nation's Amateur Radio Service.

2) Why Amateur Radio?

A great many national governments recognize the necessity for forming a body of volunteers existing entirely outside the commerical telecommunications infrastructure who are permitted to use radio frequencies. The necessity comes out of at least the following motivations: (a) the ability to form auxillary communications for public safety and welfare less subject to regional outage in the face of disaster, unrest, or other emergencies affecting normal communications (b) encouraging spread of scientific and technological literacy throughout the population via self training, (c) encouraging innovation in the state of the art of communications technology or in the basic sciences on which that technology is based, (d) encouraging goodwill between countries through informal communications between citizens of those respective countries with no payments needing to be made to a common carrier.

3) Who is eligible to operate an Amateur Radio?

Typically any citizen of a country whose laws create an Amateur Radio Service, who can pass a skills test in any or all of theory, regulations, or telegraphy which may be required for the safe operation of an amateur station on the frequencies granted for such operation. The skills test is usually basic for minimum priviledges and intensive for maximum priviledges. The skills test is usually administered either by a government official or by a panel of volunteers appointed by that official. Upon passing the skills test a license to operate is granted to that citizen.

4) Can children operate an Amateur Radio?

In the United States and many other countries there is no minimum age requirement for a minor citizen to be licensed to operate an amateur radio.

5) Who is ineligible to operate an Amateur Radio?

Typically anyone ever convicted of a felony of any kind, although this bar can be waived on a case by case basis through a legal hearing. Also, typically anyone whose license grant to operate had been revoked through a substantial violation of that nation's amateur radio regulations, and again, this bar can be waived on a case by case basis through a legal hearing.

6) What equipment can be legally used for operation?

In most countries any licensed amateur radio operator can build equipment either directly from electronic components or may adapt existing telecommunications equipment to transceive on frequencies designated for amateur radio. In other, more authoritarian countries, equipment may be held in keeping by a nation's government in designated club buildings. In countries governed under a civil law framework rather than a common law framework, a one-time or periodic tax may need to be paid to the government for each transmitter or receiver to be authorized for use by that citizen.

7) How much power can be legally used for operation?

Each nation can choose maximum legal power either on the basis of license priviledge, propogation or interference characteristics of the band in question, or safety considerations such as bodily RF exposure. Power limits could range from 5 watts to 2000 watts.

8) What communications can be conducted over amateur radio?

Typically only communications relating to public safety, statements of a personal nature, or technical conversations. Further, personal conversations may not involve material considered obscene or indecent as based on the standards of the nation of whom the citizen is a part. More authoritarian countries may place additional restrictions such as the banning of any communications containing political content or opinion. Limited one way communications are permitted, usually pertaining to telegraphy practice or to call outs for the purpose of initiating a two way conversation. Communications may generally not be intentionally obscured or encrypted, any published or commonly utilized language or protocol is considered acceptable for this purpose. One-way continuous broadcasting of news or music is typically prohibited.

9) Can unlicensed people ever operate an amateur radio?

In limited cases, yes. a) In genuine emergencies dangerous to life or limb, or potentially so, unlicensed people may use the signals MAYDAY or PAN respectively to call out for help or to warn away on any radio frequency, not just amateur radio frequencies. b) Anyone can operate an amateur radio under the direct supervision of an amateur radio operator using the priviledges of that supervisor. c) Anyone can use a frequency for micropower use so long as the frequency is not expressedly prohibited for such use. Power limits can be quite severe but they are adequate for use in demonstration, education, or research and development within the home or laboratory.

It is a myth that any person can transmit or broadcast unlicensed in international waters. Typically jurisdiction banning unlicensed operation extends either through the flag of the vessel containing the radio, or through the citizenship of the person transmitting.

10) How is amateur radio different from other competing informal radio operation?

Some countries do authorize citizen, family, or remote control radio services restricted to the use of government type-accepted equipment having fixed frequency channels, limited power, limited antenna size and/or height, and limited maximum distance.

Amateur radio is distinguished from these services by virtue of its special characteristics: a) potentially unlimited range, b) no restrictions to type-accepted equipment, c) transmission may take place anywhere within the designated band, d) international communications are allowed.

11) How is amateur radio different from experimental radio?

Some nations do offer upon application a legal grant for a limited number of people to operate telegraphy, voice, or telemetry upon bands or frequencies having interesting characteristcs. These bands or frequencies may later become adopted as part of the bands authrorized for amateur operation.

12) Is there a banned countries list?

Not at present. During the Cold War the United States and some other democratic nations did indeed publish a short list of totalitarian states and other states sponsoring terrorism with whom there was no legitimate purpose other than espionage for international communications, even as amateur radio operators. Such blockades are no longer in force. Instead, amateurs may not communicate with private citizens of other countries who have an objection to amateur radio. For all practical purposes this means the only countries with whom amateur radio operators may not communicate with are North Korea or Yemen, as
those countries do not permit thier citizens to own or use an amateur radio.

5112. A better Ham Radio FAQ than Polymath's

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 02:44:55 UTC
From: eternalsquire@comcast.net
Message-ID: <1131763495.625919.174690@o13g2000cwo.googlegroups.com>
Source record: 16395

Amateur Radio Frequently Asked Questions:

1) What is Amateur Radio?

In its most general sense the term Amateur Radio covers a very wide range of activities initiated by a group of people for the public good both short term and long term on a purely non-profit and non-commercial basis, using frequencies provided by a nation upon which that group performs its activities. Such a group is known as a nation's Amateur Radio Service.

2) Why Amateur Radio?

A great many national governments recognize the necessity for forming a body of volunteers existing entirely outside the commerical telecommunications infrastructure who are permitted to use radio frequencies. The necessity comes out of at least the following motivations: (a) the ability to form auxillary communications for public safety and welfare less subject to regional outage in the face of disaster, unrest, or other emergencies affecting normal communications (b) encouraging spread of scientific and technological literacy throughout the population via self training, (c) encouraging innovation in the state of the art of communications technology or in the basic sciences on which that technology is based, (d) encouraging goodwill between countries through informal communications between citizens of those respective countries with no payments needing to be made to a common carrier.

3) Who is eligible to operate an Amateur Radio?

Typically any citizen of a country whose laws create an Amateur Radio Service, who can pass a skills test in any or all of theory, regulations, or telegraphy which may be required for the safe operation of an amateur station on the frequencies granted for such operation. The skills test is usually basic for minimum priviledges and intensive for maximum priviledges. The skills test is usually administered either by a government official or by a panel of volunteers appointed by that official. Upon passing the skills test a license to operate is granted to that citizen.

4) Can children operate an Amateur Radio?

In the United States and many other countries there is no minimum age requirement for a minor citizen to be licensed to operate an amateur radio.

5) Who is ineligible to operate an Amateur Radio?

Typically anyone ever convicted of a felony of any kind, although this bar can be waived on a case by case basis through a legal hearing. Also, typically anyone whose license grant to operate had been revoked through a substantial violation of that nation's amateur radio regulations, and again, this bar can be waived on a case by case basis through a legal hearing.

6) What equipment can be legally used for operation?

In most countries any licensed amateur radio operator can build equipment either directly from electronic components or may adapt existing telecommunications equipment to transceive on frequencies designated for amateur radio. In other, more authoritarian countries, equipment may be held in keeping by a nation's government in designated club buildings. In countries governed under a civil law framework rather than a common law framework, a one-time or periodic tax may need to be paid to the government for each transmitter or receiver to be authorized for use by that citizen.

7) How much power can be legally used for operation?

Each nation can choose maximum legal power either on the basis of license priviledge, propogation or interference characteristics of the band in question, or safety considerations such as bodily RF exposure. Power limits could range from 5 watts to 2000 watts.

8) What communications can be conducted over amateur radio?

Typically only communications relating to public safety, statements of a personal nature, or technical conversations. Further, personal conversations may not involve material considered obscene or indecent as based on the standards of the nation of whom the citizen is a part. More authoritarian countries may place additional restrictions such as the banning of any communications containing political content or opinion. Limited one way communications are permitted, usually pertaining to telegraphy practice or to call outs for the purpose of initiating a two way conversation. Communications may generally not be intentionally obscured or encrypted, any published or commonly utilized language or protocol is considered acceptable for this purpose. One-way continuous broadcasting of news or music is typically prohibited.

9) Can unlicensed people ever operate an amateur radio?

In limited cases, yes. a) In genuine emergencies dangerous to life or limb, or potentially so, unlicensed people may use the signals MAYDAY or PAN respectively to call out for help or to warn away on any radio frequency, not just amateur radio frequencies. b) Anyone can operate an amateur radio under the direct supervision of an amateur radio operator using the priviledges of that supervisor. c) Anyone can use a frequency for micropower use so long as the frequency is not expressedly prohibited for such use. Power limits can be quite severe but they are adequate for use in demonstration, education, or research and development within the home or laboratory.

It is a myth that any person can transmit or broadcast unlicensed in international waters. Typically jurisdiction banning unlicensed operation extends either through the flag of the vessel containing the radio, or through the citizenship of the person transmitting.

10) How is amateur radio different from other competing informal radio operation?

Some countries do authorize citizen, family, or remote control radio services restricted to the use of government type-accepted equipment having fixed frequency channels, limited power, limited antenna size and/or height, and limited maximum distance.

Amateur radio is distinguished from these services by virtue of its special characteristics: a) potentially unlimited range, b) no restrictions to type-accepted equipment, c) transmission may take place anywhere within the designated band, d) international communications are allowed.

11) How is amateur radio different from experimental radio?

Some nations do offer upon application a legal grant for a limited number of people to operate telegraphy, voice, or telemetry upon bands or frequencies having interesting characteristcs. These bands or frequencies may later become adopted as part of the bands authrorized for amateur operation.

12) Is there a banned countries list?

Not at present. During the Cold War the United States and some other democratic nations did indeed publish a short list of totalitarian states and other states sponsoring terrorism with whom there was no legitimate purpose other than espionage for international communications, even as amateur radio operators. Such blockades are no longer in force. Instead, amateurs may not communicate with private citizens of other countries who have an objection to amateur radio. For all practical purposes this means the only country with whom amateur radio operators may not communicate with are North Korea or Yemen,
countries that are totalitarian states that do not permit amateur radio.

5113. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 02:55:21 UTC
From: eternalsquire@comcast.net
Message-ID: <1131764121.650140.292100@z14g2000cwz.googlegroups.com>
Source record: 16396
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

Polymath, you have my profound apologies on behalf of the entire
worldwide ham community for the harm you have suffered. And as I just
said in a seperate thread, it is things like this that make me think
that while governments have a right to demand the addresses of licensed
hams, it no longer has the right to publish them. That goes *double*
for hams who happen to be minors... Sadly, depravity no longer limited
to any single walk of life, and anonymity on the net is an importand
safety measure that should now go hand in hand with exercising the
right to free speech.

5114. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 03:03:21 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1131764601.430786.101470@g49g2000cwa.googlegroups.com>
Source record: 16397
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Polymath wrote:
> What is Ham Radio?
>
why do you post this drivel?

weren't you taught to be polite to other hams?

they are simple questions

5115. Re: Call for Entries: Home Meadmakers Competition, Feb 2006 IMA Meadfest

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 03:17:43 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1ddefeb6ae08b30d9896de@192.168.42.131>
Source record: 16248

[This followup was posted to rec.radio.amateur.homebrew and a copy was
sent to the cited author.]

In article <ns8df.5671$Vw5.5321@fe04.news.easynews.com>,
oskaar@gotmead.com says...

> Hi All,
>
> I'm posting this in this brewing group because I know that there are many
> brewers who also make wine and mead.

<snippety>

You have the wrong newsgroup. Look at the group name once again
for a clue: rec.RADIO.AMATEUR.homebrew.

Homebrewing has a different meaning in the context of amateur
radio. It refers to the design and construction of radio or electronic
test equipment from scratch.

As much as I personally like mead, I can say with confidence that
you need to double-check your newsgroup names before you post.

Keep the peace(es).

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped
with surreal ports?"

5116. Re: Call for Entries: Home Meadmakers Competition, Feb 2006 IMA Meadfest

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 03:42:01 UTC
From: Oskaar <oskaar@gotmead.com>
Message-ID: <cwddf.7522$Ww6.813@fe05.news.easynews.com>
Source record: 16249

Whoopsie!

Well, bring a homebrewed radio with you to the meadfest and I'll be happy
to pour you a glass of mead!

Anyone is welcome. Sorry for the off-topic post!

cheers,

Oskaar

Dr. Anton T. Squeegee <SpammersAreVermin@dev.null> wrote in
news:MPG.1ddefeb6ae08b30d9896de@192.168.42.131:

> [This followup was posted to rec.radio.amateur.homebrew and a copy was
> sent to the cited author.]
>
> In article <ns8df.5671$Vw5.5321@fe04.news.easynews.com>,
> oskaar@gotmead.com says...
>
>> Hi All,
>>
>> I'm posting this in this brewing group because I know that there are
>> many brewers who also make wine and mead.
>
> <snippety>
>
> You have the wrong newsgroup. Look at the group name once again
> for a clue: rec.RADIO.AMATEUR.homebrew.
>
> Homebrewing has a different meaning in the context of amateur
> radio. It refers to the design and construction of radio or electronic
> test equipment from scratch.
>
> As much as I personally like mead, I can say with confidence that
> you need to double-check your newsgroup names before you post.
>
> Keep the peace(es).
>
>

5117. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 04:44:47 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <1av2n1pkijtv0rcisfv4kakcqcejabt2bl@4ax.com>
Source record: 16250
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

On Fri, 11 Nov 2005 18:32:50 -0600, "DrDeath"
<drdeath555usb@yahoo.com> wrote:

><eternalsquire@comcast.net> wrote in message
>news:1131694672.489954.115870@g44g2000cwa.googlegroups.com...
>> But there is no such thing as true UK cuisine, it is all bangers and
>> wellingtons and steak and kidney pie washed down with lots and lots and
>> lots of Guiness.
>>
>> But enough about Brits, who are otherwise creators of fine cars, time
>> traveler shows, absurdist sitcoms, and who invented the art of sarcasm.
>>
>> The Eternal Squire
>>
>
>Don't forget they invented the Lucas electrical system (I owned an MGB) and
>whitworth tools (I also currently own a pre-unit Triumph).LOL
>

Ahh, Joseph Lucas...the prince of darkness. The warm beer bit comes
from having Lucas also build refrigerators. I too have been the
victim of a string of British motorcars. Triumphs and Austins and the
odd Lotus. I even race-prepped them. I also get around to flying
aboard BAE-146s every once in a while. Just like British sports cars
they are. Fast enough, handles like a housefly, not all that
comfortable and as noisy as hell with the gates open.

R

5118. Re: odd variable capacitor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 04:46:52 UTC
From: Jim Mueller <wrongname@nospam.com>
Message-ID: <pan.2005.11.12.04.46.50.92806@nospam.com>
Source record: 16251
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,sci.electronics.components

On Fri, 11 Nov 2005 12:44:51 +0000, Henry Kolesnik wrote:

> I never heard of the transmitter scam before and I would think that people
> would have wanted to hear their favorite 2 or 3 stations. I wonder how they
> did the scam?
> Hank
> "Jim Haynes" <haynes@alumni.uark.edu> wrote in message
> news:SaVcf.7676$AS6.7074@newsread3.news.atl.earthlink.net...
>> In article <E8xcf.14972$q%.2754@newssvr12.news.prodigy.com>,
>> Henry Kolesnik <kolesnik@sbcglobal.net> wrote:

How could they have 2 or 3 favorite stations if they didn't have a radio?

--
Jim Mueller wrongname@nospam.com

To get my real email address, replace wrongname with eportiz.
Then replace nospam with sacbeemail.

5119. Re: odd variable capacitor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 05:34:57 UTC
From: Bill <exray@coqui.net>
Message-ID: <1c0e4$43757f03$4232bd2e$1386@COQUI.NET>
Source record: 16252
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,sci.electronics.components

Jim Mueller wrote:

> How could they have 2 or 3 favorite stations if they didn't have a radio?
>
I know it sounds silly but I work in cable tv and everybody seems to
have some 'favorite' oddball channel that they are demanding be carried
as part of their service.

-Bill

5120. Re: 1936 vintage rig

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 05:39:51 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <9fadne4s7-K2HejenZ2dnUVZ_tOdnZ2d@comcast.com>
Source record: 16253

"MadEngineer" <glenn.b.dixon@gmail.com> wrote in message
news:1131716834.266593.323410@f14g2000cwb.googlegroups.com...
> Hi All,
>
> My father, W7GEG, got his ticket in 1936 when he was in high school.
> Like many others, he built his first rig. His transmitter was based on
> an 809 tube and had plug-in coils to switch bands. His receiver was a
> three-tube regenerative, but he doesn't remember the tube types. He
> worked mainly 40 meters. According to my dad, both designs were very
> popular at the time.
>
> The rig worked the first time, and was a thrilling experience for him.
> "I probably wouldn't have gone into a technical career had the radio
> not worked," he told me. He holds a PhD in physics.
>
> Can any old-timers out there help me with any information regarding
> what he might have built? I thought I might try to either find or
> build a similar rig as a gift, or at least present him with the plans
> the equipment was based on.
>
> Thanks, 73,
> Glenn Dixon AC7ZN
>

Glenn- Google search for "GlowBugs"

Here is an 809 used as a final amplifier in a homebrew design (AB0CW)
http://www.qsl.net/ab0cw/809pa.htm

The 807 was also a very popular tube of that era
http://www.qsl.net/ab4yd/myprojects/index.htm

http://www.qsl.net/ab4yd/myprojects/80m_807_a/final.jpg

Some transmitter designs
http://www.mines.uidaho.edu/%7eglowbugs/tx/index.html

5121. Re: odd variable capacitor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 06:56:32 UTC
From: xrongor <hacky@smackeycrackey.com>
Message-ID: <dl43mr$ed83$1@news3.infoave.net>
Source record: 16254
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,sci.electronics.components

well, if you had more than one transmitter, you could simply act as a
repeater and boost the signal on as many stations as you had transmitters.

but i just dont see it actually happening. sounds crazy.

randy

"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
news:7n0df.15196$q%.10041@newssvr12.news.prodigy.com...
>I never heard of the transmitter scam before and I would think that people
>would have wanted to hear their favorite 2 or 3 stations. I wonder how
>they did the scam?
> Hank

5122. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 08:02:56 UTC
From: Dana <dana@panix.com>
Message-ID: <Pine.NEB.4.63.0511120301370.9170@panix1.panix.com>
Source record: 16255
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

The mistake the FCC made was dropping the code requirment down to 5 wpm.
Lots of nivices squeeked under the wire.

On Tue, 25 Oct 2005, The Magnum wrote:

>
>>> Yet another reason I will never obtain a ham ticket.
>>
>> Good news for ham radio!
>
> Yep, there will be no one left on Ham soon after all the old farts have
> died...
>
>>> You seem to think that
>>> your little piece of paper raises your IQ.
>>
>> Yet with you cber IQ you couldn't pass the test even though the answers
>> to the questions are available.
>
> Try taking an IQ test and i bet theres hardly any difference between you and
> most people on CB. The only test you would outshine most CBers would be
> radio related...
>
>
>

5123. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 08:23:51 UTC
From: Steveo <moparholic@hotmail.com>
Message-ID: <20051112032351.715$WZ@newsreader.com>
Source record: 16256
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

lucifer@eternal-flames.gov wrote:
> HTH
>
> NIck.
>
From Nicks Deli? You guys make a pretty good corn-beef'd sandwich. Still
running that special on baklava?

5124. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 08:56:44 UTC
From: realradioham <realradioham@tiscali.co.uk>
Message-ID: <4375ae4a$1_2@mk-nntp-2.news.uk.tiscali.com>
Source record: 16257
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

"Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1131759013.090249.164400@o13g2000cwo.googlegroups.com...
the difference between a _REAL_ Radio Ham
> and a CBer-Masquerading-As-A-Radio-Ham?

So what does that make me???????????

rrh

5125. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 11:03:34 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1131793414.511552.254490@z14g2000cwz.googlegroups.com>
Source record: 16258
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

Dana wrote:
> The mistake the FCC made was dropping the code requirment down to 5 wpm.
> Lots of nivices squeeked under the wire.
>
I agree they made that mistake, they are about to fix that one by
droping it to where it belonged in the first place zero

5126. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 12:08:12 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dl4luorlj1@news8.svr.pol.co.uk>
Source record: 16259
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"Dana" <dana@panix.com> wrote in message
news:Pine.NEB.4.63.0511120301370.9170@panix1.panix.com...
> The mistake the FCC made was dropping the code requirment down to 5 wpm.
> Lots of nivices squeeked under the wire.

What is this absurd fascination with Morse Code? Wouldnt you rather just
talk to people? I know all about the arguements about it getting through
when all else fails but is it really life and death?? If i cant get through
on the radio I use a Phone or the Internet. After all its just a hobby.
Besides, doesnt all that dot dot dot.. dash dash dash give you a headache
after a while??
Dont get me wrong, im not having a go at Amateurs im just asking the
question.. why is it so important?

Regards,
Graham

5127. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 12:31:47 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dl4nav$kc6$1@newsg1.svr.pol.co.uk>
Source record: 16260
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

<eternalsquire@comcast.net> wrote in message
news:1131764121.650140.292100@z14g2000cwz.googlegroups.com...
> Polymath, you have my profound apologies on behalf of the entire
> worldwide ham community for the harm you have suffered. And as I just
> said in a seperate thread, it is things like this that make me think
> that while governments have a right to demand the addresses of licensed
> hams, it no longer has the right to publish them. That goes *double*
> for hams who happen to be minors... Sadly, depravity no longer limited
> to any single walk of life, and anonymity on the net is an importand
> safety measure that should now go hand in hand with exercising the
> right to free speech.

One thing you must take on board Poly is that these threats that anyone receives arent from just Amateurs/CB'ers. They are from people who use a radio just like they use forums.. to upset and bully people and to force their sometimes vile views upon people. These people are in both Amateur and CB circles. Its not a CB fault, its down pure and simply to "nut jobs" which the majority of CB'ers and Amateurs arent. Unfortunately if you take a stand against these people and your personal info is easily available for these nut jobs then im afraid sometimes you will get threats upon yourself. Just because you post your replys with merely a "Handle" or first name doesnt mean your a cowering hiding lowlife, quite often its because people dont wish to have this s_it from nut jobs thrust upon them. You can still make a valid point without using your traceable details. I know you shouldnt have to worry about such things but we live in the real world. As for the nut jobs... sometimes simply ignoring them is the best thing to do. They crave the attention. If you dont give them the attention they move on. Whatever you say to them they will never change.....
73's
Graham

5128. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 13:39:25 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <4375f03b.76992518@news.iol.ie>
Source record: 16261
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"an old friend" <kb9rqz@yahoo.com> wrote:

> you suose you could enlighten us what you get out posting a reporting
> this drivel!

who is ''US'' that you talk about ?

are you some sort of SHOP STEWARD or WHAT ?

5129. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 13:51:37 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <4375f34c.77777845@news.iol.ie>
Source record: 16262
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Jock. <real_classs_a@yahoo.co.uk> wrote:

> Yes, but he's a Yank.

oh ... didnt know that.

5130. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 14:02:05 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <4375f3e4.77929901@news.iol.ie>
Source record: 16263
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

Dana <dana@panix.com> wrote:

> The mistake the FCC made was dropping the code requirment down to 5 wpm.
> Lots of nivices squeeked under the wire.

the mistake every authority has made is....

when you cheapen a licence , you get lower standards of behaviour being
displayed by the licensees.

when those who have licences did very little to get that licence they will
treat that licence with very little respect.

when those licensees are governed by rules/regulations then their
behaviour may well become the subject of complaints.

complaints must be investigated.
this costs money.

end result....
lowering the 'cost of administration' allows cb'ers onto amateur bands.
cb'ers on amateur bands will cause problems.
problems cause complaints.
complaints cause investigations.
investigations cost money.
money that was hoped to have been saved in the first place !!

and a lot of this behaviour can be put down to ONE THING.
(even the interview with an rsgb president on the arrl website shows this)

the plan to get rid of compulsory morse testing for hf access.

5131. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 14:02:48 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <4375f5e3.78440683@news.iol.ie>
Source record: 16264
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"The Magnum" <magnum@NOSPAMmag2781.freeserve.co.uk> wrote:

>
> "Dana" <dana@panix.com> wrote in message
> news:Pine.NEB.4.63.0511120301370.9170@panix1.panix.com...
> > The mistake the FCC made was dropping the code requirment down to 5 wpm.
> > Lots of nivices squeeked under the wire.
>
> What is this absurd fascination with Morse Code? Wouldnt you rather just

its not absurd.

if you did the morse test you would understand.

5132. Re: A different FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 14:08:48 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <4375f6f8.78717547@news.iol.ie>
Source record: 16265

eternalsquire@comcast.net wrote:

> limb, or potentially so, unlicensed people may use the signals MAYDAY
> or PAN respectively to call out for help or to warn away on any radio

if memory serves me...

its a PAN-PAN (spoken three times)

> 10) How is amateur radio different from other competing informal radio
> operation?
>
> Some countries do authorize citizen, family, or remote control radio
> services restricted to the use of government type-accepted equipment
> having fixed frequency channels, limited power, limited antenna size
> and/or height, and limited maximum distance.
>
> Amateur radio is distinguished from these services by virtue of its
> special characteristics: a) potentially unlimited range, b) no
> restrictions to type-accepted equipment, c) transmission may take
> place anywhere within the designated band, d) international
> communications are allowed.
you left out governed by national legislatio + internationl conventions

5133. Re: Naval connection? You qualify for RNARS membership!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 14:10:18 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <4375f78e.78867810@news.iol.ie>
Source record: 16266

"Mike" <mike@my1biz.com> wrote:

>
> Details and membership application form is available online at
> http://www.rnars.org.uk

do i get membership for travelling on the
B+I & SEALINK ferries as a young lad ??????????

5134. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 14:58:21 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dl4vtrvci1@news6.svr.pol.co.uk>
Source record: 16267
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"zjjPK "
<class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net> wrote in message news:4375f5e3.78440683@news.iol.ie...
> "The Magnum" <magnum@NOSPAMmag2781.freeserve.co.uk> wrote:
>
> >
> > "Dana" <dana@panix.com> wrote in message
> > news:Pine.NEB.4.63.0511120301370.9170@panix1.panix.com...
> > > The mistake the FCC made was dropping the code requirment down to 5 wpm.
> > > Lots of nivices squeeked under the wire.
> >
> > What is this absurd fascination with Morse Code? Wouldnt you rather just
>
>
> its not absurd.
>
> if you did the morse test you would understand.

Then can you explain it to me then? Im not being flippant, I actually want to know why its important and why, in your words, it drops the quality of people who chose to become Amateur if they don't do morse... why does it make them any less of a good Amateur?... and why do you think that because morse might be dropped the band will become full of CB people who will wreak havoc? And why do you class all CB'ers as the same?

5135. Re: High-insulation 1:1 wideband transformer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 16:51:42 UTC
From: SpamHog <n1jpr@hotmail.com>
Message-ID: <1131814302.346194.290220@f14g2000cwb.googlegroups.com>
Source record: 16268

Yesss! The lightning choke! An idea that even has intuitive appeal to me, and I have already gotten some pipes to wind one on (and weatherize it too).

Even w/o a dedicated grounding on the "cold" side, it has the effect of slowing the rise and giving the spark gap more time to work on the bolt energy.

Chokes are even available commercially, and are used a lot in animal concentration camps (well, make that on electrified cattle fences).

See
http://www.kencove.com/ShopDetail.php?recordID=MWLA
and
http://www.kencove.com/ShopDetail.php?recordID=MLC.

Now off to buy some CRT high voltage wire for the DC grounding / DC block wideband transformer.

5136. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 17:12:04 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1131815524.194690.37610@g49g2000cwa.googlegroups.com>
Source record: 16269
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

zjjPK wrote:
> Dana <dana@panix.com> wrote:
>
> > The mistake the FCC made was dropping the code requirment down to 5 wpm.
> > Lots of nivices squeeked under the wire.
>
> the mistake every authority has made is....
>
> when you cheapen a licence , you get lower standards of behaviour being
> displayed by the licensees.

suppositions and unsuported
>
> when those who have licences did very little to get that licence they will
> treat that licence with very little respect.

again suposition

>
> when those licensees are governed by rules/regulations then their
> behaviour may well become the subject of complaints.
>
> complaints must be investigated.
> this costs money.

not realy the FCC did not bother with complaints for many years

that is why the bands got trashy
cut

5137. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 17:19:11 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1131815951.318845.227130@g14g2000cwa.googlegroups.com>
Source record: 16270
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

zjjPK wrote:
> "The Magnum" <magnum@NOSPAMmag2781.freeserve.co.uk> wrote:
>
> >
> > "Dana" <dana@panix.com> wrote in message
> > news:Pine.NEB.4.63.0511120301370.9170@panix1.panix.com...
> > > The mistake the FCC made was dropping the code requirment down to 5 wpm.
> > > Lots of nivices squeeked under the wire.
> >
> > What is this absurd fascination with Morse Code? Wouldnt you rather just
>
>
> its not absurd.

it is asburd
>
> if you did the morse test you would understand.

I have and I do understand it is an absurd hazing ritual

5138. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 17:21:37 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1131816097.135014.66360@f14g2000cwb.googlegroups.com>
Source record: 16271
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

zhpPK wrote:
> "an old friend" <kb9rqz@yahoo.com> wrote:
>
> > you suose you could enlighten us what you get out posting a reporting
> > this drivel!
>
>
> who is ''US'' that you talk about ?

you don't know

sheessh
>
>
> are you some sort of SHOP STEWARD or WHAT ?

nope

5139. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 17:32:43 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <437626ab.540424@news.iol.ie>
Source record: 16272
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"The Magnum" <magnum@NOSPAMmag2781.freeserve.co.uk> wrote:

> Then can you explain it to me then? Im not being flippant, I actually want
> to know why its important and why, in your words, it drops the quality of
> people who chose to become Amateur if they don't do morse... why does it
> make them any less of a good Amateur?... and why do you think that because
> morse might be dropped the band will become full of CB people who will wreak
> havoc? And why do you class all CB'ers as the same?

all you have to do is observe the behaviour on this newsgroup.

the outrageous foul language used.

and then listen to 40m

by even attempting to do the morse test shows an attempt and willingness
to improve.
something that 2500 showed they didnt have when they ran away.

and worse... they showed it to the authorities.

5140. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 17:35:58 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <4376275c.717882@news.iol.ie>
Source record: 16273
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"an_old_friend" <konstans@hotmail.com> wrote:

>
> zjjPK wrote:
> > Dana <dana@panix.com> wrote:
> >
> > > The mistake the FCC made was dropping the code requirment down to 5 wpm.
> > > Lots of nivices squeeked under the wire.
> >
> > the mistake every authority has made is....
> >
> > when you cheapen a licence , you get lower standards of behaviour being
> > displayed by the licensees.
>
> suppositions and unsuported
never listened to the bands in the last two years then ?

> >
> > when those who have licences did very little to get that licence they will
> > treat that licence with very little respect.
>
> again suposition
never listened to the bands in the last two years then ?

>
> >
> > when those licensees are governed by rules/regulations then their
> > behaviour may well become the subject of complaints.
> >
> > complaints must be investigated.
> > this costs money.
>
> not realy the FCC did not bother with complaints for many years
>
> that is why the bands got trashy

and they will continue to get 'trashy'

if 'u' are given a licence for almost no-effort then that licence is
worthless because when lost ..it represents no-amount of effort.

5141. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 17:37:16 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <43762817.904522@news.iol.ie>
Source record: 16274
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"an_old_friend" <konstans@hotmail.com> wrote:

> > who is ''US'' that you talk about ?
> you don't know
> sheessh

i suppose the fact that i asked wasnt enough for you to supply an answer ?

> > are you some sort of SHOP STEWARD or WHAT ?
> nope
didnt think so.

5142. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 17:40:16 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1131817216.661826.179400@g44g2000cwa.googlegroups.com>
Source record: 16275
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

zarPK wrote:
> "an_old_friend" <konstans@hotmail.com> wrote:
>
> >
> > zjjPK wrote:
> > > Dana <dana@panix.com> wrote:
> > >
> > > > The mistake the FCC made was dropping the code requirment down to 5 wpm.
> > > > Lots of nivices squeeked under the wire.
> > >
> > > the mistake every authority has made is....
> > >
> > > when you cheapen a licence , you get lower standards of behaviour being
> > > displayed by the licensees.
> > >
> > suppositions and unsuported
> never listened to the bands in the last two years then ?

yes I have

indeed I hear very little there a subject I find of some concern
>
>
>
> > >
> > > when those who have licences did very little to get that licence they will
> > > treat that licence with very little respect.
> > >
> > again suposition
> never listened to the bands in the last two years then ?
yes i have listened

I also know I almost nothing for my license yet I value it highly for
what it alows me to do
>
> >
> > >
> > > when those licensees are governed by rules/regulations then their
> > > behaviour may well become the subject of complaints.
> > >
> > > complaints must be investigated.
> > > this costs money.
> > >
> > not realy the FCC did not bother with complaints for many years

> >
> > that is why the bands got trashy
>
> and they will continue to get 'trashy'

and this is not affected by the testing or lack of it

you don't put the cops out looking for speeding you don't chatch the speeders

making the linces harder to get does not stopp the speeder the fears of the cops does
>
>
> if 'u' are given a licence for almost no-effort then that licence is
> worthless because when lost ..it represents no-amount of effort.

you are wrong my License was given me with no more efort than it took to show and take the test (the book i had ordered to studiy arrived the day after the test

5143. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 18:19:53 UTC
From: Walter Raleigh <walterraleigh69@hotmail.com>
Message-ID: <iuqdf.18656$R5.1833@news.indigo.ie>
Source record: 16276
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"an_old_friend" <konstans@hotmail.com> wrote in message
news:1131816097.135014.66360@f14g2000cwb.googlegroups.com...

Don't worry, it's just another example of the Doobalin illiterati returning
to the fold after a far too brief absence...

--
73s de Walter R.

5144. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 19:22:45 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dl5fdo$i18$1@newsg3.svr.pol.co.uk>
Source record: 16277
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"zjjPK "
<class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net> wrote in message news:4375f3e4.77929901@news.iol.ie...
> Dana <dana@panix.com> wrote:
>
> > The mistake the FCC made was dropping the code requirment down to 5 wpm.
> > Lots of nivices squeeked under the wire.

Lol, great command of the English language there. I wonder if his morse is as bad........

> the mistake every authority has made is....
>
> when you cheapen a licence , you get lower standards of behaviour being
> displayed by the licensees.

I disagree. There might be one or two idiots but that doesnt fall completely at the ease of getting the licence.

> when those who have licences did very little to get that licence they will
> treat that licence with very little respect.

Once again, after showing a willingness to actually bother to get licenced, being it easy or not, they have to purchase the said equipment. Surely your not saying CB'ers who dont give a rats ass about Amateur are spending their hard earnt? money on Amateur kit, and getting registered so you can find out who and where they are... just to mess about and upset a few advanced Amateurs? Seems a very strange way of going about things.

Surely these idiot users are more likely the completely unlicenced users on stolen radios or kids messing about on parents radios while they are out rather than someone who wants to become a "first step" Amateur? Also quite a few people who gain M3 licences or whatever the equivelent in the US surely would go on to intermediate and so on rather than just stop there. A few will yes but many will want to progress.

> when those licensees are governed by rules/regulations then their
> behaviour may well become the subject of complaints.

Or maybe not....... your now trying to say Amateurs above the entry level never cause interference or mess about sometimes on the air.... b-ll-cks.

> complaints must be investigated.
> this costs money.

yes........

> end result....
> lowering the 'cost of administration' allows cb'ers onto amateur bands.

Err, whats wrong with CBers becoming radio Amateurs? Its happened for years and years....long before the licence was made easier. And most of them became perfectly respected Amateurs.

> cb'ers on amateur bands will cause problems.

NO....idiots on Amateur bands will cause problems. Or do you tar all CB radio users with the same brush?

> problems cause complaints.

Yes.........

> complaints cause investigations.

Yes............

> investigations cost money.

Yes......

> money that was hoped to have been saved in the first place !!

Saved for what? The fully licenced Annual Amateur Jamboree ?

> and a lot of this behaviour can be put down to ONE THING.
> (even the interview with an rsgb president on the arrl website shows this)

Oh in that case it must be right then.....

> the plan to get rid of compulsory morse testing for hf access.

For gods sake... morse isnt the "be all and end all of radio", its an old out-dated form of communication which had its use in the past but is now just a form of elitist snobbery. Also trying to say anyone who doesnt want to learn morse is basically a "scumbag" shows Bigotry beyond contempt. Why not welcome the new Amateurs and encorage them to advance rather than look down on them. The licence was made easier because the userbase of Amateur was drastically on the decline. It was done to encorage more people to get involved and keep the "hobby" alive.

Regards,
Graham

5145. Re: 1936 vintage rig

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 19:26:52 UTC
From: Bill Janssen <billj9@ieee.org>
Message-ID: <0mrdf.2322$lg.133@news01.roc.ny>
Source record: 16278

gb wrote:

>"MadEngineer" <glenn.b.dixon@gmail.com> wrote in message
>news:1131716834.266593.323410@f14g2000cwb.googlegroups.com...
>
>
>>Hi All,
>>
>>My father, W7GEG, got his ticket in 1936 when he was in high school.
>>Like many others, he built his first rig. His transmitter was based on
>>an 809 tube and had plug-in coils to switch bands. His receiver was a
>>three-tube regenerative, but he doesn't remember the tube types. He
>>worked mainly 40 meters. According to my dad, both designs were very
>>popular at the time.
>>
>>The rig worked the first time, and was a thrilling experience for him.
>>"I probably wouldn't have gone into a technical career had the radio
>>not worked," he told me. He holds a PhD in physics.
>>
>>Can any old-timers out there help me with any information regarding
>>what he might have built? I thought I might try to either find or
>>build a similar rig as a gift, or at least present him with the plans
>>the equipment was based on.
>>
>>Thanks, 73,
>>Glenn Dixon AC7ZN
>>
>>
>>
>
>Glenn- Google search for "GlowBugs"
>
>Here is an 809 used as a final amplifier in a homebrew design (AB0CW)
>http://www.qsl.net/ab0cw/809pa.htm
>
>The 807 was also a very popular tube of that era
>http://www.qsl.net/ab4yd/myprojects/index.htm
>
>http://www.qsl.net/ab4yd/myprojects/80m_807_a/final.jpg
>
>Some transmitter designs
>http://www.mines.uidaho.edu/%7eglowbugs/tx/index.html
>
>

>
>
And if you decide you need some parts I am sure that I and others can
come up
with most. Post your need here and some body will have what you need.

Bill K7NOM

5146. Is "ARRL's RF Amplifier Classics" book any good?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 20:28:52 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <QrCdnTUSvZOozeveRVn-gQ@bright.net>
Source record: 16279

Is it worth a look? Are there good designs for VHF and up?

Scott
N0EDV

5147. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 21:27:19 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1131830838.965951.205690@g43g2000cwa.googlegroups.com>
Source record: 16280
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Walter Raleigh wrote:
> "an_old_friend" <konstans@hotmail.com> wrote in message
> news:1131816097.135014.66360@f14g2000cwb.googlegroups.com...
>
> Don't worry, it's just another example of the Doobalin illiterati returning
> to the fold after a far too brief absence...

sorry but some where in there info stopped being tranfered? who
returning? if you would be so kind
>
> --
> 73s de Walter R.

5148. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-12 21:36:37 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1131831397.091849.318910@g44g2000cwa.googlegroups.com>
Source record: 16281
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

The Magnum wrote:

oh my a post in which with ervery word of yours
> "zjjPK "
> <class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.ei
> rcom.ie.net> wrote in message news:4375f3e4.77929901@news.iol.ie...
> > Dana <dana@panix.com> wrote:
> >
> > > The mistake the FCC made was dropping the code requirment down to 5 wpm.
> > > Lots of nivices squeeked under the wire.
>
> Lol, great command of the English language there. I wonder if his morse is
> as bad........
>
> > the mistake every authority has made is....
> >
> > when you cheapen a licence , you get lower standards of behaviour being
> > displayed by the licensees.
>
> I disagree. There might be one or two idiots but that doesnt fall completely
> at the ease of getting the licence.
>
> > when those who have licences did very little to get that licence they will
> > treat that licence with very little respect.
>
> Once again, after showing a willingness to actually bother to get licenced,
> being it easy or not, they have to purchase the said equipment. Surely your
> not saying CB'ers who dont give a rats ass about Amateur are spending their
> hard earnt? money on Amateur kit, and getting registered so you can find out
> who and where they are... just to mess about and upset a few advanced
> Amateurs? Seems a very strange way of going about things.
>
> Surely these idiot users are more likely the completely unlicenced users on
> stolen radios or kids messing about on parents radios while they are out
> rather than someone who wants to become a "first step" Amateur? Also quite a
> few people who gain M3 licences or whatever the equivelent in the US surely
> would go on to intermediate and so on rather than just stop there. A few
> will yes but many will want to progress.
>
> > when those licensees are governed by rules/regulations then their
> > behaviour may well become the subject of complaints.
>
> Or maybe not....... your now trying to say Amateurs above the entry level

> never cause interference or mess about sometimes on the air.... b-ll-cks.
>
> > complaints must be investigated.
> > this costs money.
>
> yes........
>
> > end result....
> > lowering the 'cost of administration' allows cb'ers onto amateur bands.
>
> Err, whats wrong with CBers becoming radio Amateurs? Its happened for years
> and years....long before the licence was made easier. And most of them
> became perfectly respected Amateurs.
>
> > cb'ers on amateur bands will cause problems.
>
> NO....idiots on Amateur bands will cause problems. Or do you tar all CB
> radio users with the same brush?
>
> > problems cause complaints.
>
> Yes.........
>
> > complaints cause investigations.
>
> Yes............
>
> > investigations cost money.
>
> Yes......
>
> > money that was hoped to have been saved in the first place !!
>
> Saved for what? The fully licenced Annual Amateur Jamboree ?
>
> > and a lot of this behaviour can be put down to ONE THING.
> > (even the interview with an rsgb president on the arrl website shows this)
>
> Oh in that case it must be right then.....
>
> > the plan to get rid of compulsory morse testing for hf access.
>
> For gods sake... morse isnt the "be all and end all of radio", its an old
> out-dated form of communication which had its use in the past but is now
> just a form of elitist snobbery. Also trying to say anyone who doesnt want
> to learn morse is basically a "scumbag" shows Bigotry beyond contempt. Why
> not welcome the new Amateurs and encorage them to advance rather than look
> down on them. The licence was made easier because the userbase of Amateur
> was drastically on the decline. It was done to encorage more people to get
> involved and keep the "hobby" alive.

>
> Regards,
> Graham

5149. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-13 02:09:38 UTC
From: Walter Raleigh <walterraleigh69@hotmail.com>
Message-ID: <Bfxdf.18715$R5.1840@news.indigo.ie>
Source record: 16282
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"zhpPK "
<class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net>
wrote in message news:4375f03b.76992518@news.iol.ie...
> "an old friend" <kb9rqz@yahoo.com> wrote:
>
>> you suose you could enlighten us what you get out posting a reporting
>> this drivel!
>
>
> who is ''US'' that you talk about ?
>
>
> are you some sort of SHOP STEWARD or WHAT ?

Bearing in mind the mis-spellings et al., perhaps Paul, before you resume cyber-stalking G8OSN, you could enlighten us as to what right you have above the previous poster, to speak on behalf of all the participants here? A weak argument, based on a weak initial post methinks...

Just being fair...

--
73s de Walter R.

5150. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-13 02:13:35 UTC
From: Walter Raleigh <walterraleigh69@hotmail.com>
Message-ID: <ijxdf.18716$R5.1897@news.indigo.ie>
Source record: 16283
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"an_old_friend" <konstans@hotmail.com> wrote in message
news:1131830838.965951.205690@g43g2000cwa.googlegroups.com...
>
> sorry but some where in there info stopped being tranfered? who
> returning? if you would be so kind

Paul Kearney EI7GM aka Rumpelstilskin, google for more, a search by
"pkearn", a segment of his mail address used most frequently is most
effective.
Be warned, boredom may set in rather quickly....

--
73s de Walter R.

5151. Re: Trio TS-780 Repair

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-13 07:50:46 UTC
From: MerLin <mrcord81@nextgen.net.mt>
Message-ID: <1131868246.198395.39690@g47g2000cwa.googlegroups.com>
Source record: 16284

Hello Greg,

Thanks for your reply. I have just downloaded the user and service
manual for the TS-780..i will give it a look later on. However as for
T/R switch...i don't think it is being activated on trasmit as i don't
hear any replay operation. So it seems that part of the control
circuit is not functioning. I still have to look at the schematics
though.

Thanks for you help

Mario

gb wrote:
> "MerLin" <mrcord81@nextgen.net.mt> wrote in message
> news:1131658602.855490.163890@z14g2000cwz.googlegroups.com...
> > Hello all,
> >
> > I just got a Trio TS-780, however there is no RF power on Transmit. At
> > first i thought that PA stage was damaged however i also noticed that
> > the ON AIR Led and Antenna Switch are not energised in Transmit Mode.
> > Receiver is working perfrectly. Can anyone supply me with detailed
> > schematics for this Transciever and whether anyone has seen this fault
> > on similar transceivers?
> >
> > Thanks
> >
> > Mario
> >
>
> Mario -
>
> Always have a 50 ohm dummy load attached for testing.
>
> Check the T/R (Transmit/Receive) relay in the RF section of the radio.
> Is it working?
>
> Kenwood/Trio TS-870 Repair Notes (check for shorted capacitor)
> http://www.mods.dk/view.php?ArticleId=3094
>
> Kenwood/Trio TS-780 Owner and Service manuals are here:
> http://www.mods.dk/view.php?ListManuals=kenwood
>
> Greg
> w9gb

5152. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-13 10:31:51 UTC
From: gadge <g4dge@linux.user>
Message-ID: <dl74gugki1@newsg1.svr.pol.co.uk>
Source record: 16285
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

On Fri, 11 Nov 2005 06:38:23 -0800, Polymath wrote:

>
> A CB Radio hobbyist, on the other hand, sees no difference between a Ham
> Radio licence and a CB Radio licence. To him, they are
> sisters-under-the-skin.

I'm not a cb'er, never was and never will be and ham radio still looks
like cb to me! Why is that?

> Wrongly, the CB Radio Hobbyist then tries to
> classify himself as the equal of the Radio Ham when, in fact, he is
> nothing of the kind. A sure sign of a CB Radio hobbyist is if he holds, or
> has ever held, a licence issued under the gangrenous degeneration that is
> the M3/CB Fools' Licence scheme.

There are many ex/current cb'ers who are G/M0 class and proud of it.

> -----ooooo-----
>
> One group of people who claim to be of the standard of Radio Hams but who
> are in reality nothing more than an apology for the failure of a CBer are
> those class B licensees who falsely proclaimed that they were against the
> use of a Morse Test to control access to the HF bands, until, that is, a
> test was introduced at their intellectual level, the intellectual level of
> 6-year-olds.

Rubbish. Some of us have passed electronics course/exams at BSC honours
level and yet we are not interested in the slightest with morse.

> 6 year-olds simply lack the mathematical tool kit to enable them to handle
> even the simplest algebraic manipulation for Ohm's Law and thus,

And how good are you with tensors old chap.

the
> disgraceful Class Ber's in the aforementioned category are not Radio Hams
> by any stretch of the imagination!

You mistakenly ascribe too much to the ability to *jerk* a morse key old
boy.

>
> Remember - A sure sign of a CB Radio hobbyist is if he holds, or has ever
> held, a licence issued under the gangrenous degeneration that is the M3/CB
> Fools' Licence scheme!

5153. Re: Trio TS-780 Repair

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-13 13:21:29 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <je6dnRq5OrkVoOrenZ2dnUVZ_sSdnZ2d@bright.net>
Source record: 16286

Has the wiring in the microphone been checked? Maybe it's simply a
broken PTT line inside the mic or at the connector end...

Scott

MerLin wrote:

> Hello Greg,
>
> Thanks for your reply. I have just downloaded the user and service
> manual for the TS-780..i will give it a look later on. However as for
> T/R switch...i don't think it is being activated on trasmit as i don't
> hear any replay operation. So it seems that part of the control
> circuit is not functioning. I still have to look at the schematics
> though.
>
> Thanks for you help
>
> Mario
>
> gb wrote:
>
>>"MerLin" <mrcord81@nextgen.net.mt> wrote in message
>>news:1131658602.855490.163890@z14g2000cwz.googlegroups.com...
>>
>>>Hello all,
>>>
>>>I just got a Trio TS-780, however there is no RF power on Transmit. At
>>>first i thought that PA stage was damaged however i also noticed that
>>>the ON AIR Led and Antenna Switch are not energised in Transmit Mode.
>>>Receiver is working perfrectly. Can anyone supply me with detailed
>>>schematics for this Transciever and whether anyone has seen this fault
>>>on similar transceivers?
>>>
>>>Thanks
>>>
>>>Mario
>>>
>>
>>Mario -
>>
>>Always have a 50 ohm dummy load attached for testing.
>>
>>Check the T/R (Transmit/Receive) relay in the RF section of the radio.
>>Is it working?

>>
>>Kenwood/Trio TS-870 Repair Notes (check for shorted capacitor)
>>http://www.mods.dk/view.php?ArticleId=3094
>>
>>Kenwood/Trio TS-780 Owner and Service manuals are here:
>>http://www.mods.dk/view.php?ListManuals=kenwood
>>
>>Greg
>>w9gb
>
>

5154. Re: Trio TS-780 Repair

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-13 13:49:44 UTC
From: MerLin <mrcord81@nextgen.net.mt>
Message-ID: <1131889784.809918.67590@o13g2000cwo.googlegroups.com>
Source record: 16287

Hi Scott,

Yeah it has been checked and it was found to be correct. The TS-780 also has a Send/Rec Switch on the front panel and when it is flicked in Send Mode, it goes in transmit mode (no reception is possible) however ON AIR LED does not switch on, T/R relay not activated and no RF power output. Furthermore, i believe that when TX offset is activated, the display frequency should change (depedning on the offset frequency) on transmit. However this does not change. It seems that in transmit mode, the transmitter is not being activated at all.....that is why i presume its a control failure rather than RF or final stage failure. I am currently following the logic control circuit to switch between transmit/receive mode.

Thanks for your help though. If anybody has more suggestions, please let me know. Thanks all

Mario

5155. Re: Trio TS-780 Repair

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-13 15:03:59 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <SMudnT9dNJsNyOrenZ2dnUVZ_t2dnZ2d@bright.net>
Source record: 16288

No problem!! I just wanted to make sure the simple stuff was ruled out
first =8O

Sounds like you're on the right track. Assuming you have a schematic,
just start following the PTT line from the mic jack until you hit a
logic gate or a transistor. One of those is likely to be used as a
switch that routes some DC voltage to the tx circuits and maybe labeled
something like T9V or TX9, indicating some voltage level for TX mode.
Once you find the (probably a transistor) device being used as the power
switch for the transmit sections, check the capacitors and resistors
connected to it for shorts or opens. Is it possible there are 2 power
supply sections and one side (transmit) is dead?

Scott

MerLin wrote:
> Hi Scott,
>
> Yeah it has been checked and it was found to be correct. The TS-780
> also has a Send/Rec Switch on the front panel and when it is flicked in
> Send Mode, it goes in transmit mode (no reception is possible) however
> ON AIR LED does not switch on, T/R relay not activated and no RF power
> output. Furthermore, i believe that when TX offset is activated, the
> display frequency should change (depedning on the offset frequency) on
> transmit. However this does not change. It seems that in transmit
> mode, the transmitter is not being activated at all.....that is why i
> presume its a control failure rather than RF or final stage failure. I
> am currently following the logic control circuit to switch between
> transmit/receive mode.
>
> Thanks for your help though. If anybody has more suggestions, please
> let me know. Thanks all
>
> Mario
>

5156. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-13 15:54:15 UTC
From: "Jock." <real_classs_a@yahoo.co.uk>
Message-ID: <f8oen1t8jp1fp4ocgh4o7p46e4hr9dl5m6@4ax.com>
Source record: 16289
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

On Sun, 13 Nov 2005 10:31:51 +0000, gadge <g4dge@linux.user> wrote:

>I'm not a cb'er, never was and never will be and ham radio still looks
>like cb to me! Why is that?

Delighted to hear it. "Ham" radio looks like CB because of the
number of CB-ers now infesting it.

>Rubbish. Some of us have passed electronics course/exams at BSC honours
>level....

Nothing to do with radio, amateur or otherwise.

--

73 de Jock.

Aircraft stay in the sky in much the same way
that bricks don't.

5157. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-13 16:09:56 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <4377649e.81947528@news.iol.ie>
Source record: 16290
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Walter Raleigh" <walterraleigh69@hotmail.com> wrote:

> > who is ''US'' that you talk about ?
> >
> >
> > are you some sort of SHOP STEWARD or WHAT ?
>
> Bearing in mind the mis-spellings et al., perhaps Paul, before you resume
whaton earth are you on about ?

the other bloke used the term US **not me**

open your eyes please !!

> _____________ _____, you could enlighten us as to what right you have above
i sincerely hope for your sake that no such crime exists.

i also sincerely hope that you look in the mirror.

> the previous poster, to speak on behalf of all the participants here? A weak
> argument, based on a weak initial post methinks...
>
> Just being fair...
fair ?
FAIR !

bwwwwwwwwaaaaaaaaaaaaahhhhhhhhhhhhhhhh

youre the one who publishes my name on here and yet REFUSES to do the same
with YOUR OWN NAME !

you also pub;lish a comment about automatics and 'jackeen ethnic
cleansing' and refuse to clarify if this is some threat !

5158. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-13 16:14:12 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <43776650.82381970@news.iol.ie>
Source record: 16291
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"The Magnum" <magnum@NOSPAMmag2781.freeserve.co.uk> wrote:

> just a form of elitist snobbery. Also trying to say anyone who doesnt want
> to learn morse is basically a "scumbag" shows Bigotry beyond contempt. Why

I said no such thing !

you have some correcting to do.

5159. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-13 16:14:24 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <43776657.82388286@news.iol.ie>
Source record: 16292
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"an_old_friend" <konstans@hotmail.com> wrote:

>
> Walter Raleigh wrote:
> > "an_old_friend" <konstans@hotmail.com> wrote in message
> > news:1131816097.135014.66360@f14g2000cwb.googlegroups.com...
> >
> > Don't worry, it's just another example of the Doobalin illiterati returning
> > to the fold after a far too brief absence...
>
> sorry but some where in there info stopped being tranfered? who
> returning? if you would be so kind

ha ha ha..

yes wallyrally... start speaking with intelligence...
(not mention a spellchecker + decent keyboard)

5160. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-13 17:01:01 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1131898794.361555.190010@z14g2000cwz.googlegroups.com>
Source record: 16293
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

zarPK wrote:
> "an_old_friend" <konstans@hotmail.com> wrote:
>
> >
> > Walter Raleigh wrote:
> > > "an_old_friend" <konstans@hotmail.com> wrote in message
> > > news:1131816097.135014.66360@f14g2000cwb.googlegroups.com...
> > >
> > > Don't worry, it's just another example of the Doobalin illiterati returning
> > > to the fold after a far too brief absence...
> > >
> > sorry but some where in there info stopped being tranfered? who
> > returning? if you would be so kind
>
> ha ha ha..
>
>
> yes wallyrally... start speaking with intelligence...
> (not mention a spellchecker + decent keyboard)

ah yes there I have it proof enough for me the poster name not be taken
seriously

5161. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-13 17:14:47 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <43777267.85529956@news.iol.ie>
Source record: 16294
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"an old friend" <kb9rqz@yahoo.com> wrote:

> ah yes there I have it proof enough for me the poster name not be taken
> seriously

yes... wallyrally has been hiding in the shadows for over a year.

he/she/it refuses to identify himself when challenged to do so but
will publish the name and callsign of other(s) multiple times.

one wonders if he/she/it has some unfortunate status that is
best kept out of the way. a srarus that will explain his/her/its
attitude towards those who have the courage not to hide when
posting on this newsgroup.

he/she/it has criticised the spelling and grammar of other(s) but
conveniently ignores the historical catalogue of spelling mistakes
that he/she/it has made in the past !!

5162. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-13 17:19:23 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1131902363.059822.305290@g47g2000cwa.googlegroups.com>
Source record: 16295
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

zYYPK wrote:
> "an old friend" <kb9rqz@yahoo.com> wrote:
>
> > ah yes there I have it proof enough for me the poster name not be taken
> > seriously
>
> yes... wallyrally has been hiding in the shadows for over a year.

you are the poster being reffered to

and the charge is not of hiding but proof nothing you say need be taken
seriously

5163. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-13 17:31:10 UTC
From: Walter Raleigh <walterraleigh69@hotmail.com>
Message-ID: <xLKdf.18758$R5.1857@news.indigo.ie>
Source record: 16296
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"an old friend" <kb9rqz@yahoo.com> wrote in message
news:1131902363.059822.305290@g47g2000cwa.googlegroups.com...
> you are the poster being reffered to
>
> and the charge is not of hiding but proof nothing you say need be taken
> seriously

Don't worry, z??pk has no problem with picking up the baton and defending
himself, usually by the wrong end unfortunately...

He loves being called Rumpelstiltskin (• G8OSN), another individual who
hated it when people referred to him by name.

--
73s de Walter R.

5164. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-13 20:27:54 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dl87k7rkp1@newsg4.svr.pol.co.uk>
Source record: 16297
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"zarPK"
<class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net> wrote in message news:43776650.82381970@news.iol.ie...
> "The Magnum" <magnum@NOSPAMmag2781.freeserve.co.uk> wrote:
>
> > just a form of elitist snobbery. Also trying to say anyone who doesnt want
> > to learn morse is basically a "scumbag" shows Bigotry beyond contempt. Why
>
> I said no such thing !
>
> you have some correcting to do.

That comment was meant for the posters who say people on Amateur Bands who do not wish to involve themselves with morse are lowly class CBers who seem to live in trailor parks and live off welfare and care nothing (scumbags in other words) It wasnt aimed directly at you it was put in as an "Also" to those who try to put that image over. Maybe I should have made it a bit clearer.

Regards,
Graham

5165. Source for DV2840S MOSFET?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 00:09:36 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <IamdnTAng_LsSOrenZ2dnUVZ_tCdnZ2d@bright.net>
Source record: 16198

Does anybody have a source for the DV2840S MOSFET or a DV1007 (same thing, old part number)? Tried Google and Dogpile. Found one place had them for $30 each. Can anybody find a cross reference to an ECG or NTE part number? Tried both online, with no results. How about an equivalent part??

It is for a 2M amplifier project from the RSGB book "VHF UHF Manual"

Scott
N0EDV

5166. Re: Source for DV2840S MOSFET?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 01:08:58 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <HKGdnZnzacUzfurenZ2dnUVZ_tidnZ2d@comcast.com>
Source record: 16199

"Scott" <acepilot@bloomer.net> wrote in message
news:IamdnTAng_LsSOrenZ2dnUVZ_tCdnZ2d@bright.net...
> Does anybody have a source for the DV2840S MOSFET or a DV1007 (same thing,
> old part number)? Tried Google and Dogpile. Found one place had them for
> $30 each. Can anybody find a cross reference to an ECG or NTE part
> number? Tried both online, with no results. How about an equivalent
> part??
>
> It is for a 2M amplifier project from the RSGB book "VHF UHF Manual"
>
> Scott
> N0EDV

Scott,

Have you tried RF Parts?
"Best place in US for the solid-state amplifier builder
They should be able to find a suitable cross reference to a Motorola,
Toshiba or Mitsubishi device
http://www.rfparts.com/mototran.html

RF Power MOSFETs - N Channel
http://www.rfparts.com/transistorspecs.html#mosfets

Transistor Case styles
http://www.rfparts.com/trancase.html

BTW, $30 is a correct "ballpark" price for a MOSFET in the 2-meter range (up
to 175 MHz) with 70 watts output at 12.5 VDC

RF Parts
435 South Pacific Street
San Marcos, California 92078
U.S.A.
Technical Help & Customer Service
(760) 744-0750
10:00 a.m. to 4:00 p.m. PST
Monday - Friday

==========
w9gb

5167. Re: Is "ARRL's RF Amplifier Classics" book any good?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 01:11:47 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <Wqydnaa7FuPKeerenZ2dnUVZ_tydnZ2d@comcast.com>
Source record: 16200

"Scott" <acepilot@bloomer.net> wrote in message
news:QrCdnTUSvZOozeveRVn-gQ@bright.net...
> Is it worth a look? Are there good designs for VHF and up?
>
> Scott
> N0EDV

Scott,

Why don't you look at the 875A kit from CCI.
http://www.communication-concepts.com/875a.htm

You can purchase it as an entire kit, or juts what you need.
Based upon the Motorola Application Notes of Helge Granberg, K7ES (sk)

w9gb

5168. Re: Is "ARRL's RF Amplifier Classics" book any good?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 01:12:57 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <l7OdnTfFt_sAeereRVn-sA@comcast.com>
Source record: 16201

"Scott" <acepilot@bloomer.net> wrote in message
news:QrCdnTUSvZOozeveRVn-gQ@bright.net...
> Is it worth a look? Are there good designs for VHF and up?
>
> Scott
> N0EDV

Motorola Application Notes
http://www.communication-concepts.com/application_notes.htm

w9gb

5169. Re: Is "ARRL's RF Amplifier Classics" book any good?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 01:48:51 UTC
From: Bill <exray@coqui.net>
Message-ID: <11077$4377ed06$4232bea1$17507@COQUI.NET>
Source record: 16202

> "Scott" <acepilot@bloomer.net> wrote in message
> news:QrCdnTUSvZOozeveRVn-gQ@bright.net...
>
>>Is it worth a look? Are there good designs for VHF and up?
>>
>>Scott
>>N0EDV

Its an all-purpose amplifier book and covers up into VHF and microwave.
It is a collection of previously published articles as opposed to a
book on its own.
Thats not necessarily a bad thing if you don't have the past 20 years of
QST and QEX handy.

-Bill

5170. Re: Source for DV2840S MOSFET?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 02:37:19 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <i1ufn19d63ebfmgdshqd3i11dvt3vmjsq3@4ax.com>
Source record: 16203

On Mon, 14 Nov 2005 00:09:36 +0000, Scott <acepilot@bloomer.net>
wrote:

>Does anybody have a source for the DV2840S MOSFET or a DV1007 (same
>thing, old part number)? Tried Google and Dogpile. Found one place had
>them for $30 each. Can anybody find a cross reference to an ECG or NTE
>part number? Tried both online, with no results. How about an
>equivalent part??
>
>It is for a 2M amplifier project from the RSGB book "VHF UHF Manual"
>
>Scott
>N0EDV

Thats at least a 25 year old part and not common then. If RF Parts
doesn't have it it's likely unobtainium.

Allison
KB1GMX

5171. Re: Source for DV2840S MOSFET?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 03:23:33 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <8aGdnUp8DM57n-XenZ2dnUVZ_v-dnZ2d@bright.net>
Source record: 16204

RF Parts is the first place I went. I didn't see that FET listed.
Seems to me I found a website that listed an SK number cross reference,
but I can't find it again. I did email RF Parts with that SK number and
it was $2.40, so I think that SK number was referring to some other FET
on that website...They told me they were unable to give me any info on
that part when I asked if it was a MOSFET...

Scott

gb wrote:
> "Scott" <acepilot@bloomer.net> wrote in message
> news:IamdnTAng_LsSOrenZ2dnUVZ_tCdnZ2d@bright.net...
>
>>Does anybody have a source for the DV2840S MOSFET or a DV1007 (same thing,
>>old part number)? Tried Google and Dogpile. Found one place had them for
>>$30 each. Can anybody find a cross reference to an ECG or NTE part
>>number? Tried both online, with no results. How about an equivalent
>>part??
>>
>>It is for a 2M amplifier project from the RSGB book "VHF UHF Manual"
>>
>>Scott
>>N0EDV
>
>
> Scott,
>
> Have you tried RF Parts?
> "Best place in US for the solid-state amplifier builder
> They should be able to find a suitable cross reference to a Motorola,
> Toshiba or Mitsubishi device
> http://www.rfparts.com/mototran.html
>
> RF Power MOSFETs - N Channel
> http://www.rfparts.com/transistorspecs.html#mosfets
>
> Transistor Case styles
> http://www.rfparts.com/trancase.html
>
> BTW, $30 is a correct "ballpark" price for a MOSFET in the 2-meter range (up
> to 175 MHz) with 70 watts output at 12.5 VDC
>
> RF Parts
> 435 South Pacific Street
> San Marcos, California 92078

> U.S.A.
> Technical Help & Customer Service
> (760) 744-0750
> 10:00 a.m. to 4:00 p.m. PST
> Monday - Friday
>
> ========================
> w9gb
>
>

5172. Re: Source for DV2840S MOSFET?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 03:26:49 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <8aGdnUV8DM41nuXenZ2dnUVZ_v-dnZ2d@bright.net>
Source record: 16205

I know it's an oldie, but I'm hopefull to dig one up. The amp design is so simple and matches very well with the transverter I built out of the same book...2W in 25W out.

Scott
N0EDV

nospam@nouce.bellatlantic.net wrote:

> On Mon, 14 Nov 2005 00:09:36 +0000, Scott <acepilot@bloomer.net>
> wrote:
>
>
>>Does anybody have a source for the DV2840S MOSFET or a DV1007 (same
>>thing, old part number)? Tried Google and Dogpile. Found one place had
>>them for $30 each. Can anybody find a cross reference to an ECG or NTE
>>part number? Tried both online, with no results. How about an
>>equivalent part??
>>
>>It is for a 2M amplifier project from the RSGB book "VHF UHF Manual"
>>
>>Scott
>>N0EDV
>
>
> Thats at least a 25 year old part and not common then. If RF Parts
> doesn't have it it's likely unobtainium.
>
> Allison
> KB1GMX
>

5173. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 10:06:33 UTC
From: gadge <g4dge@linux.user>
Message-ID: <dl9nd9nih1@newsg3.svr.pol.co.uk>
Source record: 16206
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

On Sun, 13 Nov 2005 15:05:02 +0000, Nedlar wrote:

> On Sun, 13 Nov 2005 10:31:51 +0000, gadge <g4dge@linux.user> wrote:
>
>
>
>>I'm not a cb'er, never was and never will be and ham radio still looks
>>like cb to me! Why is that?
>
> Because the amateur bands are now full of brain-dead, non-technical CBrs.
>>
>>
>>There are many ex/current cb'ers who are G/M0 class and proud of it.
>
> That's why 'ham radio still looks like CB' , as you so correctly put it.
>
>>Rubbish. Some of us have passed electronics course/exams at BSC honours
>>level and yet we are not interested in the slightest with morse.
>
> That old excuse has been around for decades. It's just as dishonest now as
> it's always been. It's usually trotted out by CBrs and the lazy-arsed.

Ok, you support morse. I support more advanced technical exams. That way I
keep out cb'ers and morse nuts! ROTFLMAO
win win

5174. Re: Source for DV2840S MOSFET?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 12:26:44 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <1j0hn1ll6v6pkni6eso8a4otgba32jjbhj@4ax.com>
Source record: 16207

On Mon, 14 Nov 2005 03:26:49 +0000, Scott <acepilot@bloomer.net>
wrote:

>I know it's an oldie, but I'm hopefull to dig one up. The amp design is
>so simple and matches very well with the transverter I built out of the
>same book...2W in 25W out.
>
>Scott
>N0EDV

I know. Thats why I know its near unobtainum. I ended up using a
MRF part.

Allison

5175. Re: 1936 vintage rig

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 15:43:28 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1131983008.466810.179280@g14g2000cwa.googlegroups.com>
Source record: 16208

Both the transmitter and receiver are "classic" designs that survived (with variations) from the 1930's through at least the 1960's ARRL handbooks. I don't think you'll find an exact copy of what he built because most of these rigs were truly homebrewed out of what was available at the time.

By the 50's and 60's most single-tube transmitters didn't use triodes like the 809 but used tetrodes like the 1625, the 6146, sweep tubes, etc. But the principle is the same.

A three-tube regenerative was a very long-lived design as well, Allied sold their "Space Spanner" and "Ocean Hopper" up through the 1960's I think, maybe even the early 70's. A google for "three-tube regenerative" shows up several in this vein using 30's era tubes, for example:

http://www.qsl.net/wd4nka/TEXTS/REGENf~1.HTM

Tim.

5176. Coax Connectors, Adapters & Bulk cable

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 16:43:24 UTC
From: AAA RF Products <sales@aaarfproducts.com>
Message-ID: <E83ef.140$K26.117@fed1read02>
Source record: 16209

For your free copy of our new catalog,

please email sales@AAARFProducts.com

or see www.aaarfproducts.com

or call 949 481 3154 (San Clemente, CA)

No minimum order.

No handling charges.

5177. Question on Drake TR-4 restoration project.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 17:05:25 UTC
From: Paul P <p.pinyotREMOVE@REMOVEworldnet.attREMOVE.netREMOVE>
Message-ID: <pt3ef.54842$qk4.47952@bgtnsc05-news.ops.worldnet.att.net>
Source record: 16210

Gents,

I have acquired a Drake TR4 with power supply that track accurately on 80, 40, 20, 15 meters. The dial on the three 10 meter bands indicates about 30khz higher than actual. I have tried to adjust the touchy L2 accurately, looked at T1 for problems and swapped V1 tube. There are no cracked ferrite cores. Other hams on the air have told me this is typical of this TR-4 gear on 10 meters.

Is there a component or gimmick that would bring the 10m tracking back on? Does having the 6JB8 PAs screen and plate B+ disconnected affect the 10m band in this way (I would think not)?

What am I overlooking?

Thanks,
Paul.

5178. Re: Coax Connectors, Adapters & Bulk cable

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 18:09:07 UTC
From: John - kd5yi <groups5MUNGE@verizon.net>
Message-ID: <dlajsd06qu@enews3.newsguy.com>
Source record: 16215

"AAA RF Products" <sales@aaarfproducts.com> wrote in message
news:E83ef.140$K26.117@fed1read02...
> For your free copy of our new catalog,
>
> please email sales@AAARFProducts.com
>
> or see www.aaarfproducts.com
>
> or call 949 481 3154 (San Clemente, CA)
>
> No minimum order.
>
> No handling charges.
>

Do you ever come back and read responses?

Your Web site needs too many browser plug-ins.

No thanks.

5179. Help wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 18:09:42 UTC
From: Frank <frmascit@rgn.it>
Message-ID: <4378d1e2$0$16204$4fafbaef@reader3.news.tin.it>
Source record: 16211

Hello!
Does someone know the device shown in the picture :

http://www.webalice.it/bruno.santalucia/UNK.JPG

I am searching for a: manual / data sheet / user manual.
On the labels is reported : PRD Electronic Inc. Type 219 ser.no.1743 and
Type 3302 ser.no.156.
Any help is wellcome.
TNX de I6FCR

5180. Re: Help wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 18:16:45 UTC
From: Bob <balbert3@verizon.net>
Message-ID: <hw4ef.15554$Mr4.5008@trnddc08>
Source record: 16212

Frank wrote:
> Hello!
> Does someone know the device shown in the picture :
>
> http://www.webalice.it/bruno.santalucia/UNK.JPG
>
> I am searching for a: manual / data sheet / user manual.
> On the labels is reported : PRD Electronic Inc. Type 219 ser.no.1743 and
> Type 3302 ser.no.156.
> Any help is wellcome.
> TNX de I6FCR
>
>
Looks like a frequency meter to me, microwave.

73 DE Bob K6DDX

5181. Re: Help wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 18:19:26 UTC
From: dunnt@its.caltech.edu
Message-ID: <dunnt-1411051019260001@dhcp-40-121.caltech.edu>
Source record: 16213

I have a PRD catalog which list the 219 as a Standing Wave Detector and
the 3302 as a Calibrated Susceptance. The 219 and 3302 cover 100-1000
Mhz. I'll scan pages that cover device and send to you. 73 Tom WB6IQD
In article <4378d1e2$0$16204$4fafbaef@reader3.news.tin.it>, "Frank"
<frmascit@rgn.it> wrote:

> Hello!
> Does someone know the device shown in the picture :
>
> http://www.webalice.it/bruno.santalucia/UNK.JPG
>
> I am searching for a: manual / data sheet / user manual.
> On the labels is reported : PRD Electronic Inc. Type 219 ser.no.1743 and
> Type 3302 ser.no.156.
> Any help is wellcome.
> TNX de I6FCR

5182. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 18:21:29 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <4378d56f.22453095@news.blueyonder.co.uk>
Source record: 16214
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

On Fri, 11 Nov 2005 20:13:59 GMT, Lancer <lancer@rock..com> wrote:

>Isn't Ireland a part of the U.K?

WHAAAaaat?!!!!!!

5183. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 18:49:00 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dlam6aklj1@newsg4.svr.pol.co.uk>
Source record: 16216
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

"Peter" <microwaves@blueyonder.co.uk> wrote in message
news:4378d56f.22453095@news.blueyonder.co.uk...
> On Fri, 11 Nov 2005 20:13:59 GMT, Lancer <lancer@rock..com> wrote:
>
> >Isn't Ireland a part of the U.K?
>
> WHAAAaaat?!!!!!!

It gets worse... someone told me Wales was part of the UK today :o(

5184. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 19:21:34 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1131996094.573797.36220@z14g2000cwz.googlegroups.com>
Source record: 16217
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

The Magnum wrote:
> "Peter" <microwaves@blueyonder.co.uk> wrote in message
> news:4378d56f.22453095@news.blueyonder.co.uk...
> > On Fri, 11 Nov 2005 20:13:59 GMT, Lancer <lancer@rock..com> wrote:
> >
> > >Isn't Ireland a part of the U.K?
> >
> > WHAAAaaat?!!!!!!
>
> It gets worse... someone told me Wales was part of the UK today :o(

Whales has been part of the UK since it agreed to acept a "Prince that
spoke no English" was given the english prince of wales who could not
yet speak english wasn't up to goo ga ga yet

5185. Re: Help wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 19:36:29 UTC
From: Jatin <TripleDerby100-ng@yahoo.com>
Message-ID: <1H5ef.19652$dO2.3293@newssvr29.news.prodigy.net>
Source record: 16218

Check these out:

http://www.w7fg.com/manuals.php?manufacturer

http://cgi.ebay.ca/PRD-ELECTRONICS-PRECISION-TOOL-MICROMETER-TYPE-1EA_W0QQitemZ7558296853QQcategoryZ92078QQcmdZViewItem

Jatin
============

Frank wrote:
> Hello!
> Does someone know the device shown in the picture :
>
> http://www.webalice.it/bruno.santalucia/UNK.JPG
>
> I am searching for a: manual / data sheet / user manual.
> On the labels is reported : PRD Electronic Inc. Type 219 ser.no.1743 and
> Type 3302 ser.no.156.
> Any help is wellcome.
> TNX de I6FCR
>
>

5186. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 22:08:18 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <43790a48.34394070@news.iol.ie>
Source record: 16219
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"The Magnum" <magnum@NOSPAMmag2781.freeserve.co.uk> wrote:

>
> "zarPK"
> <class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.ei
> rcom.ie.net> wrote in message news:43776650.82381970@news.iol.ie...
> > "The Magnum" <magnum@NOSPAMmag2781.freeserve.co.uk> wrote:
> >
> > > just a form of elitist snobbery. Also trying to say anyone who doesnt
> want
> > > to learn morse is basically a "scumbag" shows Bigotry beyond contempt.
> Why
> >
> > I said no such thing !
> >
> > you have some correcting to do.
>
> That comment was meant for the posters who say people on Amateur Bands who
> do not wish to involve themselves with morse are lowly class CBers who seem
> to live in trailor parks and live off welfare and care nothing (scumbags in
> other words) It wasnt aimed directly at you it was put in as an "Also" to
> those who try to put that image over. Maybe I should have made it a bit
> clearer.

IT IS MY OPINION THAT...
theres a difference between
a cb'er who choses to join and amateur radio to improve his/her knowledge
and capability with radio
and
a cb'er who choses to invade amateur bands just to have extra bands to
play with and brings his/her 11m habits with him/her

5187. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 22:11:09 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <43790b70.34689922@news.iol.ie>
Source record: 16220
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Walter Raleigh" <walterraleigh69@hotmail.com> wrote:

>
> "an old friend" <kb9rqz@yahoo.com> wrote in message
> news:1131902363.059822.305290@g47g2000cwa.googlegroups.com...
> > you are the poster being reffered to
> >
> > and the charge is not of hiding but proof nothing you say need be taken
> > seriously
>
> Don't worry, z??pk has no problem with picking up the baton and defending
> himself, usually by the wrong end unfortunately...
>
> He loves being called Rumpelstiltskin (G8OSN), another individual who
> hated it when people referred to him by name.

talk about wrong end of stick !

5188. Re: Question on Drake TR-4 restoration project.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-14 23:58:02 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <75udnQ6xT6QSueTenZ2dnUVZ_sudnZ2d@comcast.com>
Source record: 16221
Body handling: HTML body converted to readable text

"Paul P" wrote in
message news:pt3ef.54842$qk4.47952@bgtnsc05-news.ops.worldnet.att.net...
> Gents,
>
> I have acquired a Drake TR4 with power supply that track accurately on 80,
> 40, 20, 15 meters. The dial on the three 10 meter bands indicates about
> 30khz higher than actual. I have tried to adjust the touchy L2
> accurately, looked at T1 for problems and swapped V1 tube. There are no
> cracked ferrite cores. Other hams on the air have told me this is typical
> of this TR-4 gear on 10 meters.
>
> Is there a component or gimmick that would bring the 10m tracking back on?
> Does having the 6JB8 PAs screen and plate B+ disconnected affect the 10m
> band in this way (I would think not)?
>
> What am I overlooking?
>
> Thanks,
> Paul.
Paul -

A frequency counter could quickly diagnose this issue. Have you checked the
crystals? The LMO may be working correctly.

gb

5189. Re: Question on Drake TR-4 restoration project.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-15 00:20:28 UTC
From: Bill <exray@coqui.net>
Message-ID: <58773$437929d0$4232bdbd$30820@COQUI.NET>
Source record: 16222

gb wrote:

> A frequency counter could quickly diagnose this issue. Have you checked the
> crystals? The LMO may be working correctly.
>
> gb
>

I'm firing off a reply before I get the schematic D/l from Bama but this reminds me of a problem I had with my old HX-50A.

I wouldn't be quick to blame all 3 band xtals to just go bad in the same way...and it would seem that the LMO is ok. But my old Hammarlund had a common coil in the osc ckt that when mal-adjusted pulled the 10m xtal freqs WAY out of whack.

Food for thought. Its hard to find a TR-3/4 anymore that hasn't been subjected to attempts to put it on 11 meters and the 10 meter alignment has been goofed up.

-Bill

5190. Re: odd variable capacitor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-15 00:35:07 UTC
From: Tim Mullen <tim@panix.com>
Message-ID: <dlbafq$6gj$1@reader2.panix.com>
Source record: 16223
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,sci.electronics.components

In <pan.2005.11.12.04.46.50.92806@nospam.com> Jim Mueller <wrongname@nospam.com> writes:

>On Fri, 11 Nov 2005 12:44:51 +0000, Henry Kolesnik wrote:

>> I never heard of the transmitter scam before and I would think that people
>> would have wanted to hear their favorite 2 or 3 stations. I wonder how they
>> did the scam?

>How could they have 2 or 3 favorite stations if they didn't have a radio?

Heard them at a neighbor's house?

--
Tim Mullen

Am I in your basement? Looking for antique televisions, fans, etc.
------ finger this account or call anytime: (212)-463-0552 -------

5191. Re: Battery quality/life/efficiency/MostBangForTheBuck/whatever

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-15 01:05:01 UTC
From: clifto <clifto@clifto.com>
Message-ID: <tqon43-2ka.ln1@remote.clifto.com>
Source record: 16224

Roy Lewallen wrote:
> clifto wrote:
>> . . .
>> Doug McLaren mentioned his experience that alkalines have higher
>> capacities than rechargeables, but I'm finding that my new Eveready
>> 2500 mAH NiMH batteries compete quite well with a fresh set of Energizers.
>> KenRockwell.com lists alkalines at 2700 to 3135 mAH, sounds reasonable.
>
> The capacity of alkaline cells is much more dependent on discharge rate
> than that of NiMH cells. Note the capacities of alkalines shown at the
> bottom of the list at
> http://www.imaging-resource.com/ACCS/BATTS/BATTS.HTM. With the 5 ohm
> load used for those tests, the alkalines have less than 800 mAh
> capacity. The capacities you quote would be obtainable only at much
> lower current drains.

And the funny thing is, at a high load such as my GPS III+, those alkalines
with their capacity diminished by the high current draw still last longer
than the NiMH that supposedly like high current draw. (I said the NiMH
compare favorably, not that they outlast alkalines.) I agree with you,
I've been playing aloud with numbers that don't always belong in the
same arena. And too many other factors impinge; I save money using the
NiMH in the GPS, but I'd kill them in flashlights that I routinely
leave on and forget. And then there are those sulfated wet-cell batteries
in the garage... *sigh*

--
If John McCain gets the 2008 Republican Presidential nomination,
my vote for President will be a write-in for Jiang Zemin.

5192. FA: NOS Western Electric Command sets + mo...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-15 01:56:11 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <%ebef.56024$qk4.38287@bgtnsc05-news.ops.worldnet.att.net>
Source record: 16225
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Two Western Electric command sets: one transmitter and one receiver: one NIB, the other just NOS (someone took the box at the estate sale before I could get to it). Both in super condition-never used-have been in storage. What a chance to get a pair together in such fine condition. + pse take a look the other item as well--tnx for looking..heytubeguy:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

5193. Re: Question on Drake TR-4 restoration project.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-15 03:14:13 UTC
From: rstealey@hotmail.com
Message-ID: <437950c4.294217312@news.optonline.net>
Source record: 16226

It sounds to me lile your oscillator might be misadjusted such that it is oscilalting on the fundament rather than the 3rd overtone. If you are lucky just tweaking the oscillator coil will snap it back to where it belongs. As the other guy pointed out, though, the oscillator might have been monkeyed with if some CB'er tried to modify it.

Also there is a better source for the TR4 manual, with better schematics. Look for TR-4C_Manual.pdf on Google.

Rick K2XT

5194. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-15 04:16:57 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1132028217.409715.250860@g47g2000cwa.googlegroups.com>
Source record: 16227
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

Walter Raleigh wrote:
> On Mon, 14 Nov 2005 22:08:18 GMT,
> class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
> (zYYPK) blurted forth into cyberspace:
>
> *apologies to Spike*
> >IT IS MY OPINION THAT...
> >theres a difference between
> >a cb'er who choses to join and amateur radio to improve his/her knowledge
> >and capability with radio
> >and
> >a cb'er who choses to invade amateur bands just to have extra bands to
> >play with and brings his/her 11m habits with him/her

thta of course depends on what those CB habits are

many Cber don't intend to operate at varrance with the rules (it is
possible at various points to break certain rules without intending I
have broken the 150 mile rule a few times is was rela drag though I was
trying to talk accroos town till the landmarks did not check out I was
in springffield IL and was talking to sringfeild MO without meaning to
>
> Absolutely correct.
> --
>
> 73s de Walter R.

5195. Re: Tube Bench Supply > Ping > Harry

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-15 06:28:49 UTC
From: west <westley@tampabay.rr.com>
Message-ID: <Befef.3708$bx3.2908@tornado.tampabay.rr.com>
Source record: 16228

<hhc314@yahoo.com> wrote in message
news:1131666766.703617.11460@g14g2000cwa.googlegroups.com...
> Michael, excellent point all.
>
> Years back I used Lambda regulated H.V. supplies in the workplace, but
> only for critical application in experimental physics apparatus where
> the accuracy and stability of the voltage had an important impact on
> our research. (I still own a comercially produced 0-5 Kv regulated
> supply, whose use is largely limited to powering photomultiplier tubes
> used in nuclear research applications.)
>
> Like you, I don't recall voltage regulation ever playing a significant
> role in vacuum tube electronics, except for those instance that you
> mention using VR tubes (as in my Hallicrafters SX-71 receiver to
> stabilize the local oscillator). Still, stabilizing that sucker
> required much more effort than simpy a VR tube!
>
> Sadly, I gave away the original Variac adjustable power supply to a
> student that had greater need for it than myslef. Then too, very little
> of the vacuum tube work I do today requires more than a few mils which
> My Heatkit IP-17 supplies.
>
> Kindest regards, Harry C.

What a small world, Harry. I was a field engineer for 25 years working mostly on Gamma Cameras. I sold a business a few years ago that primarily retrofitted Nuclear Medicine Gamma Cameras. I heard that there was a man in the Chicago area who set up a photomultiplier tube to track the moon for EME. I never found out his name, but probably could, if I made an effort. Are you a physics professor?

Cordially,
west
AF4GC
>

5196. Re: Battery quality/life/efficiency/MostBangForTheBuck/whatever

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-15 11:48:15 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <-4ednWIL1vtgV-TeRVnyhQ@pipex.net>
Source record: 16229

> And the funny thing is, at a high load such as my GPS III+, those
> alkalines
> with their capacity diminished by the high current draw still last longer
> than the NiMH that supposedly like high current draw. (I said the NiMH
> compare favorably, not that they outlast alkalines.) I agree with you,
> I've been playing aloud with numbers that don't always belong in the
> same arena. And too many other factors impinge; I save money using the
> NiMH in the GPS, but I'd kill them in flashlights that I routinely
> leave on and forget. And then there are those sulfated wet-cell batteries
> in the garage... *sigh*
==========
I had the same experience with my ancient Garmin GPS 40 ;alkaline batts held
longer than NiMHs.
Possible reason is that alkalines cells are 1.5 V and NiMHs 1.2 V
It is well possible that although the NiMHs are only considered discharged
when the voltage has dropped to below 1 Volt (per cell) this voltage (or its
multiple) is too low for the GPS to operate, whereas alkalines hold a higher
voltage for a longer period.
I noticed that when the GPS switched itself off when using NiMH batteries
,the cells apparently were not fully discharged.
Using an automatic NiCad /NiMH charger operating with an initial discharge
period as part of the overall cycle,
it took quite a while ,before the NiMH cells were discharged before charging
commenced.

Frank GM0CSZ / KN6WH

5197. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-15 17:29:11 UTC
From: see sea oh ecks at you aitch see dot comm <spammers@bugger.off.invalid>
Message-ID: <dld5t7itk1@gabriel.uhc.com>
Source record: 16232
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

In uk.radio.amateur The Magnum <magnum@nospammag2781.freeserve.co.uk> wrote:
> Also the point still stands that a few, if not lot of problems on Amateur
> bands could be down to kids going on their parents equipment while they are
> out. There are lots of possibilitys but the CB'er gets it in the neck all
> the time.

Whish is firmly where the responsibility is meant to lay. The Licensee is
the one responsible for the correct operation of his station at all times.
If he is not physically present, it is his/her responsibilty to ensure that
the equipment is disabled.
--
Chris Cox, N0UK/G4JEC NIC Handle: CC345
If at first you don't succeed, skydiving is not for you.

5198. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-15 18:13:51 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dld8g8$b4b$1@newsg3.svr.pol.co.uk>
Source record: 16230
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"zYYPK"
<class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.ei
rcom.ie.net> wrote in message news:43790a48.34394070@news.iol.ie...
> "The Magnum" <magnum@NOSPAMmag2781.freeserve.co.uk> wrote:
>
> >
> > "zarPK"
> >
<class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.ei
> > rcom.ie.net> wrote in message news:43776650.82381970@news.iol.ie...
> > > "The Magnum" <magnum@NOSPAMmag2781.freeserve.co.uk> wrote:
> > >
> > > > just a form of elitist snobbery. Also trying to say anyone who
doesnt
> > want
> > > > to learn morse is basically a "scumbag" shows Bigotry beyond
contempt.
> > Why
> > >
> > > I said no such thing !
> > >
> > > you have some correcting to do.
> >
> > That comment was meant for the posters who say people on Amateur Bands
who
> > do not wish to involve themselves with morse are lowly class CBers who
seem
> > to live in trailor parks and live off welfare and care nothing (scumbags
in
> > other words) It wasnt aimed directly at you it was put in as an "Also"
to
> > those who try to put that image over. Maybe I should have made it a bit
> > clearer.
>
>
> IT IS MY OPINION THAT...
> theres a difference between
> a cb'er who choses to join and amateur radio to improve his/her knowledge
> and capability with radio
> and
> a cb'er who choses to invade amateur bands just to have extra bands to
> play with and brings his/her 11m habits with him/her

Yes, I agree with you whole heartedly but many older Hams refer to "both" as simply CB'ers. This "will" upset genuine CB radio operators, and those who did advance to Amateur from CB, as many full licence Hams dont seem able to distinguish between the two, or dont want to distinguish... thats the problem.
Also the point still stands that a few, if not lot of problems on Amateur bands could be down to kids going on their parents equipment while they are out. There are lots of possibilitys but the CB'er gets it in the neck all the time.
Regards,
Graham

5199. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-15 18:19:11 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dld8q8$o1v$1@newsg2.svr.pol.co.uk>
Source record: 16231
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"Walter Raleigh" <walterraleigh69nospam@hotmail.com> wrote in message
news:cn8in19ovm08h9vdoirtdn0ilgjf7jkuat@4ax.com...
> On Mon, 14 Nov 2005 22:08:18 GMT,
>
class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eir
com.ie.net
> (zYYPK) blurted forth into cyberspace:
>
> *apologies to Spike*
> >IT IS MY OPINION THAT...
> >theres a difference between
> >a cb'er who choses to join and amateur radio to improve his/her knowledge
> >and capability with radio
> >and
> >a cb'er who choses to invade amateur bands just to have extra bands to
> >play with and brings his/her 11m habits with him/her
>
> Absolutely correct.
> --
>
> 73s de Walter R.

Not absolutely correct. Correct in some instances but i know lots of people
on 11 meter who go on SSB (illegaly of course) who treat it sensibly and
dont mess about. Many 11 meter users, especially the SSB users, have
reasonably good control on the airwaves even to the point of writing a log
and QSL'ing. These are CB'ers im talking about by the way, not Amateurs
although I know a couple of Amateurs who used to join in occasionally (using
their pirate call signs of course)
Regards,
Graham

5200. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-15 18:37:37 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dld9sqqh1@newsg1.svr.pol.co.uk>
Source record: 16233
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"see sea oh ecks at you aitch see dot comm" <spammers@bugger.off.invalid>
wrote in message news:dld5t7itk1@gabriel.uhc.com...
> In uk.radio.amateur The Magnum <magnum@nospammag2781.freeserve.co.uk>
wrote:
> > Also the point still stands that a few, if not lot of problems on
Amateur
> > bands could be down to kids going on their parents equipment while they
are
> > out. There are lots of possibilitys but the CB'er gets it in the neck
all
> > the time.
>
> Whish is firmly where the responsibility is meant to lay. The Licensee is
> the one responsible for the correct operation of his station at all times.
> If he is not physically present, it is his/her responsibilty to ensure
that
> the equipment is disabled.
> --
> Chris Cox, N0UK/G4JEC NIC Handle: CC345
> If at first you don't succeed, skydiving is not for you.

Maybe not to the point of disconnecting his/her equipment but at least
bringing up their kids to be respectful of things. I would personally put a
lock on the "shack" door so I could secure the room but some people have
them in their living room so sometimes I guess its asking for trouble. My CB
is in my office and also one in my repair "shack" and when I go out I make
sure both are locked. If I can do it for CB why cant they do it with their
Amateur kit... which is far more valuable in any case. Mind you, some adults
cant even be arsed to secure their guns but thats a different story.......
Regards,
Graham

5201. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-15 19:17:12 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1132082232.616919.49580@g49g2000cwa.googlegroups.com>
Source record: 16234
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

see sea oh ecks at you aitch see dot comm wrote:
> In uk.radio.amateur The Magnum <magnum@nospammag2781.freeserve.co.uk> wrote:
> > Also the point still stands that a few, if not lot of problems on Amateur
> > bands could be down to kids going on their parents equipment while they are
> > out. There are lots of possibilitys but the CB'er gets it in the neck all
> > the time.
>
> Whish is firmly where the responsibility is meant to lay. The Licensee is
> the one responsible for the correct operation of his station at all times.
> If he is not physically present, it is his/her responsibilty to ensure that
> the equipment is disabled.

not exactly or only in theory the Ham is responible for the use of his
equipement, but when was the last time the FCC tried to bust a ham for
say someone breaking into his car and using the equipment

In addition some modes can be used without the ham being present at
all

My car for example will transmit an APRS signal at intervals anytime
the engine is running, unless I turn it off each time I turn on the
engine. This allows me to kow where the body thing is if my old man
calls back to house and tells me he is lost, or if I found the car
missing and knew none of had it I could tell the cops where to go find
the theives
> --
> Chris Cox, N0UK/G4JEC NIC Handle: CC345
> If at first you don't succeed, skydiving is not for you.

5202. Re: Battery quality/life/efficiency/MostBangForTheBuck/whatever

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-15 19:36:59 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11nke6tvpovv2c@corp.supernews.com>
Source record: 16235

Highland Ham wrote:
> ==========
> I had the same experience with my ancient Garmin GPS 40 ;alkaline batts held
> longer than NiMHs.
> Possible reason is that alkalines cells are 1.5 V and NiMHs 1.2 V
> It is well possible that although the NiMHs are only considered discharged
> when the voltage has dropped to below 1 Volt (per cell) this voltage (or its
> multiple) is too low for the GPS to operate, whereas alkalines hold a higher
> voltage for a longer period.

That's a common myth. Neither type has a constant voltage during discharge, but the NiMH is much more constant than alkaline. Try this experiment: Put a resistor across an alkaline cell to simulate roughly the load a GPS receiver would present. With a DVM, check the voltage every half hour or so, and continue until it reaches 0.8 - 0.9 volts, which is where it'll be when nearly all its energy is gone. You'll find that the "1.5" volt alkaline cell voltage will reach 1.25 volts (about the voltage of a NiMH cell for most of its discharge period) at a point where half or more of the cell's energy still remains. That is, the cell voltage will be below 1.25 volts for half or more of its life. If you repeat the test with a NiMH cell, you'll find that the cell voltage is 1.2 - 1.25 volts for nearly the whole discharge cycle. So for about half the time, the NiMH cell will have a higher voltage than the alkaline.

Or, you could do it the easy way and look at the curves supplied by the manufacturers. They're readily available on the web.

If a device quits working at a cell voltage of 1.0 volts, you'll get nearly all the energy from a NiMH cell, but you'll be throwing away an alkaline cell that still contains a significant amount of energy.

> I noticed that when the GPS switched itself off when using NiMH batteries
> ,the cells apparently were not fully discharged.
> Using an automatic NiCad /NiMH charger operating with an initial discharge
> period as part of the overall cycle,
> it took quite a while ,before the NiMH cells were discharged before charging
> commenced.

Sounds like something was wrong with the GPS. If there was signficant energy left in the NiMH cells, it quit at a voltage greater than 1.0 volt/cell. And if it did that when using alkaline cells, you'd be throwing away an even bigger fraction of its total energy than with a NiMH cell.

There are several reasons why NiMH cells might not do as well as they should. One is that chargers will often shut down well before the cells

are fully charged. This is particularly common with new NiMH cells, until they've been cycled a half dozen times or so. Another potential problem is voltage depression, mistakenly called "memory". This can be cured by a full discharge to 1.0 volt/cell then recharge. Cells also have less capacity after long storage or a history of light use and recharge. Several cycles are necessary to restore full capacity. And of course, modern NiMH cells at 2500 mAh or more have a lot more capacity than earlier ones which were as little as 1300 mAh or so -- if you did a comparison some time ago, things have changed since. A number of fast chargers don't charge cells to their full capacity. Finally, a substantial portion of some cells' capacity originates in the marketing department -- tests I've run show the capacity of some to be pretty badly inflated (Lenmar is a common brand that comes to mind). They do take some care and feeding -- if it's too much of a hassle, alkaline cells are a solution.

Roy Lewallen, W7EL

5203. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-15 20:46:49 UTC
From: see sea oh ecks at you aitch see dot comm <spammers@bugger.off.invalid>
Message-ID: <dldhfp$j6i$1@gabriel.uhc.com>
Source record: 16238
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

In uk.radio.amateur an old friend <kb9rqz@yahoo.com> wrote:
> not exactly or only in theory the Ham is responible for the use of his
> equipement, but when was the last time the FCC tried to bust a ham for
> say someone breaking into his car and using the equipment
>
> In addition some modes can be used without the ham being present at
> all
>
> My car for example will transmit an APRS signal at intervals anytime
> the engine is running, unless I turn it off each time I turn on the
> engine. This allows me to kow where the body thing is if my old man
> calls back to house and tells me he is lost, or if I found the car
> missing and knew none of had it I could tell the cops where to go find
> the theives

Since when has the FCC had jurisdiction over radio amateurs in the UK?
British regulations are different to that in the UK.
--
Chris Cox, N0UK/G4JEC NIC Handle: CC345
If at first you don't succeed, skydiving is not for you.

5204. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-15 21:16:41 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <437a4fc9.265928@news.iol.ie>
Source record: 16236
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"The Magnum" <magnum@NOSPAMmag2781.freeserve.co.uk> wrote:

> Not absolutely correct. Correct in some instances but i know lots of people
> on 11 meter who go on SSB (illegaly of course) who treat it sensibly and
> dont mess about. Many 11 meter users, especially the SSB users, have
> reasonably good control on the airwaves even to the point of writing a log
> and QSL'ing. These are CB'ers im talking about by the way, not Amateurs
> although I know a couple of Amateurs who used to join in occasionally (using
> their pirate call signs of course)

later on...
i remembered those on 11m who are the height of decency and kindness
and strive for excellence on 11m rather than messing around.

5205. Need help with Swan 350

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-15 21:32:13 UTC
From: w4sef@bellsouth.net
Message-ID: <437a53d2.1430109@newsgroups.bellsouth.net>
Source record: 16237

Hello All,
I picked up a really nice working Swan 350 at a hamfest this past weekend. I bought it for nostalgic reasons as it was the kind of rig my dad bought for me in 1965. I need info on how to fix the infamous "Swan drift problem". Anyone have any websites I can go to get mods for this rig including the drift fix?
Any help will be appreciated!

Steve W4SEF

5206. Re: Need help with Swan 350

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-15 22:08:31 UTC
From: johan aeq <pe1aeq@amsat.og>
Message-ID: <c59c1$437a5e33$52ad139c$21967@news.versatel.nl>
Source record: 16241

Hello,
you might add a "Huff and Puff" stabiliser.
It is a very good and simple system to lock a vfo in 10Hz or larger steps.
The original is made by PA0KSB.
Just google and read..
Johan PE1AEQ

"Steven Fritts" <w4sef@bellsouth.net> schreef in bericht
news:437a53d2.1430109@newsgroups.bellsouth.net...
> Hello All,
> I picked up a really nice working Swan 350 at a hamfest this past
> weekend. I bought it for nostalgic reasons as it was the kind of rig
> my dad bought for me in 1965. I need info on how to fix the infamous
> "Swan drift problem". Anyone have any websites I can go to get mods
> for this rig including the drift fix?
> Any help will be appreciated!
>
> Steve W4SEF

5207. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-15 22:09:35 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <437a5c8c.3533198@news.iol.ie>
Source record: 16239
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"see sea oh ecks at you aitch see dot comm" <spammers@bugger.off.invalid>
wrote:
> Since when has the FCC had jurisdiction over radio amateurs in the UK?

this can be arranged :-)

5208. Re: Battery quality/life/efficiency/MostBangForTheBuck/whatever

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-15 22:09:52 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <BLCdnTOOXK9fwefeRVnyvg@pipex.net>
Source record: 16240

Roy ,Tnx for your comments ; I'll do some tests with NiMH cells
using a 'Maha C777Plus' discharger/(pulse)charger and check capacity .
I'll repeat the discharge/charge process a few times to see whether capacity
changes.
I realise that automatic chargers charging at a high current might not
charge any cell to its maximum capacity,
that's why I shall also charge the cell at a lower rate using a LM317
constant current circuit.
with the Maha device the cell's capacity is indicated following the
completion of a discharge period from fully charged to a threshold of just
below 1 Volt
I knew that brand new cells only get their full capacity after having been
cycled a number of times.
BTW : NiCads and NiMHs I use regularly are kept in good condition by
constant trickle charging at a few mA
, again ,with a LM317 constant current circuit ,because specially NiMH cells
have a relatively high self-discharge rate.

Frank GM0CSZ / KN6WH

> There are several reasons why NiMH cells might not do as well as they
> should. One is that chargers will often shut down well before the cells
> are fully charged. This is particularly common with new NiMH cells, until
> they've been cycled a half dozen times or so. Another potential problem is
> voltage depression, mistakenly called "memory". This can be cured by a
> full discharge to 1.0 volt/cell then recharge. Cells also have less
> capacity after long storage or a history of light use and recharge.
> Several cycles are necessary to restore full capacity. And of course,
> modern NiMH cells at 2500 mAh or more have a lot more capacity than
> earlier ones which were as little as 1300 mAh or so -- if you did a
> comparison some time ago, things have changed since. A number of fast
> chargers don't charge cells to their full capacity. Finally, a substantial
> portion of some cells' capacity originates in the marketing department --
> tests I've run show the capacity of some to be pretty badly inflated
> (Lenmar is a common brand that comes to mind). They do take some care and
> feeding -- if it's too much of a hassle, alkaline cells are a solution.
>
> Roy Lewallen, W7EL

5209. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-15 22:29:56 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <437a6100.123717746@news.blueyonder.co.uk>
Source record: 16242
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

On Mon, 14 Nov 2005 18:49:00 -0000, "The Magnum"
<magnum@NOSPAMmag2781.freeserve.co.uk> wrote:

>
>"Peter" <microwaves@blueyonder.co.uk> wrote in message
>news:4378d56f.22453095@news.blueyonder.co.uk...
>> On Fri, 11 Nov 2005 20:13:59 GMT, Lancer <lancer@rock..com> wrote:
>>
>> >Isn't Ireland a part of the U.K?
>>
>> WHAAAaaat?!!!!!!
>
>It gets worse... someone told me Wales was part of the UK today :o(
>

I could accept that! I like Wales, even Cardiff ... (cue for Old
Nick....)

Peter, G3PHO

5210. Re: Need help with Swan 350

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-16 01:08:20 UTC
From: Bob <balbert3@verizon.net>
Message-ID: <8Evef.21536$5R4.8753@trnddc06>
Source record: 16243

Steven Fritts wrote:
> Hello All,
> I picked up a really nice working Swan 350 at a hamfest this past
> weekend. I bought it for nostalgic reasons as it was the kind of rig
> my dad bought for me in 1965. I need info on how to fix the infamous
> "Swan drift problem". Anyone have any websites I can go to get mods
> for this rig including the drift fix?
> Any help will be appreciated!
>
> Steve W4SEF
The problem is, for the most part, lack of proper temperature compensation. Sure, the voltage regulation isn't that great, but it's not the main problem.

Looking at the diagram for the VFO you can see the tuned circuit components. You can add a negative temperature coefficient capacitor to the circuit to compensate for the (usually) positive coefficients of the parts.

I did this successfully in a Viking Valiant. I reduced the drift from about 10kHz or more on 10 meters to about 1kHz. One thing I did was move a hot resistor out of the VFO compartment to reduce the amount of temperature rise of the critical parts.

You can also leave the unit on, at least the VFO, at all times so the temperature will be more stable.

73, Bob K6DDX

5211. Re: FA: NOS Western Electric Command sets + mo...

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-16 02:50:49 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <06xef.6470$f_2.3195@bignews2.bellsouth.net>
Source record: 16244
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Heytubeguy wrote:
> Two Western Electric command sets: one transmitter and one receiver: one
> NIB, the other just NOS (someone took the box at the estate sale before I
> could get to it). Both in super condition-never used-have been in storage.
> What a chance to get a pair together in such fine condition. + pse take a
> look the other item as well--tnx for looking..heytubeguy:
>
> http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy
>
>
>
Nice looking old rigs, bet they bring a LOT more than the starting bid.

5212. Re: Question on Drake TR-4 restoration project.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-16 02:52:39 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <K7xef.6471$f_2.4047@bignews2.bellsouth.net>
Source record: 16245

Bill wrote:
> gb wrote:
>
>
>> A frequency counter could quickly diagnose this issue. Have you
>> checked the crystals? The LMO may be working correctly.
>>
>> gb
>
>
> I'm firing off a reply before I get the schematic D/l from Bama but this
> reminds me of a problem I had with my old HX-50A.
>
> I wouldn't be quick to blame all 3 band xtals to just go bad in the same
> way...and it would seem that the LMO is ok. But my old Hammarlund had a
> common coil in the osc ckt that when mal-adjusted pulled the 10m xtal
> freqs WAY out of whack.
>
> Food for thought. Its hard to find a TR-3/4 anymore that hasn't been
> subjected to attempts to put it on 11 meters and the 10 meter alignment
> has been goofed up.
>
> -Bill
Could also be a capacitor that changed in value.

5213. Re: Need help with Swan 350

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-16 02:56:01 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <Uaxef.6473$f_2.4621@bignews2.bellsouth.net>
Source record: 16246

Steven Fritts wrote:
> Hello All,
> I picked up a really nice working Swan 350 at a hamfest this past
> weekend. I bought it for nostalgic reasons as it was the kind of rig
> my dad bought for me in 1965. I need info on how to fix the infamous
> "Swan drift problem". Anyone have any websites I can go to get mods
> for this rig including the drift fix?
> Any help will be appreciated!
>
> Steve W4SEF
Ah yes the famous 3-drifty. I wonder if they had a temp compensation
adjustment. Consists of one positive and one negative coeficient fixed
cap of the same value, each one tied to one side of a differencial
trimmer cap, the other side of each cap tied to the tuned circuit.
You then adjust the variable trimmer for the least drift.

5214. Re: Need help with Swan 350

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-16 03:11:40 UTC
From: w4sef@bellsouth.net
Message-ID: <437aa334.17188000@newsgroups.bellsouth.net>
Source record: 16247

Bob,

can you tell me what part of the circuit needs the negative cof cap
and what value you think would be best?

Thank you for the help!!

Steve

On Wed, 16 Nov 2005 01:08:20 GMT, Bob <balbert3@verizon.net> wrote:

>Steven Fritts wrote:
>> Hello All,
>> I picked up a really nice working Swan 350 at a hamfest this past
>> weekend. I bought it for nostalgic reasons as it was the kind of rig
>> my dad bought for me in 1965. I need info on how to fix the infamous
>> "Swan drift problem". Anyone have any websites I can go to get mods
>> for this rig including the drift fix?
>> Any help will be appreciated!
>>
>> Steve W4SEF
>The problem is, for the most part, lack of proper temperature
>compensation. Sure, the voltage regulation isn't that great, but it's
>not the main problem.
>
>Looking at the diagram for the VFO you can see the tuned circuit
>components. You can add a negative temperature coefficient capacitor to
>the circuit to compensate for the (usually) positive coefficients of the
>parts.
>
>I did this successfully in a Viking Valiant. I reduced the drift from
>about 10kHz or more on 10 meters to about 1kHz. One thing I did was
>move a hot resistor out of the VFO compartment to reduce the amount of
>temperature rise of the critical parts.
>
>You can also leave the unit on, at least the VFO, at all times so the
>temperature will be more stable.
>
>73, Bob K6DDX

5215. Re: Need help with Swan 350

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-16 17:00:57 UTC
From: Bob <balbert3@verizon.net>
Message-ID: <dBJef.7494$vS4.4705@trnddc01>
Source record: 16098

Steven Fritts wrote:
> Bob,
>
> can you tell me what part of the circuit needs the negative cof cap
> and what value you think would be best?
>
> Thank you for the help!!
>
> Steve
>
>
> On Wed, 16 Nov 2005 01:08:20 GMT, Bob <balbert3@verizon.net> wrote:
>
>
>>Steven Fritts wrote:
>>
>>>Hello All,
>>>I picked up a really nice working Swan 350 at a hamfest this past
>>>weekend. I bought it for nostalgic reasons as it was the kind of rig
>>>my dad bought for me in 1965. I need info on how to fix the infamous
>>>"Swan drift problem". Anyone have any websites I can go to get mods
>>>for this rig including the drift fix?
>>>Any help will be appreciated!
>>>
>>>Steve W4SEF
>>
>>The problem is, for the most part, lack of proper temperature
>>compensation. Sure, the voltage regulation isn't that great, but it's
>>not the main problem.
>>
>>Looking at the diagram for the VFO you can see the tuned circuit
>>components. You can add a negative temperature coefficient capacitor to
>>the circuit to compensate for the (usually) positive coefficients of the
>>parts.
>>
>>I did this successfully in a Viking Valiant. I reduced the drift from
>>about 10kHz or more on 10 meters to about 1kHz. One thing I did was
>>move a hot resistor out of the VFO compartment to reduce the amount of
>>temperature rise of the critical parts.
>>
>>You can also leave the unit on, at least the VFO, at all times so the
>>temperature will be more stable.
>>
>>73, Bob K6DDX

>
>
Steve,

I don't have the circuit diagram so I can't advise. But across the inductor is the first place I would try. Of course you will have to reduce any other capacitors by that amount so that the circuit will resonate at the same frequency as before.

As someone suggested, a differential arrangement will work but it's a bit tricky. I'd prefer to substitute various values until I hit one that is close enough.

Bob

5216. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-16 18:10:25 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dlfslo$t00$1@newsg1.svr.pol.co.uk>
Source record: 16099
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

"Peter" <microwaves@blueyonder.co.uk> wrote in message
news:437a6100.123717746@news.blueyonder.co.uk...
> On Mon, 14 Nov 2005 18:49:00 -0000, "The Magnum"
> <magnum@NOSPAMmag2781.freeserve.co.uk> wrote:
>
> >
> >"Peter" <microwaves@blueyonder.co.uk> wrote in message
> >news:4378d56f.22453095@news.blueyonder.co.uk...
> >> On Fri, 11 Nov 2005 20:13:59 GMT, Lancer <lancer@rock..com> wrote:
> >>
> >> >Isn't Ireland a part of the U.K?
> >>
> >> WHAAAaaat?!!!!!!
> >
> >It gets worse... someone told me Wales was part of the UK today :o(
> >
>
>
> I could accept that! I like Wales, even Cardiff ... (cue for Old
> Nick....)
>
> Peter, G3PHO

I like Wales too really. I lived near Swansea for a year and Aberystwyth on the West coast for about 4 years. Never had a problem with the people there and the sheep were quite friendly too ;o)

Regards,
Graham

5217. Re: Need help with Swan 350

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-16 20:06:04 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <1ntmn1hfjo6tolsig4814rvitc00gcctb6@4ax.com>
Source record: 16100

On Wed, 16 Nov 2005 17:00:57 GMT, Bob <balbert3@verizon.net> wrote:

>As someone suggested, a differential arrangement will work but it's a
>bit tricky. I'd prefer to substitute various values until I hit one
>that is close enough.

It can be hard to get a differential capacitor these days.

One alternative could be to add a varactor (and a series capacitor)
into the resonant circuit and vary the varactor control voltage
according to the temperature. A suitable NTC or PTC in the voltage
divider feeding the varactor could be used.

Paul OH3LWR

5218. Re: 1936 vintage rig

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-17 02:56:43 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <yhSef.2703$i7.611@bignews2.bellsouth.net>
Source record: 16101

Tim Shoppa wrote:
> Both the transmitter and receiver are "classic" designs that survived
> (with variations) from the 1930's through at least the 1960's ARRL
> handbooks. I don't think you'll find an exact copy of
> what he built because most of these rigs were truly homebrewed out of
> what was available
> at the time.
>
> By the 50's and 60's most single-tube transmitters didn't use triodes
> like the 809 but used tetrodes like the 1625, the 6146, sweep tubes,
> etc. But the principle is the same.
>
> A three-tube regenerative was a very long-lived design as well, Allied
> sold their "Space Spanner" and "Ocean Hopper" up through the 1960's I
> think, maybe even the early 70's. A google for "three-tube
> regenerative" shows up several in this vein using 30's era tubes, for
> example:
>
> http://www.qsl.net/wd4nka/TEXTS/REGENf~1.HTM
>
> Tim.
>
I built a single tube regen using a #19 tube from plans
in a book sold by Lindsay books (www.lindsaybks.com). It's
a surprisingly sensitive radio (using my GAP Titan antenna).
You do need 'phones to hear anything, but I suppose I could have
added an output stage to drive a speaker (maybe using a #33
pentode tube). BTW the #19 is a dual triode, so this radio
is the equal of a two tube set.

5219. Confused on diplexer issue.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-17 09:50:47 UTC
From: "somphopv@yahoo.com" <somphopv@yahoo.com>
Message-ID: <1132221047.049995.189860@o13g2000cwo.googlegroups.com>
Source record: 16102

I am confused on some issue of a diplexer. Sometimes,people say that
it is a device which used to split the signal from one source to two
loads i.e., it is used to split the signal from a dual band transmitter
fed on the same coax to two different antennas. Somtimes, they say
that it is the device that used to combine the 2 signals from two
different antennas to one receiver. Which one is correct?
Are they the same device?

5220. Re: Confused on diplexer issue.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-17 13:37:15 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <fl%ef.9529$2y.5293@newsread2.news.atl.earthlink.net>
Source record: 16103

Many can be used either way. The ones that are made of low and high pass filters are usually bidirectional and it does not mater which way they are hooked up.

<somphopv@yahoo.com> wrote in message news:1132221047.049995.189860@o13g2000cwo.googlegroups.com...
> I am confused on some issue of a diplexer. Sometimes,people say that
> it is a device which used to split the signal from one source to two
> loads i.e., it is used to split the signal from a dual band transmitter
> fed on the same coax to two different antennas. Somtimes, they say
> that it is the device that used to combine the 2 signals from two
> different antennas to one receiver. Which one is correct?
> Are they the same device?
>

5221. Availability of DS1689S

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-17 16:25:26 UTC
From: Philip de Cadenet <Philstheboss@thebbc.fslife.co.uk>
Message-ID: <h5BmjrR27KfDFwJ8@philstheboss.freeserve.co.uk>
Source record: 16104

I wonder if anyone on the brain trust knows of a possible source of this chip?

Digikey, Mouser and Jameco in the US have been tried. Dallas/Maxim have them on a 6 week lead time.

I need a few pieces rather urgently.

Any suggested suppliers?
--
Philip de Cadenet G4ZOW
Transmitters 'R' Us
http://www.transmittersrus.com

5222. Bridge Rectifier Info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-17 20:49:48 UTC
From: Ron Price <ron.price2@virgin.net>
Message-ID: <M16ff.15988$8R6.10466@newsfe1-gui.ntli.net>
Source record: 16105

Hello All,
Can anyone help with the voltage and current rating of an old bridge
rectifier - Westinghouse FC442?
It's not listed in any of my data books.

Many thanks,
Ron.
GW4EVX.

5223. Standard GX3000 HEX File Creation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-17 21:46:08 UTC
From: Bill <bcrann@hotmail.com>
Message-ID: <tS6ff.2544$KP5.322942@news20.bellglobal.com>
Source record: 16106

Can anyone tell me how to create the HEX code for the 27C16 EPROM in the VHF Standard GX3000 64CH radio, or can anyone tell me where to find software to create the HEX file? I have an EPROM programmer that will program the 27C16 EPROM, so I just need a way to create the file. I would pay for the software or trade some of my radio manuals or radio software for it.

5224. Re: Standard GX3000 HEX File Creation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-17 22:40:36 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <WLydnWBhTI5Em-DeRVn-vQ@web-ster.com>
Source record: 16107

Bill wrote:
> Can anyone tell me how to create the HEX code for the 27C16 EPROM in the VHF
> Standard GX3000 64CH radio, or can anyone tell me where to find software to
> create the HEX file? I have an EPROM programmer that will program the 27C16
> EPROM, so I just need a way to create the file. I would pay for the
> software or trade some of my radio manuals or radio software for it.
>
>
If you can get your hands on another radio of the exact same model you
could read it's EPROM -- most burners will do that.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

5225. CC&R BILL HAS BEEN REINTRODUCED INTO CONGRESS -- WRITE UR CONGRESSPERSON NOW

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-17 23:39:17 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <9w8ff.213$qw.85@fed1read07>
Source record: 16108

ATTENTION ALL AMATEUR RADIO OPERATORS

DO SOMETHING NOW

CC&R BILL HAS BEEN REINTRODUCED INTO CONGRESS -- WRITE UR CONGRESSPERSON NOW

SEE SAMPLES AND TEXT OF THE BILL AT URL:

http://www.arrl.org/govrelations/hr3876/

HR 3876, The Amateur Radio Emergency Communications Consistency Act of 2005

--
CL -- I doubt, therefore I might be !

5226. Re: Standard GX3000 HEX File Creation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-18 02:43:10 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1de6df9d558fbfb19896e9@192.168.42.131>
Source record: 16109

In article <tS6ff.2544$KP5.322942@news20.bellglobal.com>,
bcrann@hotmail.com says...

> Can anyone tell me how to create the HEX code for the 27C16 EPROM in the VHF
> Standard GX3000 64CH radio, or can anyone tell me where to find software to
> create the HEX file? I have an EPROM programmer that will program the 27C16
> EPROM, so I just need a way to create the file. I would pay for the
> software or trade some of my radio manuals or radio software for it.

If you happen to find something, please let me know as well! It
seems that, unfortunately, the original programmer for the GX3000 was a
custom unit that Standard designed specifically to work in conjunction
with their software, and their software does not export a binary image.

Happy hunting.

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped
with surreal ports?"

5227. Need location of zener in Swan 350

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-18 02:58:38 UTC
From: w4sef@bellsouth.net
Message-ID: <437d3166.8965671@newsgroups.bellsouth.net>
Source record: 16110

Hello all,

THANKS to the many who helped me with my Swan 350......WHERE is the 10 volt zener located? Is it inside the VFO cabinet?

Steve

5228. Re: Availability of DS1689S

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-18 03:46:26 UTC
From: hhc314@yahoo.com
Message-ID: <1132285586.551073.217390@z14g2000cwz.googlegroups.com>
Source record: 16111

Looks like a troll, smells like a troll and probably is.

Harry C.

5229. Re: Availability of DS1689S

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-18 03:50:08 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <dljj1f$f1o$1@puck.litech.org>
Source record: 16112

hhc314@yahoo.com wrote:
> Looks like a troll, smells like a troll and probably is.

> Harry C.

Nah; Philippe's legit.

--
Mike Andrews W5EGO 15WPM
mikea@mikea.ath.cx Extra
Tired old sysadmin working on his code speed

5230. Re: Standard GX3000 HEX File Creation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-18 04:51:38 UTC
From: Bill <bcrann@hotmail.com>
Message-ID: <i6dff.2717$KP5.362060@news20.bellglobal.com>
Source record: 16113

Thanks for the suggestion. Yes I can read another EPROM and copy it (I have done that) but I still can't change a frequency. I don't know how to convert the hex into a different frequency. It can be done. I have done it in the past but I lost the instructions on how to do it manually when we moved. From what I read on a few groups/boards there are hams who wrote software in BASIC which will do it automatically without all the calculations. I guess it is just a matter of the right ham to read the post :-) That's what I am hoping for anyway.

"Tim Wescott" <tim@seemywebsite.com> wrote in message
news:WLydnWBhTI5Em-DeRVn-vQ@web-ster.com...
> Bill wrote:
>> Can anyone tell me how to create the HEX code for the 27C16 EPROM in the
>> VHF Standard GX3000 64CH radio, or can anyone tell me where to find
>> software to create the HEX file? I have an EPROM programmer that will
>> program the 27C16 EPROM, so I just need a way to create the file. I
>> would pay for the software or trade some of my radio manuals or radio
>> software for it.
> If you can get your hands on another radio of the exact same model you
> could read it's EPROM -- most burners will do that.
>
> --
>
> Tim Wescott
> Wescott Design Services
> http://www.wescottdesign.com

5231. Re: Standard GX3000 HEX File Creation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-18 04:55:46 UTC
From: Bill <bcrann@hotmail.com>
Message-ID: <aadff.2721$KP5.363236@news20.bellglobal.com>
Source record: 16114

Yes I have been sent the Standard software which I haven't been able to get work with my programmer. I will let you know what I find out.

"Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null> wrote in message news:MPG.1de6df9d558fbfb19896e9@192.168.42.131...
> In article <tS6ff.2544$KP5.322942@news20.bellglobal.com>,
> bcrann@hotmail.com says...
>
>> Can anyone tell me how to create the HEX code for the 27C16 EPROM in the
>> VHF
>> Standard GX3000 64CH radio, or can anyone tell me where to find software
>> to
>> create the HEX file? I have an EPROM programmer that will program the
>> 27C16
>> EPROM, so I just need a way to create the file. I would pay for the
>> software or trade some of my radio manuals or radio software for it.
>
> If you happen to find something, please let me know as well! It
> seems that, unfortunately, the original programmer for the GX3000 was a
> custom unit that Standard designed specifically to work in conjunction
> with their software, and their software does not export a binary image.
>
> Happy hunting.
>
>
> --
> Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
> (Known to some as Bruce Lane, ARS KC7GR,
> kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
> "If Salvador Dali had owned a computer, would it have been equipped
> with surreal ports?"

5232. Re: Availability of DS1689S

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-18 08:47:06 UTC
From: Philip de Cadenet <Philstheboss@thebbc.fslife.co.uk>
Message-ID: <Ou+dWoBKUZfDFwcH@philstheboss.freeserve.co.uk>
Source record: 16115

>Nah; Philippe's legit.

Thank you Mike.
--
Philip de Cadenet G4ZOW
Transmitters 'R' Us
http://www.transmittersrus.com

5233. Wanted Patcomm service manual

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-18 17:04:24 UTC
From: James Skalski <jskalski@yahoo.com>
Message-ID: <sQnff.33$RI5.4@trndny09>
Source record: 16116

I am looking for a PATCOMM PC-500 service manual. Original, paper copy
or cd. The 6000 may also have some of the sam circuitry. I am interested
in the receive section mostly.
Jim n2go

5234. Re: Standard GX3000 HEX File Creation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-18 17:34:57 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <fpWdnTZ0bepfjePeRVn-gw@web-ster.com>
Source record: 16117

Bill wrote:

> Thanks for the suggestion. Yes I can read another EPROM and copy it (I have
> done that) but I still can't change a frequency. I don't know how to
> convert the hex into a different frequency. It can be done. I have done it
> in the past but I lost the instructions on how to do it manually when we
> moved. From what I read on a few groups/boards there are hams who wrote
> software in BASIC which will do it automatically without all the
> calculations. I guess it is just a matter of the right ham to read the post
> :-) That's what I am hoping for anyway.
>
>
> "Tim Wescott" <tim@seemywebsite.com> wrote in message
> news:WLydnWBhTI5Em-DeRVn-vQ@web-ster.com...
>
>>Bill wrote:
>>
>>>Can anyone tell me how to create the HEX code for the 27C16 EPROM in the
>>>VHF Standard GX3000 64CH radio, or can anyone tell me where to find
>>>software to create the HEX file? I have an EPROM programmer that will
>>>program the 27C16 EPROM, so I just need a way to create the file. I
>>>would pay for the software or trade some of my radio manuals or radio
>>>software for it.
>>
>>If you can get your hands on another radio of the exact same model you
>>could read it's EPROM -- most burners will do that.
>>
>>--
>>
>>Tim Wescott
>>Wescott Design Services
>>http://www.wescottdesign.com
>
>
>
Ah. You didn't explain the real issue.

If you can't get anywhere with software, but you _can_ get your hands on
EPROMs from some different radios programmed to different frequencies
you will be able to read out their EPROMs into hex then compare the hex
files -- the different spots will almost certainly be where the
frequencies are different.

Whether you can figure out what it all _means_ is another matter,
particularly if Standard puts a checksum on their EPROM.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

5235. Re: Standard GX3000 HEX File Creation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-18 17:36:58 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <fpWdnTF0beqnjOPeRVn-gw@web-ster.com>
Source record: 16118

Bill wrote:

> Yes I have been sent the Standard software which I haven't been able to get
> work with my programmer. I will let you know what I find out.
>
>
>
> "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null> wrote in message
> news:MPG.1de6df9d558fbfb19896e9@192.168.42.131...
>
>>In article <tS6ff.2544$KP5.322942@news20.bellglobal.com>,
>>bcrann@hotmail.com says...
>>
>>
>>>Can anyone tell me how to create the HEX code for the 27C16 EPROM in the
>>>VHF
>>>Standard GX3000 64CH radio, or can anyone tell me where to find software
>>>to
>>>create the HEX file? I have an EPROM programmer that will program the
>>>27C16
>>>EPROM, so I just need a way to create the file. I would pay for the
>>>software or trade some of my radio manuals or radio software for it.
>>
>>If you happen to find something, please let me know as well! It
>>seems that, unfortunately, the original programmer for the GX3000 was a
>>custom unit that Standard designed specifically to work in conjunction
>>with their software, and their software does not export a binary image.
>>
>>Happy hunting.
>>
>>
>>--
>>Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
>>(Known to some as Bruce Lane, ARS KC7GR,
>>kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
>>"If Salvador Dali had owned a computer, would it have been equipped
>>with surreal ports?"
>
>
>
How facile a programmer are you?

Chances are that the Standard software outputs a file with some simple
format, which you may be able to reverse engineer with enough
perseverance. The Intel hex format is public domain, so once you know

what Standard's format is writing a translator would be fairly direct.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

5236. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-18 18:37:09 UTC
From: aaa@spamaway.com
Message-ID: <437E1F55.8EAE0C5C@spamaway.com>
Source record: 16119
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

This kind of continual foul language, and the anti-M3 and anti-RSGB attitude (not to mention the "wisdom" portrayed in sig files) are some of the reasons why amateurs will not be taken seriously over the BPL issue. Do the regulars of this group realise that it is becoming legendary for everything Usenet was supposed not to be? Surely it is possible to have a civilised debate without this stuff?

Jock. wrote:

> On Sat, 29 Oct 2005 23:47:24 +0100, Nedlar <Sam@Techno.invalid> wrote:
>
> >On Sat, 29 Oct 2005 21:50:03 +0100, "huLLy" <thisainthamradio@aol.com>
> >wrote:
> >
> >
> >>It's 'its' you fuckwit!
> >
> >Why don't you correct your CB chum Magnum?
> >His postings are typical of the semi-literate, brain-dead CBr.
>
> Yes, but he's a Yank. Illiteracy is expected of them.
>
> --
>
> 73 de Jock.
>
> "You will always find that those who are most apt to
> boast of national merit, have little or no merit of
> their own to depend on". - Oliver Goldsmith.

5237. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-18 19:07:49 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <9Epff.18629$Cq4.4@newsfe7-gui.ntli.net>
Source record: 16120
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

<aaa@spamaway.com> wrote in message news:437E1F55.8EAE0C5C@spamaway.com...
> This kind of continual foul language, and the anti-M3 and anti-RSGB
> attitude (not to mention the "wisdom" portrayed in sig files) are some of
> the reasons why amateurs will not be taken seriously over the BPL issue.
> Do the regulars of this group realise that it is becoming legendary for
> everything Usenet was supposed not to be? Surely it is possible to have a
> civilised debate without this stuff?

It is an insecurity thing.

Look where the "and the anti-M3 and anti-RSGB attitude (not to mention the
"wisdom" portrayed in sig files) " comes from an you rarely see anything of
value from the same source.

--
73
Brian, G8OSN
www.g8osn.org.uk

5238. A much, much better FAQ than Polymath's

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-18 21:16:19 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1132348579.261503.76110@g43g2000cwa.googlegroups.com>
Source record: 16121

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B
licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their

intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

5239. FAQ - Interested? Start here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-18 21:17:27 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1132348647.448899.309210@g49g2000cwa.googlegroups.com>
Source record: 16122
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,

competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B

licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

5240. Re: Standard GX3000 HEX File Creation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 00:25:57 UTC
From: Bill <bcrann@hotmail.com>
Message-ID: <mkuff.4288$w84.809457@news20.bellglobal.com>
Source record: 16123

I am not that good :-) I have done as you suggested and got most of my frequencies but there are a few I don't have like a few reverse repeater pairs, ISS, and PCSAT. I was emailed a GWBasic program that is suppose to create the hex file for you. When I get time to enter the frequencies and burn an EPROM I will let you guys know if it worked. Thanks for your help Tim.

Bill

"Tim Wescott" <tim@seemywebsite.com> wrote in message news:fpWdnTF0beqnjOPeRVn-gw@web-ster.com...
> Bill wrote:
>
>> Yes I have been sent the Standard software which I haven't been able to
>> get work with my programmer. I will let you know what I find out.
>>
>>
>>
>> "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null> wrote in message
>> news:MPG.1de6df9d558fbfb19896e9@192.168.42.131...
>>
>>>In article <tS6ff.2544$KP5.322942@news20.bellglobal.com>,
>>>bcrann@hotmail.com says...
>>>
>>>
>>>>Can anyone tell me how to create the HEX code for the 27C16 EPROM in the
>>>>VHF
>>>>Standard GX3000 64CH radio, or can anyone tell me where to find software
>>>>to
>>>>create the HEX file? I have an EPROM programmer that will program the
>>>>27C16
>>>>EPROM, so I just need a way to create the file. I would pay for the
>>>>software or trade some of my radio manuals or radio software for it.
>>>
>>>If you happen to find something, please let me know as well! It
>>>seems that, unfortunately, the original programmer for the GX3000 was a
>>>custom unit that Standard designed specifically to work in conjunction
>>>with their software, and their software does not export a binary image.
>>>
>>>Happy hunting.
>>>
>>>
>>>--
>>>Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
>>>(Known to some as Bruce Lane, ARS KC7GR,

>>>kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
>>>"If Salvador Dali had owned a computer, would it have been equipped
>>>with surreal ports?"
>>
>>
>>
> How facile a programmer are you?
>
> Chances are that the Standard software outputs a file with some simple
> format, which you may be able to reverse engineer with enough
> perseverance. The Intel hex format is public domain, so once you know
> what Standard's format is writing a translator would be fairly direct.
>
> --
>
> Tim Wescott
> Wescott Design Services
> http://www.wescottdesign.com

5241. help with choosing parts for project

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 00:26:42 UTC
From: Amol Desai <gtg680m@mail.gatech.edu>
Message-ID: <dllrg1okl1@news-int.gatech.edu>
Source record: 16124

I'm looking to design and develop a remote controlled motor. The way i want to implement is to have a RF transmitter chip which will recieve digital inputs (pushbuttons) convert it to analog signal and the transmitter will then transmit the signal to RF receiver chip which will then convert it back to digital signal and send it to a PIC microcontroller (16f818, specs: 3V, 4MHz oscilator and 1 Mhz internal clock). The PIC microcontroller will then understand the signal and increase or decrease the speed of the motor accordingly. (Basically the concept is based on a remote control cars which kids play with).

I'm interested in knowing which kind (specs,brand etc) of RF receiver and transmitter chips can i use to work in this project. Obviously being a college student i would like to purchase cheap parts :) Any input will be higly appereciated.

5242. Re: Bridge Rectifier Info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 00:46:28 UTC
From: fmmck@aol.com
Message-ID: <fmmck-1811051946280001@ac92726a.ipt.aol.com>
Source record: 16125

In article <M16ff.15988$8R6.10466@newsfe1-gui.ntli.net>, "Ron Price" <ron.price2@virgin.net> wrote:

> Can anyone help with the voltage and current rating of an old bridge
> rectifier - Westinghouse FC442?
> It's not listed in any of my data books.

Ron-

Does the equipment it came out of happen to have "FC" in it name? It could be a proprietary part made for that company. As such, Westinghouse would probably never reveal the specs to anyone else.

Could there be any other markings on the device? The FC442 might also be a form of date-code, such as 42nd week of 2004 or 1994, 1984, 1974, et cetera.

You may be able to determine a reverse breakdown voltage with a variable high-voltage power supply and a current-limiting resistor, but you may have to analyze the circuit it came out of for a minimum current rating.

Does the equipment happen to have service information available from some place like Howard W. Sams? If so, they often have cross-reference information for parts.

73, Fred, K4DII

5243. Trickle Charge Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 00:59:51 UTC
From: west <westley@tampabay.rr.com>
Message-ID: <bOuff.7515$bx3.4400@tornado.tampabay.rr.com>
Source record: 16126

I know this question has probably been beaten to death, nevertheless I hope you will still indulge me.

During a power outage, which occurs frequently in Florida, I would like to use a battery to power some communication gear. Although the battery is 12v and not 13.8v, I think that the gear will still work OK (hopefully).

Question 1. I believe that car batteries have a low internal resistance because their primary function is to provide a lot of current for a short time. There are other 12v large battery types that will last as long as a typical car battery. They are designed not to provide peak current, but to supply steady state current for a long time.
For the life of me, I can't remember the name of those type batteries so I can't do a google to find a supplier. I hope this is making some sense.

Question 2. Where can I find articles & schematics for a solar cell to provide a trickle charge for the aforementioned battery?

Thank you very much.

Cordially,
west

5244. Best FAQ in the Western Hemisphere

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 02:20:05 UTC
From: eternalsquire@comcast.net
Message-ID: <1132366805.373565.162400@g14g2000cwa.googlegroups.com>
Source record: 16127

Amateur Radio Frequently Asked Questions:

1) What is Amateur Radio?

In its most general sense the term Amateur Radio covers a very wide range of activities initiated by a group of people for the public good both short term and long term on a purely non-profit and non-commercial basis, using frequencies provided by a nation upon which that group performs its activities. Such a group is known as a nation's Amateur Radio Service.

2) Why Amateur Radio?

A great many national governments recognize the necessity for forming a body of volunteers existing entirely outside the commerical telecommunications infrastructure who are permitted to use radio frequencies. The necessity comes out of at least the following motivations: (a) the ability to form auxillary communications for public safety and welfare less subject to regional outage in the face of disaster, unrest, or other emergencies affecting normal communications (b) encouraging spread of scientific and technological literacy throughout the population via self training, (c) encouraging innovation in the state of the art of communications technology or in the basic sciences on which that technology is based, (d) encouraging goodwill between countries through informal communications between citizens of those respective countries with no payments needing to be made to a common carrier.

3) Who is eligible to operate an Amateur Radio?

Typically any citizen of a country whose laws create an Amateur Radio Service, who can pass a skills test in any or all of theory, regulations, or telegraphy which may be required for the safe operation of an amateur station on the frequencies granted for such operation. The skills test is usually basic for minimum priviledges and intensive for maximum priviledges. The skills test is usually administered either by a government official or by a panel of volunteers appointed by that official. Upon passing the skills test a license to operate is granted to that citizen.

4) Can children operate an Amateur Radio?

In the United States and many other countries there is no minimum age requirement for a minor citizen to be licensed to operate an amateur radio.

5) Who is ineligible to operate an Amateur Radio?

Typically anyone ever convicted of a felony of any kind, although this bar can be waived on a case by case basis through a legal hearing. Also, typically anyone whose license grant to operate had been revoked through a substantial violation of that nation's amateur radio regulations, and again, this bar can be waived on a case by case basis through a legal hearing.

6) What equipment can be legally used for operation?

In most countries any licensed amateur radio operator can build equipment either directly from electronic components or may adapt existing telecommunications equipment to transceive on frequencies designated for amateur radio. In other, more authoritarian countries, equipment may be held in keeping by a nation's government in designated club buildings. In countries governed under a civil law framework rather than a common law framework, a one-time or periodic tax may need to be paid to the government for each transmitter or receiver to be authorized for use by that citizen.

7) How much power can be legally used for operation?

Each nation can choose maximum legal power either on the basis of license priviledge, propogation or interference characteristics of the band in question, or safety considerations such as bodily RF exposure. Power limits could range from 5 watts to 2000 watts.

8) What communications can be conducted over amateur radio?

Typically only communications relating to public safety, statements of a personal nature, or technical conversations. Further, personal conversations may not involve material considered obscene or indecent as based on the standards of the nation of whom the citizen is a part. More authoritarian countries may place additional restrictions such as the banning of any communications containing political content or opinion. Limited one way communications are permitted, usually pertaining to telegraphy practice or to call outs for the purpose of initiating a two way conversation. Communications may generally not be intentionally obscured or encrypted, any published or commonly utilized language or protocol is considered acceptable for this purpose. One-way continuous broadcasting of news or music is typically prohibited.

9) Can unlicensed people ever operate an amateur radio?

In limited cases, yes. a) In genuine emergencies dangerous to life or limb, or potentially so, unlicensed people may use the signals MAYDAY or PANPAN respectively to call out for help or to warn away on any radio
frequency, not just amateur radio frequencies. b) Anyone can operate an amateur radio under the direct supervision of an amateur radio operator using the priviledges of that supervisor. c) Anyone can use a frequency for micropower use so long as the frequency is not expressedly prohibited for such use. Power limits can be quite severe but they are adequate for use in demonstration, education, or research

and development within the home or laboratory.

It is a myth that any person can transmit or broadcast unlicensed in international waters. Typically jurisdiction banning unlicensed operation extends either through the flag of the vessel containing the radio, or through the citizenship of the person transmitting.

10) How is amateur radio different from other competing informal radio operation?

Some countries do authorize citizen, family, or remote control radio services restricted to the use of government type-accepted equipment having fixed frequency channels, limited power, limited antenna size and/or height, and limited maximum distance.

Amateur radio is distinguished from these services by virtue of its special characteristics: a) potentially unlimited range, b) no restrictions to type-accepted equipment, c) transmission may take place anywhere within the designated band, d) international communications are allowed.

11) How is amateur radio different from experimental radio?

Some nations do offer upon application a legal grant for a limited number of people to operate telegraphy, voice, or telemetry upon bands or frequencies having interesting characteristcs. These bands or frequencies may later become adopted as part of the bands authrorized for amateur operation.

12) Is there a banned countries list?

Not at present. During the Cold War the United States and some other democratic nations did indeed publish a short list of totalitarian states and other states sponsoring terrorism with whom there was no legitimate purpose other than espionage for international communications, even as amateur radio operators. Such blockades are no longer in force. Instead, amateurs may not communicate with private citizens of other countries who have an objection to amateur radio. For all practical purposes this means the only country with whom amateur radio operators may not communicate with are North Korea or Yemen,
countries that are totalitarian states that do not permit amateur radio.

5245. Re: help with choosing parts for project

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 02:25:17 UTC
From: eternalsquire@comcast.net
Message-ID: <1132367117.552576.44380@g49g2000cwa.googlegroups.com>
Source record: 16128

Better idea:

Get a pair of PC's each connected to a 2 meter HT through a TNC.
Program one of the PC's to take the ASCII data and translate that to
motor control, program the other PC to translate a keystroke to the
desired ASCII data.

Much cheaper.

The Eternal Squire

5246. Re: Trickle Charge Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 03:12:15 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <jKwff.2198$N45.798@newsread1.news.atl.earthlink.net>
Source record: 16129

"west" <westley@tampabay.rr.com> wrote in message
news:bOuff.7515$bx3.4400@tornado.tampabay.rr.com...
> I know this question has probably been beaten to death, nevertheless I
hope
> you will still indulge me.
>
> During a power outage, which occurs frequently in Florida, I would like to
> use a battery to power some communication gear. Although the battery is
12v
> and not 13.8v, I think that the gear will still work OK (hopefully).
>
> Question 1. I believe that car batteries have a low internal resistance
> because their primary function is to provide a lot of current for a short
> time. There are other 12v large battery types that will last as long as a
> typical car battery. They are designed not to provide peak current, but to
> supply steady state current for a long time.
> For the life of me, I can't remember the name of those type batteries so I
> can't do a google to find a supplier. I hope this is making some sense.
>
> Question 2. Where can I find articles & schematics for a solar cell to
> provide a trickle charge for the aforementioned battery?

What you want is a deep cycle battery. Sometimes called a marine battery if
it is about the same size of a car battery. Used for trolling motors among
other things. Also used for powering golf carts.

5247. choke input voltage doubler?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 03:30:51 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <xZwff.7548$s92.5758@bignews6.bellsouth.net>
Source record: 16130

I was looking at some power supply circuits for
tube linears and was thinking about the full wave
voltage doubler. This is basicly two half wave
rectifiers in series. Now I could build this
circuit with a choke input filter for each half
wave rectifier of the voltage doubler, and I could
put the chokes in the lead without the rectifier.
In this case I could use one choke for both halfs
of the voltage doubler. The output should then
be about .9 * rms input voltage * 2
or 1.8 times the rms voltage of the transformer.

Has anybody ever tried this?

```
------>|--------
) | |
) | ---
) | ---
)-----^^^^^^----|
| |
| ---
| ---
|--|<--------|
```

Crude schematic showing transformer secondary
diodes filter choke and capacitors.

5248. Re: choke input voltage doubler?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 04:06:03 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <-oWdnRnFu6GVOePeRVn-qQ@adelphia.com>
Source record: 16131

Ken Scharf wrote:
> I was looking at some power supply circuits for
> tube linears and was thinking about the full wave
> voltage doubler. This is basicly two half wave
> rectifiers in series. Now I could build this
> circuit with a choke input filter for each half
> wave rectifier of the voltage doubler, and I could
> put the chokes in the lead without the rectifier.
> In this case I could use one choke for both halfs
> of the voltage doubler. The output should then
> be about .9 * rms input voltage * 2
> or 1.8 times the rms voltage of the transformer.
>
> Has anybody ever tried this?
>
> ------>|--------
>) | |
>) | ---
>) | ---
>)-----^^^^^^----|
> | |
> | ---
> | ---
> |--|<--------|
>
> Crude schematic showing transformer secondary
> diodes filter choke and capacitors.

If the choke is directly in series with the transformer, it will have to pass AC, and that won't provide normal choke input filtering (which steadies the DC current after the rectifier), but just puts an impedance between the transformer and the doubler.

There may be a way to incorporate an inductor into a doubler, but I don't think this is it.

5249. Re: Best FAQ in the Western Hemisphere

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 04:08:08 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <cyxff.499$qw.64@fed1read07>
Source record: 16132

http://www.arrl.org/FandES/field/regulations/news/part97/

--
CL -- I doubt, therefore I might be !

5250. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 06:36:33 UTC
From: Polymath <aiyr.r.bean@lycos.co.uk>
Message-ID: <1132382193.870681.16370@g14g2000cwa.googlegroups.com>
Source record: 16133
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

You are, "Polymath", AICMFP.

Joking apart, well said that man!

aaa@spamaway.com wrote:
> This kind of continual foul language,.....
> Do the regulars of this group realise that it is becoming legendary for
> everything Usenet was supposed not to be? Surely it is possible to have a
> civilised debate without this stuff?

5251. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 06:45:46 UTC
From: aaa@spamaway.com
Message-ID: <437ECA1A.815843C2@spamaway.com>
Source record: 16134
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Jock wrote:

> On Sat, 19 Nov 2005 05:37:09 +1100, aaa@spamaway.com wrote:
> >This kind of continual foul language, and the anti-M3 and anti-RSGB
> >attitude (not to mention the "wisdom" portrayed in sig files) are some of
> >the reasons why amateurs will not be taken seriously over the BPL issue.
> >Do the regulars of this group realise that it is becoming legendary for
> >everything Usenet was supposed not to be? Surely it is possible to have a
> >civilised debate without this stuff?
>
> Then sod off back where you came from, top-poster. If you don't like
> foul language, why do you quote it and cross-post it?
>
> If you don't like this newsgroup, why do you subscribe to it?
>

I suppose - awful fascination. Moth drawn to a candle flame? (Flame...
geditt?) I think you're one of the better ones so sorry to offend by top
posting. But seriously, this NG and the hobby are becoming famous for what its
proponents surely don't really desire.

> --
>
> 73 de Jock.

73 indeed.

5252. Best FAQ for the whole universe, and all contemporaneous (parallel) universes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 07:21:53 UTC
From: Googly Elmer Macaroni <aiyr.r.bean@lycos.co.uk>
Message-ID: <1132384913.142535.171020@g14g2000cwa.googlegroups.com>
Source record: 16135

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,

competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B

licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

5253. Homebrew radio show

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 07:43:31 UTC
From: meara.london@virgin.net
Message-ID: <1132386211.592930.68090@o13g2000cwo.googlegroups.com>
Source record: 16136
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

SOLDERSMOKE!
KL7R AND M0HBR PODCAST
FOR HOMEBREWERS!

Tired of listening to Led Zepplin or NPR on your I-Pod? Wouldn't you like to be able to carry with you the kinds of ham radio conversations that you listen to while in your radio shack?

Mike, KL7R in Juneau Alaska, and Bill, M0HBR in London, England meet regularly on the ECHOLINK system to discuss their homebrew radio projects. We have recently started recording these conversations, and are making them available as PODCASTS.

You can subscribe to the program, have them downloaded to your MP-3 player, and listen to them at your convenience.

To subscribe, just cut and paste this URL into your I-poder (or similar) software.

http://www.ourmedia.org/mediarss/user/36170

If you don't have an MP3 player you can just go to the site below and listen to the program using the audio software on your computer.

http://www.ourmedia.org/node/47682

We hope you enjoy the program. Please send us feedback.

73 Bill N2CQR CU2JL M0HBR
http://www.qsl.net/n2cqr

5254. Re: Trickle Charge Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 12:09:13 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <keKdnQMxjs1BiOLeRVnysQ@pipex.net>
Source record: 16137

> During a power outage, which occurs frequently in Florida, I would like to
> use a battery to power some communication gear. Although the battery is
> 12v
> and not 13.8v, I think that the gear will still work OK (hopefully).
>
> Question 1. I believe that car batteries have a low internal resistance
> because their primary function is to provide a lot of current for a short
> time. There are other 12v large battery types that will last as long as a
> typical car battery. They are designed not to provide peak current, but to
> supply steady state current for a long time.
> For the life of me, I can't remember the name of those type batteries so I
> can't do a google to find a supplier. I hope this is making some sense.
>
> Question 2. Where can I find articles & schematics for a solar cell to
> provide a trickle charge for the aforementioned battery?
==========
1) If radio still works at 12 V you can use a 12 V battery

2)If a lead acid battery is charged to 13.8 V and subsequebtly discharged it still has 70 -80 % of its full charge when the voltage has dropped to 12.6 V.

3) The construction of car - versus leisure (deep cycle) batteries is that the plates of a car battery have a larger area but are thinner . This enables the chemical reaction to be stronger resulting in a high current capability (engine start) ,be it for a relatively short time. A leisure battery has thicker plates but with a smaller area ,hence these batteries can provide a more modest current ,but for a longer time .
Marine batteries have similar characteristics.
Leisure batteries are available as 'wet' units which can be topped up , with distilled or de-ionised water ,or are of the sealed type (as used in UPS =Uninterruptible Power Supply units and for example golf carts)
It is recommended by some manufacturers to charge SLAs = sealed lead acid batteries to 13.5 -13.8 V ,not higher ,when used for stand by service .
(I restrict the SLAs I use to 13.5 V)

4) If only a solar panel is used for charging a lead acid battery , a simple comparator circuit with any opamp ,sensing (a fraction of) the battery voltage against a zener reference can operate a relay disconnecting the battery from the solar panel and shorting the solar panel . Alternatively ,when battery is fully charged the generated current is dumped via a transistor - resistor or transistor- car bulb arrangement .
The current dumping system is necessary when other renewable energy sources are used as well ,like a wind generator. The latter system is the one I use .

Frank GM0CSZ / KN6WH

5255. Re: Trickle Charge Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 12:51:42 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <437F1FDE.9000605@bloomer.net>
Source record: 16138

You may be thinking of a "deep cycle battery", which make good batteries to power communication gear. They are commonly called 12 Volt batteries (just the same as car batteries are) but in reality, when fully charged, they are really 13.8 Volts (just as car batteries are), so they will work fine for powering gear designed for 13.8V.

Charging with a solar panel is pretty easy. All you need is a solar panel, a charge controller and the battery. The charge controller will have positive and negative connection points labeled "Array" or something similar. Hook up the solar panels positive and negative leads there (positive to positive and negative to negative). The other connection points will go to the battery (again, positive to positive and negative to negative). Aim the solar panel due South and tilt it (0 degrees being horizontal) at an angle that is your location's lattitude + 15 degrees. In Florida, that would be about 43 degrees in Central Florida. So the panel would be placed at a 43 degree angle up from horizontal and so that the solar cells are facing South. Be careful to have the batteries located in a place that is vented since they will give off a little hydrogen as they charge (even the sealed batteries do) and hydrogen is explosive (aka Hindenburg). A small vented box outside it good and run the wires inside (be sure to use a large enough wire to avoid dropping the voltage at the radio to a level that is too low to operate it). 10 or 12 gauge wire should be fine for short runs of 10 to 20 feet for an HF radio that draws something like 20 Amps in transmit.

More info on this can be found at http://www.homepower.com and I whole-heartedly suggest you subscribe if you are at all interested in alternative power sources for other things around the home. You might check your local library and see if they have the magazine (I can get it at my local Border's Book Store).

Scott
N0EDV

west wrote:
> I know this question has probably been beaten to death, nevertheless I hope
> you will still indulge me.
>
> During a power outage, which occurs frequently in Florida, I would like to
> use a battery to power some communication gear. Although the battery is 12v
> and not 13.8v, I think that the gear will still work OK (hopefully).
>
> Question 1. I believe that car batteries have a low internal resistance
> because their primary function is to provide a lot of current for a short
> time. There are other 12v large battery types that will last as long as a

> typical car battery. They are designed not to provide peak current, but to
> supply steady state current for a long time.
> For the life of me, I can't remember the name of those type batteries so I
> can't do a google to find a supplier. I hope this is making some sense.
>
> Question 2. Where can I find articles & schematics for a solar cell to
> provide a trickle charge for the aforementioned battery?
>
> Thank you very much.
>
> Cordially,
> west
>
>

5256. Re: choke input voltage doubler?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 15:38:35 UTC
From: Wes Stewart <n7ws*@*yahoo.com>
Message-ID: <lfhun1la9hh371uumos1n5c0qf9guhn2vv@4ax.com>
Source record: 16139

On Fri, 18 Nov 2005 23:06:03 -0500, John Popelish <jpopelish@rica.net>
wrote:

>Ken Scharf wrote:
>> I was looking at some power supply circuits for
>> tube linears and was thinking about the full wave
>> voltage doubler. This is basicly two half wave
>> rectifiers in series. Now I could build this
>> circuit with a choke input filter for each half
>> wave rectifier of the voltage doubler, and I could
>> put the chokes in the lead without the rectifier.
>> In this case I could use one choke for both halfs
>> of the voltage doubler. The output should then
>> be about .9 * rms input voltage * 2
>> or 1.8 times the rms voltage of the transformer.
>>
>> Has anybody ever tried this?
>>
>> ------>|--------
>>) | |
>>) | ---
>>) | ---
>>)-----^^^^^^----|
>> | |
>> | ---
>> | ---
>> |--|<--------|
>>
>> Crude schematic showing transformer secondary
>> diodes filter choke and capacitors.
>
>If the choke is directly in series with the transformer, it will have
>to pass AC, and that won't provide normal choke input filtering (which
>steadies the DC current after the rectifier), but just puts an
>impedance between the transformer and the doubler.

All chokes are in series with the transformer and pass some AC
component. If they only passed DC we would need them.

Without giving this too much (likely enought) thought I think this
will fail because without loads across -each- filter cap, the critical
inductance will not be obtained.
>
>There may be a way to incorporate an inductor into a doubler, but I
>don't think this is it.

5257. Re: choke input voltage doubler?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 16:08:10 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <-sudnS4NPMzb0OLeRVn-gw@adelphia.com>
Source record: 16140

Wes Stewart wrote:
> On Fri, 18 Nov 2005 23:06:03 -0500, John Popelish <jpopelish@rica.net>
> wrote:
>
>
>>Ken Scharf wrote:
>>
>>>I was looking at some power supply circuits for
>>>tube linears and was thinking about the full wave
>>>voltage doubler. This is basicly two half wave
>>>rectifiers in series. Now I could build this
>>>circuit with a choke input filter for each half
>>>wave rectifier of the voltage doubler, and I could
>>>put the chokes in the lead without the rectifier.
>>>In this case I could use one choke for both halfs
>>>of the voltage doubler. The output should then
>>>be about .9 * rms input voltage * 2
>>>or 1.8 times the rms voltage of the transformer.
>>>
>>>Has anybody ever tried this?
>>>
>>> ------>|--------
>>>) | |
>>>) | ---
>>>) | ---
>>>)-----^^^^^^----|
>>> | |
>>> | ---
>>> | ---
>>> |--|<--------|
>>>
>>>Crude schematic showing transformer secondary
>>>diodes filter choke and capacitors.
>>
>>If the choke is directly in series with the transformer, it will have
>>to pass AC, and that won't provide normal choke input filtering (which
>>steadies the DC current after the rectifier), but just puts an
>>impedance between the transformer and the doubler.
>
>
> All chokes are in series with the transformer and pass some AC
> component. If they only passed DC we would need them.

I was using DC in the "unidirectional current" sense, not the "having no AC components" sense.

> Without giving this too much (likely enought) thought I think this
> will fail because without loads across -each- filter cap, the critical
> inductance will not be obtained.

Regardless of the loads across the caps, this inductor cannot ever achieve critical inductance, since that is the inductance that keeps the current reaching zero, each half cycle. In this circuit, the inductor precedes the rectifiers, so its current must pass through zero twice per cycle, regardless of the capacitor load.

You could also put it in series with the primary, instead, and achieve the same effect (with the proper scaling to account for the turns ratio).

>>There may be a way to incorporate an inductor into a doubler, but I
>>don't think this is it.

5258. Re: choke input voltage doubler?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 18:02:23 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1132421698.539800.219000@g14g2000cwa.googlegroups.com>
Source record: 16141

So, why do you want to use a choke-input filter in the first place? AFAIK, they are most useful in giving you better output voltage regulation under varying load than a capacitor input filter. They have the added advantage that you can get more DC _power_ from a given transformer by using a choke input filter, because although the output voltage is lower, the RMS transformer winding current is lowered even more.

BUT--the voltage regulation advantage is lost if you try this with a half-wave rectifier circuit, because you cannot maintain constant enough current in the choke. To get the voltage regulation, the current in the choke must not drop to zero at any time in the cycle, and that's not going to happen while maintaining reasonable output voltage in a half-wave circuit. (There's some limited help if you put a "catch diode" to keep the voltage across the choke from swinging too far negative, but that's not enough to get the advantage of the full-wave circuit.)

In addition, as John says, in the circuit as drawn, the choke is simply in series with the transformer secondary, so you must reverse the current in it between half-cycles to get conduction on both half-cycles. It will not behave anything even close to the way that a full-wave rectifier feeding a choke input filter will.

Suggest you try a simple Spice (e.g. the free LTSpice from the Linear Techonolgy website) simulation of this and the normal full-wave circuit, and look at the huge differences. Note especially what happens when you vary the DC load on the output.

Cheers,
Tom

5259. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 18:53:15 UTC
From: aaa@spamaway.com
Message-ID: <437F749B.7174ED0C@spamaway.com>
Source record: 16142
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

The Magnum wrote:

> ....(snip)
> Lol, great command of the English language there. I wonder if his morse is
> as bad........
> (snip)

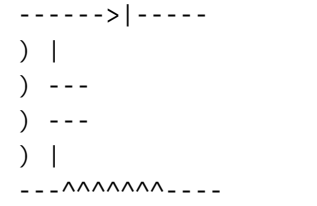
> ......****. your **** now trying to say Amateurs above the entry level
> never cause interference or mess about sometimes on the air.... b-ll-cks.

5260. Re: choke input voltage doubler?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 19:05:42 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <YFKff.7421$i7.942@bignews2.bellsouth.net>
Source record: 16143

```
John Popelish wrote:
> Wes Stewart wrote:
>
>> On Fri, 18 Nov 2005 23:06:03 -0500, John Popelish <jpopelish@rica.net>
>> wrote:
>>
>>
>>> Ken Scharf wrote:
>>>
>>>> I was looking at some power supply circuits for
>>>> tube linears and was thinking about the full wave
>>>> voltage doubler. This is basicly two half wave
>>>> rectifiers in series. Now I could build this
>>>> circuit with a choke input filter for each half
>>>> wave rectifier of the voltage doubler, and I could
>>>> put the chokes in the lead without the rectifier.
>>>> In this case I could use one choke for both halfs
>>>> of the voltage doubler. The output should then
>>>> be about .9 * rms input voltage * 2
>>>> or 1.8 times the rms voltage of the transformer.
>>>>
>>>> Has anybody ever tried this?
>>>>
>>>> ------>|--------
>>>> ) | |
>>>> ) | ---
>>>> ) | ---
>>>> )-----^^^^^^----|
>>>> | |
>>>> | ---
>>>> | ---
>>>> |--|<--------|
>>>>
>>>> Crude schematic showing transformer secondary
>>>> diodes filter choke and capacitors.
>>>
>>>
>>> If the choke is directly in series with the transformer, it will have
>>> to pass AC, and that won't provide normal choke input filtering
>>> (which steadies the DC current after the rectifier), but just puts an
>>> impedance between the transformer and the doubler.
>>
>>
>>
```

>> All chokes are in series with the transformer and pass some AC
>> component. If they only passed DC we would need them.
>
>
> I was using DC in the "unidirectional current" sense, not the "having no
> AC components" sense.
>
>> Without giving this too much (likely enought) thought I think this
>> will fail because without loads across -each- filter cap, the critical
>> inductance will not be obtained.
>
>
> Regardless of the loads across the caps, this inductor cannot ever
> achieve critical inductance, since that is the inductance that keeps the
> current reaching zero, each half cycle. In this circuit, the inductor
> precedes the rectifiers, so its current must pass through zero twice per
> cycle, regardless of the capacitor load.
>
> You could also put it in series with the primary, instead, and achieve
> the same effect (with the proper scaling to account for the turns ratio).
>
>>> There may be a way to incorporate an inductor into a doubler, but I
>>> don't think this is it.
>
>
Why you all may be right, what you are failing to see is that
the choke is simply in the negative leg of the positive half
wave rectifier, and in the positive leg of the negative half
wave rectifier, and both rectifier outputs are in series.



This is a half wave rectifier with a choke input filter with the
choke in the negative end. Will this work? Now connect
this circuit in series with negative output half wave and you
notice you have two chokes in parallel. Yes you do need a
bleeder resistor or minimal load to satisify the choke current
requirement, I simply didn't draw this, the resting current
of a class AB1 linear would satisfy that.

Now what am I failing to see?

5261. Re: choke input voltage doubler?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 19:24:58 UTC
From: fmmck@aol.com
Message-ID: <fmmck-1911051424580001@aca3c22c.ipt.aol.com>
Source record: 16144

In article <xZwff.7548$s92.5758@bignews6.bellsouth.net>, Ken Scharf
<wa2mzeNOTTHIS@bellsouth.net> wrote:

> I was looking at some power supply circuits for
> tube linears and was thinking about the full wave
> voltage doubler. This is basicly two half wave
> rectifiers in series. Now I could build this
> circuit with a choke input filter for each half
> wave rectifier of the voltage doubler, and I could
> put the chokes in the lead without the rectifier.
> In this case I could use one choke for both halfs
> of the voltage doubler.

Ken-

This doesn't make sense to me. My recollection of the choke-input filter,
is that it can only be used following a full-wave rectifier. You are
suggesting they be used prior to the rectifier, which is not where a
"filter" is normally placed. Instead, the choke would act as a series
impedance to the AC source.

It seems to me that you can't separate the capacitors from the rectifiers,
or you wouldn't have doubler action. Therefore, capacitor-input is the
only filtering that makes sense for this circuit. Of course you might use
the choke in a Pi configuration between the output and another filter
capacitor.

If you have any success with this approach, it will be from extra voltage
generated by the choke's collapsing magnetic field. This is similar to
how switching regulators work, but without any active regulation.

73, Fred, K4DII

5262. Re: choke input voltage doubler?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 19:29:08 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <87ydnd4TdaL94eLeRVn-qw@adelphia.com>
Source record: 16145

```
Ken Scharf wrote:
> John Popelish wrote:
>
>>Wes Stewart wrote:
>>
>>
>>>On Fri, 18 Nov 2005 23:06:03 -0500, John Popelish <jpopelish@rica.net>
>>>wrote:
>>>
>>>
>>>
>>>>Ken Scharf wrote:
>>>>
>>>>
>>>>I was looking at some power supply circuits for
>>>>>tube linears and was thinking about the full wave
>>>>>voltage doubler. This is basicly two half wave
>>>>>rectifiers in series. Now I could build this
>>>>>circuit with a choke input filter for each half
>>>>>wave rectifier of the voltage doubler, and I could
>>>>>put the chokes in the lead without the rectifier.
>>>>>In this case I could use one choke for both halfs
>>>>>of the voltage doubler. The output should then
>>>>>be about .9 * rms input voltage * 2
>>>>>or 1.8 times the rms voltage of the transformer.
>>>>>
>>>>>Has anybody ever tried this?
>>>>>
>>>>>------>|--------
>>>>>) | |
>>>>>) | ---
>>>>>) | ---
>>>>>)-----^^^^^^----|
>>>>> | |
>>>>> | ---
>>>>> | ---
>>>>> |--|<--------|
>>>>>
>>>>>Crude schematic showing transformer secondary
>>>>>diodes filter choke and capacitors.
>>>>
>>>>
>>>>If the choke is directly in series with the transformer, it will have
>>>>to pass AC, and that won't provide normal choke input filtering
```

>>>>(which steadies the DC current after the rectifier), but just puts an
>>>>impedance between the transformer and the doubler.
>>>
>>>
>>>
>>>All chokes are in series with the transformer and pass some AC
>>>component. If they only passed DC we would need them.
>>
>>
>>I was using DC in the "unidirectional current" sense, not the "having no
>>AC components" sense.
>>
>>
>>>Without giving this too much (likely enought) thought I think this
>>>will fail because without loads across -each- filter cap, the critical
>>>inductance will not be obtained.
>>
>>
>>Regardless of the loads across the caps, this inductor cannot ever
>>achieve critical inductance, since that is the inductance that keeps the
>>current reaching zero, each half cycle. In this circuit, the inductor
>>precedes the rectifiers, so its current must pass through zero twice per
>>cycle, regardless of the capacitor load.
>>
>>You could also put it in series with the primary, instead, and achieve
>>the same effect (with the proper scaling to account for the turns ratio).
>>
>>
>>>>There may be a way to incorporate an inductor into a doubler, but I
>>>>don't think this is it.
>>
>>
> Why you all may be right, what you are failing to see is that
> the choke is simply in the negative leg of the positive half
> wave rectifier, and in the positive leg of the negative half
> wave rectifier, and both rectifier outputs are in series.
>
> ------>|-----
>) |
>) ---
>) ---
>) |
> ---^^^^^^^----
>
> This is a half wave rectifier with a choke input filter with the
> choke in the negative end. Will this work?

Not at all well, because you have provided no path for the inductor
current when the voltage from the transformer tires to reverse bias
the diode. So the inductor will keep the diode conducting as the

voltage reverses. This is not at all the way a choke input filter
acts with a full wave rectifier. I am quite sure you have never seen
a choke input filter in a half wave supply, for this reason.

> Now connect
> this circuit in series with negative output half wave and you
> notice you have two chokes in parallel. Yes you do need a
> bleeder resistor or minimal load to satisify the choke current
> requirement, I simply didn't draw this, the resting current
> of a class AB1 linear would satisfy that.
>
> Now what am I failing to see?

That there is a second current path through the inductor that involves
the other rectifier. So AC is applied to the inductor, instead of
unidirectional voltage.

5263. Re: FAQ - Interested? Start here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 19:40:43 UTC
From: aaa@spamaway.com
Message-ID: <437F7FBB.BF3F9A20@spamaway.com>
Source record: 16146
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

And so, on and on go the anti CB and anti-M3 ramblings (rumblings?)... What about volunteering to serve on the RSGB or is that too hard? Just better to crticise... And what about showing new M3s a better way to behave.. by **example**. Nah, just gripe and snipe.. easier.

Polymath wrote:

> What is Ham Radio?
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation...

> These CB types engage in the competitive activities
> with their Cheque-Book-purchased off-the-shelf radios
> in a forlorn effort to prove that they are Radio Hams.
>
> No _REAL_ Radio Hams are deceived by such people!
>

etc. etc. etc.

Most (not just CB and M3) amateurs, sadly, use off the shelf cheque book purchased rigs and accessories. Amateur radio *has* changed. I think it was better BTW, but that has been changed by technology. The number of intolerant people blaming the wrong things has not changed - just become more readily readable by eg newsgroups. Again, simply the march of technology. A good hobby would move with technology. Adapt where it has to, and always be positive. Most of you regulars to this NG do not adapt. You are negative and destructive (eg towards the RSGB and M3s). Your continual sniping about both is a bore. References to eg Potty Bar were once mildly amusing but now tedious. Specifically, someone on here recently reported that he had been wrongly castigated by an M3 for transmitting off channel. A clear case of where technical experience was lacking. An amateur with the true spirit would have tactfullly explained the facts. And that was one of the *better* comments! Most are non-specific and generalised sniping. Yes, there are poor M3s, and there are also poor full calls, and poor but fast CW senders and so on. Any non-amateur who lurks across this group will quickly form an opinion that radio amateurs are a bunch of negative misfits and the sooner that BPL for the masses reduces their facility the better. BTW, for reasons beyond my control I'm not a member of the RSGB. I'm not an M3 either. Just an amateur. And why do I bother, I sense some ask. I suppose I'm still an incurable optimist who thinks some conscience may be pricked and this behaviour improved.. Why be here at all (Jock - one of the

better ones - asked) See my earlier reply. Come on chaps and chapesses. Lift your game. Time is running out. Do not be like the famous Australian amateur (a UNIX expert) who responded to accidental OT posts to their newsgroup (I think it was then called just "radio") in the early days of the Net by flaming. His "cleverest" flame was metres long printouts which informed people they were on the wrong group. By giving such a negative image to amateur radio to so many technically curious people (surely exactly those we want) he did a great deal of lasting damage to the amateur cause - perhaps aided in its disappearance. He is actually a public-spirited amateur, but what an error! Some of you are public spirited too. So for those, a plea for more tolerance. More thinking before putting keyboard, mouth, key into gear... Or will the replies show the absolute opposite? We shall see.. Time gets short. BPL for HF and other pressures for VHF/UHF/SHF could arguably squeeze us all out. The efforts of this group do not help in resisting this. They vastly aid it. Any lurkers are going to have a most negative impression of what probably are a bunch of fine people doing their best to hide it! "Amateur radio - so that's what it's like - best legislate against it without delay!" Anyone got anything *new* to add? Usenet is meant to aid debate, so have a go. But please not the usual, broing, repetive stuff; we've read it all before... Thanks for reading this; I now feel slightly better...

5264. Re: choke input voltage doubler?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 20:29:18 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <gKWdnbGpC5HnF-LenZ2dnUVZ_tSdnZ2d@adelphia.com>
Source record: 16147

Fred McKenzie wrote:
> In article <xZwff.7548$s92.5758@bignews6.bellsouth.net>, Ken Scharf
> <wa2mzeNOTTHIS@bellsouth.net> wrote:
>
>
>>I was looking at some power supply circuits for
>>tube linears and was thinking about the full wave
>>voltage doubler. This is basicly two half wave
>>rectifiers in series. Now I could build this
>>circuit with a choke input filter for each half
>>wave rectifier of the voltage doubler, and I could
>>put the chokes in the lead without the rectifier.
>>In this case I could use one choke for both halfs
>>of the voltage doubler.
>
>
> Ken-
>
> This doesn't make sense to me. My recollection of the choke-input filter,
> is that it can only be used following a full-wave rectifier. You are
> suggesting they be used prior to the rectifier, which is not where a
> "filter" is normally placed. Instead, the choke would act as a series
> impedance to the AC source.
>
> It seems to me that you can't separate the capacitors from the rectifiers,
> or you wouldn't have doubler action. Therefore, capacitor-input is the
> only filtering that makes sense for this circuit. Of course you might use
> the choke in a Pi configuration between the output and another filter
> capacitor.
>
> If you have any success with this approach, it will be from extra voltage
> generated by the choke's collapsing magnetic field. This is similar to
> how switching regulators work, but without any active regulation.
>
> 73, Fred, K4DII

I played around with choke input filtering for this circuit with Spice
and got "continuous inductor current" if I used two highly coupled
inductors, one after each rectifier, and another pair of diodes from
the input side of the chokes to the capacitor common point. However,
this "continuous current" switches back and forth between the two
coupled inductors on alternating half cycles so each end of the
capacitor pair sees current as a half cycle approximately square wave
pulse. So each capacitor charges and discharges with a quite

triangular voltage ripple. But the sum of the two capacitor voltages is a very pure DC, compared to the no choke version, since the ripples cancel quite well. However, this reduces the output voltage to only half of the no choke version, so you might as well have made a full wave supply, instead of a doubler configuration.

5265. Re: Trickle Charge Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 21:47:04 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <v3Nff.4677$El5.2808@fe06.lga>
Source record: 16148

Although most posts have suggested what you are thinking of is a deep cycle marine battery or similar, you might consider using an SLA for your purpose.

SLAs will probably be more expensive, per amp-hour, than a marine battery. However, most lead acid batteries are intended to be operated outdoors. SLAs are a lot more housebroken.

With an ordinary lead-acid battery, you have two problems. The obvious one is leaking acid, which could be a real problem in the house. The other is outgassing hydrogen. Hydrogen is extremely easy to ignite, and if the concentration gets within the flammable range, it will almost certainly find an ignition source. Outdoors it is pretty tough (relatively) to get the concentration high enough to burn, but not so indoors. Hydrogen burns very quickly, so the result of a hydrogen fire, even in an open space, is often much like an explosion. The good news is that is has relatively little energy, so while it burns very hot, it tends to be over with very quickly, so it is (relatively) unlikely to ignite things around it. Still, I'm not the biggest fan of indoor explosions .. at least in my house.

With SLAs, neither the hydrogen nor the acid gets out, so they are a little more friendly indoors.

..

"west" <westley@tampabay.rr.com> wrote in message
news:bOuff.7515$bx3.4400@tornado.tampabay.rr.com...
>I know this question has probably been beaten to death, nevertheless I hope
> you will still indulge me.
>
> During a power outage, which occurs frequently in Florida, I would like to
> use a battery to power some communication gear. Although the battery is
> 12v
> and not 13.8v, I think that the gear will still work OK (hopefully).
>
> Question 1. I believe that car batteries have a low internal resistance
> because their primary function is to provide a lot of current for a short
> time. There are other 12v large battery types that will last as long as a
> typical car battery. They are designed not to provide peak current, but to
> supply steady state current for a long time.
> For the life of me, I can't remember the name of those type batteries so I
> can't do a google to find a supplier. I hope this is making some sense.
>
> Question 2. Where can I find articles & schematics for a solar cell to
> provide a trickle charge for the aforementioned battery?
>
> Thank you very much.

>
> Cordially,
> west
>
>

5266. FRIEND: as are You, Brandon is Awesome.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-19 22:55:46 UTC
From: nikool18a@yahoo.com
Message-ID: <1132440946.145977.20580@o13g2000cwo.googlegroups.com>
Source record: 16149

FRIEND,

Hi. Check out www.ChezBrandon.com ; it's awesome. As are you, Brandon is highly intelligent, knowledgeable, and good. May you have an awesome day.

A Succinct Warning: Elements of the Mossad, sated with cash from the murderous and destructive narcotics trade, are using some medical, pharmacy, and food service workers to murder men, women, and children. (A certain tasteless acid, for instance, causes cancer.)

Victor Ostrovsky's books BY WAY OF DECEPTION and THE OTHER SIDE OF DECEPTION: A ROGUE AGENT EXPOSES THE MOSSAD'S SECRET AGENDA offers elucidation, as does James Ennes, Jr.'s ASSAULT ON THE LIBERTY.

Again, may you have an awesome day, and check out www.reopen911.org and www.ChezBrandon.com
-- NICK

5267. Re: choke input voltage doubler?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 01:28:00 UTC
From: "wa2mze(spamless)" <"wa2mze(spamless)"@bellsouth.net>
Message-ID: <mgQff.787$KP1.461@bignews5.bellsouth.net>
Source record: 16150

```
John Popelish wrote:
> Ken Scharf wrote:
>
>> John Popelish wrote:
>>
>>> Wes Stewart wrote:
>>>
>>>
>>>> On Fri, 18 Nov 2005 23:06:03 -0500, John Popelish <jpopelish@rica.net>
>>>> wrote:
>>>>
>>>>
>>>>
>>>>> Ken Scharf wrote:
>>>>>
>>>>>
>>>>>> I was looking at some power supply circuits for
>>>>>> tube linears and was thinking about the full wave
>>>>>> voltage doubler. This is basicly two half wave
>>>>>> rectifiers in series. Now I could build this
>>>>>> circuit with a choke input filter for each half
>>>>>> wave rectifier of the voltage doubler, and I could
>>>>>> put the chokes in the lead without the rectifier.
>>>>>> In this case I could use one choke for both halfs
>>>>>> of the voltage doubler. The output should then
>>>>>> be about .9 * rms input voltage * 2
>>>>>> or 1.8 times the rms voltage of the transformer.
>>>>>>
>>>>>> Has anybody ever tried this?
>>>>>>
>>>>>> ------>|--------
>>>>>> ) | |
>>>>>> ) | ---
>>>>>> ) | ---
>>>>>> )-----^^^^^^----|
>>>>>> | |
>>>>>> | ---
>>>>>> | ---
>>>>>> |--|<--------|
>>>>>>
>>>>>> Crude schematic showing transformer secondary
>>>>>> diodes filter choke and capacitors.
>>>>>
>>>>>
```

>>>>>
>>>>> If the choke is directly in series with the transformer, it will have
>>>>> to pass AC, and that won't provide normal choke input filtering
>>>>> (which steadies the DC current after the rectifier), but just puts an
>>>>> impedance between the transformer and the doubler.
>>>>
>>>>
>>>>
>>>>
>>>> All chokes are in series with the transformer and pass some AC
>>>> component. If they only passed DC we would need them.
>>>
>>>
>>>
>>> I was using DC in the "unidirectional current" sense, not the "having no
>>> AC components" sense.
>>>
>>>
>>>> Without giving this too much (likely enought) thought I think this
>>>> will fail because without loads across -each- filter cap, the critical
>>>> inductance will not be obtained.
>>>
>>>
>>>
>>> Regardless of the loads across the caps, this inductor cannot ever
>>> achieve critical inductance, since that is the inductance that keeps the
>>> current reaching zero, each half cycle. In this circuit, the inductor
>>> precedes the rectifiers, so its current must pass through zero twice per
>>> cycle, regardless of the capacitor load.
>>>
>>> You could also put it in series with the primary, instead, and achieve
>>> the same effect (with the proper scaling to account for the turns
>>> ratio).
>>>
>>>
>>>>>>> There may be a way to incorporate an inductor into a doubler, but I
>>>>>>> don't think this is it.
>>>
>>>
>>>
>> Why you all may be right, what you are failing to see is that
>> the choke is simply in the negative leg of the positive half
>> wave rectifier, and in the positive leg of the negative half
>> wave rectifier, and both rectifier outputs are in series.
>>
>> ------>|-----
>>) |
>>) ---
>>) ---
>>) |

>> ---^^^^^^^----
>>
>> This is a half wave rectifier with a choke input filter with the
>> choke in the negative end. Will this work?
>
>
> Not at all well, because you have provided no path for the inductor
> current when the voltage from the transformer tires to reverse bias the
> diode. So the inductor will keep the diode conducting as the voltage
> reverses. This is not at all the way a choke input filter acts with a
> full wave rectifier. I am quite sure you have never seen a choke input
> filter in a half wave supply, for this reason.
>
I guess I can't recall seeing a half wave rectifier circuit using
a choke input filter, but I thought that was because half wave
circuits are usually used in low voltage circuits where a choke
input filter would not have any advantage anyway.

However in a full wave circuit how is there an alternate path?
The center tapped transformer simply provides two ac excitations
to two rectifiers 180 degress out of phase. This allows only
one rectifier to conduct at a time. True, there is a more or less
constant excitation to the choke, but there is NO reverse path as
the diodes still only allow conduction in one direction.
Either way the choke sees a DC current, not an AC one (minus the
ripple, which a half sinewave imposed on a dc current).

>> Now connect
>> this circuit in series with negative output half wave and you
>> notice you have two chokes in parallel. Yes you do need a
>> bleeder resistor or minimal load to satisify the choke current
>> requirement, I simply didn't draw this, the resting current
>> of a class AB1 linear would satisfy that.
>>
>> Now what am I failing to see?
>
>
> That there is a second current path through the inductor that involves
> the other rectifier. So AC is applied to the inductor, instead of
> unidirectional voltage.

5268. Re: Coax Connectors, Adapters & Bulk cable

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 01:32:41 UTC
From: gagnonrchrd@netscape.net
Message-ID: <1132450361.214807.168050@z14g2000cwz.googlegroups.com>
Source record: 16151

John - kd5yi wrote:
> "AAA RF Products" <sales@aaarfproducts.com> wrote in message
> news:E83ef.140$K26.117@fed1read02...
> > For your free copy of our new catalog,
> >
> > please email sales@AAARFProducts.com
> >
> > or see www.aaarfproducts.com
> >
> > or call 949 481 3154 (San Clemente, CA)
> >
> > No minimum order.
> >
> > No handling charges.
> >
>
>
> Do you ever come back and read responses?
>
> Your Web site needs too many browser plug-ins.
>
> No thanks.

I asked the same question some months ago. No answer.
Apparently they have no clue that they have no clue.

Richard

5269. Re: choke input voltage doubler?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 02:41:49 UTC
From: "wa2mze(spamless)" <"wa2mze(spamless)"@bellsouth.net>
Message-ID: <zlRff.815$KP1.677@bignews5.bellsouth.net>
Source record: 16152

K7ITM wrote:
> So, why do you want to use a choke-input filter in the first place?
> AFAIK, they are most useful in giving you better output voltage
> regulation under varying load than a capacitor input filter. They have
> the added advantage that you can get more DC _power_ from a given
> transformer by using a choke input filter, because although the output
> voltage is lower, the RMS transformer winding current is lowered even
> more.
>
> BUT--the voltage regulation advantage is lost if you try this with a
> half-wave rectifier circuit, because you cannot maintain constant
> enough current in the choke. To get the voltage regulation, the
> current in the choke must not drop to zero at any time in the cycle,
> and that's not going to happen while maintaining reasonable output
> voltage in a half-wave circuit. (There's some limited help if you put
> a "catch diode" to keep the voltage across the choke from swinging too
> far negative, but that's not enough to get the advantage of the
> full-wave circuit.)
>
> In addition, as John says, in the circuit as drawn, the choke is simply
> in series with the transformer secondary, so you must reverse the
> current in it between half-cycles to get conduction on both
> half-cycles. It will not behave anything even close to the way that a
> full-wave rectifier feeding a choke input filter will.
>
> Suggest you try a simple Spice (e.g. the free LTSpice from the Linear
> Techonolgy website) simulation of this and the normal full-wave
> circuit, and look at the huge differences. Note especially what
> happens when you vary the DC load on the output.
>
> Cheers,
> Tom
>
I think I understand what you are saying here, but even with
a full wave rectifier doesn't the current through the choke drop
to zero (though only for a brief instant) between the two phases
of rectification when the diodes switch roles? And since there
isn't a capacitor before the chokes the voltage at the input
to the filter would drop to zero, unlike with a capacitor input
filter.

Also, with either type of rectifier (FW or HW) is shouldn't matter
which leg the choke is placed in, as Kirkoff's law is satified
either way.

5270. Re: choke input voltage doubler?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 03:38:08 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <p-Cdnb7xr59hc-LenZ2dnUVZ_tmdnZ2d@adelphia.com>
Source record: 16153

wa2mze(spamless) wrote:
> John Popelish wrote:

>>Not at all well, because you have provided no path for the inductor
>>current when the voltage from the transformer tires to reverse bias the
>>diode. So the inductor will keep the diode conducting as the voltage
>>reverses. This is not at all the way a choke input filter acts with a
>>full wave rectifier. I am quite sure you have never seen a choke input
>>filter in a half wave supply, for this reason.
>
> I guess I can't recall seeing a half wave rectifier circuit using
> a choke input filter, but I thought that was because half wave
> circuits are usually used in low voltage circuits where a choke
> input filter would not have any advantage anyway.

The advantages of a choke input filter (lower RMS transformer current per amp of DC output, much lower high frequencies in the ripple, less voltage sag with increase in load current, etc.) are not directly related to the output voltage. The concept of a choke input filter is that the current is continuous through the inductor, and so, into the capacitor. A capacitor input filter charges the cap during brief pulses at the line peaks, instead, producing a higher RMS transformer current and higher harmonic ripple components, but also higher peak output voltage.

> However in a full wave circuit how is there an alternate path?
> The center tapped transformer simply provides two ac excitations
> to two rectifiers 180 degress out of phase.

The inductor current switches from one rectifier to the other as the transformer voltage goes through zero. At the moment the transformer voltage is zero, the inductor draws current through both rectifiers, producing an input voltage to the inductor 1 diode plus transformer resistance drop below the center tap voltage.

> This allows only
> one rectifier to conduct at a time. True, there is a more or less
> constant excitation to the choke, but there is NO reverse path as
> the diodes still only allow conduction in one direction.

I suggest you follow those currents through the inductor for a full cycle. Since the inductor is in series with the secondary, if the secondary conducts in both directions (alternating which diode is conducting) then the inductor must also conduct in both directions.

> Either way the choke sees a DC current, not an AC one (minus the
> ripple, which a half sinewave imposed on a dc current).

The diodes are turned opposite ways, so one conducts DC one way, and one conducts DC the other way. Both those currents pass alternately through the same inductor.

5271. Cleaning Tektronix TM500 series cam switches??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 03:53:05 UTC
From: hexter@blazenet.net
Message-ID: <11nvsp1e3vmgb90@corp.supernews.com>
Source record: 16154

Hi folks.

Wondering if anyone here knows a good way to clean and restore
life to the rotary cam finger switches like are used in Tek SC502,
SG503 etc.

I don't have any of the blue and the red CAIG fluid anymore but
to anyone here who ever used it what do you think of the stuff??
I had two little bottles with a built it applicator brush and I
thought the stuff worked great!

My SG503 went bonkers and I used spray isopropyl alcohol and then
a small shot of WD-40 on the contacts. Seems o.k. now.

5272. Wtb: Hp-23

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 04:18:07 UTC
From: John <sandersj@cowtown.net>
Message-ID: <11nvucreka4igbe@corp.supernews.com>
Source record: 16155

I am looking for a heathkit hp-23 power supply , please let me know what you want for it.

Thanks, John n5nme

5273. Re: FAQ - Interested? Start here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 04:27:59 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1132460879.036154.77790@g14g2000cwa.googlegroups.com>
Source record: 16156
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

aaa@spamaway.com wrote:
> And so, on and on go the anti CB and anti-M3 ramblings (rumblings?)...
> What about volunteering to serve on the RSGB or is that too hard? Just
> better to crticise... And what about showing new M3s a better way to
> behave.. by **example**. Nah, just gripe and snipe.. easier.
>
wrong on both count the word would seem to be raving

5274. Re: Cleaning Tektronix TM500 series cam switches??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 04:44:12 UTC
From: dplatt@radagast.org
Message-ID: <11nvvosk09t8403@corp.supernews.com>
Source record: 16157

In article <11nvsp1e3vmgb90@corp.supernews.com>,
Gudmundur <retxeh@blazenet.net> wrote:

> Hi folks.
>
> Wondering if anyone here knows a good way to clean and restore
>life to the rotary cam finger switches like are used in Tek SC502,
>SG503 etc.

Some Tek components come with a warning not to use anything stronger
or more persistent than high-grade isopropanol on their switches (e.g.
the attenuator switches in the 4xx-series o-scopes). These switches
incorporate materials which can be damaged by many organic solvents,
or are used in high-impedance circuits in which small amounts of
leakage current from contact-cleaner residue can mess up the behavior
of the circuit.

> I don't have any of the blue and the red CAIG fluid anymore but
>to anyone here who ever used it what do you think of the stuff??
> I had two little bottles with a built it applicator brush and I
>thought the stuff worked great!

Agreed.

Both the original (German) Cramolin products, and the DeOxIt
formulations which Caig is selling these days, seem to work quite well
for many of these sorts of problems.

> My SG503 went bonkers and I used spray isopropyl alcohol and then
>a small shot of WD-40 on the contacts. Seems o.k. now.

Ugh. I would never recommend using WD-40 on electrical contacts in
fine electronic equipment. It gets gummy with time, and attracts
dust. It may make things better in the short run but I fear that if
it's left in place it may cause further (worse) problems.

I'd recommend flushing it out with another spray of isopropanol. If
the switches do need lubing, check the Tek manuals for the proper
procedure, if you can. Some of the modern contact-and-control
lubricants are designed both for electrical stability, and to stay
where they're put and not migrate around where they aren't wanted.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5275. Re: Standard GX3000 HEX File Creation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 05:44:38 UTC
From: EasyRider <easyrider@shaw.ca>
Message-ID: <a3Uff.541301$1i.465018@pd7tw2no>
Source record: 16158

Bill,

Put me on your list as well, as I have a GX3000 as well. I also have the
Standard software but haven't figure out what they are doing to
with in the program either. Also don't have a spare eprom to work with
either.

73...de ve7agw Al
Port Alberni, BC

"Bill" <bcrann@hotmail.com> wrote in message
news:mkuff.4288$w84.809457@news20.bellglobal.com...
>I am not that good :-) I have done as you suggested and got most of my
>frequencies but there are a few I don't have like a few reverse repeater
>pairs, ISS, and PCSAT. I was emailed a GWBasic program that is suppose to
>create the hex file for you. When I get time to enter the frequencies and
>burn an EPROM I will let you guys know if it worked. Thanks for your help
>Tim.
>
> Bill
>
> "Tim Wescott" <tim@seemywebsite.com> wrote in message
> news:fpWdnTF0beqnjOPeRVn-gw@web-ster.com...
>> Bill wrote:
>>
>>> Yes I have been sent the Standard software which I haven't been able to
>>> get work with my programmer. I will let you know what I find out.
>>>
>>>
>>>
>>> "Dr. Anton T. Squeegee" <SpammersAreVermin@dev.null> wrote in message
>>> news:MPG.1de6df9d558fbfb19896e9@192.168.42.131...
>>>
>>>>In article <tS6ff.2544$KP5.322942@news20.bellglobal.com>,
>>>>bcrann@hotmail.com says...
>>>>
>>>>
>>>>>Can anyone tell me how to create the HEX code for the 27C16 EPROM in
>>>>>the VHF
>>>>>Standard GX3000 64CH radio, or can anyone tell me where to find
>>>>>software to
>>>>>create the HEX file? I have an EPROM programmer that will program the
>>>>>27C16
>>>>>EPROM, so I just need a way to create the file. I would pay for the
>>>>>software or trade some of my radio manuals or radio software for it.

>>>>
>>>>If you happen to find something, please let me know as well! It
>>>>seems that, unfortunately, the original programmer for the GX3000 was a
>>>>custom unit that Standard designed specifically to work in conjunction
>>>>with their software, and their software does not export a binary image.
>>>>
>>>>Happy hunting.
>>>>
>>>>
>>>>--
>>>>Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
>>>>(Known to some as Bruce Lane, ARS KC7GR,
>>>>kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
>>>>"If Salvador Dali had owned a computer, would it have been equipped
>>>>with surreal ports?"
>>>
>>>
>>>
>> How facile a programmer are you?
>>
>> Chances are that the Standard software outputs a file with some simple
>> format, which you may be able to reverse engineer with enough
>> perseverance. The Intel hex format is public domain, so once you know
>> what Standard's format is writing a translator would be fairly direct.
>>
>> --
>>
>> Tim Wescott
>> Wescott Design Services
>> http://www.wescottdesign.com
>
>

5276. Re: choke input voltage doubler?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 06:28:28 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1132468108.016464.141440@z14g2000cwz.googlegroups.com>
Source record: 16159

No, with sufficient load current, the choke current never goes to zero. See the formula for the minimum choke inductance versus supply voltage and current...the usual formula also assumes 60Hz--->120Hz ripple. Remember: V=L*di/dt. The output DC voltage is the average of the input voltage to the choke, less any I*R drop in the choke. It MUST be, or the current in the choke would change until it was. So the output voltage is (nominally) 0.9* the RMS input voltage, or 0.9/sqrt(2) times the peak voltage, assuming the choke input voltage tracks the full-wave rectified sine (in other words, the absolute value of the sine). When the input voltage to the choke is > the output voltage, the choke current increases. When it is less, the choke current decreases. The average choke current must be the average load current, or electrons would accumulate somewhere. If the inductance is large enough, and the cycles come fast enough, then the change in current is less than enough to make the current go to zero.

It's a bit of calculating to do it for a sine wave. Just think of this example: a square wave that sits at zero for one second, then at 2 volts for one second, then repeats. Feed it to a choke, say 2 henries. Output of the choke to a mongo capacitor, so the output voltage doesn't change significantly. Put a 1 amp load current on it. The output voltage must be one volt, since that's the average of the input. So half the time the choke has one volt across it in one direction, and half the time it has one volt in the other direction. One volt divided by two henries is half an amp per second. Since the average current is one amp, the current must swing between 0.75 amps and 1.25 amps. It never goes to zero, or even close. But drop the load current to 0.25 amps, and the choke current goes just to zero when the input is at the end of the low period. A bit lower load current, and the choke current would go negative (or to zero if there's a diode keeping it going one direction only). That's why a choke input filter looses its good regulation if the load current gets too small.

In the full wave rectifier, the choke current (if it doesn't drop to zero) will force the diode output voltage to be one diode drop below ground, PLUS the I*R drop in the transformer winding, when the voltage across the outside of the secondary is zero. At that point, both diodes will be conducting equally, assuming they are matched, and half the choke current will come from each half of the transformer secondary.

Hope that helps!

Cheers,
Tom

(off to Holden for a week...no internet there, so you're in John's capable hands on this one!)

To illustrate this wi

5277. Re: Cleaning Tektronix TM500 series cam switches??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 06:57:26 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1132469846.501634.146520@g44g2000cwa.googlegroups.com>
Source record: 16160

Dave Platt wrote:
> In article <11nvsp1e3vmgb90@corp.supernews.com>,
> Gudmundur <retxeh@blazenet.net> wrote:
>
> > Hi folks.
> >
> > Wondering if anyone here knows a good way to clean and restore
> >life to the rotary cam finger switches like are used in Tek SC502,
> >SG503 etc.
>
> Some Tek components come with a warning not to use anything stronger
> or more persistent than high-grade isopropanol on their switches (e.g.
> the attenuator switches in the 4xx-series o-scopes). These switches
> incorporate materials which can be damaged by many organic solvents,
> or are used in high-impedance circuits in which small amounts of
> leakage current from contact-cleaner residue can mess up the behavior
> of the circuit.
>
> > I don't have any of the blue and the red CAIG fluid anymore but
> >to anyone here who ever used it what do you think of the stuff??
> > I had two little bottles with a built it applicator brush and I
> >thought the stuff worked great!
>
> Agreed.
>
> Both the original (German) Cramolin products, and the DeOxIt
> formulations which Caig is selling these days, seem to work quite well
> for many of these sorts of problems.
>
> > My SG503 went bonkers and I used spray isopropyl alcohol and then
> >a small shot of WD-40 on the contacts. Seems o.k. now.
>
> Ugh. I would never recommend using WD-40 on electrical contacts in
> fine electronic equipment. It gets gummy with time, and attracts
> dust. It may make things better in the short run but I fear that if
> it's left in place it may cause further (worse) problems.
>

Agreed - WD40 is good for de-gumming your chainsaw, preventing rust on garden tools, and freeing up rusted bolts, but thats about it. BP grade isopropyl(sp) alcohol is readily available from chemical suppliers - (A litre bottle will last you for EVER) - if you do insist on a "tougher: lubricant, then CRC 2-26 is pretty good. BUT - as in everything else - RTFM before you do ANYTHING!

Andrew VK3BFA.

5278. WANTED! Mostar Intrerface Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 07:19:28 UTC
From: Gene Rodgers <oldcodger@verizon.net>
Message-ID: <4sVff.5408$BC2.1398@trnddc04>
Source record: 16161

I want to find a schematic for the Motorola Mostar Interface Box. I need a MIB to program my Mostars.

Thanks,

Gene ke5bfa

5279. Re: Cleaning Tektronix TM500 series cam switches??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 08:00:00 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <KtxqWzCA0CgDFAkm@ifwtech.co.uk>
Source record: 16162

Andrew VK3BFA wrote:
>> Ugh. I would never recommend using WD-40 on electrical contacts in
>> fine electronic equipment. It gets gummy with time, and attracts
>> dust. It may make things better in the short run but I fear that if
>> it's left in place it may cause further (worse) problems.
>>
>
>Agreed - WD40 is good for de-gumming your chainsaw, preventing rust on
>garden tools, and freeing up rusted bolts, but thats about it. BP
>grade isopropyl(sp) alcohol is readily available from chemical
>suppliers - (A litre bottle will last you for EVER) - if you do insist
>on a "tougher: lubricant, then CRC 2-26 is pretty good. BUT - as in
>everything else - RTFM before you do ANYTHING!
>
"TFM" for WD-40 is at:
http://www.wd40.com/Brands/wd40.cfm

The website enthuses about all the uses of WD-40, including that it
"dries out" electrical systems. (Recall that the "WD" stands for "water
displacement".)

But even on their own site, I couldn't find any word about WD-40 as a
switch cleaner and contact lubricant... and that speaks loudest of all.

--
73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

5280. Re: FAQ - Interested? Start here!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 09:28:13 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <79g0o1l98vfs7d5fjs4pmfig0bb73isnet@4ax.com>
Source record: 16163
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew

Polymath wrote:

>Radio Hams
>are qualified to design, build and then
>operate their own pieces of equipment.

However,

[ ] In the UK, no repeat no licence of any kind is necessary to specify, design, construct, modify, repair, own, or (under some circumstances) test an Amateur transmitter.

[ ] A pass in a current examination for a UK Amateur Licence qualifies the successful candidate for the issue of a UK Licence. Holders of the appropriate levels of licence are permitted to operate transmitting equipment that is not subject to a formal approvals procedure, and to carry out technical investigations. A qualification for a Licence, or the Licence itself, is not, repeat not, a qualification to specify, design, construct, modify, repair, or own transmitting equipment.

from
Aero Spike

5281. Re: Standard GX3000 HEX File Creation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 15:12:41 UTC
From: budgie <me@privacy.net>
Message-ID: <4f41o1933aqc8965dn89bcvd433rhp0bh6@4ax.com>
Source record: 16164

On Thu, 17 Nov 2005 18:16:08 -0330, "Bill" <bcrann@hotmail.com> wrote:

>Can anyone tell me how to create the HEX code for the 27C16 EPROM in the VHF
>Standard GX3000 64CH radio, or can anyone tell me where to find software to
>create the HEX file? I have an EPROM programmer that will program the 27C16
>EPROM, so I just need a way to create the file. I would pay for the
>software or trade some of my radio manuals or radio software for it.

Can one of you with this issue email me a BINARY taken from an eprom from a
working GX3000, together with a list of the frequencies you generate from that
eprom?

Addie is fortyfour (as digits).at.westnet.com.au

I'll see what I can do.

5282. Re: choke input voltage doubler?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 15:16:58 UTC
From: fmmck@aol.com
Message-ID: <fmmck-2011051016580001@ac9401c9.ipt.aol.com>
Source record: 16165

In article <zlRff.815$KP1.677@bignews5.bellsouth.net>, "wa2mze(spamless)"
<"wa2mze(spamless)"@bellsouth.net> wrote:

> I think I understand what you are saying here, but even with
> a full wave rectifier doesn't the current through the choke drop
> to zero (though only for a brief instant) between the two phases
> of rectification when the diodes switch roles? And since there
> isn't a capacitor before the chokes the voltage at the input
> to the filter would drop to zero, unlike with a capacitor input
> filter.
>
> Also, with either type of rectifier (FW or HW) is shouldn't matter
> which leg the choke is placed in, as Kirkoff's law is satified
> either way.

Spamless-

Yes, it wouldn't matter what leg the choke is in as long as it is on the
output side of the rectifier (assuming full wave).

For Half Wave, you must also consider the voltage across the choke.
Voltage is L times di/dt where di/dt is very high at the moment the diode
stops conducting. This is why a diode is often placed across a solenoid
or relay coil, to prevent a high voltage pulse across the switching
device. As a side-effect, relay drop-out is slow since current continues
flowing as the magnetic field is discharged.

With the relay analogy in mind, perhaps there could be some advantage if a
diode were placed across the choke of a choke input filter fed with a half
wave rectifier. It would be connected with cathode towards the cathode
end of the rectifier, and would allow choke current to continue flowing
during the off-portion of the rectifier's conduction cycle.

73, Fred, K4DII

5283. Re: Bridge Rectifier Info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 15:42:42 UTC
From: fmmck@aol.com
Message-ID: <fmmck-2011051042420001@ac9401c9.ipt.aol.com>
Source record: 16166

In article <M16ff.15988$8R6.10466@newsfe1-gui.ntli.net>, "Ron Price"
<ron.price2@virgin.net> wrote:

> The equipment is an old Lab-Craft UHF Signal Strength Meter probably from
> the 60's or 70's.
> I have partly dismantled it and plan on using the chassis and psu to build a
> one or two valve QRP CW TX for 80-m so I wanted a rough idea of what sort of
> current I could pull from the rectifier. The previous valve line-up was
> PC86, PC88, EF184(x2),6AL5,OA2.
> I have an old data book and this lista a few rectifiers starting with FC but
> not the one I want!

Ron-

If you plan to use the existing power supply, then the rectifier is most likely capable of handling as much current as the the transformer can deliver. If you don't want to trust it, one ampere silicon rectifier diodes are relatively inexpensive. Choose a set with reverse voltage greater than three times the transformer's RMS voltage (2.83 plus safety factor).

I believe the OA2 is a 150 Volt gas voltage regulator tube. That would provide stability for the plate supply of your oscillator stage, or at least its screen voltage supply.

The 6AL5 may be a dual-diode used as a meter rectifier. I'm not familiar with the others, but you should be able to obtain their rated filament currents to size the transformer's filament winding.

73, Fred, K4DII

5284. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 19:09:16 UTC
From: aaa@spamaway.com
Message-ID: <4380C9DC.6A35CA81@spamaway.com>
Source record: 16167
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Gudmundur wrote:

> In article <1130522688.763854.113650@g44g2000cwa.googlegroups.com>,
> aiyr.r.bean@lycos.co.uk says...
> >
> >What is Ham Radio?
>
> Do you have some point to prove here you ignorant bandwidth waster?
> What kind of asswipe constantly posts the same dribble when in fact
> newsgroup articles are archived?
>
> What is Polymath?
>
> He is a self important asshole who's self assumed duty is to educate
> folks about that which he knows nothing but only quotes things he has
> heard or read. No actual brain activity belongs to PolyDouche.
>
> Why do you constantly keep this up?? You prove you are to newsgroups
> the very thing you hate most about others.
>
> Why waste the space on this newsgroup, and why waste the bandwidth???
> If you want something to play with stick your hands in your pocket and
> play. You are the lowest form of life that exists.
>
> You Polymath are truely worthless, no one here learns from your constant
> post of the same dribble and in fact no self respectable ham would act
> in the way you do, proving you are among the most childish of the very
> CB'ers you seem to hate.
>
> Suck me, blow us, or just blow away!! Fuck your useless posts!!!
> Go talk politics with the WalMartians at your local WalMart.
>
> Do you have nothing better to do than post the same worthless note?
> Are you that lonely and disfunctional? You don't even rate as high
> on the evolutionary scale as the idiots of 3898khz.
>
> You have made a name for yourself indeed Polymath the biggest asshole
> known to any newsgroup.
>
> Tell us of anything electronic or ham related that you ever built. Give
> us something of value. You can't and you know it and it pisses you off
> to look at such a worthless asshole in the mirror each and every morning
> and the worst part is tomorrow isn't looking any better.

>
> Take your worthless post, print ten thousand copies and shove one up
> your ass each morning while you contemplate your own suicide. If you
> lack the methods and means to such an end I'll be the first in line to
> by you a complete suicide do-it-yourself kit.
>
> Opinions expressed here are my own but reflected by the entire newgroup
> and anyone else with 2 or more functioning brain cells.
>
> Piss off pal and take your idiotic plagerised post with you.

Yes, bit of a bore isn't he? I'll put you down as "don't know..."

5285. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 19:10:50 UTC
From: aaa@spamaway.com
Message-ID: <4380CA39.3BBBBDC9@spamaway.com>
Source record: 16168
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Polymath wrote:

> You would seem to be one of the Childish Broadcasters (CBers)
> warned against in the article.

Ah! The usual. Is that what the regulars want to be like?

5286. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 19:13:32 UTC
From: aaa@spamaway.com
Message-ID: <4380CADC.FC511408@spamaway.com>
Source record: 16169
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Polymath wrote:

> In addition, if you disagree with what I post, and do
> not wish to see it....

> If you have a reasonable - and reasoned - response as
> to what you think Ham Rad...

Just a pointer, Polymath. The term "ham" radio is not endearing to the vast majority of this ng.

5287. Re: Wtb: Hp-23

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 23:02:50 UTC
From: hhc314@yahoo.com
Message-ID: <1132525195.779480.238530@g44g2000cwa.googlegroups.com>
Source record: 16170

John, are you sure it's an HP-23, and not an IP-23? Is this one of
their high voltage power supplies or a low voltage model.

Whatever, your most likely bet is going to be eBay. Here's two of the
Heathkit power supplies being currently auctioned.

http://cgi.ebay.com/Heathkit-Regulated-L-V-Power-Supply-IP-27_W0QQitemZ5831130036QQcategoryZ48708QQssPageNameZWDVWQQrdZ1QQcmdZViewItem

http://cgi.ebay.com/HEATHKIT-REGULATED-HV-POWER-SUPPLY-IP-2717-1EA_W0QQitemZ7563991806QQcategoryZ100184QQssPageNameZWDVWQQrdZ1QQcmdZViewItem

http://cgi.ebay.com/HEATHKIT-REGULATED-HV-POWER-SUPPLY-IP-17-PARTS-ONLY_W0QQitemZ7563997388QQcategoryZ100184QQssPageNameZWDVWQQrdZ1QQcmdZViewItem

Good luck. Harry C.

5288. Re: Wtb: Hp-23

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 23:11:48 UTC
From: Bill <exray@coqui.net>
Message-ID: <ad935$438102b6$4232be41$6514@COQUI.NET>
Source record: 16171

hhc314@yahoo.com wrote:

> John, are you sure it's an HP-23, and not an IP-23? Is this one of
> their high voltage power supplies or a low voltage model.

HP-23 is the one that goes with the radio.amateur gear.

-Bill

5289. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 23:35:33 UTC
From: aaa@spamaway.com
Message-ID: <43810845.F6A6E404@spamaway.com>
Source record: 16172
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Polymathprssed a button and reproduced yet again...

> What is Ham Radio?

(the rest snipped in the interests of sanity)

Lots of truth there but lots of rubbish too.

5290. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 23:38:17 UTC
From: aaa@spamaway.com
Message-ID: <438108E9.93C694FA@spamaway.com>
Source record: 16173
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Polymath wrote:

> Andre Craddock, M0SWB, proves that he continues to
> be an INCURABLE CBER through the medium of his
> Childish Broadcast (CB).....
>
> Infantile and abusive......is there any difference between an M0
> callsign and one of those issued under the gangrenous degeneration
> that is the M3/CB Fools' Licence scheme? Seemingly not.

I'm beginning to come to the conclusion that he doesn't like CBers.

What happened to the bit of real amateur spirit about being tolerant and helping a new amateur to improve, and showing him by example? It doesn't really show up in Polymath's postings

5291. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-20 23:40:17 UTC
From: aaa@spamaway.com
Message-ID: <43810961.87D30069@spamaway.com>
Source record: 16174
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.cb

Frank Gilliland wrote:

> On 4 Nov 2005 07:00:39 -0800, "Polymath" <aiyr.r.bean@lycos.co.uk>
> wrote in <1131116439.255278.104600@g43g2000cwa.googlegroups.com>:
>
> >What is Ham Radio?
>
> Do you mean the Amateur Radio Service?
>
> >Ham Radio
>
> Amateur radio.....

I agree.

5292. Re: Best FAQ in the Western Hemisphere

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 00:02:36 UTC
From: eternalsquire@comcast.net
Message-ID: <1132531356.825439.110350@g43g2000cwa.googlegroups.com>
Source record: 16175

Yes, and all that. Next post should include this link.

The Eternal Squire

5293. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 00:20:09 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <hY-dnT1M7aI2jxzeRVnyhA@pipex.net>
Source record: 16176
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

```
>> What is Polymath?
>> You have made a name for yourself indeed Polymath the biggest asshole
>> known to any newsgroup.
> Yes, bit of a bore isn't he? I'll put you down as "don't know..."
================================
Polymath or Airy Bean ,whatever he calls himself is Gareth A. Evans ,
G4SDW
He is a nuissance
Any reaction on his weekly outpour seems to encourage him . It is best to
ignore him .
```

Frank GM&#65533;CSZ / KN6WH.

5294. SLA charging question.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 01:27:49 UTC
From: J Shrum <shrumj@madisontelco.com>
Message-ID: <n_-dnTsa8NUIvxzeRVn-hA@madisontelco.com>
Source record: 16177

Hey guys... I've spent lots of time looking over google archives for the answer to this, and God knows this has been covered many times, but I've not quite found my answer.

I have the following QRP power supply/charger http://www.mfjenterprises.com/products.php?prodid=MFJ-4114 .
Basically it comes standard to charge a 12 nicads, but I took out the nicad holders and put in a 12v 5AH gel cell. I modified it to charge directly from the 13.8v power supply instead of the 18v nicad charger circuit. I charged the battery to about 13.8v (w/ no load) by floating. If I measure the battery while having my radio on receive, which only draws maybe 80mA's or so, I see the battery dropping by .10's of a V in no time. The battery is brand new.
I've noticed that the battery only draws about 30mA's while charging at any voltage. I even added a switch so I can switch extra diodes between the regulator ground so I can charge it at 14.X volts.

So my question... If it measures 13.8-14v after charging, it should be fully charged, right? Is there something going on since it is only drawing 10's of milliamps while charging? I've read that they charge at several hundred milli's. I'd like to use my QRP rig remotely, and at the rate its dropping, I just don't think it will serve the purpose.

Thanks for all the help.

Jim, AB9LM

5295. Re: SLA charging question.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 02:02:27 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <TU9gf.3505$N45.1328@newsread1.news.atl.earthlink.net>
Source record: 16178

"J Shrum" <shrumj@madisontelco.com> wrote in message
news:n_-dnTsa8NUIvxzeRVn-hA@madisontelco.com...
> Hey guys... I've spent lots of time looking over google archives for the
> answer to this, and God knows this has been covered many times, but I've
not
> quite found my answer.
>
> I have the following QRP power supply/charger
> http://www.mfjenterprises.com/products.php?prodid=MFJ-4114 .
> Basically it comes standard to charge a 12 nicads, but I took out the
nicad
> holders and put in a 12v 5AH gel cell. I modified it to charge directly
from
> the 13.8v power supply instead of the 18v nicad charger circuit. I charged
> the battery to about 13.8v (w/ no load) by floating. If I measure the
> battery while having my radio on receive, which only draws maybe 80mA's or
> so, I see the battery dropping by .10's of a V in no time. The battery is
> brand new.
> I've noticed that the battery only draws about 30mA's while charging at
any
> voltage. I even added a switch so I can switch extra diodes between the
> regulator ground so I can charge it at 14.X volts.
>
> So my question... If it measures 13.8-14v after charging, it should be
fully
> charged, right? Is there something going on since it is only drawing 10's
of
> milliamps while charging? I've read that they charge at several hundred
> milli's. I'd like to use my QRP rig remotely, and at the rate its
dropping,
> I just don't think it will serve the purpose.
>
> Thanks for all the help.
>
> Jim, AB9LM
>

It takes more voltage to charge a battery than what it is rated at. That is
the reason for an 18 volt charger voltage instead of 14 volts.

5296. Re: SLA charging question.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 03:17:48 UTC
From: budgie <me@privacy.net>
Message-ID: <cpe2o1hnu2easv42sgesmhjhiln4c14cmd@4ax.com>
Source record: 16179

On Sun, 20 Nov 2005 19:27:49 -0600, "J Shrum" <shrumj@madisontelco.com> wrote:

>Hey guys... I've spent lots of time looking over google archives for the
>answer to this, and God knows this has been covered many times, but I've not
>quite found my answer.
>
>I have the following QRP power supply/charger
>http://www.mfjenterprises.com/products.php?prodid=MFJ-4114 .
>Basically it comes standard to charge a 12 nicads, but I took out the nicad
>holders and put in a 12v 5AH gel cell. I modified it to charge directly from
>the 13.8v power supply instead of the 18v nicad charger circuit. I charged
>the battery to about 13.8v (w/ no load) by floating. If I measure the
>battery while having my radio on receive, which only draws maybe 80mA's or
>so, I see the battery dropping by .10's of a V in no time. The battery is
>brand new.
>I've noticed that the battery only draws about 30mA's while charging at any
>voltage. I even added a switch so I can switch extra diodes between the
>regulator ground so I can charge it at 14.X volts.
>
>So my question... If it measures 13.8-14v after charging, it should be fully
>charged, right? Is there something going on since it is only drawing 10's of
>milliamps while charging? I've read that they charge at several hundred
>milli's. I'd like to use my QRP rig remotely, and at the rate its dropping,
>I just don't think it will serve the purpose.

Just float charging at 13v8 isn't going to do a great lot for an SLA. Download
and read the following two docs from TI/Unitrode which will give you a fair
insight into the proper care and feeding of SLA's.

http://focus.ti.com/lit/an/slua115/slua115.pdf

http://focus.ti.com/lit/ds/symlink/uc3906.pdf

There's a lot of overlap, but good info, and that chip makes a fairly simple yet
elegant charger.

5297. Re: SLA charging question. -- follow up

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 03:25:02 UTC
From: J Shrum <shrumj@madisontelco.com>
Message-ID: <TKmdnQbrL_iToxzenZ2dnUVZ_sednZ2d@madisontelco.com>
Source record: 16180

Me again.
Thanks for the info. I just decided to run it down to see how long it would go. Like I said before, after fresh charge, and the battery showing 14v, after aplying the slightest load, the voltage started dropping... it dropped down to 12.6 in no time, but.... its been staying there. I've had the radio on for a couple hours, and its not moved from 12.6v. I even keyed a bunch, and that draws about an amp. Seems its holding steady at that voltage under load.

Thanks again guys, your always more than helpful.

Jim, AB9LM

"J Shrum" <shrumj@madisontelco.com> wrote in message
news:n_-dnTsa8NUIvxzeRVn-hA@madisontelco.com...
> Hey guys... I've spent lots of time looking over google archives for the
> answer to this, and God knows this has been covered many times, but I've
> not quite found my answer.
>
> I have the following QRP power supply/charger
> http://www.mfjenterprises.com/products.php?prodid=MFJ-4114 .
> Basically it comes standard to charge a 12 nicads, but I took out the
> nicad holders and put in a 12v 5AH gel cell. I modified it to charge
> directly from the 13.8v power supply instead of the 18v nicad charger
> circuit. I charged the battery to about 13.8v (w/ no load) by floating. If
> I measure the battery while having my radio on receive, which only draws
> maybe 80mA's or so, I see the battery dropping by .10's of a V in no time.
> The battery is brand new.
> I've noticed that the battery only draws about 30mA's while charging at
> any voltage. I even added a switch so I can switch extra diodes between
> the regulator ground so I can charge it at 14.X volts.
>
> So my question... If it measures 13.8-14v after charging, it should be
> fully charged, right? Is there something going on since it is only drawing
> 10's of milliamps while charging? I've read that they charge at several
> hundred milli's. I'd like to use my QRP rig remotely, and at the rate its
> dropping, I just don't think it will serve the purpose.
>
> Thanks for all the help.
>
> Jim, AB9LM
>
>

5298. Re: SLA charging question. -- follow up

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 04:05:00 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <Dv6dnWXo5qgf2hzenZ2dnUVZ_vidnZ2d@web-ster.com>
Source record: 16181

J Shrum wrote:
(top-posting fixed)
> "J Shrum" <shrumj@madisontelco.com> wrote in message
> news:n_-dnTsa8NUIvxzeRVn-hA@madisontelco.com...
>
>>Hey guys... I've spent lots of time looking over google archives for the
>>answer to this, and God knows this has been covered many times, but I've
>>not quite found my answer.
>>
>>I have the following QRP power supply/charger
>>http://www.mfjenterprises.com/products.php?prodid=MFJ-4114 .
>>Basically it comes standard to charge a 12 nicads, but I took out the
>>nicad holders and put in a 12v 5AH gel cell. I modified it to charge
>>directly from the 13.8v power supply instead of the 18v nicad charger
>>circuit. I charged the battery to about 13.8v (w/ no load) by floating. If
>>I measure the battery while having my radio on receive, which only draws
>>maybe 80mA's or so, I see the battery dropping by .10's of a V in no time.
>>The battery is brand new.
>>I've noticed that the battery only draws about 30mA's while charging at
>>any voltage. I even added a switch so I can switch extra diodes between
>>the regulator ground so I can charge it at 14.X volts.
>>
>>So my question... If it measures 13.8-14v after charging, it should be
>>fully charged, right? Is there something going on since it is only drawing
>>10's of milliamps while charging? I've read that they charge at several
>>hundred milli's. I'd like to use my QRP rig remotely, and at the rate its
>>dropping, I just don't think it will serve the purpose.
>>
>>Thanks for all the help.
>>
>>Jim, AB9LM
>>
>>
>
>
>
> Me again.
> Thanks for the info. I just decided to run it down to see how long it
> would go. Like I said before, after fresh charge, and the battery
> showing 14v, after applying the slightest load, the voltage started
> dropping... it dropped down to 12.6 in no time, but.... its been
> staying there. I've had the radio on for a couple hours, and its not
> moved from 12.6v. I even keyed a bunch, and that draws about an amp.
> Seems its holding steady at that voltage under load.

>
> Thanks again guys, your always more than helpful.
>
> Jim, AB9LM
>
I was going to suggest that you do this. If you have the patience keep it up until the battery voltage really starts doing a nosedive. Radio Shack sells (or used to sell) a DVM with a serial output and a little scope program that was nice for collecting this sort of data.

"Rechargeable Batteries Application Handbook" by the "Technical Marketing Staff at Gates Energy Products" indicates that a SLA battery isn't really discharged until it's down around 1.8V per cell. I'm not sure that I'd take it that low, but 12.6 - 12.8 is what you expect from a six-cell lead-acid battery that's not being charged, and it will hold that voltage for 70-80% of the time that it's discharging.

It's a good book, by the way. It's no more technical than the ARRL Handbook, and it has slews of information about NiCd and lead-acid batteries. It's a bit light (and a bit out of date) on NiMh batteries and it came out before Lithium Polymer batteries were on the market, but other than that it's a fine resource.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

5299. Re: Heathkit HP-23 Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 04:27:44 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <CPedncOn0Kde0RzeRVn-sw@comcast.com>
Source record: 16182

"John" <sandersj@cowtown.net> wrote in message
news:11nvucreka4igbe@corp.supernews.com...
>I am looking for a heathkit hp-23 power supply , please let me know what
>you want for it.
>
> Thanks, John n5nme
Here is a fixer-upper HP-23A on eBay Item number: 5831350002

You can even use the HP-23R replacement board
http://www.theheathkitshop.com/hp23r.html

IF you do not desire to change out the existing capacitors.

w9gb

5300. Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 05:14:33 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1132550073.630433.132830@g49g2000cwa.googlegroups.com>
Source record: 16183
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

I am the "lucky" owner of a number of older UPSes.

So what can a person build out of these?

The batteries are for the most part dead but the remainder of the components seem to be in good condition.

Any suggestions?

Thanks

TMT

5301. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 05:26:22 UTC
From: Ed Huntress <huntres23@optonline.net>
Message-ID: <6Wcgf.78792$rE2.19809@fe10.lga>
Source record: 16186
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
news:1132550073.630433.132830@g49g2000cwa.googlegroups.com...
> I am the "lucky" owner of a number of older UPSes.
>
> So what can a person build out of these?
>
> The batteries are for the most part dead but the remainder of the
> components seem to be in good condition.
>
> Any suggestions?
>
> Thanks
>
> TMT

If you can get your hands on a copy of the 2005 ARRL Handbook, there are several suggestions in there (radio-related, but you can improvise from them), and some information about UPS's.

One is a charger for 12V storage batteries in general, including car batteries. Another is an emergency power supply (you can just run two wires to your car battery, or a bank of deep-discharge batteries wired in parallel if you're so inclined). Depending on the model you have, you can get 160 W to over 300 W of 120 VAC and/or 12VDC from them.

Mine (an APC Back-UPS 600) is now wired to an old car battery. It will run my computer for a lot longer than the old gel-cell that came with it. Since we're on the end of a power transmission line, it gets a fair amount of use.

--
Ed Huntress

5302. Re: Uses for Old UPS units

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 05:27:04 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <WqqdnZu6kfE2xxzeRVn-gw@comcast.com>
Source record: 16184

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
news:1132550073.630433.132830@g49g2000cwa.googlegroups.com...
>I am the "lucky" owner of a number of older UPSes.
>
> So what can a person build out of these?
>
> The batteries are for the most part dead but the remainder of the
> components seem to be in good condition.
>
> Any suggestions?
>
> Thanks
>
> TMT
>
A local college student has a successful business placing new batteries in
these units -- checking out and selling on eBay and to a large number of
local small companies.

I usually pickup the transformers from his junked units (fire, internal
damage).
This are usually good for 13.8 VDC linear power supplies in the 7 to 25 amp
range.

gb

5303. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 05:28:10 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1132550890.450959.244000@g47g2000cwa.googlegroups.com>
Source record: 16185
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

Too_Many_Tools wrote:
> I am the "lucky" owner of a number of older UPSes.
>
> So what can a person build out of these?
>
> The batteries are for the most part dead but the remainder of the
> components seem to be in good condition.
>
> Any suggestions?
>
> Thanks
>
> TMT

Yep, the power transformers in them - feed the local mains voltage BACK into it, you will get 18v (usually centre tapped) on the other side where the original switching transistors were, nice big thick wire - good for a few amps. As well, lots of other windings, good for what have you voltages.

73 de VK3BFA Andrew

5304. Re: A, An, or The FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 06:32:20 UTC
From: aaa@spamaway.com
Message-ID: <438169F4.1CD38524@spamaway.com>
Source record: 16187
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Highland Ham wrote:

> >> What is Polymath?
> >> You have made a name for yourself indeed Polymath the biggest asshole
> >> known to any newsgroup.
> > Yes, bit of a bore isn't he? I'll put you down as "don't know..."
> ==========
> Polymath or Airy Bean ,whatever he calls himself is Gareth A. Evans ,
> G4SDW
> He is a nuissance
> Any reaction on his weekly outpour seems to encourage him . It is best to
> ignore him .

Oh, I see... One of those new fangled G4s. That explains it all...

5305. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 06:44:18 UTC
From: Mark <mfraser@helix.net>
Message-ID: <43816CC2.9020304@helix.net>
Source record: 16188
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

I have a back-UPS 400 with a useless gelcell. However, touching
terminals of a fully charged and healthy gelcell to the battery
leads causes mega amps to flow, so something is likely fried.
Interestingly, the dead battery has about 10.5 volts on it,
in-circuit, no current!

Anyone got a schematic or wisdom to share? / thanks / mark

Ed Huntress wrote:

> "Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
> news:1132550073.630433.132830@g49g2000cwa.googlegroups.com...
>
>>I am the "lucky" owner of a number of older UPSes.
>>
>>So what can a person build out of these?
>>
>>The batteries are for the most part dead but the remainder of the
>>components seem to be in good condition.
>>
>>Any suggestions?
>>
>>Thanks
>>
>>TMT
>
>
> If you can get your hands on a copy of the 2005 ARRL Handbook, there are
> several suggestions in there (radio-related, but you can improvise from
> them), and some information about UPS's.
>
> One is a charger for 12V storage batteries in general, including car
> batteries. Another is an emergency power supply (you can just run two wires
> to your car battery, or a bank of deep-discharge batteries wired in parallel
> if you're so inclined). Depending on the model you have, you can get 160 W
> to over 300 W of 120 VAC and/or 12VDC from them.
>
> Mine (an APC Back-UPS 600) is now wired to an old car battery. It will run
> my computer for a lot longer than the old gel-cell that came with it. Since
> we're on the end of a power transmission line, it gets a fair amount of use.
>
> --
> Ed Huntress
>

>

5306. Re: FAQ, just what is Ham Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 06:52:56 UTC
From: aaa@spamaway.com
Message-ID: <43816EC8.6B4141E6@spamaway.com>
Source record: 16189
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Polymath wrote:

> What is Ham Radio?
> ...

Blimey! I can't believe he's at it again!

5307. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 11:34:05 UTC
From: Vaughn <vaughnsimonHATESSPAM@att.fake.net>
Message-ID: <Ngigf.140696$zb5.18264@bgtnsc04-news.ops.worldnet.att.net>
Source record: 16190
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
news:1132550073.630433.132830@g49g2000cwa.googlegroups.com...

Too_Many_Crossposts

5308. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 12:04:08 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <moqdnTC_tIrAKhzenZ2dnUVZ_sednZ2d@bright.net>
Source record: 16191
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

Replace the batteries. We do it at work all the time.

Scott

Too_Many_Tools wrote:
> I am the "lucky" owner of a number of older UPSes.
>
> So what can a person build out of these?
>
> The batteries are for the most part dead but the remainder of the
> components seem to be in good condition.
>
> Any suggestions?
>
> Thanks
>
> TMT
>

5309. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 13:10:08 UTC
From: "John, N9JG" <john@gotwals.XremoveY.com>
Message-ID: <PGjgf.348277$084.150154@attbi_s22>
Source record: 16192

Do you have to worry about fumes from the car battery, or do you only use
the "sealed" type of car battery?

"Ed Huntress" <huntres23@optonline.net> wrote in message
news:6Wcgf.78792$rE2.19809@fe10.lga...
> "Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
> news:1132550073.630433.132830@g49g2000cwa.googlegroups.com...
> If you can get your hands on a copy of the 2005 ARRL Handbook, there are
> several suggestions in there (radio-related, but you can improvise from
> them), and some information about UPS's.
>
> One is a charger for 12V storage batteries in general, including car
> batteries. Another is an emergency power supply (you can just run two
> wires
> to your car battery, or a bank of deep-discharge batteries wired in
> parallel
> if you're so inclined). Depending on the model you have, you can get 160 W
> to over 300 W of 120 VAC and/or 12VDC from them.
>
> Mine (an APC Back-UPS 600) is now wired to an old car battery. It will run
> my computer for a lot longer than the old gel-cell that came with it.
> Since
> we're on the end of a power transmission line, it gets a fair amount of
> use.

5310. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 13:32:06 UTC
From: Al <no.spam@wanted.com>
Message-ID: <no.spam-D5F7C1.08320421112005@news.verizon.net>
Source record: 16193
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

In article <1132550073.630433.132830@g49g2000cwa.googlegroups.com>,
"Too_Many_Tools" <too_many_tools@yahoo.com> wrote:

> I am the "lucky" owner of a number of older UPSes.
>
> So what can a person build out of these?
>
> The batteries are for the most part dead but the remainder of the
> components seem to be in good condition.
>
> Any suggestions?
>
> Thanks
>
> TMT
>

I replace the batteries. I get them at the MIT flea market, two for 10
bucks. Yes, and they have a test load there so you can verify the
batteries are good. I have had not problem.

I have several free UPSs because clueless people have thrown them out at
our recycling center as they are "bad."

Al

5311. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 13:54:10 UTC
From: "Pete C." <aux3.DOH.4@snet.net>
Message-ID: <4381D182.E4E69A5A@snet.net>
Source record: 16194
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

Al wrote:
>
> In article <1132550073.630433.132830@g49g2000cwa.googlegroups.com>,
> "Too_Many_Tools" <too_many_tools@yahoo.com> wrote:
>
> > I am the "lucky" owner of a number of older UPSes.
> >
> > So what can a person build out of these?
> >
> > The batteries are for the most part dead but the remainder of the
> > components seem to be in good condition.
> >
> > Any suggestions?
> >
> > Thanks
> >
> > TMT
> >
>
> I replace the batteries. I get them at the MIT flea market, two for 10
> bucks. Yes, and they have a test load there so you can verify the
> batteries are good. I have had not problem.
>
> I have several free UPSs because clueless people have thrown them out at
> our recycling center as they are "bad."
>
> Al

Generally you can get new batteries from a local battery distributor at very good prices and with local pickup no shipping costs. I used to use Midstate Battery in Bloomfield, CT but there will be wholesale distributors everywhere. With new batteries most UPSs will be good as new.

Keep what you can use and sell the rest locally, donate a few to the local senior center for a tax write off (yes seniors use computers these days), etc.

Pete C.

5312. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 14:34:42 UTC
From: Joseph Gwinn <JoeGwinn@comcast.net>
Message-ID: <JoeGwinn-CF38BE.09344221112005@comcast.dca.giganews.com>
Source record: 16195
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

In article <43816CC2.9020304@helix.net>, Mark <mfraser@helix.net>
wrote:

> I have a back-UPS 400 with a useless gelcell. However, touching
> terminals of a fully charged and healthy gelcell to the battery
> leads causes mega amps to flow, so something is likely fried.
> Interestingly, the dead battery has about 10.5 volts on it,
> in-circuit, no current!

This is the classic symptom of a 12-volt lead-acid battery with one cell shorted. Hooking a 12-volt battery to a 10-volt battery will draw lots of current, as observed. Replace the old gelcell battery with the new one; do not keep the old gelcell in the circuit.

Joe Gwinn

5313. Re: SLA charging question.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 14:38:42 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <E--dnf0OoZNBRhzenZ2dnUVZ8qidnZ2d@pipex.net>
Source record: 16196

These SLA =Sealed Lead Acid batteries usually have a charging rate for 2 types of usage The YUASA battery I have in front of me has the following instructions (applicable at 20 degrees Celcius) :
Standby Use : Voltage regulation 13.50 -13.80 V Initial current : No Limit
Cyclic Use : voltage regulation 14.4 - 15.00 V Initial current: 1.75 Amperes max.

I also use a number of SLAs without such instructions , which I (safely) charge at 0.1 C (for example a 7Ah battery is charged at 700 mA) and limiting the Voltage to 13.5 V ,bearing in mind that 12 V lead acid batteries are still 70 -80 % charged when voltage has dropped to 12.6 V
To test (charged)12 V lead acid batteries I discharge them at a constant 0.1C current and check the time until the voltage has dropped to 11.9 V (at that voltage the battery might not as yet be fully discharged ,but below that voltage they are of no use to me)

Frank GM0CSZ / KN6WH

++++++++++++++++++++++
> So my question... If it measures 13.8-14v after charging, it should be
> fully charged, right? Is there something going on since it is only drawing
> 10's of milliamps while charging? I've read that they charge at several
> hundred milli's. I'd like to use my QRP rig remotely, and at the rate its
> dropping, I just don't think it will serve the purpose.

5314. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 15:12:40 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <aoSdnVUsa_tPfhzeRVnyuw@pipex.net>
Source record: 16197

> Do you have to worry about fumes from the car battery, or do you only use
> the "sealed" type of car battery?
==========
The 'fumes ' you refer to are hydrogen and oxygen ,with hydrogen potentially dangerous when not vented.
That's why I keep non-sealed lead acid batteries on a well ventilated loft.

BTW : Hydrogen has such a low density that , as tests (not by me) have proved , it is impossible to ignite hydrogen released from vertically positioned tubing by a naked flame located at a distance of more than 100 mm (4 inches) from the hydrogen exhaust.

Providing this info does not mean I wish to encourage anyone to 'mess about with hydrogen'.
It is only to show that hydrogen doesn't spread throughout an enclosed space but ,upon release, moves upwards very rapidly .

Frank GM0CSZ / KN6WH

5315. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 16:23:03 UTC
From: Tom Gardner <tom@ohiobrush.com>
Message-ID: <Hvmgf.1853$nA2.740@newssvr22.news.prodigy.net>
Source record: 16048
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
news:1132550073.630433.132830@g49g2000cwa.googlegroups.com...
>I am the "lucky" owner of a number of older UPSes.
>
> So what can a person build out of these?
>
> The batteries are for the most part dead but the remainder of the
> components seem to be in good condition.
>
> Any suggestions?
>
> Thanks
>
> TMT
>

Time Machine!

5316. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 17:54:47 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1132595687.535583.3130@z14g2000cwz.googlegroups.com>
Source record: 16049
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

I apoligize if I posted too widely....I posted to the groups that I thought might have an interest and I would be revelant information from.

And I suspect I am not the only one with an extra UPS laying around looking for a second life.

TMT

5317. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 18:02:14 UTC
From: Gunner Asch <gunner@lightspeed.net>
Message-ID: <ss24o1hmphaupqdb7hr5ei9v1qpsdu8iia@4ax.com>
Source record: 16050
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

On Mon, 21 Nov 2005 16:23:03 GMT, "Tom Gardner"
<tom(nospam)@ohiobrush.com> wrote:

>
>"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
>news:1132550073.630433.132830@g49g2000cwa.googlegroups.com...
>>I am the "lucky" owner of a number of older UPSes.
>>
>> So what can a person build out of these?
>>
>> The batteries are for the most part dead but the remainder of the
>> components seem to be in good condition.
>>
>> Any suggestions?
>>
>> Thanks
>>
>> TMT
>>
>
>Time Machine!
>
For that..you need a British phone both IRRC.

Gunner

"Pax Americana is a philosophy. Hardly an empire.
Making sure other people play nice and dont kill each other (and us)
off in job lots is hardly empire building, particularly when you give
them self determination under "play nice" rules.

Think of it as having your older brother knock the shit out of you
for torturing the cat." Gunner

5318. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 18:30:54 UTC
From: Tom Gardner <tom@ohiobrush.com>
Message-ID: <ynogf.1894$rq3.850@newssvr19.news.prodigy.com>
Source record: 16051
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

">>
> For that..you need a British phone both IRRC.
>
> Gunner
>

I need a new battery for my Tardis!

5319. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 19:43:20 UTC
From: "Pete C." <aux3.DOH.4@snet.net>
Message-ID: <43822356.4A1E3D17@snet.net>
Source record: 16052
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

Tom Gardner wrote:
>
> ">>
> > For that..you need a British phone both IRRC.
> >
> > Gunner
> >
>
> I need a new battery for my Tardis!

Borrow one from K-9...

Pete C.

5320. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 21:03:15 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1132606995.627331.158630@g49g2000cwa.googlegroups.com>
Source record: 16053
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

aaa@spamaway.com wrote:
> Polymath wrote:
>
> > Andre Craddock, M0SWB, proves that he continues to
> > be an INCURABLE CBER through the medium of his
> > Childish Broadcast (CB).....
> >
> > Infantile and abusive......is there any difference between an M0
> > callsign and one of those issued under the gangrenous degeneration
> > that is the M3/CB Fools' Licence scheme? Seemingly not.
>
> I'm beginning to come to the conclusion that he doesn't like CBers.

gee whod of thought that?
>
> What happened to the bit of real amateur spirit about being tolerant and helping
> a new amateur to improve, and showing him by example? It doesn't really show up
> in Polymath's postings

it seem long dead in mst corners of Ham radio

5321. Re: Trickle Charge Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 21:13:06 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dltd93$6i7$1@engnntp2.cig.mot.com>
Source record: 16054

Looks like you have some good info from others. Here's a little more.

What you will be doing is not "trickle" charging, but it is called "float" charging. Lead acid chemistry, similar to Li-ion (unlike ni-Cd & Ni-Mh) has the characteristic that it has a voltage charactistic such that the terminal voltage rises between dead and full charge. You can safely put a constant voltage (but also with a current limit) on the battery and it will seek its own full charge and the current will taper off, when it gets enough, to what it needs to stay at full charge. CAUTION -- This voltage is typically around 13.8, HOWEVER you MUST consult the manufacturer's specs. This voltage also changes slightly as the temperature of the battery changes.

A commercial device designed for this service is recommended.

73, Steve, K,9.D;C'I

"west" <westley@tampabay.rr.com> wrote in message
news:bOuff.7515$bx3.4400@tornado.tampabay.rr.com...
> I know this question has probably been beaten to death, nevertheless I
hope
> you will still indulge me.
>
> During a power outage, which occurs frequently in Florida, I would like to
> use a battery to power some communication gear. Although the battery is
12v
> and not 13.8v, I think that the gear will still work OK (hopefully).
>
> Question 1. I believe that car batteries have a low internal resistance
> because their primary function is to provide a lot of current for a short
> time. There are other 12v large battery types that will last as long as a
> typical car battery. They are designed not to provide peak current, but to
> supply steady state current for a long time.
> For the life of me, I can't remember the name of those type batteries so I
> can't do a google to find a supplier. I hope this is making some sense.
>
> Question 2. Where can I find articles & schematics for a solar cell to
> provide a trickle charge for the aforementioned battery?
>
> Thank you very much.
>
> Cordially,
> west
>
>

5322. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 22:06:07 UTC
From: Mark <mfraser@helix.net>
Message-ID: <11o4hbnfbdvbe13@corp.supernews.com>
Source record: 16055
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

Um, I didn't make myself clear, I guess - I took the old one out,
clipped to the new one, instant heat. Big heat.
I'm guessing that there's circuitry which avoids draining the
(bad) low voltage one past a certain point. I'm also guessing
that a fully charged battery (the one I tried to hook up) enables
current flow, and that perhaps the input of the invertor section
is shorted. I didn't feel like leaving a perfectly good 17A-hour
battery to fry itself and the surrounding wires etc.....

BUt thanks for the response / mark

Joseph Gwinn wrote:

> In article <43816CC2.9020304@helix.net>, Mark <mfraser@helix.net>
> wrote:
>
>
>>I have a back-UPS 400 with a useless gelcell. However, touching
>>terminals of a fully charged and healthy gelcell to the battery
>>leads causes mega amps to flow, so something is likely fried.
>>Interestingly, the dead battery has about 10.5 volts on it,
>>in-circuit, no current!
>
>
> This is the classic symptom of a 12-volt lead-acid battery with one cell
> shorted. Hooking a 12-volt battery to a 10-volt battery will draw lots
> of current, as observed. Replace the old gelcell battery with the new
> one; do not keep the old gelcell in the circuit.
>
> Joe Gwinn

5323. Re: choke input voltage doubler?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 22:06:17 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dltgcp$8qf$1@engnntp2.cig.mot.com>
Source record: 16056

Some real brain fodder here. John P. Your Spice model with the coupled inductors seems to take a divergent turn and I am not sure about this "coupled" part. Did you try a single inductor.

On to my original thoughts. This really takes me back and requires serious thought. One thing to keep in mind. An inductor (by virtue of the magnetic field cutting its own turns) tries to keep whatever current is flowing, flowing. An inductor will make the voltage across it "do whatever it takes" to keep that current flowing-- and allow this current to decay (some say discharge) in what can be considered a normal manner. The diode on the relay coil is a good example. The voltage can rise very high without the diode, but using this model, you can figure out what the inductor voltage does when the normally conducting device turns off.

That said... I had never studied choke input filters to such a degree... However, its action must allow the filter cap to charge for a longer time, thus keeping the average diode current lower...
Does the current through the inductor drop to zero in the normal choke input filter?
If not, a close look at the current path in the full-wave circuit will show where the current goes at the cross-over points. Brain full - can't figure out now. I'd have to model it in Spice and watch things

Very interesting thingh. If the current does drop to zero, then it seems the single choke would work.

Then, reading some of the latter posts, I too, wonder why the desire for choke input.

73, Steve, K,9;D.C'I

John Popelish" <jpopelish@rica.net> wrote in message news:gKWdnbGpC5HnF-LenZ2dnUVZ_tSdnZ2d@adelphia.com...
> Fred McKenzie wrote:
> > In article <xZwff.7548$s92.5758@bignews6.bellsouth.net>, Ken Scharf
> > <wa2mzeNOTTHIS@bellsouth.net> wrote:
> >
> >
> >>I was looking at some power supply circuits for
> >>tube linears and was thinking about the full wave
> >>voltage doubler. This is basicly two half wave
> >>rectifiers in series. Now I could build this
> >>circuit with a choke input filter for each half
> >>wave rectifier of the voltage doubler, and I could
> >>put the chokes in the lead without the rectifier.
> >>In this case I could use one choke for both halfs

> >>of the voltage doubler.
> >
> >
> > Ken-
> >
> > This doesn't make sense to me. My recollection of the choke-input
filter,
> > is that it can only be used following a full-wave rectifier. You are
> > suggesting they be used prior to the rectifier, which is not where a
> > "filter" is normally placed. Instead, the choke would act as a series
> > impedance to the AC source.
> >
> > It seems to me that you can't separate the capacitors from the
rectifiers,
> > or you wouldn't have doubler action. Therefore, capacitor-input is the
> > only filtering that makes sense for this circuit. Of course you might
use
> > the choke in a Pi configuration between the output and another filter
> > capacitor.
> >
> > If you have any success with this approach, it will be from extra
voltage
> > generated by the choke's collapsing magnetic field. This is similar to
> > how switching regulators work, but without any active regulation.
> >
> > 73, Fred, K4DII
>
> I played around with choke input filtering for this circuit with Spice
> and got "continuous inductor current" if I used two highly coupled
> inductors, one after each rectifier, and another pair of diodes from
> the input side of the chokes to the capacitor common point. However,
> this "continuous current" switches back and forth between the two
> coupled inductors on alternating half cycles so each end of the
> capacitor pair sees current as a half cycle approximately square wave
> pulse. So each capacitor charges and discharges with a quite
> triangular voltage ripple. But the sum of the two capacitor voltages
> is a very pure DC, compared to the no choke version, since the ripples
> cancel quite well. However, this reduces the output voltage to only
> half of the no choke version, so you might as well have made a full
> wave supply, instead of a doubler configuration.

5324. Re: SLA charging question.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 22:26:33 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dlthip$9mf$1@engnntp2.cig.mot.com>
Source record: 16057

Not sure who the OP is here...

I gave some relevant info in another thread (Below), but here's some additional info.

The lead acid chemistry's voltage goes from just under 12 volts at dead, to just over 12 V at full charge (Don't remember the exact, but the idea holds). HOWEVER, this is ONLY after "RESTING" for some time. I never found out (or perhaps remembered) what this resting time is, but think it is perhaps half to one hour.

Float voltage is around 13.8 (I have some Yuasa SLAs and they say give a range of around 13.7-13.9 for float). At the float voltage, they will "take what they need" to stay charged, but that is NOT the terminal voltage after resting, or when delivering current. This is what I say above.

In addition to the constant voltage float, you MUST also limit the current to some maximum (specified my the mfr) when a dead battery is first put on the charger. With a high current 13.8 supply, you can damage (explode, or whatever) the battery with too much current at this time. Once the battery gets up to the 13.8 float voltage, the current will begin to drop and the constant current part of the charger will fall out of use and you have a constant voltage, where the battery top itself off thing going on.

Steve

==========
=
previous post

Looks like you have some good info from others. Here's a little more.

What you will be doing is not "trickle" charging, but it is called "float" charging. Lead acid chemistry, similar to Li-ion (unlike in-Cd & Ni-Mh) has the characteristic that it has a voltage chrematistic such that the terminal voltage rises between dead and full charge. You can safely put a constant voltage (but also with a current limit) on the battery and it will seek its own full charge and the current will taper off, when it gets enough, to what it needs to stay at full charge. CAUTION -- This voltage is typically around 13.8, HOWEVER you MUST consult the manufacturer's specs. This voltage also changes slightly as the temperature of the battery changes.

A commercial device designed for this service is recommended.

73, Steve, K,9.D;C'I

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message news:E--dnf0OoZNBRhzenZ2dnUVZ8qidnZ2d@pipex.net...

> These SLA =Sealed Lead Acid batteries usually have a charging rate for 2
> types of usage The YUASA battery I have in front of me has the following
> instructions (applicable at 20 degrees Celcius) :
> Standby Use : Voltage regulation 13.50 -13.80 V Initial current :
> No Limit
> Cyclic Use : voltage regulation 14.4 - 15.00 V Initial
current:
> 1.75 Amperes max.
>
> I also use a number of SLAs without such instructions , which I (safely)
> charge at 0.1 C (for example a 7Ah battery is charged at 700 mA) and
> limiting the Voltage to 13.5 V ,bearing in mind that 12 V lead acid
> batteries are still 70 -80 % charged when voltage has dropped to 12.6 V
> To test (charged)12 V lead acid batteries I discharge them at a constant
> 0.1C current and check the time until the voltage has dropped to 11.9 V
> (at that voltage the battery might not as yet be fully discharged ,but
below
> that voltage they are of no use to me)
>
> Frank GM0CSZ / KN6WH
>
> ++++++++++++++++++++++
> > So my question... If it measures 13.8-14v after charging, it should be
> > fully charged, right? Is there something going on since it is only
drawing
> > 10's of milliamps while charging? I've read that they charge at several
> > hundred milli's. I'd like to use my QRP rig remotely, and at the rate
its
> > dropping, I just don't think it will serve the purpose.
>
>

5325. Re: choke input voltage doubler?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-21 23:28:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11o4m0jmnkg5nca@corp.supernews.com>
Source record: 16058

Steve Nosko wrote:
> . . .
> That said... I had never studied choke input filters to such a degree...
> However, its action must allow the filter cap to charge for a longer time,
> thus keeping the average diode current lower...
> Does the current through the inductor drop to zero in the normal choke input
> filter?
> If not, a close look at the current path in the full-wave circuit will show
> where the current goes at the cross-over points. Brain full - can't figure
> out now. I'd have to model it in Spice and watch things
>
> Very interesting thingh. If the current does drop to zero, then it seems
> the single choke would work.
> . . .

In a properly designed choke input filter, the choke current never drops to zero. If it does, the circuit becomes the equivalent of a capacitor input filter, with the capacitor furnishing the load current and the voltage increasing as the whole thing acts more like a peak detector rather than an averager. This means that a common choke input filter requires a minimum load current if it's to always behave like a choke input filter.

Quite a few switching supply topologies also include an inductor. In the ones I've designed, diodes are used to provide a path for inductor current between input pulses. Diode reverse recovery time becomes important as the switching frequency increases, since it dictates how quickly the diode can turn off once the voltage across it reverses. It's often possible to design a regulator which will tolerate the inductor current going to zero. But it requires special care because the relationship between input pulse width and output voltage becomes very different(*) and it can be tricky to make the regulation control loop operate stably and correctly under the two very different conditions.

(*) While inductor current is present it behaves like a choke input filter, the output voltage being essentially the average of the pulsed input voltage and so easily controlled via the duty cycle of the input. If the inductor runs dry, the output voltage becomes relatively independent of the input duty cycle -- it becomes the peak value of the input during the input peaks, and sagging between peaks according to how much current is being drawn from the capacitor.

Roy Lewallen, W7EL

5326. Re: choke input voltage doubler?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 00:07:23 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <2YmdnaQEyY4J_R_enZ2dnUVZ_vydnZ2d@adelphia.com>
Source record: 16059

Steve Nosko wrote:
> Some real brain fodder here. John P. Your Spice model with the coupled
> inductors seems to take a divergent turn and I am not sure about this
> "coupled" part. Did you try a single inductor.

Yes. First I tried a single inductor in the common leg of the
transformer. I used a 1 Hy inductor and two 220 uF capacitors and a
100 ohm load resistor across the doubler, with a +-10 volt peak sine
source as a transformer secondary. The inductor current settled to a
+24 mA to -24 mA sine wave. The output voltage across the load
resistor was about .825 volts with a 120 Hz ripple that swung from
about .77 to .88 volts. Not much of a doubler. Almost all the
secondary voltage is dropped across the inductor.

I also tried several different configurations with two separate
inductors, one between each diode and capacitor. Only the coupled
inductor did anything like a choke input filter. And such coupled
chokes exist. See type 2-2690 and 2-2691:
http://www.stancor.com/pdfs/pg56.pdf

> On to my original thoughts. This really takes me back and requires serious
> thought. One thing to keep in mind. An inductor (by virtue of the
> magnetic field cutting its own turns) tries to keep whatever current is
> flowing, flowing. An inductor will make the voltage across it "do whatever
> it takes" to keep that current flowing-- and allow this current to decay
> (some say discharge) in what can be considered a normal manner.

The relation between voltage and current is V=L*(dI/dt). The only way
the current can change is if the inductor has voltage across it.

> The diode
> on the relay coil is a good example. The voltage can rise very high without
> the diode, but using this model, you can figure out what the inductor
> voltage does when the normally conducting device turns off.

Yes. The current ramps down as determined by the drop across the
inductance. In this case, that is a diode drop added to the resistive
drop of the coil.

> That said... I had never studied choke input filters to such a degree...
> However, its action must allow the filter cap to charge for a longer time,
> thus keeping the average diode current lower...

Make that "the peak diode current lower". The average diode current
has to be equal to the average DC output current, regardless of the
filter.

> Does the current through the inductor drop to zero in the normal choke input
> filter?

If the inductance is below the critical value, it certainly does. But most choke input filters are designed to produce continuous (but varying current) throughout the cycle at minimum current load. But all choke input filters will go into interrupted current operation at some minimum load current.

> If not, a close look at the current path in the full-wave circuit will show
> where the current goes at the cross-over points. Brain full - can't figure
> out now. I'd have to model it in Spice and watch things
>
> Very interesting thingh. If the current does drop to zero, then it seems
> the single choke would work.

I guess that depends on what you mean by "works". It cannot ever work as a normal (continuous current) choke input filter.

> Then, reading some of the latter posts, I too, wonder why the desire for
> choke input.

It has advantages for lower transformer heating and low line harmonic currents and improved DC voltage regulation (compared to a capacitor input filter) with changing load currents (as long as the minimum is above that which maintains continuous current) and low output line harmonics above the second. If any or all of those are important to you, it may justify the high weight and cost of an inductor.

5327. "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 00:13:42 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <438262c8$0$27904$9b4e6d93@newsread4.arcor-online.net>
Source record: 16060
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Hi all -

I'm not new to electronics but to vhf comm. I want to build small circuits:
LNA, power amp to 10 watts, etc. At the moment between 10MegHz and 150MegHz.

What are the standard parts, cheap but effective, preferable with spice
model availability (I'm doing much with LTspice)?
Transistors, ICs, coil-suppliers, suppliers in general for small quantities

Please no triodes etc. I like more SMD ;-)
Lists somewhere in the net? Japanese parts?

I think such lists will be of interest to others too!

Thank you!!

Best regards -
Henry

5328. Re: The FAQ - because no-one has an alternative one.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 00:31:32 UTC
From: aaa@spamaway.com
Message-ID: <438266E4.684B49B5@spamaway.com>
Source record: 16061
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

an old friend wrote:

> it [gentlemanly attitude] seems long dead in mst corners of Ham radio

Well, time to bring it back to *amateur* radio (apols if you're a Yank). We could start here...

5329. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 00:40:40 UTC
From: "RST Engineering (jw)" <jim@rstengineering.com>
Message-ID: <11o4q89q7708kcd@corp.supernews.com>
Source record: 16062
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

You are going to use Spice to model an RF circuit. DId I get that right?

Jim

"Henry Kiefer" <otc_friend@gmx.net> wrote in message
news:438262c8$0$27904$9b4e6d93@newsread4.arcor-online.net...
> Hi all -
>
> I'm not new to electronics but to vhf comm. I want to build small
> circuits:
> LNA, power amp to 10 watts, etc. At the moment between 10MegHz and
> 150MegHz.
>
> What are the standard parts, cheap but effective, preferable with spice
> model availability (I'm doing much with LTspice)?
> Transistors, ICs, coil-suppliers, suppliers in general for small
> quantities

5330. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 00:52:01 UTC
From: RDF <NT_Geek@NOSPAMhotmail.com>
Message-ID: <-vOdnTG5yJoo9h_eRVn-pg@comcast.com>
Source record: 16063
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

Would a 12 V deep cycle- Optima work in a APC-UPS 1400R I keep my servers and dyno on with it along with some routers and switches. I don't know the output, the battery fails and I now have it frightfully bypassed. The batteries died and are almost 2 bills to replace. voltages ? issues? but I have a few Optima batteries from wrecked race cars that would be perfect!

Any input would be appreciated,
Rob

Fraser Competition Engines
Chicago, IL.
"Pete C." <aux3.DOH.4@snet.net> wrote in message
news:43822356.4A1E3D17@snet.net...
> Tom Gardner wrote:
>>
>> ">>
>> > For that..you need a British phone both IRRC.
>> >
>> > Gunner
>> >
>>
>> I need a new battery for my Tardis!
>
> Borrow one from K-9...
>
> Pete C.

5331. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 00:57:08 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <43826cd2$0$27883$9b4e6d93@newsread4.arcor-online.net>
Source record: 16064
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Yes Jim!
Im not very experienced there (Digital designs/layout is my profession) -
but for example I designed a LNA and got simulations results (even for noise
performance) very similar to a real circuit built from a ham with great
background (found later on the net).
Even a Synchronous Oscillator for 145MegHz seem to work with LTspice. I work
on it today trying to modify it to an fsk modulated power oscillator to keep
component count to the lowest.

Why you ask?

- Henry

"RST Engineering (jw)" <jim@rstengineering.com> schrieb im Newsbeitrag
news:11o4q89q7708kcd@corp.supernews.com...
> You are going to use Spice to model an RF circuit. DId I get that right?
>
> Jim
>
>
>
> "Henry Kiefer" <otc_friend@gmx.net> wrote in message
> news:438262c8$0$27904$9b4e6d93@newsread4.arcor-online.net...
> > Hi all -
> >
> > I'm not new to electronics but to vhf comm. I want to build small
> > circuits:
> > LNA, power amp to 10 watts, etc. At the moment between 10MegHz and
> > 150MegHz.
> >
> > What are the standard parts, cheap but effective, preferable with spice
> > model availability (I'm doing much with LTspice)?
> > Transistors, ICs, coil-suppliers, suppliers in general for small
> > quantities
>
>

5332. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 01:21:41 UTC
From: eternalsquire@comcast.net
Message-ID: <1132622501.128593.126840@g47g2000cwa.googlegroups.com>
Source record: 16065
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

No list needed!

VHF traditionally begins at around 6 meters, but design techniques there are not much different from those used at 10 meters. The point where you need to begin being more careful regarding circuit layout is around 2 meters. Many devices that operate on the lower shortwave bands still function reasonably well at this region. So... the same analog circuits will work, but WATCH OUT for circuit layout.

The Eternal Squire

5333. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 01:37:15 UTC
From: Mark <makolber@yahoo.com>
Message-ID: <1132623435.194584.293170@z14g2000cwz.googlegroups.com>
Source record: 16066
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

there are lots of parts...

stat by looking at these vendors

Mini Circuits
Maxum

Mark

5334. Re: Powerpole 180A Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 01:39:16 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <jvs4o1d0tuilp6bjlmf21npfiqu6mlokv7@4ax.com>
Source record: 16067

On Fri, 14 Oct 2005 06:53:25 -0500, "gb" <onw9mapsgb@no.arrl.spam.net>
wrote:

>"Richard W. Solomon, W1KSZ" <w1ksz@earthlink.net> wrote in message
>news:9hnpg15mc8el1keek6gfnbkvbu2in37bgs@4ax.com...
>> No, they are the SINGLEPOLE Connectors.
>>
>> http://www.andersonpower.com/products/pp/sp.html
>>
>> 73, Dick, W1KSZ
>>
>Powerx sells the entire line - give them a call or send an e-mail to their
>sales department.
>Powerwerz web page
>http://www.powerwerx.com
>
Double check the Powerwerx site, as I seem to remember them having
larger than 75, maybe only 150. Just checked. See:
<http://www.powerwerx.com/category.asp?CtgID=3579> where they have up
to 350 Amp ones. If that's

At some hamfests, there are dealers who have used ones from electric
forklifts and other industrial equipment. Good prices, although you
may not be able to reuse the contacts. Contacts for that size will
require a major league crimper (pneumatic or hydraulic). More
practical would be a large soldering iron.

As an aside, when you get to the larger wire sizes like 1/0 or 2/0
(pronounced one aught or two aught) you would want welding cable.
Welding cable has the same cross sectional area of copper as regular
wire, but has a larger number of finer strands, which allows the whole
thing to bend. Regular wire in that size often needs a large tubing or
conduit bender to shape it.

If you need more than 350 Amp carrying capacity. . .
Happy trails,
Gary (net.yogi.bear)
--
At the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

5335. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 01:55:17 UTC
From: "Pete C." <aux3.DOH.4@snet.net>
Message-ID: <43827A84.B4C3DDAE@snet.net>
Source record: 16068
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

RDF wrote:
>
> Would a 12 V deep cycle- Optima work in a APC-UPS 1400R I keep my servers
> and dyno on with it along with some routers and switches. I don't know the
> output, the battery fails and I now have it frightfully bypassed. The
> batteries died and are almost 2 bills to replace. voltages ? issues? but I
> have a few Optima batteries from wrecked race cars that would be perfect!
>
> Any input would be appreciated,
> Rob
>
> Fraser Competition Engines
> Chicago, IL.

Unlikely, but while the replacement batteries may be, as you say 2
bills, from APC, if you take the old ones to a proper wholesale battery
distributor they will in all probability be able to sell you proper
replacements for about $20-$25 ea.

Pete C.

5336. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 02:41:26 UTC
From: DaveM <masondg4499@comcast99.net>
Message-ID: <qbGdneIQw8fKGB_enZ2dnUVZ_s-dnZ2d@comcast.com>
Source record: 16069
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

"Henry Kiefer" <otc_friend@gmx.net> wrote in message
news:438262c8$0$27904$9b4e6d93@newsread4.arcor-online.net...
> Hi all -
>
> I'm not new to electronics but to vhf comm. I want to build small
> circuits:
> LNA, power amp to 10 watts, etc. At the moment between 10MegHz and
> 150MegHz.
>
> What are the standard parts, cheap but effective, preferable with spice
> model availability (I'm doing much with LTspice)?
> Transistors, ICs, coil-suppliers, suppliers in general for small
> quantities
>
> Please no triodes etc. I like more SMD ;-)
> Lists somewhere in the net? Japanese parts?
>
> I think such lists will be of interest to others too!
>
> Thank you!!
>
> Best regards -
> Henry
>
>
>

http://www.rfparts.com/ is a good source of RF components. Also look at
http://www.danssmallpartsandkits.net/ for great prices on common parts.
--
Dave M
MasonDG44 at comcast dot net (Just substitute the appropriate characters in
the address)

Never take a laxative and a sleeping pill at the same time!!

5337. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 02:48:10 UTC
From: "Bruce L. Bergman" <blPYTHONbergman@earthlink.invalid>
Message-ID: <kc15o1pr09im1guvgk9l4vj5pbqek0hq0q@4ax.com>
Source record: 16070
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

On Mon, 21 Nov 2005 18:52:01 -0600, "RDF" <NT_Geek@NOSPAMhotmail.com>
wrote:

>Would a 12 V deep cycle- Optima work in a APC-UPS 1400R I keep my servers
>and dyno on with it along with some routers and switches. I don't know the
>output, the battery fails and I now have it frightfully bypassed. The
>batteries died and are almost 2 bills to replace. voltages ? issues? but I
>have a few Optima batteries from wrecked race cars that would be perfect!

If they are 'Red Top' starting batteries, not really. Starting duty
batteries aren't meant to be deep discharged, even if the Optima
starved electrolyte design will take the abuse far better than most
because electrolyte volume is restricted.

If they're the Yellow Top deep-cycle, or the Blue Top Marine
starting/deep cycle, and the voltages are right, yes.

But realize it might work TOO well when compared with a standard
gel-cell battery. Those Optima batteries can deliver frightening
amounts of short-circuit current for several seconds and the circuit
can fry before a fuse can react.

--<< Bruce >>--

--
Bruce L. Bergman, Woodland Hills (Los Angeles) CA - Desktop
Electrician for Westend Electric - CA726700
5737 Kanan Rd. #359, Agoura CA 91301 (818) 889-9545
Spamtrapped address: Remove the python and the invalid, and use a net.

5338. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 03:45:11 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <tk7tn1lhmubet4oaikpue7p5are69nbshl@4ax.com>
Source record: 16071
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

On 20 Nov 2005 21:14:33 -0800, "Too_Many_Tools"
<too_many_tools@yahoo.com> wrote:

>I am the "lucky" owner of a number of older UPSes.
>
>So what can a person build out of these?
>
>The batteries are for the most part dead but the remainder of the
>components seem to be in good condition.
>
>Any suggestions?
>
>Thanks
>
>TMT

Sure! I have a few of them. I usually get them for free because they are "broken". I replace the batteries and they are as good as new. I have even gotten a hold of an expensive "sine wave" UPS. Most UPSs use a sum of square waves to simulate the 60Hz sine wave. There are lots of transients and noise, however. Some (expensive) UPSs use a different type of inverter and produce pure sine wave AC. If you put an accessory plug in the side, you can use it to keep the batteries topped off and plug into the accessory plug for volts. Be careful though, the better ones use 2 12V batteries in series.

Russ

5339. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 03:59:32 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <ms55o1d4h3rrlkp1l4igkfufa807krib8a@4ax.com>
Source record: 16072
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Mon, 21 Nov 2005 16:40:40 -0800, "RST Engineering \(jw\)"
<jim@rstengineering.com> wrote:

>You are going to use Spice to model an RF circuit. DId I get that right?
>
>Jim
>
>

Why not?

John

5340. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 04:53:33 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <11o592i478r2dc2@corp.supernews.com>
Source record: 16073
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

"Russ" <carlzomer@hotmail.com> wrote in message
news:tk7tn1lhmubet4oaikpue7p5are69nbshl@4ax.com...
> Sure! I have a few of them. I usually get them for free because they
> are "broken". I replace the batteries and they are as good as new. I
> have even gotten a hold of an expensive "sine wave" UPS. Most UPSs
> use a sum of square waves to simulate the 60Hz sine wave. There are
> lots of transients and noise, however. Some (expensive) UPSs use a
> different type of inverter and produce pure sine wave AC. If you put
> an accessory plug in the side, you can use it to keep the batteries
> topped off and plug into the accessory plug for volts. Be careful
> though, the better ones use 2 12V batteries in series.

You need to be very careful with this - I have seen units that have one side of line voltage on the battery terminals. This is not a problem with the batteries sealed in the UPS, but could be a big problem if you try to bring leads out to charge a battery.

I have about 25 UPS' I picked up at a local university sale for $30 total. The largest was a 2KW unit with 18 12V batteries, one of which was dead :-). Metalworking content - after replacing the one bad battery I tested it using my bandsaw....

- Bob Headrick

5341. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 07:55:26 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <11o5jngnvqrqmcb@corp.supernews.com>
Source record: 16074
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Well, just for starters, what does Spice say about a 1000 pf capacitor with
either ¼" lead lengths or a total of 1" of PCB trace at 150 MHz.?

Jim

"John Larkin" <jjlarkin@highNOTlandTHIStechnologyPART.com> wrote in message
news:ms55o1d4h3rrlkp1l4igkfufa807krib8a@4ax.com...
> On Mon, 21 Nov 2005 16:40:40 -0800, "RST Engineering \(jw\)"
> <jim@rstengineering.com> wrote:
>
>>You are going to use Spice to model an RF circuit. DId I get that right?
>>
>>Jim
>>
>>
>
> Why not?
>
> John
>
>

5342. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 11:18:46 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4382ffe2$0$27884$9b4e6d93@newsread4.arcor-online.net>
Source record: 16075
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Ok Jim. You're asked about the stray components hidden in the real parts/circuit. If you take the values from the datasheets for die and/or package or give it a guess if not available, and add values for the pcb lines, you have a good simulation result. The pcb by itself is not of much interest if you simulate not much over 100MegHz. Even starting a oscillator with thermal noise is possible!
Sure, you must know what you're doing :-)

Spice by itself can simulate almost all if you have the right models included - even if you wanna simulate a mechanical system. There is no frequency limit at least to 100GHz.

Do you had bad result doing Spice?

To come back to your question: Spice will give you better results than your real circuit! You can connect a probe with no interaction to the circuit! Try this with your real parts! Don't forget the component variations in real circuits coming from the manufacturing processes of the parts.

- Henry

"RST Engineering" <jim@rstengineering.com> schrieb im Newsbeitrag
news:11o5jngnvqrqmcb@corp.supernews.com...
> Well, just for starters, what does Spice say about a 1000 pf capacitor
with
> either ¼" lead lengths or a total of 1" of PCB trace at 150 MHz.?
>
> Jim
>
>
>
>
> "John Larkin" <jjlarkin@highNOTlandTHIStechnologyPART.com> wrote in
message
> news:ms55o1d4h3rrlkp1l4igkfufa807krib8a@4ax.com...
> > On Mon, 21 Nov 2005 16:40:40 -0800, "RST Engineering \(jw\)"
> > <jim@rstengineering.com> wrote:
> >
> >>You are going to use Spice to model an RF circuit. DId I get that
right?
> >>
> >>Jim
> >>
> >>

> >
> > Why not?
> >
> > John
> >
> >
>
>

5343. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 11:20:25 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4382ffe3$0$27884$9b4e6d93@newsread4.arcor-online.net>
Source record: 16076
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Thank Mark!

MC and Maxim is not new to me. I thought on list of cheap, easy getting
parts with reasonable performance.

- Henry

"Mark" <makolber@yahoo.com> schrieb im Newsbeitrag
news:1132623435.194584.293170@z14g2000cwz.googlegroups.com...
> there are lots of parts...
>
> stat by looking at these vendors
>
> Mini Circuits
> Maxum
>
> Mark
>

5344. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 11:57:46 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <2oydnVhXno09mh7enZ2dnUVZ8qSdnZ2d@pipex.net>
Source record: 16077
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

> Would a 12 V deep cycle- Optima work in a APC-UPS 1400R I keep my servers
> and dyno on with it along with some routers and switches. I don't know the
> output, the battery fails and I now have it frightfully bypassed. The
> batteries died and are almost 2 bills to replace. voltages ? issues? but
> I have a few Optima batteries from wrecked race cars that would be
> perfect!
==========
Suggest you check the charging instructions on the original battery and
compare these with the ones applicable to the Optima type of battery.
The battery in a UPS is on 'standby duty' The charging instruction for a
YUASA SLA found in many UPSes has the following for standby duty :
Voltage regulation : 13.5 - 13.8 V
Initial current : Unlimited

Connect the Optima battery to the UPS and check the voltage when the
battery is fully charged . You can charge the battery externally to say 13.5
volt before you connect it to the UPS. If the fully charged voltage is in
the above range ,you can safely use it for this purpose.
I would think that any 12 V SLA will happily work with your APC UPS 1400R
,provided its capacity is adequate for the load to be maintained for the
minimum time needed. If you use a number of batts in parallel ,please
ensure there is an adequate FUSE in each battery circuit !
You can also connect a much larger 12 V sealed battery to the UPS (for
example those used in electric golf trolleys). Even non-sealed batts can be
used provided they are located in a well ventilated area .
I have non-sealed batts located on the loft connected via leads made from
welding cable running to equipment in the ground floor radio shack (to feed
radio equipment requiring a peak current not exceeding 25 Amperes)

Above I mentioned batts for Golf trolleys because their cost is very
reasonable nowadays there being a relatively large demand , hence
competition (pun intended)

Frank GM&#65533;CSZ / KN6WH

5345. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 12:29:37 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <07qdnVvtoq2Lkh7enZ2dnUVZ8qidnZ2d@pipex.net>
Source record: 16078
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

> I have about 25 UPS' I picked up at a local university sale for $30 total.
> The
> largest was a 2KW unit with 18 12V batteries, one of which was dead :-).
> Metalworking content - after replacing the one bad battery I tested it
> using my bandsaw....
> - Bob Headrick
==========
Bob , Interesting info ; can you confirm that the 18 pcs 12V battery were
in fact 9 strings of 2 batts in series (each string having a fuse)
providing 24 V ? or were all the 18 batts in parallel ?

Frank GM&#65533;CSZ / KN6WH

5346. Re: Bridge Rectifier Info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 12:31:22 UTC
From: John A <e455gkf@yahoo.co.uk>
Message-ID: <dlv35c$h31$1@news6.svr.pol.co.uk>
Source record: 16079

Could it be an FC142? This is a Westinghouse bridge rated at 250v, 40mA?

5347. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 12:53:46 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <a156o19olioeab1e5vbd18ejbcqmu6itdo@4ax.com>
Source record: 16080

On Tue, 22 Nov 2005 12:20:25 +0100, "Henry Kiefer"
<otc_friend@gmx.net> wrote:

>Thank Mark!
>
>MC and Maxim is not new to me. I thought on list of cheap, easy getting
>parts with reasonable performance.
>
>- Henry

Minicircuits the MIMICs and mixers are of most interest and there
are inexpensive versions in the line up. What both offer is well
characterized RF 50 ohm port parts that behave well in circuits.
For example you can build a DBM, can you say for sure what the
characteristics will be from say 2-500mhz?

Other useful parts from there are VCOs and RF transformers.

Allison

5348. Re: choke input voltage doubler?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 12:58:06 UTC
From: John A <e455gkf@yahoo.co.uk>
Message-ID: <dlv4nf$i81$1@news6.svr.pol.co.uk>
Source record: 16081

If the inductor in your design is replaced by a piece of wire, the diodes will directly charge the two capacitors and the connected equipment will draw charge from the capacitor pair.

If you then replace the wire with an inductor, ALL that will change is that the capacitors will charge less effectively and you'll have a less efficient, bulkier and more expensive power supply.

As simple as that? ;-}

5349. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 15:53:16 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1132674796.572921.121460@g43g2000cwa.googlegroups.com>
Source record: 16082
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

"2. The charging current of the tiny native 1400va ups batteries is
probably much less than that of the car batteries. Higher current
coulld damage the charging circuit of the UPS. You could make some
current limiter (see Art of Electronics) to limit charging current,
but it probably is not worth the time. "

Why would that matter?

Wouldn't the charging circuit be current limited?

TMT

5350. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 18:05:02 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <11o6neic2a7gt64@corp.supernews.com>
Source record: 16083
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

"Henry Kiefer" <otc_friend@gmx.net> wrote in message
news:4382ffe2$0$27884$9b4e6d93@newsread4.arcor-online.net...

> Ok Jim. You're asked about the stray components hidden in the real
> parts/circuit.

There is nothing hidden at all. Strays are a part of the real life at VHF
and above. Sometimes strays have more effect than the part itself.

If you take the values from the datasheets for die and/or
> package or give it a guess if not available, and add values for the pcb
> lines, you have a good simulation result.

Horsefeathers. What "values" do you add for the pcb lines?

The pcb by itself is not of much
> interest if you simulate not much over 100MegHz. Even starting a
> oscillator
> with thermal noise is possible!
> Sure, you must know what you're doing :-)

As with anything in the world.

>
> Spice by itself can simulate almost all if you have the right models
> included - even if you wanna simulate a mechanical system. There is no
> frequency limit at least to 100GHz.

The problem is getting the right models, which is an art in and of itself.

>
> Do you had bad result doing Spice?
>
> To come back to your question: Spice will give you better results than
> your
> real circuit! You can connect a probe with no interaction to the circuit!
> Try this with your real parts! Don't forget the component variations in
> real
> circuits coming from the manufacturing processes of the parts.

Again I ask the question: What does Spice say about a 1000 pf capacitor
with 1" total lead length at 150 MHz.? Don't give me the BS about Spice
being "better than a real circuit". Until you can give me a ferrite slug on
one end of a toothpick and a brass slug on the other end to increase or
decrease inductance in Spice, the physical circuit is the "real" circuit.

Jim

5351. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 18:51:01 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1132685461.553016.209410@z14g2000cwz.googlegroups.com>
Source record: 16084
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

How would one verify it in a UPS?

TMT

5352. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 19:20:10 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1132687210.699766.160170@f14g2000cwb.googlegroups.com>
Source record: 16085
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

Yes, one could call if the company is still around and they want to
tell you.

What if the UPS is propietary or if the company is long gone?

Any test setup one can rig to measure rated charging capability?

TMT

5353. Re: Bridge Rectifier Info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 20:42:32 UTC
From: Ron Price <ron.price2@virgin.net>
Message-ID: <YoLgf.1365$xP2.900@newsfe2-gui.ntli.net>
Source record: 16086

I thought that also John but it is very clearly marked as FC442!
Thanks,
Ron GW4EVX

"John A" <e455gkf@yahoo.co.uk> wrote in message
news:dlv35c$h31$1@news6.svr.pol.co.uk...
> Could it be an FC142? This is a Westinghouse bridge rated at 250v, 40mA?
>
>

5354. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 20:55:29 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <11o71e72oifva06@corp.supernews.com>
Source record: 16087
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:07qdnVvtoq2Lkh7enZ2dnUVZ8qidnZ2d@pipex.net...

> Bob , Interesting info ; can you confirm that the 18 pcs 12V battery were
> in fact 9 strings of 2 batts in series (each string having a fuse)
> providing 24 V ? or were all the 18 batts in parallel ?

Actually they were all in series, making it a bit nerve-wracking to replace a
battery in the string.

- Bob W7OV

5355. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 21:03:18 UTC
From: nospam.clare.nce@sny.der.on.ca
Message-ID: <fm17o1d4d8tfvoqkia5120o9bo98cq2ch9@4ax.com>
Source record: 16088
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

On Tue, 22 Nov 2005 12:29:37 -0000, "Highland Ham"
<abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:

>
>> I have about 25 UPS' I picked up at a local university sale for $30 total.
>> The
>> largest was a 2KW unit with 18 12V batteries, one of which was dead :-).
>> Metalworking content - after replacing the one bad battery I tested it
>> using my bandsaw....
>> - Bob Headrick
>==========
>Bob , Interesting info ; can you confirm that the 18 pcs 12V battery were
>in fact 9 strings of 2 batts in series (each string having a fuse)
>providing 24 V ? or were all the 18 batts in parallel ?
>
>Frank GMï¿½CSZ / KN6WH
>
Most likely six strings of 3, for a 36 volt system, or 3 strings of 6
for 72. a 2KW 110 volt system on 12 volts would draw close to 200
volts, on 24 close to 100, on 36 close to 60, and on 72 less tan 30
amps for 18 amps out and85% +/- efficiency.

5356. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 21:05:54 UTC
From: Brent Atkerson <brent.atkerson@anrodscreen.comINVALID>
Message-ID: <tqqdncMGH5OpFR7enZ2dnUVZ_tidnZ2d@casscity.net>
Source record: 16089
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

This one interests me. Wonder how many small UPSs you could run from a truck battery (assuming using heavy enough cables between each UPS and each battery [when needed for the 24 volt input]). I am sure you would have to leave the vehicle running if running the UPSs for any length of time or heavy load... Probably pretty basic questions but I am kind of interested because I have a couple laying around and never thought of using them as an inverter (powered by a vehicle). That would make a neat addition to a garden tractor or something too...

--
Brent Atkerson
Anrod Screen Cylinder Co.
www.anrodscreen.com

"Ignoramus1487" <ignoramus1487@NOSPAM.1487.invalid> wrote in message news:uVJgf.5890$3I1.1138@fe27.usenetserver.com...
> On 22 Nov 2005 10:51:01 -0800, Too_Many_Tools <too_many_tools@yahoo.com>
> wrote:
>> How would one verify it in a UPS?
>>
>
> Try calling APC and ask them (with your particular model) if you can
> hook up an extra or external battery to it. See what they say.
>
> I blew a charging circuit on one UPS once. It was a ferrups that
> I picked up from trash. I wanted to use it as a powerful inverter for
> powering my home from my pickup, so its charging capabilities did not
> interest me. For a few years, it was my house power backup. It worked
> great, producing power from truck's battery.
>
> i
>

5357. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 21:22:27 UTC
From: crazy_horse_12002@yahoo.co.uk
Message-ID: <1132694547.178571.113170@z14g2000cwz.googlegroups.com>
Source record: 16090
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

Ignoramus14135 wrote:
> On Mon, 21 Nov 2005 20:53:33 -0800, Bob Headrick <bobh@proaxis.com> wrote:
> >

> I almost bought a 15 kva UPS for $49, but decided that I had too much
> on my hands already...
>
> i

5358. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 21:23:36 UTC
From: Brent Atkerson <brent.atkerson@anrodscreen.comINVALID>
Message-ID: <f72dneKX6MLEER7eRVn-vw@casscity.net>
Source record: 16091
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

There are 2 types of UPS. One, the load actually runs off the battery (the UPS just keeps the battery charged and inverts the DC power to AC) and the other the load actually runs on line voltage and switches to battery when line voltage disappears (this is probably the type you are speaking of but I have not tested that).
Also, should not need any heavier cables (except to account for the longer length that may occur between truck battery and UPS) as long as using the UPS within the design specifications. I think it is generally about 12 Ga. wire between the battery and UPS (at least in the PC world, servers might be a little bigger since the batteries are often in series).

--
Brent Atkerson
Anrod Screen Cylinder Co.
www.anrodscreen.com

"Ignoramus1487" <ignoramus1487@NOSPAM.1487.invalid> wrote in message news:aRLgf.8781$_a.8289@fe40.usenetserver.com...
> On Tue, 22 Nov 2005 16:05:54 -0500, Brent Atkerson
> <brent.atkerson@anrodscreen.comINVALID> wrote:
>> This one interests me. Wonder how many small UPSs you could run from a
>> truck battery (assuming using heavy enough cables between each UPS and
>> each
>> battery [when needed for the 24 volt input]). I am sure you would have
>> to
>> leave the vehicle running if running the UPSs for any length of time or
>> heavy load... Probably pretty basic questions but I am kind of
>> interested
>> because I have a couple laying around and never thought of using them as
>> an
>> inverter (powered by a vehicle). That would make a neat addition to a
>> garden tractor or something too...
>>
>
>
> Beware that some UPSes refuse to start without A/C voltage
> present. Kind of stupid, but it's reality. That could hinder their use
> for emergency.
>
> 12V is a very low voltage and you need big cables. Your battery can
> produce a lot of amps intermittently, so with it, you could run loads
> that are not too high on average.
>
> For example, on 70 amps, you could run about 700 watts of power (after

> considering all losses). That's enough to power up the furnace and a
> few fluorescent lights or the TV. Maybe even a refrigerator.
>
> Since your truck recharges the battery as it runs, the battery acts as
> a buffer/smoother of your alternator's output and can help produce
> power without frying the alternator.
>
> i
>

5359. Simple triggered sweep.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 21:41:19 UTC
From: novatech@eskimo.com
Message-ID: <dm039v$n4q$1@eskinews.eskimo.com>
Source record: 16092
Cross-posted to: sci.electronics.basics,sci.electronics.design,rec.radio.amateur.homebrew

Greetings.

A short while ago, I posted a request for links to simple triggered sweeps for older recurrent timebase oscilloscopes. I spent a fair amount of time looking in old magazines and circuit handbooks, but didn't find what I thought I was looking for.

So I decided to cobble-up a homebrew of my own. This circuit probably has been done before, but it met my criterion of being really simple. I used already on-hand parts, so the design is far from optimum. It works fine on an Eico 460 up to about 1MHz. No attempt was made to make a calibrated sweep. You could use a 5v rail and an HC4538 to make a nice high speed triggered sweep.

Have a look at:

http://novatech-instr.com/Fun/trig.pdf

Thank you to all of you who sent me emails and posted comments on these boards.

Steve.
Seattle,WA.
--
Steven D. Swift, novatech@eskimo.com, http://www.novatech-instr.com
NOVATECH INSTRUMENTS, INC. P.O. Box 55997
206.301.8986, fax 206.363.4367 Seattle, Washington 98155 USA

5360. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 22:39:29 UTC
From: Chris Jones <lugnut808@nospam.yahoo.com>
Message-ID: <11o77g69er67g06@corp.supernews.com>
Source record: 16093
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

RST Engineering wrote:

>
> "Henry Kiefer" <otc_friend@gmx.net> wrote in message
> news:4382ffe2$0$27884$9b4e6d93@newsread4.arcor-online.net...
>
>> Ok Jim. You're asked about the stray components hidden in the real
>> parts/circuit.
>
> There is nothing hidden at all. Strays are a part of the real life at VHF
> and above. Sometimes strays have more effect than the part itself.
You have to put the strays into the spice model if you want an accurate
result, just like you would have to if you work it out with a pencil and
paper.

> If you take the values from the datasheets for die and/or
>> package or give it a guess if not available, and add values for the pcb
>> lines, you have a good simulation result.
>
> Horsefeathers. What "values" do you add for the pcb lines?

You can work out the inductance, resistance (including skin effect) and
capacitance of arbitrary structures using the free programs FastCap and
FastHenry, though these consider inductive and capacitive effects
separately so you have to break the problem into several parts sometimes,
e.g. if the structure is a significant fraction of a wavelength in size.
Constructing the model files can be tedious, and you may end up having to
write some code to automate it. You can view the model files using a
viewer program which used to be and hopefully still is available from
www.fastfieldsolvers.com You could also buy one of the commercial
full-wave solvers if you have more spare money than time.

> The pcb by itself is not of much
>> interest if you simulate not much over 100MegHz. Even starting a
>> oscillator
>> with thermal noise is possible!
>> Sure, you must know what you're doing :-)
>
> As with anything in the world.
>
>
>>
>> Spice by itself can simulate almost all if you have the right models
>> included - even if you wanna simulate a mechanical system. There is no

>> frequency limit at least to 100GHz.
>
> The problem is getting the right models, which is an art in and of itself.
Right but you have to do that one way or another anyway even if the model is
inside your head, unless you design purely by trial and error.

>> Do you had bad result doing Spice?
>>
>> To come back to your question: Spice will give you better results than
>> your
>> real circuit! You can connect a probe with no interaction to the circuit!
>> Try this with your real parts! Don't forget the component variations in
>> real
>> circuits coming from the manufacturing processes of the parts.
>
> Again I ask the question: What does Spice say about a 1000 pf capacitor
> with 1" total lead length at 150 MHz.? Don't give me the BS about Spice
> being "better than a real circuit". Until you can give me a ferrite slug
> on one end of a toothpick and a brass slug on the other end to increase or
> decrease inductance in Spice, the physical circuit is the "real" circuit.
>
> Jim
The real advantage of spice is in situations where trial and error is more
expensive than getting it right the first time (where you can justify
spending a long time making good models). He does also have a point about
being able to probe components inside a circuit that you could never probe
on a real one due to loading effects of the real probe. It seems to me
that your real objection is not with computer simulation of circuits, but
rather with poor models for components. Fair enough, garbage in garbage
out, but I would consider using bad models to be a form of 'user error'.

Chris

5361. Re: Simple triggered sweep.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-22 23:45:21 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <dJadnd5xTtF6MR7eRVn-rA@adelphia.com>
Source record: 16094
Cross-posted to: sci.electronics.basics,sci.electronics.design,rec.radio.amateur.homebrew

Steven Swift wrote:
> Greetings.
>
> A short while ago, I posted a request for links to simple triggered
> sweeps for older recurrent timebase oscilloscopes. I spent a fair
> amount of time looking in old magazines and circuit handbooks, but
> didn't find what I thought I was looking for.
>
> So I decided to cobble-up a homebrew of my own. This circuit probably
> has been done before, but it met my criterion of being really simple.
> I used already on-hand parts, so the design is far from optimum. It
> works fine on an Eico 460 up to about 1MHz. No attempt was made to make
> a calibrated sweep. You could use a 5v rail and an HC4538 to make a
> nice high speed triggered sweep.
>
> Have a look at:
>
> http://novatech-instr.com/Fun/trig.pdf
>
> Thank you to all of you who sent me emails and posted comments on these
> boards.
>
> Steve.
> Seattle,WA.

I think you could use an LM361 comparator in place of the front opamp.
It produces high going and low going digital outputs that you can
enable separately, so you can choose whether you want to sync on
positive going or negative going edges, without changing the switching
threshold.

It will also clock the flip flop a lot faster than an opamp will.

http://www.national.com/ds.cgi/LM/LM161.pdf

5362. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 00:18:45 UTC
From: ehsjr <ehsjr@bellatlantic.net>
Message-ID: <FzOgf.5107$BU2.5026@trndny01>
Source record: 16095
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

Too_Many_Tools wrote:
> Yes, one could call if the company is still around and they want to
> tell you.
>
> What if the UPS is propietary or if the company is long gone?

Assume the UPS was designed to properly charge the batteries.
Look up the battery manufacturer's recommended charge rate.
As a practical matter, that's probably the best most people
can do when the UPS specs are not available.

>
> Any test setup one can rig to measure rated charging capability?

Well, if you happen to have a high wattage fully adjustable load
(not very damn likely) and the wherewithal to fool the UPS into
"thinking" that a battery is connected (with a variable supply and
a diode or maybe a big 'lytic), you could plot a charge curve by
measuring the current through the load and the voltage across it.

Ed

>
> TMT
>

5363. Re: Simple triggered sweep.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 00:29:07 UTC
From: novatech@eskimo.com
Message-ID: <dm0d4j$pa1$1@eskinews.eskimo.com>
Source record: 16096
Cross-posted to: sci.electronics.basics,sci.electronics.design,rec.radio.amateur.homebrew

John Popelish <jpopelish@rica.net> writes:

>I think you could use an LM361 comparator in place of the front opamp.
> It produces high going and low going digital outputs that you can
>enable separately, so you can choose whether you want to sync on
>positive going or negative going edges, without changing the switching
>threshold.

>It will also clock the flip flop a lot faster than an opamp will.

>http://www.national.com/ds.cgi/LM/LM161.pdf

Yup, good call! I actually have a 361 based circuit I built a long time ago. It works to about 50MHz. It is overkill for this purpose, but would be the right choice, along with an HC4538, if someone wanted to modify this and go to higher frequencies. You actually have to move some pins around on the 4538 to make it non-retriggerable.

On the 361 board, I use long-tailed pair miller integrators to get near perfect sweeps. But that was a complete homebrew scope I designed in 1978 or so.

Thanks.

Steve
--
Steven D. Swift, novatech@eskimo.com, http://www.novatech-instr.com
NOVATECH INSTRUMENTS, INC. P.O. Box 55997
206.301.8986, fax 206.363.4367 Seattle, Washington 98155 USA

5364. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 00:37:25 UTC
From: "Martin H. Eastburn" <lionslair@consolidated.net>
Message-ID: <1132706398_22791@spool6-east.superfeed.net>
Source record: 15998
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

Crazy hose must have a HP mini running Bruno!
Bruno could draw up the darnest pictures and export them as ascii for teletype transport.

Martin [all of my paper tape - 5 and 8 level were given away or dumped last year.]

Martin Eastburn
@ home at Lions' Lair with our computer lionslair at consolidated dot net
NRA LOH, NRA Life
NRA Second Amendment Task Force Charter Founder

crazy_horse_12002@yahoo.co.uk wrote:
> Ignoramus14135 wrote:
>
>>On Mon, 21 Nov 2005 20:53:33 -0800, Bob Headrick <bobh@proaxis.com> wrote:
>>
>
>>I almost bought a 15 kva UPS for $49, but decided that I had too much
>>on my hands already...
>>
>>i
>
>
> /| /| _____________________
> ||__|| | |
> / O O__ | PLEASE DO NOT |
> / \ | FEED THE TROLLS |
> / \ \|_____________________|
> / _ \ \ ||
> / |____\ \ ||
> / | | | |____/ ||
> / \|_|_|/ | _||
> / / \ |____| ||
> / | | | --|
> | | | |____ --|
> * _ | |_|_|_| | \-/
> *-- _--\ _ \ | ||
> / _ \\ | / `
> * / _ /- | | |
> * ___ C_c_c_C/ \C_c_c_c____________
>

-----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups

----= East and West-Coast Server Farms - Total Privacy via Encryption =----

5365. Re: choke input voltage doubler?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 00:37:26 UTC
From: "wa2mze(spamless)" <"wa2mze(spamless)"@bellsouth.net>
Message-ID: <XOOgf.21382$6y4.7596@bignews3.bellsouth.net>
Source record: 16097

John Popelish wrote:
> wa2mze(spamless) wrote:
>
>> John Popelish wrote:
>>
>>
>>> Not at all well, because you have provided no path for the inductor
>>> current when the voltage from the transformer tires to reverse bias the
>>> diode. So the inductor will keep the diode conducting as the voltage
>>> reverses. This is not at all the way a choke input filter acts with a
>>> full wave rectifier. I am quite sure you have never seen a choke input
>>> filter in a half wave supply, for this reason.
>>
>>
>> I guess I can't recall seeing a half wave rectifier circuit using
>> a choke input filter, but I thought that was because half wave
>> circuits are usually used in low voltage circuits where a choke
>> input filter would not have any advantage anyway.
>
>
> The advantages of a choke input filter (lower RMS transformer current
> per amp of DC output, much lower high frequencies in the ripple, less
> voltage sag with increase in load current, etc.) are not directly
> related to the output voltage. The concept of a choke input filter is
> that the current is continuous through the inductor, and so, into the
> capacitor. A capacitor input filter charges the cap during brief pulses
> at the line peaks, instead, producing a higher RMS transformer current
> and higher harmonic ripple components, but also higher peak output voltage.
>
>> However in a full wave circuit how is there an alternate path?
>> The center tapped transformer simply provides two ac excitations
>> to two rectifiers 180 degress out of phase.
>
>
> The inductor current switches from one rectifier to the other as the
> transformer voltage goes through zero. At the moment the transformer
> voltage is zero, the inductor draws current through both rectifiers,
> producing an input voltage to the inductor 1 diode plus transformer
> resistance drop below the center tap voltage.
>
>> This allows only
>> one rectifier to conduct at a time. True, there is a more or less
>> constant excitation to the choke, but there is NO reverse path as
>> the diodes still only allow conduction in one direction.

>
>
> I suggest you follow those currents through the inductor for a full
> cycle. Since the inductor is in series with the secondary, if the
> secondary conducts in both directions (alternating which diode is
> conducting) then the inductor must also conduct in both directions.
>
>> Either way the choke sees a DC current, not an AC one (minus the
>> ripple, which a half sinewave imposed on a dc current).
>
>
> The diodes are turned opposite ways, so one conducts DC one way, and one
> conducts DC the other way. Both those currents pass alternately through
> the same inductor.
I tried a mental exercise, I redrew the voltage doubler adding another
winding to the power transformer to provide output 180 degress out of
phase and added two more diodes so I now had each capacitor feed by
both rectified phases. The result, is of course, a full wave bridge
rectifier, but with a center tap of the transformer coupled to the
junction of the two filter capacitors. This is similar to the
dual voltage power supplies so often seen in the ARRL handbooks from
the 60's and 70's for tube transmitters. I suppose a choke could
be placed in the lead from the anodes of one pair of diodes to ground,
so it would be commond to both outputs and the lead from the transformer
centertap isn't needed.

5366. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 00:41:30 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1132706490.722996.82350@g44g2000cwa.googlegroups.com>
Source record: 15999
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

18 x 12v = 216v with plenty current...since you are with us I assume
everything went well? ;<)

TMT

5367. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 00:46:43 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1132706803.290527.130400@g49g2000cwa.googlegroups.com>
Source record: 16000
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

Most are APCs but I have others (Best, Minuteman, etc.) and have access
to several others I have yet to see.

My questions are an attempt to learn so I can evaluate all them
properly.

I appreciate the information from those who have gone before and still
are around to tell about. ;<)

TMT

5368. Re: Simple triggered sweep.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 00:47:56 UTC
From: Yukio YANO <yano@shaw.ca>
Message-ID: <0%Ogf.578157$tl2.287340@pd7tw3no>
Source record: 16001
Cross-posted to: sci.electronics.basics,sci.electronics.design,rec.radio.amateur.homebrew

Steven Swift wrote:
> Greetings.
>
> A short while ago, I posted a request for links to simple triggered
> sweeps for older recurrent timebase oscilloscopes. I spent a fair
> amount of time looking in old magazines and circuit handbooks, but
> didn't find what I thought I was looking for.
>
> So I decided to cobble-up a homebrew of my own. This circuit probably
> has been done before, but it met my criterion of being really simple.
> I used already on-hand parts, so the design is far from optimum. It
> works fine on an Eico 460 up to about 1MHz. No attempt was made to make
> a calibrated sweep. You could use a 5v rail and an HC4538 to make a
> nice high speed triggered sweep.
>
> Have a look at:
>
> http://novatech-instr.com/Fun/trig.pdf
>
> Thank you to all of you who sent me emails and posted comments on these
> boards.
>
> Steve.
> Seattle,WA.
It would seem to me relatively easy to replace the horizontal sweep
oscillator with a 555 chip ! and trigger it with a sample of the
vertical Amp. signal !

Yukio YANO

5369. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 01:06:11 UTC
From: "Pete C." <aux3.DOH.4@snet.net>
Message-ID: <4383C081.3960E781@snet.net>
Source record: 16002
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

Too_Many_Tools wrote:
>
> Most are APCs but I have others (Best, Minuteman, etc.) and have access
> to several others I have yet to see.
>
> My questions are an attempt to learn so I can evaluate all them
> properly.
>
> I appreciate the information from those who have gone before and still
> are around to tell about. ;<)
>
> TMT

If you have any Best Fortress 1420s of the older model with the 4 digit
display, I might be interested in purchasing them sans batteries to save
on shipping if the price it right.

Pete C.

5370. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 01:36:20 UTC
From: kensmith@green.rahul.net
Message-ID: <dm0h2k$8hi$4@blue.rahul.net>
Source record: 16003
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

In article <11o6neic2a7gt64@corp.supernews.com>,
RST Engineering <jim@rstengineering.com> wrote:
>
>"Henry Kiefer" <otc_friend@gmx.net> wrote in message
>news:4382ffe2$0$27884$9b4e6d93@newsread4.arcor-online.net...
>
>> Ok Jim. You're asked about the stray components hidden in the real
>> parts/circuit.
>
>There is nothing hidden at all. Strays are a part of the real life at VHF
>and above. Sometimes strays have more effect than the part itself.

Heck, that can happen before you hit 1MHz. Check out the ESL and ESR of a
47,000uF capacitor some time.

--
--
kensmith@rahul.net forging knowledge

5371. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 01:52:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11o7iq78697846d@corp.supernews.com>
Source record: 16004
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Ken Smith wrote:
>
> Heck, that can happen before you hit 1MHz. Check out the ESL and ESR of a
> 47,000uF capacitor some time.
>

How about dielectric absorption ("soak")? I first encountered this in an electrolytic capacitor being used for generating a sweep of about a minute duration. The capacitor had to be kept shorted for several seconds between sweeps in order for the charge to adequately empty, an equivalent frequency of less than one Hz.

Roy Lewallen, W7EL

5372. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 01:53:11 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11o7iv99ppgmsca@corp.supernews.com>
Source record: 16005
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

"Ken Smith" <kensmith@green.rahul.net> wrote in message
news:dm0h2k$8hi$4@blue.rahul.net...
> Heck, that can happen before you hit 1MHz. Check out the ESL and ESR of a
> 47,000uF capacitor some time.

For some of the university work I've done, some of our reference papers are
from people modeling power lines as full-fledged transmission lines that are
many wavelengths long at 50Hz. No simple equivalent circuit model works for
them either!

5373. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 01:59:55 UTC
From: Greg O <goo1959@cableone.net>
Message-ID: <11o7j97nqklkf84@corp.supernews.com>
Source record: 16006
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
news:1132706803.290527.130400@g49g2000cwa.googlegroups.com...
> Most are APCs but I have others (Best, Minuteman, etc.) and have access
> to several others I have yet to see.
>
> My questions are an attempt to learn so I can evaluate all them
> properly.
>
> I appreciate the information from those who have gone before and still
> are around to tell about. ;<)
>
> TMT
>

I have two Minuteman units I rescued from work. Both just needed batteries.
I opened them up so I could get to the battery while they were plugged in
and checked the charging voltage. It was something over what the battery was
rated, 13 volts and a 12 volt battery, so I figured that the charging
circuit was ok. The UPS worked as far as running a load when unplugged, but
they had no reserve capacity so I took a chance and put batteries in them.
Greg

5374. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 02:02:45 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11o7jh8jtqdnk13@corp.supernews.com>
Source record: 16007
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> wrote in message
news:11o7iv99ppgmsca@corp.supernews.com...
> For some of the university work I've done, some of our reference papers are
> from people modeling power lines as full-fledged transmission lines that are
> many wavelengths long at 50Hz. No simple equivalent circuit model works for
> them either!

OK, I did get a little over-excited there -- it should say "that are
significant fractions of a wavelength long," (e.g., more than 1/6th) such that
you can't use a simple circuit model for them.

5375. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 02:12:09 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <dpj7o19ch3ekfq6c1ekhnr65iouq76trrk@4ax.com>
Source record: 16008
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Mon, 21 Nov 2005 23:55:26 -0800, "RST Engineering"
<jim@rstengineering.com> wrote:

>Well, just for starters, what does Spice say about a 1000 pf capacitor with
>either ï¿½" lead lengths or a total of 1" of PCB trace at 150 MHz.?
>
>Jim
>
>

When they matter, just poke in the appropriate series L or a bit of
transmission line. I use Spice now and then to sim picosecond stuff.
Even if the simulation isn't highly accurate, it helps train your
instincts, shows you which parasitics will have which effects, so when
you build the real thing you have a jump on the complexity.

Hell, 150 MHz is slow.

John

5376. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 02:14:52 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <k1k7o1hom8g1q8bvn3q1201oogc1sv4eds@4ax.com>
Source record: 16009
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Tue, 22 Nov 2005 10:05:02 -0800, "RST Engineering"
<jim@rstengineering.com> wrote:

>
>"Henry Kiefer" <otc_friend@gmx.net> wrote in message
>news:4382ffe2$0$27884$9b4e6d93@newsread4.arcor-online.net...
>
>> Ok Jim. You're asked about the stray components hidden in the real
>> parts/circuit.
>
>There is nothing hidden at all. Strays are a part of the real life at VHF
>and above. Sometimes strays have more effect than the part itself.
>
>
>
> If you take the values from the datasheets for die and/or
>> package or give it a guess if not available, and add values for the pcb
>> lines, you have a good simulation result.
>
>Horsefeathers. What "values" do you add for the pcb lines?
>
>

Lumped L and C if things are slow, or a hunk of transmission line when
things get fast. Works fine.

John

5377. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 02:37:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11o7lfasini0k06@corp.supernews.com>
Source record: 16010
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Joel Kolstad wrote:
> "Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> wrote in message
> news:11o7iv99ppgmsca@corp.supernews.com...
>
>>For some of the university work I've done, some of our reference papers are
>>from people modeling power lines as full-fledged transmission lines that are
>>many wavelengths long at 50Hz. No simple equivalent circuit model works for
>>them either!
>
>
> OK, I did get a little over-excited there -- it should say "that are
> significant fractions of a wavelength long," (e.g., more than 1/6th) such that
> you can't use a simple circuit model for them.
>

That's interesting -- SPICE has models for (lossless) transmission lines, and lines of that length can also be adequately modeled with a few LC sections. I can imagine line loss could be tricky, though. I've modeled skin effect loss in the process of designing time-domain circuits to compensate for delay line loss over a wide time range (and therefore broad frequency range). But loss due to interaction of the fields with ground underneath the wires might be more difficult. At least you've only got one frequency to deal with -- unless harmonic content is high enough to worry about. Perhaps you've also got to deal with loss due to radiation?

Roy Lewallen, W7EL

5378. Re: SLA charging question.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 02:49:28 UTC
From: Tom Coates <tecoatesHatesSpam@comcast.net>
Message-ID: <T-ednbSFYMFsRR7eRVn-jQ@comcast.com>
Source record: 16011

Can anyone comment on the merits of the Schumacher 1562A charger?

Tom

"J Shrum" <shrumj@madisontelco.com> wrote in message
news:n_-dnTsa8NUIvxzeRVn-hA@madisontelco.com...
> Hey guys... I've spent lots of time looking over google archives for the
> answer to this, and God knows this has been covered many times, but I've
not
> quite found my answer.
>
> I have the following QRP power supply/charger
> http://www.mfjenterprises.com/products.php?prodid=MFJ-4114 .
> Basically it comes standard to charge a 12 nicads, but I took out the
nicad
> holders and put in a 12v 5AH gel cell. I modified it to charge directly
from
> the 13.8v power supply instead of the 18v nicad charger circuit. I charged
> the battery to about 13.8v (w/ no load) by floating. If I measure the
> battery while having my radio on receive, which only draws maybe 80mA's or
> so, I see the battery dropping by .10's of a V in no time. The battery is
> brand new.
> I've noticed that the battery only draws about 30mA's while charging at
any
> voltage. I even added a switch so I can switch extra diodes between the
> regulator ground so I can charge it at 14.X volts.
>
> So my question... If it measures 13.8-14v after charging, it should be
fully
> charged, right? Is there something going on since it is only drawing 10's
of
> milliamps while charging? I've read that they charge at several hundred
> milli's. I'd like to use my QRP rig remotely, and at the rate its
dropping,
> I just don't think it will serve the purpose.
>
> Thanks for all the help.
>
> Jim, AB9LM
>
>

5379. Re: Standard GX3000 HEX File Creation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 03:51:16 UTC
From: budgie <me@privacy.net>
Message-ID: <eop7o1h86ektm8necmaofj843l0vtpfhcc@4ax.com>
Source record: 16012

On Sun, 20 Nov 2005 23:12:41 +0800, budgie <me@privacy.net> wrote:

>On Thu, 17 Nov 2005 18:16:08 -0330, "Bill" <bcrann@hotmail.com> wrote:
>
>>Can anyone tell me how to create the HEX code for the 27C16 EPROM in the VHF
>>Standard GX3000 64CH radio, or can anyone tell me where to find software to
>>create the HEX file? I have an EPROM programmer that will program the 27C16
>>EPROM, so I just need a way to create the file. I would pay for the
>>software or trade some of my radio manuals or radio software for it.
>
>Can one of you with this issue email me a BINARY taken from an eprom from a
>working GX3000, together with a list of the frequencies you generate from that
>eprom?
>
>Addie is fortyfour (as digits).at.westnet.com.au
>
>I'll see what I can do.

Obviously no takers. All trolls or just too hard?

5380. Free Old Tyme Ham Radio Calendar

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 05:27:40 UTC
From: Carl WA1KPD <nantucketbound@yahoo.com>
Message-ID: <v8ednUp9o8mMYB7eRVn-iw@comcast.com>
Source record: 16013
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

The WA1KPD Old Time ham Radio calendar is now available for free at

http://home.comcast.net/~chnord/wa1kpd.html

Click on the first link " Download the Free 2006 WA1KPD 2006 Antique Station Calendar" and it is yours to keep.

Lots of old 20's and 30's pics of ham radio setups in a monthly calendar.

73, Happy Holidays and keep 'em glowing in 2006

Carl WA1KPD

--
Carl
WA1KPD
Visit My Boatanchor Collection at
http://home.comcast.net/~chnord/wa1kpd.html

5381. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 05:34:15 UTC
From: nospam.clare.nce@sny.der.on.ca
Message-ID: <7qv7o1ptqdkeoh6mq8tjlj9rsd0eaua584@4ax.com>
Source record: 16014
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

On Wed, 23 Nov 2005 01:06:11 GMT, "Pete C." <aux3.DOH.4@snet.net>
wrote:

>Too_Many_Tools wrote:
>>
>> Most are APCs but I have others (Best, Minuteman, etc.) and have access
>> to several others I have yet to see.
>>
>> My questions are an attempt to learn so I can evaluate all them
>> properly.
>>
>> I appreciate the information from those who have gone before and still
>> are around to tell about. ;<)
>>
>> TMT
>
>If you have any Best Fortress 1420s of the older model with the 4 digit
>display, I might be interested in purchasing them sans batteries to save
>on shipping if the price it right.
>
>Pete C.
Those older Fortress units are EXCELLENT

5382. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 05:38:17 UTC
From: nospam.clare.nce@sny.der.on.ca
Message-ID: <n108o11edrshcm3ltlsu7hj8bq4kd4vvpo@4ax.com>
Source record: 16015
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

On Tue, 22 Nov 2005 12:55:29 -0800, "Bob Headrick" <bobh@proaxis.com>
wrote:

>
>"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
>news:07qdnVvtoq2Lkh7enZ2dnUVZ8qidnZ2d@pipex.net...
>
>> Bob , Interesting info ; can you confirm that the 18 pcs 12V battery were
>> in fact 9 strings of 2 batts in series (each string having a fuse)
>> providing 24 V ? or were all the 18 batts in parallel ?
>
>Actually they were all in series, making it a bit nerve-wracking to replace a
>battery in the string.
>
> - Bob W7OV
>
216 volt battery pack??? I don't think so.

5383. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 06:21:01 UTC
From: "RST Engineering (jw)" <jim@rstengineering.com>
Message-ID: <11o82iimo8iv1d6@corp.supernews.com>
Source record: 16016
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Agreed, John, 150 MHz is damned near DC for a lot of us, but as yet I have no answer from the "spice" folks for the 1 nf capacitor question. A lot of fancydancing but no answers.

Jim

"John Larkin" <jjlarkin@highNOTlandTHIStechnologyPART.com> wrote in message news:dpj7o19ch3ekfq6c1ekhnr65iouq76trrk@4ax.com...
> On Mon, 21 Nov 2005 23:55:26 -0800, "RST Engineering"
> <jim@rstengineering.com> wrote:
>
>>Well, just for starters, what does Spice say about a 1000 pf capacitor
>>with
>>either ¼" lead lengths or a total of 1" of PCB trace at 150 MHz.?
>>
>>Jim
>>
>>
>
> When they matter, just poke in the appropriate series L or a bit of
> transmission line. I use Spice now and then to sim picosecond stuff.
> Even if the simulation isn't highly accurate, it helps train your
> instincts, shows you which parasitics will have which effects, so when
> you build the real thing you have a jump on the complexity.
>
> Hell, 150 MHz is slow.
>
> John
>
>

5384. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 09:43:23 UTC
From: John Devereux <jdREMOVE@THISdevereux.me.uk>
Message-ID: <87oe4bn1hg.fsf@cordelia.devereux.me.uk>
Source record: 16017
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

"RST Engineering \(jw\)" <jim@rstengineering.com> writes:

> Agreed, John, 150 MHz is damned near DC for a lot of us, but as yet I have
> no answer from the "spice" folks for the 1 nf capacitor question. A lot of
> fancydancing but no answers.

I am not an expert, but can you not just add a bit of series L to approximate this? Or even transmission line for higher frequencies / longer tracks.

I have had surprisingly good results simulating a single transistor UHF oscillator at ~500MHz. The results agreed with reality quite well, even *without* explicitly modelling all the parasitics. Certainly spice was better than me at predicting what would happen (although that is not saying much!) I guess perhaps the reason that I could get away with this was because of the small size and high performance of SMT parts these days.

--

John Devereux

5385. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 10:40:05 UTC
From: "Pete C." <aux3.DOH.4@snet.net>
Message-ID: <43844704.391277DD@snet.net>
Source record: 16018
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

nospam.clare.nce@sny.der.on.ca wrote:
>
> On Tue, 22 Nov 2005 12:55:29 -0800, "Bob Headrick" <bobh@proaxis.com>
> wrote:
>
> >
> >"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
> >news:07qdnVvtoq2Lkh7enZ2dnUVZ8qidnZ2d@pipex.net...
> >
> >> Bob , Interesting info ; can you confirm that the 18 pcs 12V battery were
> >> in fact 9 strings of 2 batts in series (each string having a fuse)
> >> providing 24 V ? or were all the 18 batts in parallel ?
> >
> >Actually they were all in series, making it a bit nerve-wracking to replace a
> >battery in the string.
> >
> > - Bob W7OV
> >
> 216 volt battery pack??? I don't think so.

Not very common on a unit as small as 2kW, but very common on units in
the double digit kw range. If he meant 20kW instead of 2kW, it almost
certainly had a high voltage battery string. Much more efficient to have
the higher voltage at much lower current to convert to the high voltage
AC. On a 20kW unit that would put your battery current in the 85A range
for a 2xxV battery string vs. 850A range for a 24V battery string.

Pete C.

5386. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 10:40:26 UTC
From: Boris Mohar <borism_-void-_@sympatico.ca>
Message-ID: <hjh8o15lpd9t8tdulibp5ff8tnu9j3c8at@4ax.com>
Source record: 16019
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

On Tue, 22 Nov 2005 16:05:54 -0500, "Brent Atkerson"
<brent.atkerson@anrodscreen.comINVALID> wrote:

>This one interests me. Wonder how many small UPSs you could run from a
>truck battery (assuming using heavy enough cables between each UPS and each
>battery [when needed for the 24 volt input]). I am sure you would have to
>leave the vehicle running if running the UPSs for any length of time or
>heavy load... Probably pretty basic questions but I am kind of interested
>because I have a couple laying around and never thought of using them as an
>inverter (powered by a vehicle). That would make a neat addition to a
>garden tractor or something too...

Better check first if the UPS can handle a log term run of a battery. It
might be that it was designed for a short term, just to give you enough time
to power everything down properly. Longer runt time might cause some
marginal designs to overheat.

Regards,

Boris Mohar

Got Knock? - see:
Viatrack Printed Circuit Designs (among other things) http://www.viatrack.ca

void _-void-_ in the obvious place

5387. Re: Standard GX3000 HEX File Creation?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 11:53:23 UTC
From: Bill <bcrann@hotmail.com>
Message-ID: <XKYgf.21462$gK4.509078@news20.bellglobal.com>
Source record: 16020

I was emailed some software written in GWBASIC that seems to do the trick.
If anyone else is interested in the software email me directly. Thanks for
the help.

"budgie" <me@privacy.net> wrote in message
news:eop7o1h86ektm8necmaofj843l0vtpfhcc@4ax.com...
> On Sun, 20 Nov 2005 23:12:41 +0800, budgie <me@privacy.net> wrote:
>
>>On Thu, 17 Nov 2005 18:16:08 -0330, "Bill" <bcrann@hotmail.com> wrote:
>>
>>>Can anyone tell me how to create the HEX code for the 27C16 EPROM in the
>>>VHF
>>>Standard GX3000 64CH radio, or can anyone tell me where to find software
>>>to
>>>create the HEX file? I have an EPROM programmer that will program the
>>>27C16
>>>EPROM, so I just need a way to create the file. I would pay for the
>>>software or trade some of my radio manuals or radio software for it.
>>
>>Can one of you with this issue email me a BINARY taken from an eprom from
>>a
>>working GX3000, together with a list of the frequencies you generate from
>>that
>>eprom?
>>
>>Addie is fortyfour (as digits).at.westnet.com.au
>>
>>I'll see what I can do.
>
> Obviously no takers. All trolls or just too hard?

5388. Re: Simple triggered sweep.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 13:07:33 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <haq8o1h9qikga7mimkb0a076ab8cfo6en3@4ax.com>
Source record: 16021

On 22 Nov 2005 21:41:19 GMT, novatech@eskimo.com (Steven Swift) wrote:

>Greetings.
>
>A short while ago, I posted a request for links to simple triggered
>sweeps for older recurrent timebase oscilloscopes. I spent a fair
>amount of time looking in old magazines and circuit handbooks, but
>didn't find what I thought I was looking for.
>
>So I decided to cobble-up a homebrew of my own. This circuit probably
>has been done before, but it met my criterion of being really simple.
>I used already on-hand parts, so the design is far from optimum. It
>works fine on an Eico 460 up to about 1MHz. No attempt was made to make
>a calibrated sweep. You could use a 5v rail and an HC4538 to make a
>nice high speed triggered sweep.
>
>Have a look at:
>
>http://novatech-instr.com/Fun/trig.pdf
>
>Thank you to all of you who sent me emails and posted comments on these
>boards.
>
>Steve.
>Seattle,WA.

Pretty good. Did a similar thing using 3 555s. One was used as a
threshold detector, one for the Onshot (with a FET constant current
source) and one for the retrigger holdoff oneshot. Worked to well
to beyond the 5mhz scope it was used with.

Allison

5389. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 13:32:06 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <dm1r0m0m7s@drn.newsguy.com>
Source record: 16022
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

jw\ wrote...
>
> Agreed, John, 150 MHz is damned near DC for a lot of us, but as
> yet I have no answer from the "spice" folks for the 1 nf capacitor
> question. A lot of fancydancing but no answers.

Spice, smice. You got good answers. Wake up, spice is just an
engine to run your component models in circuits of your making.
Once one gets beyond the "toy" level of using spice it becomes
necessary to vet and complete the models of all your critical
components, including parasitic circuit elements. Want a good
RF capacitor model, you do well to make it yourself, from the
manufacturer's data and info, and from your understanding of the
part, aided by theory and bench measurements. Then vet your model
with more bench measurements. Thinking about component leads and
PCB wiring? Hey, you need to explicitly add all these into your
circuit. Just don't blame any resulting shortcomings on "spice."

--
Thanks,
- Win

5390. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 14:23:58 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11o8uscr7q0n613@corp.supernews.com>
Source record: 16023
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

RST Engineering (jw) wrote:
> Agreed, John, 150 MHz is damned near DC for a lot of us, but as yet I have
> no answer from the "spice" folks for the 1 nf capacitor question. A lot of
> fancydancing but no answers.
>
> Jim

I didn't realize that this question was addressed to all "'spice' folks", but was directed only to the OP. That's probably why the "'spice' folks" haven't leapt to respond. Anyone who uses SPICE professionally, and indeed a great number of amateur users should be able to answer the question easily.

At 150 MHz, a capacitor lead can generally be handled as a single lumped inductance. The amount depends on the wire's diameter and environment, but around 7 nH is a good working number for a half inch lead. The inductance of the capacitor body itself might have to be included in the model if high accuracy is important. Capacitance to ground, from both the leads and the capacitor body, might also be important if the impedance of the circuit to ground is high. If so, it can be included. The way I'd approach inclusion of the C would be to calculate the impedance and length of the transmission line comprised of the lead and ground plane or capacitor body and ground plane, then convert those values to a single series L and shunt C rather than just directly using a transmission line model -- very short transmission lines in a model can greatly slow SPICE calculations unless there are also other very short time constants involved.

On the other hand, if the "leads" are PC traces over a ground plane, shunt capacitance will be higher, and the approach I mentioned with the transmission line is the way I'd always do it. The model for the leads would include both L and C. As an example, if the "lead" is a .010" trace on .032" FR4 material (er ~ 5) over a ground plane, it makes a transmission line of Z0 = 105 ohms, velocity factor 0.55. The equivalent L and C of a half inch of this line are 8 nH and 0.73 pF respectively.

Other characteristics of the capacitor such as ESR might have to be included in the model depending on the application.

You gave a capacitor value in your question -- an ideal capacitor of that value would of course be the other part of the model.

SPICE is used daily, as it has been for decades, by professionals and produces strikingly good results in the hands of someone who is skilled at modeling and has a good understanding of the circuitry being modeled.

I've personally used SPICE for modeling linear to highly nonlinear circuits up to 50 GHz, where even tiny SMT components were often modeled as transmission lines and every pad and solder blob is significant and included. The results were used in the design of products which have been successfully produced by the thousands and sold for years.

Roy Lewallen, W7EL

5391. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 15:27:38 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <mj19o1lo0l8dm3am94cpi4g7usa5uokvdk@4ax.com>
Source record: 16024

On Wed, 23 Nov 2005 06:23:58 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>RST Engineering (jw) wrote:
>> Agreed, John, 150 MHz is damned near DC for a lot of us, but as yet I have
>> no answer from the "spice" folks for the 1 nf capacitor question. A lot of
>> fancydancing but no answers.
>>
>> Jim
>
>I didn't realize that this question was addressed to all "'spice'
>folks", but was directed only to the OP. That's probably why the
>"'spice' folks" haven't leapt to respond. Anyone who uses SPICE
>professionally, and indeed a great number of amateur users should be
>able to answer the question easily.
>
>At 150 MHz, a capacitor lead can generally be handled as a single lumped
>inductance. The amount depends on the wire's diameter and environment,
>but around 7 nH is a good working number for a half inch lead. The
>inductance of the capacitor body itself might have to be included in the
>model if high accuracy is important. Capacitance to ground, from both
>the leads and the capacitor body, might also be important if the
>impedance of the circuit to ground is high. If so, it can be included.
>The way I'd approach inclusion of the C would be to calculate the
>impedance and length of the transmission line comprised of the lead and
>ground plane or capacitor body and ground plane, then convert those
>values to a single series L and shunt C rather than just directly using
>a transmission line model -- very short transmission lines in a model
>can greatly slow SPICE calculations unless there are also other very
>short time constants involved.

The problem is the higher the frequency the more second and third
order effects are noted. A 1000pF cap at 1mhz is a cap for all
intents. At 150mhz it's now a complex RLC.

>On the other hand, if the "leads" are PC traces over a ground plane,
>shunt capacitance will be higher, and the approach I mentioned with the
>transmission line is the way I'd always do it. The model for the leads
>would include both L and C. As an example, if the "lead" is a .010"
>trace on .032" FR4 material (er ~ 5) over a ground plane, it makes a
>transmission line of Z0 = 105 ohms, velocity factor 0.55. The equivalent
>L and C of a half inch of this line are 8 nH and 0.73 pF respectively.

There is a point here where you have to ask is a PCB trace a cap,
inductor or more realisticly a transmission line. Each has it's model

and they are different. With two sided (or more layers) board the
transmission line model is likely the one to use. Especially if your
working with VHF transistors at any power level as impedences
are in the range of a few hundred ohms on the high side and fractions
of an ohm at the low side. Typical 30-100W devices have an imput
imedence under 2 ohms (and Xc) and output in the sub 4 ohms range
depending on power. In those cases everything counts and getting
hard numbers requires some work.

It hits a hard nail on what model to use and when because spice will
only give the results you asked for be they real or imagined.

>Other characteristics of the capacitor such as ESR might have to be
>included in the model depending on the application.

In most I'd naturally assume though at low VHF it's less signigicant
than at 2.4ghz.

>You gave a capacitor value in your question -- an ideal capacitor of
>that value would of course be the other part of the model.

And depending on frequency it may be a open ended transmission line
on the etch.

>SPICE is used daily, as it has been for decades, by professionals and
>produces strikingly good results in the hands of someone who is skilled
>at modeling and has a good understanding of the circuitry being modeled.
>I've personally used SPICE for modeling linear to highly nonlinear
>circuits up to 50 GHz, where even tiny SMT components were often modeled
>as transmission lines and every pad and solder blob is significant and
>included. The results were used in the design of products which have
>been successfully produced by the thousands and sold for years.
>
>Roy Lewallen, W7EL

Spice is a great tool. Like every tool one must know how it works,
how to use it to its fullest and knowing the tool can hurt you if
abused. When introduced to spice for the first time I was told
garbage in, garbage out and never assume that computer
crunched garbage is anything other than composted garbage.
What I've found is that Spice does allow you the luxury of saying
"what if" or "how does that affect xxx" even if you are not sure it's
real.

Allison
KB1GMX

5392. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 16:13:58 UTC
From: "Bruce L. Bergman" <blPYTHONbergman@earthlink.invalid>
Message-ID: <uv49o1dm4hjtqdnelh46vcf0ullrj1raju@4ax.com>
Source record: 16025
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

On Wed, 23 Nov 2005 00:38:17 -0500, nospam.clare.nce@sny.der.on.ca
wrote:
>On Tue, 22 Nov 2005 12:55:29 -0800, "Bob Headrick" <bobh@proaxis.com>
>wrote:
>>"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
>>news:07qdnVvtoq2Lkh7enZ2dnUVZ8qidnZ2d@pipex.net...

>>> Bob , Interesting info ; can you confirm that the 18 pcs 12V battery were
>>> in fact 9 strings of 2 batts in series (each string having a fuse)
>>> providing 24 V ? or were all the 18 batts in parallel ?
>>
>>Actually they were all in series, making it a bit nerve-wracking to replace a
>>battery in the string.
>
>216 volt battery pack??? I don't think so.

No, quite possible and makes some design sense - they would not need
a heavy output transformer in the unit boosting the voltage of a 36V
or 48V battery string after converting it to a sine wave AC, as 216V
would be right around the sine wave peak voltage of 120VAC. Just run
the battery DC through two sets of power transistors to let through a
reconstituted sine wave - one for the positive half of the output
waveform, the other negative.

And it cuts the current the transistors have to pass.

--<< Bruce >>--

--
Bruce L. Bergman, Woodland Hills (Los Angeles) CA - Desktop
Electrician for Westend Electric - CA726700
5737 Kanan Rd. #359, Agoura CA 91301 (818) 889-9545
Spamtrapped address: Remove the python and the invalid, and use a net.

5393. CRT tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 16:53:50 UTC
From: mrhaney <w4pqw@cox.net>
Message-ID: <1132764830.133509.289920@g43g2000cwa.googlegroups.com>
Source record: 16026

I am starting to clear out some stuff that I don`t need.. I have a 3FP7
----5FP7----5UP1 all look good.. Pay the postage and they are yours..
73 W4PQW (OK on QRZ)

5394. Re: Free Old Tyme Ham Radio Calendar

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 17:07:09 UTC
From: Larry <noone@home.com>
Message-ID: <Xns97177C3D26BC9noone@63.223.7.253>
Source record: 16027
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

"Carl WA1KPD" <nantucketbound@yahoo.com> wrote in news:v8ednUp9o8mMYB7eRVn-iw@comcast.com:

> http://home.comcast.net/~chnord/wa1kpd.html

Thanks, Carl. I emailed my ham radio buddies with your URL. Much appreciated by all.

--
Larry

5395. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 18:24:55 UTC
From: UPS DUDE <ups_dude@upsdude.com>
Message-ID: <4384B3F5.B94109C3@upsdude.com>
Source record: 16028

hi very good point, many older units will not startup w/o
running from a/c power first.

Some newer APC models you can 'fool' it into
startup by pressing the test button with it offline.

Another factor, many of these older units like
the Exide, Best, Liebert and Trip Lite are
full sine wave units, a real bargian at today prices.

There was an article in QST on adapting a smaller
ups to run on an external battery. Very easy to to,
just use good fuses MaxiFuse on the leads.

Some of these newer units use microprocessors
to run the thing so if the don't power on without
batteries, they are useless except for the transformers.

73 dude

>
>
> Beware that some UPSes refuse to start without A/C voltage
> present. Kind of stupid, but it's reality. That could hinder their use
> for emergency.

5396. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 18:27:27 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4384bb8b$0$20850$9b4e6d93@newsread2.arcor-online.net>
Source record: 16033
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

I know of a german power line corporation who develops Spice models for
their power line test equipment. So it must be possible...

- Henry

"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> schrieb im Newsbeitrag
news:11o7iv99ppgmsca@corp.supernews.com...
> "Ken Smith" <kensmith@green.rahul.net> wrote in message
> news:dm0h2k$8hi$4@blue.rahul.net...
> > Heck, that can happen before you hit 1MHz. Check out the ESL and ESR of
a
> > 47,000uF capacitor some time.
>
> For some of the university work I've done, some of our reference papers
are
> from people modeling power lines as full-fledged transmission lines that
are
> many wavelengths long at 50Hz. No simple equivalent circuit model works
for
> them either!
>
>

5397. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 18:28:48 UTC
From: UPS DUDE <ups_dude@upsdude.com>
Message-ID: <4384B4DF.51C9DF6C@upsdude.com>
Source record: 16029

Good point bob,

my liebert unit is full sine wave, from a supermarket
pos system, just replaced all three 12v batteries
with new ones, they are in series, 36 vdc.

My work ups, exide 12kva unit used 60 batteries,
three phased in series 240vdc

dude.

Bob Headrick wrote:

> "Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
> news:07qdnVvtoq2Lkh7enZ2dnUVZ8qidnZ2d@pipex.net...
>
> > Bob , Interesting info ; can you confirm that the 18 pcs 12V battery were
> > in fact 9 strings of 2 batts in series (each string having a fuse)
> > providing 24 V ? or were all the 18 batts in parallel ?
>
> Actually they were all in series, making it a bit nerve-wracking to replace a
> battery in the string.
>
> - Bob W7OV

5398. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 18:33:08 UTC
From: UPS DUDE <ups_dude@upsdude.com>
Message-ID: <4384B5E3.4276A1D@upsdude.com>
Source record: 16030

Yes, very possible !
Exide models as well at the other big boys Liebert etc.
use this configuration.

They use torrid transformers, very compact,
the entire assy about the size of a loaf of white bread !

The ups w batteries about 36" cubed. 12 KVA 3 phased.

dude

>
> >
> >216 volt battery pack??? I don't think so.
>
> No, quite possible and makes some design sense - they would not need
> a heavy output transformer in the unit boosting the voltage of a 36V
> or 48V battery string after converting it to a sine wave AC, as 216V
> would be right around the sine wave peak voltage of 120VAC. Just run
> the battery DC through two sets of power transistors to let through a
> reconstituted sine wave - one for the positive half of the output
> waveform, the other negative.
>
> And it cuts the current the transistors have to pass.
>
> --<< Bruce >>--
>
> --
> Bruce L. Bergman, Woodland Hills (Los Angeles) CA - Desktop
> Electrician for Westend Electric - CA726700
> 5737 Kanan Rd. #359, Agoura CA 91301 (818) 889-9545
> Spamtrapped address: Remove the python and the invalid, and use a net.

5399. Re: Powerpole 180A Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 18:34:34 UTC
From: UPS DUDE <ups_dude@upsdude.com>
Message-ID: <4384B639.57FC69CC@upsdude.com>
Source record: 16031

hi,

on ebay do a search for anderson power*
and you'll find them new in box or used pulls.

dude

5400. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 18:38:33 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4384bb8b$1$20850$9b4e6d93@newsread2.arcor-online.net>
Source record: 16032

I don't know why "RST" is so aggressive but I would mention here, that the
really funny part begins if you garbage in and get meaningful output!

I like to smell the solder iron but it can be very interesting playing with
Spice and see how changing values can and CAN BE NOT have a drastic result
in the simulation. Sometimes changes are not so great in result and parts
can be simpler made. e.g. changed from 1% to 5% or more.

- Henry

<nospam@nouce.bellatlantic.net> schrieb im Newsbeitrag
news:mj19o1lo0l8dm3am94cpi4g7usa5uokvdk@4ax.com...
> On Wed, 23 Nov 2005 06:23:58 -0800, Roy Lewallen <w7el@eznec.com>
> wrote:
> Spice is a great tool. Like every tool one must know how it works,
> how to use it to its fullest and knowing the tool can hurt you if
> abused. When introduced to spice for the first time I was told
> garbage in, garbage out and never assume that computer
> crunched garbage is anything other than composted garbage.
> What I've found is that Spice does allow you the luxury of saying
> "what if" or "how does that affect xxx" even if you are not sure it's
> real.
>
> Allison
> KB1GMX

5401. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 19:55:44 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4384c9b8$0$27885$9b4e6d93@newsread4.arcor-online.net>
Source record: 16034
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

OK Jim -

I simulated your question in a first trial. Here is the result:
approx. 70MegHz resonance for 100pF, 30mOhm ESR and 5nH for the trace.
Surely I would prefer smd chips having better results.

BTW: I cannot understand why you're so aggressive and I would prefer that
the thread will go in direction of my FIRST posting. I'm doing electronics
since I was 12 years old and that is 25 years back. I have for example a
patent application made and worked in the communication industry. So you can
surely think I know what I'm doing. Thanks!

- Henry

"RST Engineering (jw)" <jim@rstengineering.com> schrieb im Newsbeitrag
news:11o82iimo8iv1d6@corp.supernews.com...
> Agreed, John, 150 MHz is damned near DC for a lot of us, but as yet I have
> no answer from the "spice" folks for the 1 nf capacitor question. A lot
of
> fancydancing but no answers.
>
> Jim

5402. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 19:57:37 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4384c9b8$1$27885$9b4e6d93@newsread4.arcor-online.net>
Source record: 16035
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

You can that simulate as a rc coupled line of a few steps. That works even
for battery simulations.

- Henry

"Roy Lewallen" <w7el@eznec.com> schrieb im Newsbeitrag
news:11o7iq78697846d@corp.supernews.com...
> Ken Smith wrote:
> >
> > Heck, that can happen before you hit 1MHz. Check out the ESL and ESR of
a
> > 47,000uF capacitor some time.
> >
>
> How about dielectric absorption ("soak")? I first encountered this in an
> electrolytic capacitor being used for generating a sweep of about a
> minute duration. The capacitor had to be kept shorted for several
> seconds between sweeps in order for the charge to adequately empty, an
> equivalent frequency of less than one Hz.
>
> Roy Lewallen, W7EL

5403. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 19:59:10 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4384cae4$0$20859$9b4e6d93@newsread2.arcor-online.net>
Source record: 16036

Thanks Allison!
- Henry

<nospam@nouce.bellatlantic.net> schrieb im Newsbeitrag
news:a156o19olioeab1e5vbd18ejbcqmu6itdo@4ax.com...
> On Tue, 22 Nov 2005 12:20:25 +0100, "Henry Kiefer"
> <otc_friend@gmx.net> wrote:
>
> >Thank Mark!
> >
> >MC and Maxim is not new to me. I thought on list of cheap, easy getting
> >parts with reasonable performance.
> >
> >- Henry
>
> Minicircuits the MIMICs and mixers are of most interest and there
> are inexpensive versions in the line up. What both offer is well
> characterized RF 50 ohm port parts that behave well in circuits.
> For example you can build a DBM, can you say for sure what the
> characteristics will be from say 2-500mhz?
>
> Other useful parts from there are VCOs and RF transformers.
>
>
> Allison
>
>
>

5404. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 21:15:43 UTC
From: Rich the Newsgroup Wacko <gfy@example.net>
Message-ID: <pan.2005.11.23.20.18.13.253806@example.net>
Source record: 16037
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

On Sun, 20 Nov 2005 21:14:33 -0800, Too_Many_Tools wrote:

> I am the "lucky" owner of a number of older UPSes.
>
> So what can a person build out of these?
>
> The batteries are for the most part dead but the remainder of the
> components seem to be in good condition.
>
> Any suggestions?
>

Sell them to FedEx? ;-)
--
Cheers!
Rich

"Grain grows best in shit."
-- U.K. LeGuin

5405. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 23:05:42 UTC
From: "RST Engineering (jw)" <jim@rstengineering.com>
Message-ID: <11o9tect0adji4b@corp.supernews.com>
Source record: 16038
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

"Henry Kiefer" <otc_friend@gmx.net> wrote in message
news:4384c9b8$0$27885$9b4e6d93@newsread4.arcor-online.net...
> OK Jim -
>
> I simulated your question in a first trial. Here is the result:
> approx. 70MegHz resonance for 100pF, 30mOhm ESR and 5nH for the trace.
> Surely I would prefer smd chips having better results.

But that wasn't the question. THe question was to simulate a 1000 pf (1 nf)
capacitor at 150 MHz. with an inch of lead or an inch of normal pcb trace
and tell me what you get.

>
> BTW: I cannot understand why you're so aggressive and I would prefer that
> the thread will go in direction of my FIRST posting.

OK by me.

I'm doing electronics
> since I was 12 years old

8 years old.

> and that is 25 years back.

54 years back.

>I have for example a
> patent application made

I've got a few more.

> and worked in the communication industry.

38 years straight now.

So you can
> surely think I know what I'm doing.

Then answer the question.

Jim

5406. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-23 23:21:02 UTC
From: "Bruce L. Bergman" <blPYTHONbergman@earthlink.invalid>
Message-ID: <hgt9o11351rbobsq7rsu1eadlfcfgl7akf@4ax.com>
Source record: 16039
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

On Wed, 23 Nov 2005 16:22:24 GMT, Ignoramus22022
<ignoramus22022@NOSPAM.22022.invalid> wrote:
>On Wed, 23 Nov 2005 16:13:58 GMT, Bruce L Bergman <blPYTHONbergman@earthlink.invalid>
wrote:
>> On Wed, 23 Nov 2005 nospam.clare.nce@sny.der.on.ca wrote:
>>>On Tue, 22 Nov 2005 12:55:29 -0800, "Bob Headrick" wrote:
>>>>"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:

>>>>> Bob , Interesting info ; can you confirm that the 18 pcs 12V battery were
>>>>> in fact 9 strings of 2 batts in series (each string having a fuse)
>>>>> providing 24 V ? or were all the 18 batts in parallel ?
>>>>
>>>>Actually they were all in series, making it a bit nerve-wracking to replace a
>>>>battery in the string.
>>>
>>>216 volt battery pack??? I don't think so.
>>
>> No, quite possible and makes some design sense - they would not need
>> a heavy output transformer in the unit boosting the voltage of a 36V
>> or 48V battery string after converting it to a sine wave AC, as 216V
>> would be right around the sine wave peak voltage of 120VAC. Just run
>> the battery DC through two sets of power transistors to let through a
>> reconstituted sine wave - one for the positive half of the output
>> waveform, the other negative.
>>
>> And it cuts the current the transistors have to pass.
>
>Bruce, this also sounds like a simple approach to generating 3 phase
>out of DC. Without the noise and weight of rotary phase
>converters. What are your thoughts on that?

Quite Plausible, but when you add the caveat of reproducing 3-Phase
power the engineering just got really complicated, and more than
likely rather expensive. And I'm NOT a high-powered electronics drive
wonk by any means, the best I could do for fixing them is look for the
obviously crispy components and swap out the blown boards - or swap
the crispy parts and diodes that fail a VOM test and see if that does
it.

With a single phase inverter, they're just doing a push-pull on one
240V lead, relative to the center tapped neutral. When you try
3-phase, there's going to be constant voltage, current and capacitance
interaction between all three sets of "hot AC" switching transistors
(or Triacs, or whatever). And the load's resistive, inductive and

capacitive components are all going to come into play.

The resulting inverter would need to be built rather robust, and be able to overcome drive issues with brute force where finesse won't do. Compared to that, RPC's are the KISS method. And RPC's aren't a bad way to go, if they are well balanced and have cooling air you can tuck them away in a closet.

--<< Bruce >>--

--
Bruce L. Bergman, Woodland Hills (Los Angeles) CA - Desktop
Electrician for Westend Electric - CA726700
5737 Kanan Rd. #359, Agoura CA 91301 (818) 889-9545
Spamtrapped address: Remove the python and the invalid, and use a net.

5407. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 01:04:56 UTC
From: "Pete C." <aux3.DOH.4@snet.net>
Message-ID: <438511B7.A65CD29@snet.net>
Source record: 16040
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

Ignoramus22022 wrote:
>
> On Wed, 23 Nov 2005 23:21:02 GMT, Bruce L Bergman <blPYTHONbergman@earthlink.invalid>
wrote:
> > On Wed, 23 Nov 2005 16:22:24 GMT, Ignoramus22022
> ><ignoramus22022@NOSPAM.22022.invalid> wrote:
> >>On Wed, 23 Nov 2005 16:13:58 GMT, Bruce L Bergman <blPYTHONbergman@earthlink.invalid>
wrote:
> >>> On Wed, 23 Nov 2005 nospam.clare.nce@sny.der.on.ca wrote:
> >>>>On Tue, 22 Nov 2005 12:55:29 -0800, "Bob Headrick" wrote:
> >>>>>"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:
> >
> >>>>>> Bob , Interesting info ; can you confirm that the 18 pcs 12V battery were
> >>>>>> in fact 9 strings of 2 batts in series (each string having a fuse)
> >>>>>> providing 24 V ? or were all the 18 batts in parallel ?
> >>>>>
> >>>>>Actually they were all in series, making it a bit nerve-wracking to replace a
> >>>>>battery in the string.
> >>>>
> >>>>216 volt battery pack??? I don't think so.
> >>>
> >>> No, quite possible and makes some design sense - they would not need
> >>> a heavy output transformer in the unit boosting the voltage of a 36V
> >>> or 48V battery string after converting it to a sine wave AC, as 216V
> >>> would be right around the sine wave peak voltage of 120VAC. Just run
> >>> the battery DC through two sets of power transistors to let through a
> >>> reconstituted sine wave - one for the positive half of the output
> >>> waveform, the other negative.
> >>>
> >>> And it cuts the current the transistors have to pass.
> >>
> >>Bruce, this also sounds like a simple approach to generating 3 phase
> >>out of DC. Without the noise and weight of rotary phase
> >>converters. What are your thoughts on that?
> >
> > Quite Plausible, but when you add the caveat of reproducing 3-Phase
> > power the engineering just got really complicated, and more than
> > likely rather expensive. And I'm NOT a high-powered electronics drive
> > wonk by any means, the best I could do for fixing them is look for the
> > obviously crispy components and swap out the blown boards - or swap
> > the crispy parts and diodes that fail a VOM test and see if that does
> > it.
> >

> > With a single phase inverter, they're just doing a push-pull on one
> > 240V lead, relative to the center tapped neutral.
>
> Right. As you know, I recently made a DC -> AC inverter myself.
>
> > When you try 3-phase, there's going to be constant voltage, current
> > and capacitance interaction between all three sets of "hot AC"
> > switching transistors (or Triacs, or whatever). And the load's
> > resistive, inductive and capacitive components are all going to come
> > into play.
>
> Yep.
>
> > The resulting inverter would need to be built rather robust, and be
> > able to overcome drive issues with brute force where finesse won't do.
> > Compared to that, RPC's are the KISS method. And RPC's aren't a bad
> > way to go, if they are well balanced and have cooling air you can tuck
> > them away in a closet.
>
> You are right. I am going to redo my RPC into a 17.5 HP RPC. (two
> motors, 10 and 7.5 HP). Right now I have a 10 HP RPC.
>
> Someone offered me a Semikron 6 IGBT drive, with which I could make a
> 3 phase inverter. That sort of made me interested.
>
> i

Get your hands on a large, like 30kw or better, used as in "please take it out of here", three phase, online UPS from a computer room installation. As long as you can supply adequate power to the DC bus the inverter portion will happily generate your three phase power with no issues with designing and inverter or trying to synchronize three inverters or duty cycle problems. It's a DC - 3 phase AC continuous duty inverter, ready-to-go.

Pete C.

5408. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 01:49:31 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <dm367b01hj7@drn.newsguy.com>
Source record: 16042
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

jw\ wrote...
>
> The question was to simulate a 1000 pf (1 nf) capacitor at
> 150 MHz. with an inch of lead or an inch of normal pcb trace
> and tell me what you get.

Such a question is stupid and incomplete. First of all, in
cases where impedance matters, one wouldn't dare use an inch
of lead at 150MHz, we'd cut that short, 0.1-inch max. And
we certainly wouldn't use an inch of pcb trace unless it was
field-controlled with a ground plane. This is true whether a
1nF cap is involved or not. If you were to insist on analyzing
an inch of lead, we'd insist on knowing *all* about the ground
scene. Since you aggressively put your question without any
relevant information about what the ground is like, and where
it is, the question is intrinsically-stupid and incomplete.

Sorry, jw\, but that's the way it is.

>> BTW: I cannot understand why you're so aggressive ...

Indeed.

> Then answer the question.

Answered repeatedly already.

--
Thanks,
- Win

5409. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 02:04:18 UTC
From: JeffM <jeffm_@email.com>
Message-ID: <1132797858.290876.314360@z14g2000cwz.googlegroups.com>
Source record: 16041
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Mark wrote [WITHOUT CONTEXT]:
> there are lots of parts...

http://groups.google.com/group/sci.electronics.design/browse_frm/thread/1e72eb22780bfcee/6939ac83d77b8ded?q=don't-click-the-reply-link-that-is-in-plain-sight+To-get-context-the-easy-way+on-Google+zzz+show-options*-*-*-snip-*-*-*-*-the-automated-blockquote-*-*-*+click-THAT-Reply-link

5410. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 04:31:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11oaghi7ah9p06@corp.supernews.com>
Source record: 16043
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

RST Engineering (jw) wrote:
> . . .
> Then answer the question.

Did you find my answer to be inadequate or incorrect? If so, in what ways? If not, why do you need it to be answered again?

Roy Lewallen, W7EL
-- one of the "'spice' folks"

5411. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 06:30:26 UTC
From: "Pete C." <aux3.DOH.4@snet.net>
Message-ID: <43855E01.48A94356@snet.net>
Source record: 16044
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

Ignoramus22022 wrote:
>
> On Thu, 24 Nov 2005 01:04:56 GMT, Pete C. <aux3.DOH.4@snet.net> wrote:
> > Ignoramus22022 wrote:
> >>
> >> On Wed, 23 Nov 2005 23:21:02 GMT, Bruce L Bergman <blPYTHONbergman@earthlink.invalid>
wrote:
> >> > On Wed, 23 Nov 2005 16:22:24 GMT, Ignoramus22022
> >> ><ignoramus22022@NOSPAM.22022.invalid> wrote:
> >> >>On Wed, 23 Nov 2005 16:13:58 GMT, Bruce L Bergman
<blPYTHONbergman@earthlink.invalid> wrote:
> >> >>> On Wed, 23 Nov 2005 nospam.clare.nce@sny.der.on.ca wrote:
> >> >>>>On Tue, 22 Nov 2005 12:55:29 -0800, "Bob Headrick" wrote:
> >> >>>>>"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:
> >> >
> >> >>>>>> Bob , Interesting info ; can you confirm that the 18 pcs 12V battery were
> >> >>>>>> in fact 9 strings of 2 batts in series (each string having a fuse)
> >> >>>>>> providing 24 V ? or were all the 18 batts in parallel ?
> >> >>>>>
> >> >>>>>Actually they were all in series, making it a bit nerve-wracking to replace a
> >> >>>>>battery in the string.
> >> >>>>
> >> >>>>216 volt battery pack??? I don't think so.
> >> >>>
> >> >>> No, quite possible and makes some design sense - they would not need
> >> >>> a heavy output transformer in the unit boosting the voltage of a 36V
> >> >>> or 48V battery string after converting it to a sine wave AC, as 216V
> >> >>> would be right around the sine wave peak voltage of 120VAC. Just run
> >> >>> the battery DC through two sets of power transistors to let through a
> >> >>> reconstituted sine wave - one for the positive half of the output
> >> >>> waveform, the other negative.
> >> >>>
> >> >>> And it cuts the current the transistors have to pass.
> >> >>
> >> >>Bruce, this also sounds like a simple approach to generating 3 phase
> >> >>out of DC. Without the noise and weight of rotary phase
> >> >>converters. What are your thoughts on that?
> >> >
> >> > Quite Plausible, but when you add the caveat of reproducing 3-Phase
> >> > power the engineering just got really complicated, and more than
> >> > likely rather expensive. And I'm NOT a high-powered electronics drive
> >> > wonk by any means, the best I could do for fixing them is look for the
> >> > obviously crispy components and swap out the blown boards - or swap

> >> > the crispy parts and diodes that fail a VOM test and see if that does
> >> > it.
> >> >
> >> > With a single phase inverter, they're just doing a push-pull on one
> >> > 240V lead, relative to the center tapped neutral.
> >>
> >> Right. As you know, I recently made a DC -> AC inverter myself.
> >>
> >> > When you try 3-phase, there's going to be constant voltage, current
> >> > and capacitance interaction between all three sets of "hot AC"
> >> > switching transistors (or Triacs, or whatever). And the load's
> >> > resistive, inductive and capacitive components are all going to come
> >> > into play.
> >>
> >> Yep.
> >>
> >> > The resulting inverter would need to be built rather robust, and be
> >> > able to overcome drive issues with brute force where finesse won't do.
> >> > Compared to that, RPC's are the KISS method. And RPC's aren't a bad
> >> > way to go, if they are well balanced and have cooling air you can tuck
> >> > them away in a closet.
> >>
> >> You are right. I am going to redo my RPC into a 17.5 HP RPC. (two
> >> motors, 10 and 7.5 HP). Right now I have a 10 HP RPC.
> >>
> >> Someone offered me a Semikron 6 IGBT drive, with which I could make a
> >> 3 phase inverter. That sort of made me interested.
> >>
> >> i
> >
> > Get your hands on a large, like 30kw or better, used as in "please take
> > it out of here", three phase, online UPS from a computer room
> > installation. As long as you can supply adequate power to the DC bus the
> > inverter portion will happily generate your three phase power with no
> > issues with designing and inverter or trying to synchronize three
> > inverters or duty cycle problems. It's a DC - 3 phase AC continuous duty
> > inverter, ready-to-go.
>
> A 30 kVa UPS would weigh approximately a ton. That's without
> batteries. It is beyond what I can handle.

No way, I put in a 30kw 3 phase UPS (Best Unity/1) and it was close to a
ton with batteries. Without batteries (when I moved it across a raised
floor with a pallet jack) it was far under a ton.

>
> Since it needs a system for producing DC, it would be comparable to
> what the UPS already has.

It has a system for producing DC, it's just setup for three phase input.
Depending on how it is configured it could be quite easy to rework the

input section for single phase. The more modular the design the better and you might get lucky and find three discrete DC supplies, one fed from each phase, that couldn't care less if they were actually 120 degrees apart.

>
> That means that I would have a monster that weighs a ton.

That would mean you have all the clean sine wave three phase power your shop could need, uninterruptable no less, and heat for the winter.

>
> I almost bought a 15 kVa UPS though.
>
> i

The building I used to work in had about six monster UPSes in the basement, each feeding a 600A 208/120V 3 phase buss duct running up through the building to multiple PDUs. They had the nice 5 gal size glass cased batteries in the strings. Also had five 800KW diesel generators with paralleling switch gear and 40,000 gal of fuel supply. Redundant utility feeds as well. Place would have made a nice house if it was in a better location :)

Pete C.

5412. Re: Simple triggered sweep.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 06:58:27 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <dm3oaj$8t3$1@theodyn.ncf.ca>
Source record: 16045
Cross-posted to: sci.electronics.basics,sci.electronics.design,rec.radio.amateur.homebrew

(nospam@nouce.bellatlantic.net) writes:
> On 22 Nov 2005 21:41:19 GMT, novatech@eskimo.com (Steven Swift) wrote:
>
>>Greetings.
>>
>>A short while ago, I posted a request for links to simple triggered
>>sweeps for older recurrent timebase oscilloscopes. I spent a fair
>>amount of time looking in old magazines and circuit handbooks, but
>>didn't find what I thought I was looking for.
>>
>>So I decided to cobble-up a homebrew of my own. This circuit probably
>>has been done before, but it met my criterion of being really simple.
>>I used already on-hand parts, so the design is far from optimum. It
>>works fine on an Eico 460 up to about 1MHz. No attempt was made to make
>>a calibrated sweep. You could use a 5v rail and an HC4538 to make a
>>nice high speed triggered sweep.
>>
>>Have a look at:
>>
>>http://novatech-instr.com/Fun/trig.pdf
>>
>>Thank you to all of you who sent me emails and posted comments on these
>>boards.
>>
>>Steve.
>>Seattle,WA.
>
> Pretty good. Did a similar thing using 3 555s. One was used as a
> threshold detector, one for the Onshot (with a FET constant current
> source) and one for the retrigger holdoff oneshot. Worked to well
> to beyond the 5mhz scope it was used with.
>
> Allison
>
And as I pointed out in the previous thread, that wave thirty years
ago of adding triggered sweep to older scopes did all use 555s for
the ramp generator.

I cleared off the scanner, and
http://www.cam.org/~blackm00/ramp.jpg
is the scan out of Howard Berlin's "The 555 Timer Applications Sourcebook
with Experiments" from 1976. The actual circuit was originally in Electronics
magazine for October 11, 1973, which I likely do have (at least

the part with the circuit) somewhere but can't be bothered looking.

And as I said, this basic circuit did seem to be the basis of
all those "add triggered sweep to your oscilliscope" articles
from thirty years ago. As I recall, they were all basically like
this one.

Michael VE2BVW

5413. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 07:40:29 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <43856ed5$0$27882$9b4e6d93@newsread4.arcor-online.net>
Source record: 16046
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

"RST Engineering (jw)" <jim@rstengineering.com> schrieb im Newsbeitrag
news:11o9tect0adji4b@corp.supernews.com...
> > I simulated your question in a first trial. Here is the result:
> > approx. 70MegHz resonance for 100pF, 30mOhm ESR and 5nH for the trace.
> > Surely I would prefer smd chips having better results.
>
> But that wasn't the question. THe question was to simulate a 1000 pf (1
nf)
> capacitor at 150 MHz. with an inch of lead or an inch of normal pcb trace
> and tell me what you get.

> Then answer the question.

OK - playing on:
I got nothing. There is no power supply. No antenna interaction. No thermal
noise source. You circuit is bullshit!

Maybe we have a communication problem and should drink a beer??
- Henry

5414. Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 08:40:27 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4385b3b1$1$27887$9b4e6d93@newsread4.arcor-online.net>
Source record: 16047
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Hi all -

After my first thread going from "standard" cheap parts for up to vhf frequency to a discussion about the usefulness of Spice simulator..... I try it another time hopefully get attention of frustrated co-readers:

For example the rechtifier diode 1N4007 can be used as a rf switching diode, for example as rx/tx-switch. This is because it is a pin structure diode. This type is cheap and you can get it almost everywhere. It shows good performance for the price. Surely for high-end you should do it with another type tuned to the application it is made for. But anyway it works in some circuits.

Do you know of other interesting devices or circuits good for misuse?

Best regards -
Henry

5415. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 13:07:15 UTC
From: Stefan Heimers <stefan.usenet@heimers.ch>
Message-ID: <4385bb03@news1.ethz.ch>
Source record: 15848
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Henry Kiefer wrote:

>
> Do you know of other interesting devices or circuits good for misuse?

I never tried it myself, but I heard that some people abused opened memory
chips as cameras, back when CCD camera chips were too expensive for
hobbyists.

http://www.classiccmp.org/pipermail/cctalk/2004-May/042581.html

http://groups.google.com/group/comp.robotics.misc/browse_thread/thread/652cc4b0e1ccee57/f84b0f2d5c0b6da7?lnk=st&q=opened+RAM+chips+used+as+camera&rnum=6#f84b0f2d5c0b6da7

5416. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 15:44:52 UTC
From: upsDUDE <upsdude@nosapam.com>
Message-ID: <4385DFF2.843F1DAA@nosapam.com>
Source record: 15849

The Exide we have is configurable on output
via software, you can setup the output
via the control panel or use a laptop via
rs232 and term pgm.

the 12kva unit we have (5 years old)
is under 200 lbs w/o batteries, uses 60 12v 7ah
std cells.

5417. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 17:30:06 UTC
From: Jorgen Lund-Nielsen <jorgen.lund-nielsen@xxxxxxxxxxxxdesy.de>
Message-ID: <dm4tcv$7t29$1@claire.desy.de>
Source record: 15851
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Henry Kiefer wrote:
> Hi all -
>
> After my first thread going from "standard" cheap parts for up to vhf
> frequency to a discussion about the usefulness of Spice simulator..... I
> try it another time hopefully get attention of frustrated co-readers:
>
> For example the rechtifier diode 1N4007 can be used as a rf switching diode,
> for example as rx/tx-switch. This is because it is a pin structure diode.
> This type is cheap and you can get it almost everywhere. It shows good
> performance for the price. Surely for high-end you should do it with another
> type tuned to the application it is made for. But anyway it works in some
> circuits.
>
> Do you know of other interesting devices or circuits good for misuse?
>
> Best regards -
> Henry

Tuner Switching Diodes like the european BA244 (NOT PIN-Diodes!) work
well as medium fast Step Recovery Diodes.

Jorgen

5418. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 17:55:13 UTC
From: "RST Engineering (jw)" <jim@rstengineering.com>
Message-ID: <11obvka78059g2b@corp.supernews.com>
Source record: 15852
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

"Winfield Hill" <Winfield_member@newsguy.com> wrote in message
news:dm367b01hj7@drn.newsguy.com...

> jw\ wrote...
>>
>> The question was to simulate a 1000 pf (1 nf) capacitor at
>> 150 MHz. with an inch of lead or an inch of normal pcb trace
>> and tell me what you get.
>
> Such a question is stupid and incomplete.

No, Win, the question is well formed and quite complete. Sleep off the ten shots of Old Rammycackle and let's have the discussion when you are sober.

First of all, in
> cases where impedance matters, one wouldn't dare use an inch
> of lead at 150MHz, we'd cut that short, 0.1-inch max.

No, Win, neither you nor I would do such a thing. But somebody who is (as the OP posted) new to the RF world would do so without a second thought. You and I have been playing this game all our lives and take self-resonance into account without even thinking about it. However, a student new to the field (as my freshman engineering students are) makes the mistake repeatedly, even when using a decent text called ... um ... The Art Of Something Or Other. When their RF amplifier starts squeeging or motorboating, I tell them that the power supply isn't bypassed well enough, and I'll be damned if the first thing they do is put a BIGGER capacitor on the supply line.

I'll then ask them what they think the bypass impedance is and get the stock answer "1/(2*pi*f*c)". Hm, says I, how about the three inches of wire between the capacitor and the supply line. Oh, says them, that's a direct short. Straight wire doesn't have a reactive component. Hm, says I, let's see what the network analyzer says about that. Hm, says student, it says 60 nanohenries. How can that be? Mm, 20 nanohenries per inch for #20 wire sounds about right, so what does that series circuit look like? Hm. Inductive at the frequency of interest. Now, grasshopper, tell me about self-resonance of capacitors with long leads.

And
> we certainly wouldn't use an inch of pcb trace unless it was
> field-controlled with a ground plane.

That's not always an option in commercial gear, Win.

This is true whether a
> 1nF cap is involved or not. If you were to insist on analyzing
> an inch of lead, we'd insist on knowing *all* about the ground
> scene. Since you aggressively put your question without any
> relevant information about what the ground is like, and where
> it is, the question is intrinsically-stupid and incomplete.
>

If I didn't say what the ground is, then we can assume that I formulated the question without ground plane. 99% of the commercial products run this way.

> Sorry, jw\, but that's the way it is.

Sorry, Win, that's NOT the real world.

Jim

5419. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 18:00:37 UTC
From: "R.Freitag" <rfr-mailbox@gmx.de>
Message-ID: <dm4u3a$fo8$1@newsreader3.netcologne.de>
Source record: 15850
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Henry Kiefer wrote:
[...]
> Do you know of other interesting devices or circuits good for misuse?

Take away the hat of a 2N3055 and use it as a light sensor (sensitive).

Robert
>
> Best regards -
> Henry

--
'Vom Standpunkt eines Beamtenrechtlers aus betrachtet ist der Tod die
schï¿œrfstwirkenste aller bekannten, langfristig wirkenden Formen der
vollstï¿œndigen Dienstunfï¿œhigkeit.'
aus: Kommentar zum Beamtenrecht.

5420. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 18:04:31 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <covbo15hq9aooc41uoea1fe0kus03kn91k@4ax.com>
Source record: 15853
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Thu, 24 Nov 2005 09:40:27 +0100, "Henry Kiefer"
<otc_friend@gmx.net> wrote:

>Hi all -
>
>After my first thread going from "standard" cheap parts for up to vhf
>frequency to a discussion about the usefulness of Spice simulator..... I
>try it another time hopefully get attention of frustrated co-readers:
>
>For example the rechtifier diode 1N4007 can be used as a rf switching diode,
>for example as rx/tx-switch. This is because it is a pin structure diode.
>This type is cheap and you can get it almost everywhere. It shows good
>performance for the price. Surely for high-end you should do it with another
>type tuned to the application it is made for. But anyway it works in some
>circuits.
>
>Do you know of other interesting devices or circuits good for misuse?
>
>Best regards -
>Henry
>

A 1N4007 can also be used as a drift step-recovery diode and as a
plasma avalanche diode. Together, two can generate a kilovolt edge
with a 100 ps risetime.

GAASfets make good fast analog switches; they behave pretty much like
jfets.

Wide-open LDO regulators make nice resettable fuses.

Ferrite beads do all sorts of interesting stuff.

Power mosfets make good heaters, and TO-220 bipolar transistors make
nice temperature sensors.

LVDS line receivers are surprisingly good comparators, and *fast*

I could go on...

John

5421. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 18:20:54 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <vq0co1ph3ddjjhbfeg0cdrii8i0ml7838v@4ax.com>
Source record: 15854
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Wed, 23 Nov 2005 15:05:42 -0800, "RST Engineering \(jw\)"
<jim@rstengineering.com> wrote:

>
>"Henry Kiefer" <otc_friend@gmx.net> wrote in message
>news:4384c9b8$0$27885$9b4e6d93@newsread4.arcor-online.net...
>> OK Jim -
>>
>> I simulated your question in a first trial. Here is the result:
>> approx. 70MegHz resonance for 100pF, 30mOhm ESR and 5nH for the trace.
>> Surely I would prefer smd chips having better results.
>
>But that wasn't the question. THe question was to simulate a 1000 pf (1 nf)
>capacitor at 150 MHz. with an inch of lead or an inch of normal pcb trace
>and tell me what you get.
>
>

The question is unclear. Any component must have a return path, either
when you measure it or when you use it in a circuit. The entire loop
determines the "lead" inductance. If I solder an axial cap, with 1" of
extra leads, onto the end of a hunk of coax, and analyze it with a VNA
or TDR, I can bend the cap leads into various fat/flat loops and push
the L all over the place.

John

5422. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 18:20:57 UTC
From: CA <no@mail.com>
Message-ID: <dwnhf.38732$d5.195480@newsb.telia.net>
Source record: 15855
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

>Do you know of other interesting devices or circuits good for misuse?

The LM317 as a radio transmitter

http://web.telia.com/~u85920178/tx/317-tx.htm

5423. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 18:22:36 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <361co1pavjfi56f0kmrm8phrtb64g2kmvo@4ax.com>
Source record: 15856
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Thu, 24 Nov 2005 18:30:06 +0100, Jorgen Lund-Nielsen
<jorgen.lund-nielsen@xxxxxxxxxxxxdesy.de> wrote:

>Henry Kiefer wrote:
>> Hi all -
>>
>> After my first thread going from "standard" cheap parts for up to vhf
>> frequency to a discussion about the usefulness of Spice simulator..... I
>> try it another time hopefully get attention of frustrated co-readers:
>>
>> For example the rechtifier diode 1N4007 can be used as a rf switching diode,
>> for example as rx/tx-switch. This is because it is a pin structure diode.
>> This type is cheap and you can get it almost everywhere. It shows good
>> performance for the price. Surely for high-end you should do it with another
>> type tuned to the application it is made for. But anyway it works in some
>> circuits.
>>
>> Do you know of other interesting devices or circuits good for misuse?
>>
>> Best regards -
>> Henry
>
>Tuner Switching Diodes like the european BA244 (NOT PIN-Diodes!) work
>well as medium fast Step Recovery Diodes.
>
>Jorgen

I know a guy who uses surface-mount resistors as explosive detonators.

John

5424. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 19:11:27 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <k04co1pm0eothvth4sqbicjqe3nfikfab3@4ax.com>
Source record: 15857
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Thu, 24 Nov 2005 09:40:27 +0100, "Henry Kiefer"
<otc_friend@gmx.net> wrote:

>Hi all -
>
>After my first thread going from "standard" cheap parts for up to vhf
>frequency to a discussion about the usefulness of Spice simulator..... I
>try it another time hopefully get attention of frustrated co-readers:
>
>For example the rechtifier diode 1N4007 can be used as a rf switching diode,
>for example as rx/tx-switch. This is because it is a pin structure diode.
[snip]
>
>Best regards -
>Henry
>

That's an interesting use of the 1N4007. I've not tried that, what
kind of off capacitance do you get?

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

5425. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 19:33:39 UTC
From: Boris Mohar <borism_-void-_@sympatico.ca>
Message-ID: <345co1d2ab1b0lo01oofsa6cgaannlm08p@4ax.com>
Source record: 15861
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Cadmium sulphide (CdS) LDR as a Beta radiation detector. Not sensitive to Gamma radiation which can be an advantage because it will detect Beta in presence of Gamma. You have to paint it black. Horrible temperature sensitivity but you can use another CdS as reference.

Regards,

Boris Mohar

Got Knock? - see:
Viatrack Printed Circuit Designs (among other things) http://www.viatrack.ca

void _-void-_ in the obvious place

5426. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 19:42:23 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <rn5co1du8q33kjc57iae57jf8apakthocd@4ax.com>
Source record: 15858
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Thu, 24 Nov 2005 18:20:57 GMT, "CA" <no@mail.com> wrote:

>>Do you know of other interesting devices or circuits good for misuse?
>
>The LM317 as a radio transmitter
>
>http://web.telia.com/~u85920178/tx/317-tx.htm
>

Cool. 3T regulators, 317 and LM1117 types, can be neat power amps, for
driving unipolar loads like motors and such. Sort of a follower with a
largish offset.

Hmmm, an LM1117 followed by a monster darlington becomes a
super-follower with roughly zero offset.

John

5427. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 19:44:51 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <9u5co19jkjoep5n68ddmk71vh709v2eatk@4ax.com>
Source record: 15859
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Thu, 24 Nov 2005 18:30:06 +0100, Jorgen Lund-Nielsen
<jorgen.lund-nielsen@xxxxxxxxxxxxdesy.de> wrote:

>Henry Kiefer wrote:
>> Hi all -
>>
>> After my first thread going from "standard" cheap parts for up to vhf
>> frequency to a discussion about the usefulness of Spice simulator..... I
>> try it another time hopefully get attention of frustrated co-readers:
>>
>> For example the rechtifier diode 1N4007 can be used as a rf switching diode,
>> for example as rx/tx-switch. This is because it is a pin structure diode.
>> This type is cheap and you can get it almost everywhere. It shows good
>> performance for the price. Surely for high-end you should do it with another
>> type tuned to the application it is made for. But anyway it works in some
>> circuits.
>>
>> Do you know of other interesting devices or circuits good for misuse?
>>
>> Best regards -
>> Henry
>
>Tuner Switching Diodes like the european BA244 (NOT PIN-Diodes!) work
>well as medium fast Step Recovery Diodes.
>

Tell me about it. I tried some pins to see if they would snap, and
they turn out to have incredibly mushy reverse recovery, Slop Recovery
Diodes.

I'll have to try the varicaps.

John

5428. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 19:47:37 UTC
From: Phil Hobbs <pcdhSpamMeSenseless@us.ibm.com>
Message-ID: <438618D9.4080403@us.ibm.com>
Source record: 15860
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

John Larkin wrote:

> A 1N4007 can also be used as a drift step-recovery diode and as a
> plasma avalanche diode. Together, two can generate a kilovolt edge
> with a 100 ps risetime.

Okay, so I'm intrigued already. I have all the hardware available--two
1N4007s and a 3 kV adjustable power supply! How do I build one?

Cheers,

Phil Hobbs

5429. Re: Simple triggered sweep.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 19:55:28 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <qf6co15n868cn5kj8urohnukslhgioju0b@4ax.com>
Source record: 15862

On 24 Nov 2005 06:58:27 GMT, et472@FreeNet.Carleton.CA (Michael Black)
wrote:

> (nospam@nouce.bellatlantic.net) writes:
>> On 22 Nov 2005 21:41:19 GMT, novatech@eskimo.com (Steven Swift) wrote:
>>
>> Pretty good. Did a similar thing using 3 555s. One was used as a
>> threshold detector, one for the Onshot (with a FET constant current
>> source) and one for the retrigger holdoff oneshot. Worked to well
>> to beyond the 5mhz scope it was used with.
>>
>> Allison
>>
>And as I pointed out in the previous thread, that wave thirty years
>ago of adding triggered sweep to older scopes did all use 555s for
>the ramp generator.
>
>I cleared off the scanner, and
> http://www.cam.org/~blackm00/ramp.jpg
>is the scan out of Howard Berlin's "The 555 Timer Applications Sourcebook
>with Experiments" from 1976. The actual circuit was originally in Electronics
>magazine for October 11, 1973, which I likely do have (at least
>the part with the circuit) somewhere but can't be bothered looking.
>
>And as I said, this basic circuit did seem to be the basis of
>all those "add triggered sweep to your oscilliscope" articles
>from thirty years ago. As I recall, they were all basically like
>this one.
>
> Michael VE2BVW

It was 1972 when I first did the 555 thing. The basic circuit was
greatly improved over the one shown in the URL. But the idea
was the same. The 555 is an interesting chip and does real well
for things like threshold detection and any form of timing or timing
related functions.

Allison

5430. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 19:56:17 UTC
From: RDF <NT_Geek@NOSPAMhotmail.com>
Message-ID: <JJKdnVKrv_J-hxvenZ2dnUVZ_vmdnZ2d@comcast.com>
Source record: 15863
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

Thanks for the input! I'll get out the Fluke and download the .PDF and see what I can find before I burn the place down :) I was sort of hoping to be able to replace the stock batteries but they are so insanely expensive, hacking the box for batteries I have no use for (Still in the plastic wrap and caps on. got them in a barter) Get this- Mercedes wanted $430.00 to replace my battery for P/M- Yea right, my car now has a Optima yellow in the trunk and why a factory (much smaller and lighter too) battery would be junk after two years blows my mind.

Thanks for the info and help!

Rob Fraser

Fraser Competition Engines
Chicago, IL.

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message news:2oydnVhXno09mh7enZ2dnUVZ8qSdnZ2d@pipex.net...
>> Would a 12 V deep cycle- Optima work in a APC-UPS 1400R I keep my servers
>> and dyno on with it along with some routers and switches. I don't know
>> the output, the battery fails and I now have it frightfully bypassed. The
>> batteries died and are almost 2 bills to replace. voltages ? issues? but
>> I have a few Optima batteries from wrecked race cars that would be
>> perfect!
> ==========
> Suggest you check the charging instructions on the original battery and
> compare these with the ones applicable to the Optima type of battery.
> The battery in a UPS is on 'standby duty' The charging instruction for a
> YUASA SLA found in many UPSes has the following for standby duty :
> Voltage regulation : 13.5 - 13.8 V
> Initial current : Unlimited
>
> Connect the Optima battery to the UPS and check the voltage when the
> battery is fully charged . You can charge the battery externally to say
> 13.5 volt before you connect it to the UPS. If the fully charged
> voltage is in the above range ,you can safely use it for this purpose.
> I would think that any 12 V SLA will happily work with your APC UPS 1400R
> ,provided its capacity is adequate for the load to be maintained for the
> minimum time needed. If you use a number of batts in parallel ,please
> ensure there is an adequate FUSE in each battery circuit !
> You can also connect a much larger 12 V sealed battery to the UPS (for
> example those used in electric golf trolleys). Even non-sealed batts can
> be used provided they are located in a well ventilated area .
> I have non-sealed batts located on the loft connected via leads made from

> welding cable running to equipment in the ground floor radio shack (to
> feed radio equipment requiring a peak current not exceeding 25 Amperes)
>
> Above I mentioned batts for Golf trolleys because their cost is very
> reasonable nowadays there being a relatively large demand , hence
> competition (pun intended)
>
> Frank GM&#65533;CSZ / KN6WH
>
>
>
>

5431. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 20:07:35 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <0t6co11edadugadvv1i9mhmq2v00uaknfh@4ax.com>
Source record: 15864

On Thu, 24 Nov 2005 09:40:27 +0100, "Henry Kiefer"
<otc_friend@gmx.net> wrote:

>Hi all -
>
>After my first thread going from "standard" cheap parts for up to vhf
>frequency to a discussion about the usefulness of Spice simulator..... I
>try it another time hopefully get attention of frustrated co-readers:
>
>For example the rechtifier diode 1N4007 can be used as a rf switching diode,
>for example as rx/tx-switch. This is because it is a pin structure diode.
>This type is cheap and you can get it almost everywhere. It shows good
>performance for the price. Surely for high-end you should do it with another
>type tuned to the application it is made for. But anyway it works in some
>circuits.
>
>Do you know of other interesting devices or circuits good for misuse?
>
>Best regards -
>Henry

1n4007 as varactor (freq multiplier) and also Varicap.
You already mentioned RX/TX swich.
Also in PIN attenuator circuits.

Glass cased rectifiers (1n4007 in glass rather than epoxy)
as photodiode.

1n914 as 2ghz multipler (as varactor) to 100mw output.

1n914/4148 as silicon temperature sensor. (forward bias)

Base emitter of NPN silicon transistors as Zeners (5-8Vrange).
Makes a decent noise diode that way too.

Base collector of NPN si transistor as Varicap

Collector emitter of silicon transistors reverse biased as negative
resistance device.

Open GE and SI transistors are sensitive photodetectors.

Opened SCRs as photoswitches.

Allison

5432. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 20:27:40 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <pt7co1152lfl99cugi9fpqmuk1uo8sj7vq@4ax.com>
Source record: 15865
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Thu, 24 Nov 2005 14:47:37 -0500, Phil Hobbs
<pcdhSpamMeSenseless@us.ibm.com> wrote:

>John Larkin wrote:
>
>> A 1N4007 can also be used as a drift step-recovery diode and as a
>> plasma avalanche diode. Together, two can generate a kilovolt edge
>> with a 100 ps risetime.
>
>Okay, so I'm intrigued already. I have all the hardware available--two
>1N4007s and a 3 kV adjustable power supply! How do I build one?
>
>Cheers,
>
>Phil Hobbs

Google "Grekhov diode." A lot of the papers are for members only, but
this one gives the general idea:

http://www.ece.jhu.edu/~pps/ECE777/ADMAT/CircDev/Pulse-GENERATORS-SHAPERS/sub-nano-pulse1.
pdf

Grekhov discovered both the DSRD and the plasma avalanche effects in
cheap power diodes. The core of the DSRD effect is that, if a PIN
diode is forward biased for not too many nanoseconds, the carriers
don't have time to float all around the place so the charge profile is
good for a nice reverse snap. HP did the same thing in their classic
1430 12-GHz sampling head, circa 1965 roughly.

This box used the DSRD effect, in a semiconductor that one would not
expect to be used in an application like this...

http://www.highlandtechnology.com/DSS/T220DS.html

We bias the snap diode +48 volts (yes, forward direction) for about 80
ns before we turn the drive around for the snap. It was originally
designed for use in a LEAP atom probe.

John

5433. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 21:02:37 UTC
From: Robert Obermayer <coolpc@web.de>
Message-ID: <43862a64$0$41138$14726298@news.sunsite.dk>
Source record: 15866
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Hi,

2N3055: one-time trigger diode with abt. 160v triggering voltage
[had some ones of unknown state left from a PSU that blew one of 5
transistors, replaced them with MJ15003]

various, sometimes expensive components: firecrackers, smoke bombs,
lamps (most of the time unintended ;))

old EPROMs: Lamp.Find some pins with low resistance and apply .5-2A.

the IC/transistor that was broken and took you some hours to find the
trouble:
Get 1-5 large caps (like 12 000i¿œF 350V), charge them, and apply the
voltage to the part with a very large relay.
LOUD!

5434. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 23:13:02 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11oci80ha32mv77@corp.supernews.com>
Source record: 15867
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Zener diodes work fine as varicaps, at least at HF. The lower the zener voltage and higher the power dissipation rating, the higher the C. As someone else mentioned, transistor emitter-base junctions can be used as either zeners (typical zener voltage around 5 volts) or varicaps.

A zener can be used as a broadband noise source. I've had the best luck with zeners of 10 - 15 volt breakdown, with around 100 uA current. Some are noisier than others, and they often have a critical current where the noise is the greatest.

Tektronix used selected transistors to generate high voltage (~100 volts) fast steps (~100 ps rise time if I recall correctly) by avalanching the collector. Some fraction of some common transistor types worked satisfactorily in this application.

1N914 type diodes can be used as step recovery diodes to generate a step with about a ns risetime -- maybe faster with a chip component and some care. This could be the basis of a broadband harmonic generator.

Roy Lewallen, W7EL

5435. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 23:49:15 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <dm5jhr$a88$1@theodyn.ncf.ca>
Source record: 15868

(nospam@nouce.bellatlantic.net) writes:

> 1n4007 as varactor (freq multiplier) and also Varicap.
That's not really a new thing, or specific to the 1N4007.

Sam Harris, in that first article about parametric amplifiers in
CQ circa 1958, goes into detail of what's required, and then
practically leaves the issue of the varactor to the end. At
the time, they were new, likely expensive, and not easy to get.
Sam had it easy, he worked at Microwave Associates at the time.
So then towards the end of the article where he attends to the
issue of the varactor, he basically says use whatever's available,
try things, and at least practice with those other devices until
you get good at it, at which point it's time for the "real thing".
I have quoted that bit in the past, but I don't know where I've
put the article to get the exact wording.

And ever since then, influenced by his words or maybe independent
thought, the magazines have been full of mention of using whatever's
available as a varactor, the results varying with the diode (or
junction, since some have used part of a transistor) and of course
the application.

And of course, there was one article where the author mentioned a lot
of hum in his six meter synthesizer that used something like a 1N914
for the varactor. He then realizes that the problem was the light
of a nearby lamp getting to the actual diode theough the glass
case of the diode, and hence modulating the VCO that way.

Michael VE2BVW

5436. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-24 23:49:24 UTC
From: Jon Yaeger <jono_1@bellsouth.net>
Message-ID: <BFABBBB4.42EA2%jono_1@bellsouth.net>
Source record: 15869
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Take apart a couple of D cell carbon-zinc batteries.

Wash off the carbon rods. Put each in a wooden clothes pin and connect the attached ends to the mains voltage (US customers only, please).

Tap the free ends of the rods together. Move them apart as necessary. Very bright! Much brighter than you are.

Jon

5437. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 00:00:46 UTC
From: "Pete C." <aux3.DOH.4@snet.net>
Message-ID: <43865425.9AF462C3@snet.net>
Source record: 15870
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

RDF wrote:
>
> Thanks for the input! I'll get out the Fluke and download the .PDF and see
> what I can find before I burn the place down :) I was sort of hoping to be
> able to replace the stock batteries but they are so insanely expensive,
> hacking the box for batteries I have no use for (Still in the plastic wrap
> and caps on. got them in a barter) Get this- Mercedes wanted $430.00 to
> replace my battery for P/M- Yea right, my car now has a Optima yellow in the
> trunk and why a factory (much smaller and lighter too) battery would be junk
> after two years blows my mind.
>
> Thanks for the info and help!
>
> Rob Fraser
>
> Fraser Competition Engines
> Chicago, IL.

The VP of my department found the same thing with the battery in his
BMW. He decided that the zillion dollar original was BS so I sent him to
my favorite battery distributor for an Optima and helped him retrofit
the hold down.

Pete C.

5438. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 00:40:17 UTC
From: ehsjr <ehsjr@bellatlantic.net>
Message-ID: <R3thf.9922$BU2.983@trndny01>
Source record: 15871
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Henry Kiefer wrote:
> Hi all -
>
> After my first thread going from "standard" cheap parts for up to vhf
> frequency to a discussion about the usefulness of Spice simulator..... I
> try it another time hopefully get attention of frustrated co-readers:
>
> For example the rechtifier diode 1N4007 can be used as a rf switching diode,
> for example as rx/tx-switch. This is because it is a pin structure diode.
> This type is cheap and you can get it almost everywhere. It shows good
> performance for the price. Surely for high-end you should do it with another
> type tuned to the application it is made for. But anyway it works in some
> circuits.
>
> Do you know of other interesting devices or circuits good for misuse?
>
> Best regards -
> Henry
>
>

An LED as a shunt regulator. Also, as a varicap.
Ed

5439. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 03:43:24 UTC
From: RDF <NT_Geek@NOSPAMhotmail.com>
Message-ID: <UZydnW7ogYjDFRvenZ2dnUVZ_sudnZ2d@comcast.com>
Source record: 15872
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

Pete,
I hear ya- loud and clear. This one is even better. At 30k the P/M is to replace the serpentine belt (fully logical) I asked "How much" expecting about $30.00 He told me $220.79 Now, my car has my company name and graphic on the trunk lid, I asked the guy if it was correct and he reassured me it was and it needed a "special tool" to change it. So in I peek. Went and got a 4" C- clamp to compress a hydraulic cylinder to maintain pressure on the tensioner and installed a Gates Powergrip belt (at a whopping $14.99 at NAPA) I wonder what a $200.00 C-clamp does :)
Moral of the story- I'm not the brightest guy on the planet but that is plain theft. And people pay it, I feel sorry for them. This is why I had my ex-girlfriend's daughter take autoshop and work for me in the summer. Let some other sucker bite that hook. That in itself justified me buying a complete factory service manual and a Benz logic cartridge set for my Snap-On scanner. Hell, I would have spent that on a belt alone from the dealer.

I know it's very OT but it just leaves me angry to recall it and think I'd go for it.

All the best,

Rob Fraser

Fraser Competition Engines
Chicago, IL.
"Pete C." <aux3.DOH.4@snet.net> wrote in message
news:43865425.9AF462C3@snet.net...
> RDF wrote:
>>
>> Thanks for the input! I'll get out the Fluke and download the .PDF and
>> see
>> what I can find before I burn the place down :) I was sort of hoping to
>> be
>> able to replace the stock batteries but they are so insanely expensive,
>> hacking the box for batteries I have no use for (Still in the plastic
>> wrap
>> and caps on. got them in a barter) Get this- Mercedes wanted $430.00 to
>> replace my battery for P/M- Yea right, my car now has a Optima yellow in
>> the
>> trunk and why a factory (much smaller and lighter too) battery would be
>> junk
>> after two years blows my mind.
>>

>> Thanks for the info and help!
>>
>> Rob Fraser
>>
>> Fraser Competition Engines
>> Chicago, IL.
>
> The VP of my department found the same thing with the battery in his
> BMW. He decided that the zillion dollar original was BS so I sent him to
> my favorite battery distributor for an Optima and helped him retrofit
> the hold down.
>
> Pete C.

5440. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 05:11:07 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_43868d90@fidonet.org>
Source record: 15873

"ehsjr" bravely wrote to "All" (25 Nov 05 00:40:17)
--- on the heady topic of "Re: Unusual functions of cheap parts"

eh> From: ehsjr <ehsjr@bellatlantic.net>
eh> rec.radio.amateur.homebrew:89241 sci.electronics.components:102765
eh> sci.electronics.design:525790

eh> Henry Kiefer wrote:
> Hi all -
>
> After my first thread going from "standard" cheap parts for up to vhf
> frequency to a discussion about the usefulness of Spice simulator..... I
> try it another time hopefully get attention of frustrated co-readers:
>
> For example the rechtifier diode 1N4007 can be used as a rf switching diode,
> for example as rx/tx-switch. This is because it is a pin structure diode.
> This type is cheap and you can get it almost everywhere. It shows good
> performance for the price. Surely for high-end you should do it with another
> type tuned to the application it is made for. But anyway it works in some
> circuits.
>
> Do you know of other interesting devices or circuits good for misuse?
>
> Best regards -
> Henry

eh> An LED as a shunt regulator. Also, as a varicap.
eh> Ed

A TL431 precision bandgap voltage reference IC as a 400mW output
phono amplifier. It's in the application notes!

A*s*i*m*o*v

... Marketing success has little to do with technical merit.

5441. Conductive plastic/cermet pots

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 05:13:18 UTC
From: Ivan Makarov <miv@hotmail.com>
Message-ID: <Zfqdnd0JeKHwABveRVn-pA@rogers.com>
Source record: 15874

Hi, All,

can anybody tell if conductive plastic pots are non-inductive and can be
used for HF/50MHz ?
Same question re cermet pots.

Thks

5442. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 06:23:25 UTC
From: "Pete C." <aux3.DOH.4@snet.net>
Message-ID: <4386ADDD.9EB4CEC6@snet.net>
Source record: 15875
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

RDF wrote:
>
> Pete,
> I hear ya- loud and clear. This one is even better. At 30k the P/M is to
> replace the serpentine belt (fully logical) I asked "How much" expecting
> about $30.00 He told me $220.79 Now, my car has my company name and graphic
> on the trunk lid, I asked the guy if it was correct and he reassured me it
> was and it needed a "special tool" to change it. So in I peek. Went and got
> a 4" C- clamp to compress a hydraulic cylinder to maintain pressure on the
> tensioner and installed a Gates Powergrip belt (at a whopping $14.99 at
> NAPA) I wonder what a $200.00 C-clamp does :)
> Moral of the story- I'm not the brightest guy on the planet but that is
> plain theft. And people pay it, I feel sorry for them. This is why I had my
> ex-girlfriend's daughter take autoshop and work for me in the summer. Let
> some other sucker bite that hook. That in itself justified me buying a
> complete factory service manual and a Benz logic cartridge set for my
> Snap-On scanner. Hell, I would have spent that on a belt alone from the
> dealer.
>
> I know it's very OT but it just leaves me angry to recall it and think
> I'd go for it.
>
> All the best,
>
> Rob Fraser
>
> Fraser Competition Engines
> Chicago, IL.

With each new vehicle I have owned, I have ordered the factory service manual(s) at the same time I ordered the vehicle. I can't understand people who whine about a $100 manual set when they just spent $30,000 or more on the vehicle. I've read every one of those manuals cover to cover several times and you learn quite a bit.

Pete C.

5443. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 06:51:46 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrndodd42.n9s.ben@saturn.home.ben.com>
Source record: 15876

On 2005-11-24, John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com> wrote:
> I know a guy who uses surface-mount resistors as explosive detonators.

I understand you can place a row of surface-mount capacitors along the
edge of a board so they will be scraped off by any accidental contact
with nearby sheetmetal.

--
Ben Jackson
<ben@ben.com>
http://www.ben.com/

5444. Re: Conductive plastic/cermet pots

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 08:05:45 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11odhers7enq57a@corp.supernews.com>
Source record: 15877

Ivan Makarov wrote:
> Hi, All,
>
> can anybody tell if conductive plastic pots are non-inductive and can be
> used for HF/50MHz ?
> Same question re cermet pots.

The short answer is yes, but the long answer, as always, is more involved.

Nothing is truly non-inductive -- even a short straight piece of wire has inductance. But the inductance of a conductive plastic or cermet pot is only due to the physical length of the element. That is, it's as small as it can possibly be for the physical size of the pot. That's in contrast to a wire-wound pot which has many turns and a correspondingly much higher inductance.

Whether you can use them at a given frequency depends on the particular application. If you can tolerate a wire at that point in the circuit which is the length of the pot's element (plus the distance to the external connections), then you can tolerate the pot. Otherwise, you might or might not be able to use the pot, depending on the relationship between the inductance and resistance.

Because the element length is shorter, physically smaller pots have less inductance than larger ones.

Roy Lewallen, W7EL

5445. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 08:43:52 UTC
From: Bob Monsen <rcsurname@comcast.net>
Message-ID: <pan.2005.11.25.08.43.49.111086@comcast.net>
Source record: 15878
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Thu, 24 Nov 2005 18:49:24 -0500, Jon Yaeger wrote:

> Take apart a couple of D cell carbon-zinc batteries.
>
> Wash off the carbon rods. Put each in a wooden clothes pin and connect the
> attached ends to the mains voltage (US customers only, please).
>
> Tap the free ends of the rods together. Move them apart as necessary. Very
> bright! Much brighter than you are.

One of the MIT EE course videos on the web shows a demonstration of AC
across a pickle... it is an interesting effect. Not sure how the pickle
tastes afterward. Cooking hotdogs with AC is similar, but the pickle gives
off a much nicer translucent flickering glow. Very pretty.

Regards,
Bob Monsen

The question of the ultimate foundations and the ultimate meaning of
mathematics remains open; we do not know in what direction it will find its
final solution or even whether a final objective answer can be expected at
all. "Mathematizing" may well be a creative activity of man, like language
or music, of primary originality, whose historical decisions defy complete
objective rationalization.
- Hermann Weyl in 1944

5446. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 09:07:38 UTC
From: Pooh Bear <rabbitsfriendsandrelations@hotmail.com>
Message-ID: <4386D45A.8FCD2C77@hotmail.com>
Source record: 15879
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

John Larkin wrote:

> TO-220 bipolar transistors make nice temperature sensors.

I like that trick. Esp the isolated tab type.

Graham

5447. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 09:46:43 UTC
From: Ban <bansuri@masterweb.it>
Message-ID: <4OChf.266$5Z4.11@news.edisontel.com>
Source record: 15884
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Roy Lewallen wrote:
> Zener diodes work fine as varicaps, at least at HF. The lower the
> zener voltage and higher the power dissipation rating, the higher the
> C. As someone else mentioned, transistor emitter-base junctions can
> be used as either zeners (typical zener voltage around 5 volts) or
> varicaps.
> A zener can be used as a broadband noise source. I've had the best
> luck with zeners of 10 - 15 volt breakdown, with around 100 uA
> current. Some are noisier than others, and they often have a critical
> current where the noise is the greatest.
>
> Tektronix used selected transistors to generate high voltage (~100
> volts) fast steps (~100 ps rise time if I recall correctly) by
> avalanching the collector. Some fraction of some common transistor
> types worked satisfactorily in this application.
>
> 1N914 type diodes can be used as step recovery diodes to generate a
> step with about a ns risetime -- maybe faster with a chip component
> and some care. This could be the basis of a broadband harmonic
> generator.
> Roy Lewallen, W7EL

At a leading Ultrasonic flaw detector company we used simple low frequency
Motorola sot23 transistors in avalance mode for making a nice pulse
generator for 100MHz probes. These were better than the Zetex avalance
specified transistors.
--
ciao Ban
Apricale, Italy

5448. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 09:52:26 UTC
From: Frithiof Andreas Jensen <frithiof.jensen@die_spammer_die.ericsson.com>
Message-ID: <dm6msqbvk1@news.al.sw.ericsson.se>
Source record: 15880
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

"Henry Kiefer" <otc_friend@gmx.net> wrote in message
news:4385b3b1$1$27887$9b4e6d93@newsread4.arcor-online.net...

> Do you know of other interesting devices or circuits good for misuse?

LED's work both ways, as a light emitter and a photodiode.

The inbuilt colour filter can be used to distinguish between Grass and Not grass f.ex. by comparing output from a red and a green LED using white light as illumination.

Back when fiber was ex$$$pensive one often saw clever circuitry using two transmitters to form a duplex connection over a single fiber.

The USD 10 solar powered garden lamps will, with a little persuation, yield a nice solar cell well below the price of a similar unit in the shops - and - two 600 mAh NiMh batteries and a grotty circuit for switching the LED.

5449. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 10:08:35 UTC
From: John Devereux <jdREMOVE@THISdevereux.me.uk>
Message-ID: <8764qh82fw.fsf@cordelia.devereux.me.uk>
Source record: 15881
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

ehsjr <ehsjr@bellatlantic.net> writes:
> Henry Kiefer wrote:
> > Do you know of other interesting devices or circuits good for misuse?
> > Best regards -
> > Henry
>
> An LED as a shunt regulator. Also, as a varicap.
> Ed

Also a photodetector that is insensitive to long wavelengths (because
of the high bandgap).

--

John Devereux

5450. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 11:26:43 UTC
From: PaoloC <ollollo@hotpop.com>
Message-ID: <4386f4f3_1@x-privat.org>
Source record: 15882

(not x-posted)

Besides the already mentioned reverse-polarized diodes as varicaps (http://www.hanssummers.com/radio/varicap/index.htm), I use 74HC240 as HF QRP finals (600mW) and IRF510 as HF PA (20-30W max, QST has some articles in the past).

Paolo IK1ZYW

5451. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 11:32:07 UTC
From: "Harold E. Johnson" <w4zcb@mchsi.com>
Message-ID: <XCChf.359944$084.88153@attbi_s22>
Source record: 15883

> Besides the already mentioned reverse-polarized diodes as varicaps
> (http://www.hanssummers.com/radio/varicap/index.htm), I use 74HC240 as HF
> QRP finals (600mW) and IRF510 as HF PA (20-30W max, QST has some articles
> in the past).
>
> Paolo IK1ZYW

TL-431 Shunt regulator as a low powered fixed gain 3 terminal audio amplifier.

W4ZCB

5452. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 11:46:17 UTC
From: Jorgen Lund-Nielsen <jorgen.lund-nielsen@xxxxxxxxxxxxdesy.de>
Message-ID: <dm6tk9$8pm3$1@claire.desy.de>
Source record: 15885
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

John Larkin wrote:
> On Thu, 24 Nov 2005 18:30:06 +0100, Jorgen Lund-Nielsen
> <jorgen.lund-nielsen@xxxxxxxxxxxxdesy.de> wrote:
>
>
>>Henry Kiefer wrote:
>>
>>>Hi all -
>>>
>>>After my first thread going from "standard" cheap parts for up to vhf
>>>frequency to a discussion about the usefulness of Spice simulator..... I
>>>try it another time hopefully get attention of frustrated co-readers:
>>>
>>>For example the rechtifier diode 1N4007 can be used as a rf switching diode,
>>>for example as rx/tx-switch. This is because it is a pin structure diode.
>>>This type is cheap and you can get it almost everywhere. It shows good
>>>performance for the price. Surely for high-end you should do it with another
>>>type tuned to the application it is made for. But anyway it works in some
>>>circuits.
>>>
>>>Do you know of other interesting devices or circuits good for misuse?
>>>
>>>Best regards -
>>>Henry
>>
>>Tuner Switching Diodes like the european BA244 (NOT PIN-Diodes!) work
>>well as medium fast Step Recovery Diodes.
>>
>
>
> Tell me about it. I tried some pins to see if they would snap, and
> they turn out to have incredibly mushy reverse recovery, Slop Recovery
> Diodes.
>
> I'll have to try the varicaps.
>
> John

Hello John,

I wrote: NOT PIN - Diodes - as they wouldn't snap.

i mean Band Switching diodes for TV-Tuners like the BA244 and the BA682.

BA682 Datasheet:

http://www.vishay.com/docs/85530/85530.pdf

- and they snap! Try it!

Jorgen
dj0ud

5453. For sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 13:05:16 UTC
From: David J Windisch <davidjw@cinci.rr.com>
Message-ID: <g_Dhf.233897$Il5.95863@tornado.ohiordc.rr.com>
Source record: 15886

Hi, all concerned:

For sale:

1. 80-10M Drake L-4B amplifier, sn 1010, Eimac tubes, pwr supply sn 1000, book, in good condition electrically; cosmetically, a few scuffs around the front edges. No issues with it; I simply got an amp with 160M. If you pick it up, I could demonstrate its 600W out on c-w and 1100W out on ssb. 10-day money-back warranty, provided it comes back in the same condition it leaves.

2. Meissner Signal Shifter exciter in good working and physical condition; 3.4-30 MHz, copy of book. I got it to drive a homebrew 4-400 to a KW on c-w, but that's not going to happen.

3. ESS TIME MACHINE: complete info at:
http://www.expandedspectrumsystems.com/prod2.html
I have band-filters and 9 different crystals for 40-30-20-15-10M, FLX-90, LO1 external-lo buffer, wall wart, all manuals. Got this for experimenting with homebrew software-defined-radio, also not going to happen.

4. Original service manual for Kenwood TS850SAT. Sold rigs; buyers didn't want it.

5. Before-MFJ HyGain TH7DX broadband tri-band antenna, good condition, original book.

6. Cushcraft 402CD pre-XM240 2-element 40M yagi, good condition, with CC 40M rotatable dipole I got to make 3L yagi out of 2L.

7. TMC IPA r-f deck, uses PL-172/8295A (no tube; same *socket* as 8877; chimney could have 4-inch OD-3-1/2orso-ID machined hi-temp non-conductive ring sitting on 8877 to cover over difference in tube diameters), 750pF Tune/1000pF vac variables with turns-counters in 2-30MHz bandswitched tank which has 3/8-in silver-plated conductors, 2 multi-meters, 6CL6/6146 bandswitched driver, no power supplies.

Pls make offers, and remember shipping from 45251. Antennas can be disassembled far enough to fit in those concrete-form tubes, for shipping. You know; those ones you've seen in bigboxhardware :o)

Tks for reading.

73, Dave, N3HE
Cincinnati, OH
513-674-7202

5454. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 13:23:21 UTC
From: Jorgen Lund-Nielsen <jorgen.lund-nielsen@xxxxxxxxxxxxdesy.de>
Message-ID: <dm73aa$8sd7$1@claire.desy.de>
Source record: 15887
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Ban wrote:

> Roy Lewallen wrote:
>
>>Zener diodes work fine as varicaps, at least at HF. The lower the
>>zener voltage and higher the power dissipation rating, the higher the
>>C. As someone else mentioned, transistor emitter-base junctions can
>>be used as either zeners (typical zener voltage around 5 volts) or
>>varicaps.
>>A zener can be used as a broadband noise source. I've had the best
>>luck with zeners of 10 - 15 volt breakdown, with around 100 uA
>>current. Some are noisier than others, and they often have a critical
>>current where the noise is the greatest.
>>
>>Tektronix used selected transistors to generate high voltage (~100
>>volts) fast steps (~100 ps rise time if I recall correctly) by
>>avalanching the collector. Some fraction of some common transistor
>>types worked satisfactorily in this application.
>>
>>1N914 type diodes can be used as step recovery diodes to generate a
>>step with about a ns risetime -- maybe faster with a chip component
>>and some care. This could be the basis of a broadband harmonic
>>generator.
>>Roy Lewallen, W7EL
>
>
> At a leading Ultrasonic flaw detector company we used simple low frequency
> Motorola sot23 transistors in avalance mode for making a nice pulse
> generator for 100MHz probes. These were better than the Zetex avalance
> specified transistors.

2N2369 for fast pulses.
2N2222 and even 2N2219 works, but a bit slower and they requiring more
voltage to avalance, but still < 1nS rt
The Zetex are slower but can deliver much more current (up to 60A, ZTX
415 family).

Jorgen

5455. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 14:28:21 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1132928901.255333.129630@g43g2000cwa.googlegroups.com>
Source record: 15888
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

As an addition to the various mentions of common diodes as varactors there is a well publicized British design for a frequency tripler that will put out 2 watts at 1.3 GHz and uses five 1N914's in parallel.

I once built an HF transceiver that used CMOS logic chips for all functions except an audio low noise amp and a voltage regulator...with further thought those two could likely be done with CMOS logic too.

5456. Re: WANTED! Mostar Intrerface Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 16:23:40 UTC
From: SignalFerret <signalferret@verizon.net>
Message-ID: <gUGhf.67$HC2.8@trnddc06>
Source record: 15889

If recall Mostars had a PROM on the controller board. They're programmed using a stand alone PROM programmer. As I recall it was a big suit case looking monster.

May I ask, what frequency band is the Mostar, and more importantly, why bother. It's a Mostar. Worst Motorola radio ever!

Robert N3LGC

"Gene Rodgers" <oldcodger@verizon.net> wrote in message news:4sVff.5408$BC2.1398@trnddc04...
>I want to find a schematic for the Motorola Mostar Interface Box. I need a
>MIB to program my Mostars.
>
> Thanks,
>
> Gene ke5bfa
>

5457. Re: FS: 8877's

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 16:49:01 UTC
From: py8elo <py8elo.1z2mtb@news.radiobanter.com>
Message-ID: <py8elo.1z2mtb@news.radiobanter.com>
Source record: 15950

Hi,
how to send a pvt email for you???
I�m intersted in som tubes...
Please, mail me in pvt to py8elo@yahoo.com.br...
Best regards,
Silva.
PY8ELO

```
The Tube Man Wrote:
> FOR SALE
>
> 8877 EIMAC PULLS
> TESTED
> FULL OUTPUT
> GUARANTEED
> $340+SHIPPING
>
> + MOST ANY OTHER TUBES YOU MAY NEED
>
> PLEASE EMAIL ME WITH YOUR INQUIRIES

--
py8elo
```

5458. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 17:20:42 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <11oehva6fhp3523@corp.supernews.com>
Source record: 15890
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

And by varying the reverse bias through a current source (or moderately
large fixed resistor) you can make them into nifty phase shifters.

Jim

> I wrote: NOT PIN - Diodes - as they wouldn't snap.
>
> i mean Band Switching diodes for TV-Tuners like the BA244 and the BA682.
>
> BA682 Datasheet:
>
> http://www.vishay.com/docs/85530/85530.pdf
>
> - and they snap! Try it!
>
> Jorgen
> dj0ud
>
>

5459. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 17:26:58 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <11oeib193nk1ua7@corp.supernews.com>
Source record: 15891

Take a crystal for which you need a constant temperature. Solder the cathode of a cheap diode (1N4148 etc.) to the crystal case. Solder one end of a moderately low value half-watt resistor to the case. Bring out the anode of the diode, the free end of the resistor, and the crystal case on wire leads and encapsulate the crystal-diode-resistor in heat shrink. Use the diode as your temperature sensor, the resistor as your heating element, an opamp/driver transistor as the comparator/amplifier and bingo, the world's cheapest crystal oven. Bang-bang or linear, your choice.

Jim

>
> eh> Henry Kiefer wrote:
> > Hi all -
> >
> >
> > Do you know of other interesting devices or circuits good for misuse?
> >
> > Best regards -
> > Henry

5460. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 17:55:40 UTC
From: Frithiof Andreas Jensen <frithiof.jensen@diespammerdie.jensen.tdcadsl.dk>
Message-ID: <43875017$0$8788$edfadb0f@dread14.news.tele.dk>
Source record: 15892
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

"Henry Kiefer" <otc_friend@gmx.net> skrev i en meddelelse
news:4385b3b1$1$27887$9b4e6d93@newsread4.arcor-online.net...

> Do you know of other interesting devices or circuits good for misuse?

Unbuffered logic gates can make a really bad but still useful analogue
amplifier by adding feedback and bias.

5461. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 18:04:35 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <bgkeo1dtb6v5e788i89bl63apgakke050v@4ax.com>
Source record: 15893
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Fri, 25 Nov 2005 12:46:17 +0100, Jorgen Lund-Nielsen
<jorgen.lund-nielsen@xxxxxxxxxxxxdesy.de> wrote:

>John Larkin wrote:
>> On Thu, 24 Nov 2005 18:30:06 +0100, Jorgen Lund-Nielsen
>> <jorgen.lund-nielsen@xxxxxxxxxxxxdesy.de> wrote:
>>
>>
>>>Henry Kiefer wrote:
>>>
>>>>Hi all -
>>>>
>>>>After my first thread going from "standard" cheap parts for up to vhf
>>>>frequency to a discussion about the usefulness of Spice simulator..... I
>>>>try it another time hopefully get attention of frustrated co-readers:
>>>>
>>>>For example the rechtifier diode 1N4007 can be used as a rf switching diode,
>>>>for example as rx/tx-switch. This is because it is a pin structure diode.
>>>>This type is cheap and you can get it almost everywhere. It shows good
>>>>performance for the price. Surely for high-end you should do it with another
>>>>type tuned to the application it is made for. But anyway it works in some
>>>>circuits.
>>>>
>>>>Do you know of other interesting devices or circuits good for misuse?
>>>>
>>>>Best regards -
>>>>Henry
>>>
>>>Tuner Switching Diodes like the european BA244 (NOT PIN-Diodes!) work
>>>well as medium fast Step Recovery Diodes.
>>>
>>
>>
>> Tell me about it. I tried some pins to see if they would snap, and
>> they turn out to have incredibly mushy reverse recovery, Slop Recovery
>> Diodes.
>>
>> I'll have to try the varicaps.
>>
>> John
>
>Hello John,
>

>I wrote: NOT PIN - Diodes - as they wouldn't snap.
>

I got that!

>i mean Band Switching diodes for TV-Tuners like the BA244 and the BA682.
>
>BA682 Datasheet:
>
>http://www.vishay.com/docs/85530/85530.pdf
>
>- and they snap! Try it!

OK, I'll try some.

Thanks

John

5462. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 18:05:41 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <1ikeo19k0plc7o1au959earm3vt8s4dv9v@4ax.com>
Source record: 15894
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Fri, 25 Nov 2005 09:07:38 +0000, Pooh Bear
<rabbitsfriendsandrelations@hotmail.com> wrote:

>
>
>John Larkin wrote:
>
>> TO-220 bipolar transistors make nice temperature sensors.
>
>I like that trick. Esp the isolated tab type.
>
>Graham

There's also an LM35 in a TO-220 package! Ideal way to monitor a
heatsink.

John

5463. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 18:18:58 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <clieo1lq869ialc6um02omsfdt266dvr2c@4ax.com>
Source record: 15895
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Thu, 24 Nov 2005 18:49:24 -0500, Jon Yaeger <jono_1@bellsouth.net>
wrote:

>Take apart a couple of D cell carbon-zinc batteries.
>
>Wash off the carbon rods. Put each in a wooden clothes pin and connect the
>attached ends to the mains voltage (US customers only, please).

The problem is that the carbon rod conducts heat quite well, so after
a while, any wooden object will catch fire :-).

>Tap the free ends of the rods together. Move them apart as necessary.

You must have quite slow fuses in 110 V land if you can do a reliable
ignition without blowing the fuse. For 230 V operation, I would
suggest using a current limiting resistor (such as a large heater) or
an inductance (such as fluorescent light ballast) during the ignition.
When there is a solid arc, the current limiter can be shorted out.

Paul

5464. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 19:21:46 UTC
From: Ron G <ron@gould.net>
Message-ID: <dm7o7n02asn@news4.newsguy.com>
Source record: 15896
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Our newspaper had an article on that.
Also, for model rockets, burning up an ordinary resistor can be used as a super-cheap ignitor.
Best---
Ron

John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com> wrote in message news:361co1pavjfi56f0kmrm8phrtb64g2kmvo@4ax.com...
> On Thu, 24 Nov 2005 18:30:06 +0100, Jorgen Lund-Nielsen
> <jorgen.lund-nielsen@xxxxxxxxxxxxdesy.de> wrote:
>
> >Henry Kiefer wrote:
> >> Hi all -
> >>
> >> After my first thread going from "standard" cheap parts for up to vhf
> >> frequency to a discussion about the usefulness of Spice simulator......
I
> >> try it another time hopefully get attention of frustrated co-readers:
> >>
> >> For example the rechtifier diode 1N4007 can be used as a rf switching
diode,
> >> for example as rx/tx-switch. This is because it is a pin structure
diode.
> >> This type is cheap and you can get it almost everywhere. It shows good
> >> performance for the price. Surely for high-end you should do it with
another
> >> type tuned to the application it is made for. But anyway it works in
some
> >> circuits.
> >>
> >> Do you know of other interesting devices or circuits good for misuse?
> >>
> >> Best regards -
> >> Henry
> >
> >Tuner Switching Diodes like the european BA244 (NOT PIN-Diodes!) work
> >well as medium fast Step Recovery Diodes.
> >
> >Jorgen
>
>
> I know a guy who uses surface-mount resistors as explosive detonators.
>

> John
>
>

5465. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 20:03:32 UTC
From: meow2222@care2.com
Message-ID: <1132949012.092126.59490@g47g2000cwa.googlegroups.com>
Source record: 15897
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

John Larkin wrote:

> A 1N4007 can also be used as a drift step-recovery diode and as a
> plasma avalanche diode. Together, two can generate a kilovolt edge
> with a 100 ps risetime.
>
> GAASfets make good fast analog switches; they behave pretty much like
> jfets.
>
> Wide-open LDO regulators make nice resettable fuses.
>
> Ferrite beads do all sorts of interesting stuff.
>
> Power mosfets make good heaters, and TO-220 bipolar transistors make
> nice temperature sensors.
>
> LVDS line receivers are surprisingly good comparators, and *fast*
>
>
> I could go on...
>
> John

tell us more John

NT

5466. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 20:29:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11oet22oed6gl8b@corp.supernews.com>
Source record: 15948
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Paul Keinanen wrote:
> . . .
> You must have quite slow fuses in 110 V land if you can do a reliable
> ignition without blowing the fuse. For 230 V operation, I would
> suggest using a current limiting resistor (such as a large heater) or
> an inductance (such as fluorescent light ballast) during the ignition.
> When there is a solid arc, the current limiter can be shorted out.
>

Aren't you in danger of damaging your eyes from the UV emitted from the arc?

Roy Lewallen, W7EL

5467. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 20:48:19 UTC
From: Al <no.spam@wanted.com>
Message-ID: <no.spam-94A7B5.15482025112005@news.verizon.net>
Source record: 15949
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

In article <clieo1lq869ialc6um02omsfdt266dvr2c@4ax.com>,
Paul Keinanen <keinanen@sci.fi> wrote:

> On Thu, 24 Nov 2005 18:49:24 -0500, Jon Yaeger <jono_1@bellsouth.net>
> wrote:
>
> >Take apart a couple of D cell carbon-zinc batteries.
> >
> >Wash off the carbon rods. Put each in a wooden clothes pin and connect the
> >attached ends to the mains voltage (US customers only, please).
>
> The problem is that the carbon rod conducts heat quite well, so after
> a while, any wooden object will catch fire :-).
>
> >Tap the free ends of the rods together. Move them apart as necessary.
>
> You must have quite slow fuses in 110 V land if you can do a reliable
> ignition without blowing the fuse. For 230 V operation, I would
> suggest using a current limiting resistor (such as a large heater) or
> an inductance (such as fluorescent light ballast) during the ignition.
> When there is a solid arc, the current limiter can be shorted out.
>
> Paul
>

I would put a 100 watt lamp in series thereby limiting the current. I
would shave the ends down to points so they heated up rapidly. I put
them into a hollowed out fire brick and made a cheap furnace. Of course
don't look at it; it's like looking at the sun.

PS: I was 16 at the time ;-)

5468. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 21:51:24 UTC
From: Robert Obermayer <coolpc@web.de>
Message-ID: <43878751$0$41144$14726298@news.sunsite.dk>
Source record: 15951
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

hi,

sorry if you didnt like everything, but sometimes some voilence against parts that cost you half a day of time and gave you a bad headache while troubleshooting is necessary...

For more useful things, FETs actually can work as quite useful one-component HF oscillators if wires and connection points are properly chosen.With a second transistor one can build a working shortrange AM transmitter.

A rather useful (works perfectly for SMPS uses) AC current probe for a scope can be made by using a small UI cored RFI filter coil from a monitor, connecting its windings in series and terminating with a 1ohm resistor, to which a coax cable with BNC connector is soldered to.
The wire you want to measure the current in simply is fed trough the core one time.
This only gives quantitative measurements unless calibrated but can be very useful if you cant afford a real current probe.

The known resonant royer circiut used for CCFL inverters can be used for larger inverters if appropriate parts are chosen, and can produce some high frequency/high voltage with a transformer from a old TV (with no internal rectifier).
This has its uses, besides connecting it to a old light bulb that works as plasma globe or connecting both outputs to a large neon bulb [Bienenkorbglimmlampe], which simply looks very nice but also produces lots of RFI, so dont run it for too long.

FET gate drivers make nice TTL output stages for function generators, as these can drive rather high currents and are fairly robust.

If a slowly, steadily changing linear voltage is necessary (for ex. confirming the linearity of something) a 10turn precicion pot copuled with a slow syncronous motor (a old microwave oven has a nice 2.5u/min one) by some tape (so it slips/breaks when the pot is at its endpoint) works nicely.

5469. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-25 21:53:49 UTC
From: nospam.clare.nce@sny.der.on.ca
Message-ID: <mc1fo15f2dkhfndm85umhe419j7lr7q3kf@4ax.com>
Source record: 15952
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

On Fri, 25 Nov 2005 05:34:47 GMT, Ignoramus10725
<ignoramus10725@NOSPAM.10725.invalid> wrote:

>On Thu, 24 Nov 2005 21:43:24 -0600, RDF <NT_Geek@NOSPAMhotmail.com> wrote:
>> Pete,
>> I hear ya- loud and clear. This one is even better. At 30k the P/M is to
>> replace the serpentine belt (fully logical) I asked "How much" expecting
>> about $30.00 He told me $220.79 Now, my car has my company name and graphic
>> on the trunk lid, I asked the guy if it was correct and he reassured me it
>> was and it needed a "special tool" to change it. So in I peek. Went and got
>> a 4" C- clamp to compress a hydraulic cylinder to maintain pressure on the
>> tensioner and installed a Gates Powergrip belt (at a whopping $14.99 at
>> NAPA) I wonder what a $200.00 C-clamp does :)
>> Moral of the story- I'm not the brightest guy on the planet but that is
>> plain theft. And people pay it, I feel sorry for them. This is why I had my
>> ex-girlfriend's daughter take autoshop and work for me in the summer. Let
>> some other sucker bite that hook. That in itself justified me buying a
>> complete factory service manual and a Benz logic cartridge set for my
>> Snap-On scanner. Hell, I would have spent that on a belt alone from the
>> dealer.
>
>I do not even bother looking for honest car mechanics anymore. I gave
>up. I do everything I can do on my truck, myself. If that takes buying
>tools, usually I buy tools as it turns out to be cheaper anyway.
>
>Furthermore, I even do not deal with car mechanics when they try to
>sell their used stuff (my hobby is to resell used equipment on ebay).
>
>As soon as I learn that the seller is a car mechanic, I say something
>polite and hang up. That's not out of bitterness or some such, this
>policy does not make me lose money. I just know that I would come in,
>he would be unreasonable in his asking prices and likely even
>impolite, and try to screw me in every way he can.
>
>i

Too bad all you've met are the bad ones. There are a few good ones
left - but most of US have gotten out.(which leaves only the bad ones
for you to deal with).
I got out, largely, because the CUSTOMERS are unpolite,
demanding,dishonest, cheap, and generally impossible to satisfy - even
when you do something for nothing.
They book their car for 3 hours of work and don't show up, after you
have made room in your busy schedule to get them in NOW - and that is

only because it is IMPOSSIBLE to do it yesterday. Then they want you
to diagnose the problem over the phone and guarantee the price - AND
be cheaper than the other 10 or 12 mechanics they have done the same
thing to. If you can't get the parts PRONTO, they cry and complain -
and you can NOT have every possible part available - the dealers don't
either. Then they lie about what has happened to the car, because they
want it to be someone elses fault and problem, not their own.
You fix the car and they leave and stop payment on the check or
dispute the charge on their credit card. Not only that, they bad-mouth
you to everyone who will listen when at the bar, a party, or wherever,
whenever the subject of auto repair or car problems comes up - which
is ANY time. Then 3 months later, after you have fixed, say the
brakes, they come back with the wiper motor not working - and - you
guessed it - its YOUR fault!!!!
>

It just wasn't fun any more after 25 years - and its gotten a whole
lot worse in the last 15 or more years.
>
>> I know it's very OT but it just leaves me angry to recall it and think
>> I'd go for it.
>>
>> All the best,
>>
>> Rob Fraser
>>
>>
>> Fraser Competition Engines
>> Chicago, IL.
>> "Pete C." <aux3.DOH.4@snet.net> wrote in message
>> news:43865425.9AF462C3@snet.net...
>>> RDF wrote:
>>>>
>>>> Thanks for the input! I'll get out the Fluke and download the .PDF and
>>>> see
>>>> what I can find before I burn the place down :) I was sort of hoping to
>>>> be
>>>> able to replace the stock batteries but they are so insanely expensive,
>>>> hacking the box for batteries I have no use for (Still in the plastic
>>>> wrap
>>>> and caps on. got them in a barter) Get this- Mercedes wanted $430.00 to
>>>> replace my battery for P/M- Yea right, my car now has a Optima yellow in
>>>> the
>>>> trunk and why a factory (much smaller and lighter too) battery would be
>>>> junk
>>>> after two years blows my mind.
>>>>
>>>> Thanks for the info and help!
>>>>
>>>> Rob Fraser

>>>>
>>>> Fraser Competition Engines
>>>> Chicago, IL.
>>>
>>> The VP of my department found the same thing with the battery in his
>>> BMW. He decided that the zillion dollar original was BS so I sent him to
>>> my favorite battery distributor for an Optima and helped him retrofit
>>> the hold down.
>>>
>>> Pete C.
>>
>>

5470. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 01:50:49 UTC
From: shb*NO*SPAM*@comporium.net
Message-ID: <4387be6d.204451325@news.comporium.net>
Source record: 15953
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Fri, 25 Nov 2005 20:48:19 GMT, Al <no.spam@wanted.com> wrote:

>In article <clieo1lq869ialc6um02omsfdt266dvr2c@4ax.com>,
> Paul Keinanen <keinanen@sci.fi> wrote:
>
>> On Thu, 24 Nov 2005 18:49:24 -0500, Jon Yaeger <jono_1@bellsouth.net>
>> wrote:
>>
>> >Take apart a couple of D cell carbon-zinc batteries.
>> >
>> >Wash off the carbon rods. Put each in a wooden clothes pin and connect the
>> >attached ends to the mains voltage (US customers only, please).
>>
>> The problem is that the carbon rod conducts heat quite well, so after
>> a while, any wooden object will catch fire :-).
>>
>> >Tap the free ends of the rods together. Move them apart as necessary.
>>
>> You must have quite slow fuses in 110 V land if you can do a reliable
>> ignition without blowing the fuse. For 230 V operation, I would
>> suggest using a current limiting resistor (such as a large heater) or
>> an inductance (such as fluorescent light ballast) during the ignition.
>> When there is a solid arc, the current limiter can be shorted out.
>>
>> Paul
>>
>
>I would put a 100 watt lamp in series thereby limiting the current. I
>would shave the ends down to points so they heated up rapidly. I put
>them into a hollowed out fire brick and made a cheap furnace. Of course
>don't look at it; it's like looking at the sun.

The current limiter I saw used a glass pie pan with pieces copper
metal on each side with salty water as the electrolyte. It would
start to steam some when in operation. The furnace was a small
clay flower pot with holes in each side with the carbon rods
sticking inside until they touched.

5471. 12 vdc distribution network?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 02:32:00 UTC
From: Denton <denton@oregontrail.net>
Message-ID: <11ofi91dgtedh04@corp.supernews.com>
Source record: 15954

Hi all...
I am looking for an idea or schematic for a dc power distribution box...something that will allow me to feed two vhf/uhf and two hf rigs from the same power supply and battery pack, with sufficient rf isolation.
Thanks in advance de Denton WB7TDG

5472. Re: Conductive plastic/cermet pots

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 02:52:56 UTC
From: Ivan Makarov <miv@hotmail.com>
Message-ID: <PfydnZscQ9eYUxrenZ2dnUVZ_tGdnZ2d@rogers.com>
Source record: 15955

Thanks, Roy,

and multiturn conductive plastic/cermet pots still have the same flat
element, say , 340 degree, but incude a vernier dial that changes turns
ratio?

Thks

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:11odhers7enq57a@corp.supernews.com...
> Ivan Makarov wrote:
> > Hi, All,
> >
> > can anybody tell if conductive plastic pots are non-inductive and can be
> > used for HF/50MHz ?
> > Same question re cermet pots.
>
> The short answer is yes, but the long answer, as always, is more involved.
>
> Nothing is truly non-inductive -- even a short straight piece of wire
> has inductance. But the inductance of a conductive plastic or cermet pot
> is only due to the physical length of the element. That is, it's as
> small as it can possibly be for the physical size of the pot. That's in
> contrast to a wire-wound pot which has many turns and a correspondingly
> much higher inductance.
>
> Whether you can use them at a given frequency depends on the particular
> application. If you can tolerate a wire at that point in the circuit
> which is the length of the pot's element (plus the distance to the
> external connections), then you can tolerate the pot. Otherwise, you
> might or might not be able to use the pot, depending on the relationship
> between the inductance and resistance.
>
> Because the element length is shorter, physically smaller pots have less
> inductance than larger ones.
>
> Roy Lewallen, W7EL

5473. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 03:13:38 UTC
From: Phil Hobbs <pcdhSpamMeSenseless@us.ibm.com>
Message-ID: <4387D2E2.4000500@us.ibm.com>
Source record: 15956
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Si Ballenger wrote:

>>I would put a 100 watt lamp in series thereby limiting the current. I
>>would shave the ends down to points so they heated up rapidly. I put
>>them into a hollowed out fire brick and made a cheap furnace. Of course
>>don't look at it; it's like looking at the sun.
>
>
> The current limiter I saw used a glass pie pan with pieces copper
> metal on each side with salty water as the electrolyte. It would
> start to steam some when in operation. The furnace was a small
> clay flower pot with holes in each side with the carbon rods
> sticking inside until they touched.
>

As a boy, I used an electric teakettle as a ballast for a two-D-cell carbon arc lamp--worked great.

Cheers,

Phil Hobbs

5474. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 04:24:01 UTC
From: boB_K7IQ <boB>
Message-ID: <5gofo1l9ajqbsgps7abg1fealcr185re2r@4ax.com>
Source record: 15957

A simple 1.0 K Ohm or so carbon film resistor placed across the line makes a very nice display after a couple of seconds. They also make a handy fuse to trigger a little firecracker when used as a "surprise" for some unsuspecting technician placed across his load behind the workbench when he turns it on in the morning.

boB
K7IQ

5475. Re: Conductive plastic/cermet pots

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 04:27:49 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11ofp28a8gubec1@corp.supernews.com>
Source record: 15958

Ivan Makarov wrote:
> Thanks, Roy,
>
> and multiturn conductive plastic/cermet pots still have the same flat
> element, say , 340 degree, but incude a vernier dial that changes turns
> ratio?

I've seen pots of both types, but I think the only ones I've seen with a multi-turn helical element were wirewound. I'd say look at the shape of the pot -- if it's a flattened cylinder like a conventional pot, it's probably got a single flat element. On ones I have like that, the planetary vernier drive is obvious. But if it's shaped more like a tin can, I'd suspect a multi-turn element.

Roy Lewallen, W7EL

5476. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 05:33:15 UTC
From: Ralph Barone <this_is_not_valid@shau.ca>
Message-ID: <this_is_not_valid-7DD15C.21330025112005@news>
Source record: 15959
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

In article <no.spam-94A7B5.15482025112005@news.verizon.net>,
Al <no.spam@wanted.com> wrote:

> In article <clieo1lq869ialc6um02omsfdt266dvr2c@4ax.com>,
> Paul Keinanen <keinanen@sci.fi> wrote:
>
> > On Thu, 24 Nov 2005 18:49:24 -0500, Jon Yaeger <jono_1@bellsouth.net>
> > wrote:
> >
> > >Take apart a couple of D cell carbon-zinc batteries.
> > >
> > >Wash off the carbon rods. Put each in a wooden clothes pin and connect the
> > >attached ends to the mains voltage (US customers only, please).
> >
> > The problem is that the carbon rod conducts heat quite well, so after
> > a while, any wooden object will catch fire :-).
> >
> > >Tap the free ends of the rods together. Move them apart as necessary.
> >
> > You must have quite slow fuses in 110 V land if you can do a reliable
> > ignition without blowing the fuse. For 230 V operation, I would
> > suggest using a current limiting resistor (such as a large heater) or
> > an inductance (such as fluorescent light ballast) during the ignition.
> > When there is a solid arc, the current limiter can be shorted out.
> >
> > Paul
> >
>
> I would put a 100 watt lamp in series thereby limiting the current. I
> would shave the ends down to points so they heated up rapidly. I put
> them into a hollowed out fire brick and made a cheap furnace. Of course
> don't look at it; it's like looking at the sun.
>
> PS: I was 16 at the time ;-)

I used a 0.5 or 0.7 mm pencil lead gently torqued down across the
terminals of a regulated DC power supply. Set the current limit very
low, crank the voltage up all the way and increase the current limit
until the center of the lead starts glowing red. Due to the heatsinking
effect of the binding posts, the lead will always heat up the most in
the center, then the carbon will start to evaporate and the remaining
lead will gradually neck down in the center until it is glowing white
hot. As soon as the lead breaks in the middle, you convert from
incandescent to carbon arc lamp, which usually surprises everybody

watching. The arc is good for about 5 seconds until the voltage drop across the arc exceeds the capability of the power supply.

5477. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 05:59:10 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <4387FA25.9040302@nettally.com>
Source record: 15960
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

I have also seen thermistors used as a self regulating thermal element
for a crystal oven.

Joe Leikhim K4SAT
"The RFI-EMI-GUY"

"Follow The Money"

Pooh Bear wrote:

>John Larkin wrote:
>
>
>
>>TO-220 bipolar transistors make nice temperature sensors.
>>
>>
>
>I like that trick. Esp the isolated tab type.
>
>Graham
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"

"Follow The Money"

5478. Re: WANTED! Mostar Intrerface Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 06:10:52 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <4387FCE3.90209@nettally.com>
Source record: 15961

The Mostars originally used an EPSON "computer" as a programmer. The program was on a tape drive. Very clunky. Later on the MIB programmer was developed. I am sure you had to burn a code plug in any event.

The Mostars had a couple problems 1) The UHF ones had a problem with tin "whiskers" growing inside the helical preselector casting which would short out and detune the front end. It was impossible to repair this part as it was permanently attached to the main board. 2) the 800 MHz ones had a problem with thermal and mechanical expansion which affected the VCO helical coil which was housed in the casting called the "helical hotel" by the development engineer. This part you could solder with special solder but it would soon again fail. The symptom was an intermittent radio (no TX or RX). If you banged on it, it would start working again for days.

Apart from these serious problems, the radios were quite an advancement from the previous Maxar radios which used crystals and leaded components. I believe the Mostars were the first Motorola radios to use surface mount components and metric fastners.

SignalFerret wrote:

>If recall Mostars had a PROM on the controller board. They're programmed
>using a stand alone PROM programmer. As I recall it was a big suit case
>looking monster.
>
>May I ask, what frequency band is the Mostar, and more importantly, why
>bother. It's a Mostar. Worst Motorola radio ever!
>
>Robert N3LGC
>
>"Gene Rodgers" <oldcodger@verizon.net> wrote in message
>news:4sVff.5408$BC2.1398@trnddc04...
>
>
>>I want to find a schematic for the Motorola Mostar Interface Box. I need a
>>MIB to program my Mostars.
>>
>>Thanks,
>>
>>Gene ke5bfa
>>
>>
>>
>

>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"

"Follow The Money"

5479. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 09:56:55 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <2a8go1tmpkvjo2ceemnnrp5ooln57m5vg1@4ax.com>
Source record: 15962
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Fri, 25 Nov 2005 12:29:52 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Paul Keinanen wrote:
>> . . .
>> You must have quite slow fuses in 110 V land if you can do a reliable
>> ignition without blowing the fuse. For 230 V operation, I would
>> suggest using a current limiting resistor (such as a large heater) or
>> an inductance (such as fluorescent light ballast) during the ignition.
>> When there is a solid arc, the current limiter can be shorted out.
>>
>
>Aren't you in danger of damaging your eyes from the UV emitted from the arc?

Certainly.

I used arc welding glasses when conducing these experiments.

Some trivia:

In the silent film era, actors had eye problems due to the UV
radiation from arc studio lamps.

Most of the usable illumination from the arc lights is actually from
the glowing carbon electrodes.

"Automatic arc lights" used a solenoid in series with the arc to keep
the distance constant between the poles regardless of carbon electrode
burnout. I assume that if this is to be used with a AC arc light, both
the moving coil as well as the static coil should carry the arc
current.

Paul OH3LWR

5480. Re: For sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 11:11:41 UTC
From: David J Windisch <davidjw@cinci.rr.com>
Message-ID: <NpXhf.121142$Hs.25343@tornado.ohiordc.rr.com>
Source record: 15963

Ads were a bit cryptic, sri. I'm seeking *offers*, tks. 73, Dave, N3HE

5481. Re: For sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 11:15:40 UTC
From: David J Windisch <davidjw@cinci.rr.com>
Message-ID: <wtXhf.121144$Hs.20367@tornado.ohiordc.rr.com>
Source record: 15964

Ads were a bit cryptic, sri. I'm seeking *offers*, tks. 73, Dave, N3HE

5482. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 11:19:18 UTC
From: Murray <me@erewhon.net>
Message-ID: <43884488$0$12455$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 15965
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Frithiof Andreas Jensen wrote:

> "Henry Kiefer" <otc_friend@gmx.net> skrev i en meddelelse
> news:4385b3b1$1$27887$9b4e6d93@newsread4.arcor-online.net...
>
>
>>Do you know of other interesting devices or circuits good for misuse?
>
>
> Unbuffered logic gates can make a really bad but still useful analogue
> amplifier by adding feedback and bias.
>
>
E.G the CMOS 4007. See the old handbooks for a '100dB
amplifier' based on a RCA chip - there was a wiring
error in that old description - IIRC it was 3800? -
whatever, the 4007 is the same chip.

Murray vk4aok

5483. Crystal VCO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 12:01:06 UTC
From: Apparatus <apparatus.home@lycos.com>
Message-ID: <1133006466.459174.216740@z14g2000cwz.googlegroups.com>
Source record: 15966

Hi all,

I have a colpitts crystal oscillator with a 16.000 MHz parallel resonance crystal that I'm turning into a FSK modulator with the addition of a varactor / varicap diode. Two questions:

Originally, I had the varicap diode in parallel with the crystal. This caused the oscillation to significantly attenuate (10 dB or so) as I pulled the crystal 1 - 2 kHz. I found a reference design of a Hartley oscillator that had two varicaps in series with a resonance capacitor, so I decided to give this a try. This works a lot better, attenuating my 1Vpp oscillation about 100mVpp. Why does the series configuration work so much better?

I'm at home where I only have an analog tektronix 2213 60MHz scope (no spectrum analyzer). How can I measure the frequency deviation / pull of the crystal with the series configuration? Any ideas?

Cheers,
Chris

5484. FAQ - Is anyone interested in _REAL_ Ham Radio any more?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 12:35:33 UTC
From: Heinrich Hurts <aiyr.r.bean@lycos.co.uk>
Message-ID: <1133008533.449590.8800@z14g2000cwz.googlegroups.com>
Source record: 15967
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,

competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B

licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

5485. Crystal VCO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 12:36:51 UTC
From: Apparatus <apparatus.home@lycos.com>
Message-ID: <1133008611.942023.234010@g44g2000cwa.googlegroups.com>
Source record: 15968

Hi all,

I have a colpitts crystal oscillator with a 16.000 MHz parallel resonance crystal that I'm turning into a FSK modulator with the addition of a varactor / varicap diode. Two questions:

Originally, I had the varicap diode in parallel with the crystal. This caused the oscillation to significantly attenuate (10 dB or so) as I pulled the crystal 1 - 2 kHz. I found a reference design of a Hartley oscillator that had two varicaps in series with a resonance capacitor, so I decided to give this a try. This works a lot better, attenuating my 1Vpp oscillation about 100mVpp. Why does the series configuration work so much better?

I'm at home where I only have an analog tektronix 2213 60MHz scope (no spectrum analyzer). How can I measure the frequency deviation / pull of the crystal with the series configuration? Any ideas?

Cheers,
Chris

5486. Re: Crystal VCO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 12:55:32 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11ogmqadr5i3c0e@corp.supernews.com>
Source record: 15969

Apparatus wrote:
> . . .
> I'm at home where I only have an analog tektronix 2213 60MHz scope (no
> spectrum analyzer). How can I measure the frequency deviation / pull of
> the crystal with the series configuration? Any ideas?

If you have another crystal, build a second oscillator. Run the two into a mixer followed by a simple lowpass filter, and measure the resulting difference frequency.

Roy Lewallen, W7EL

5487. Re: Crystal VCO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 13:15:45 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <p6WdndH2jbo9whXeRVn-og@bright.net>
Source record: 15970

Wouldn't it be easier to use a frequency counter? If one is not
available, but a general coverage HF receiver or transceiver with a
digital readout is available, you could zero beat the oscillator, note
the reading on the display, cause the oscillator to shift to your other
frequency, zero beat that signal, note the display reading and subtract
to find the difference in frequency.

Scott

Roy Lewallen wrote:
> Apparatus wrote:
>
>> . . .
>> I'm at home where I only have an analog tektronix 2213 60MHz scope (no
>> spectrum analyzer). How can I measure the frequency deviation / pull of
>> the crystal with the series configuration? Any ideas?
>
>
> If you have another crystal, build a second oscillator. Run the two into
> a mixer followed by a simple lowpass filter, and measure the resulting
> difference frequency.
>
> Roy Lewallen, W7EL

5488. Re: FAQ - Is anyone interested in _REAL_ Ham Radio any more?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 13:56:41 UTC
From: "Harold E. Johnson" <w4zcb@mchsi.com>
Message-ID: <tQZhf.362704$084.3738@attbi_s22>
Source record: 15971
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

My GAWD! Bean, can't you just go away and put us all out of your misery?

Plonk one more name and time.

W4ZCB

"Heinrich Hurts" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1133008533.449590.8800@z14g2000cwz.googlegroups.com...
> What is Ham Radio?
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.
>
> Ham Radio awakens in its aficionados a whole-life
> fascination with all things technical and gives
> an all-abiding curiosity to improve one's scientific
> knowledge. It's a great swimming pool, please dive in!
>
> This excitement causes a wish to share the experience
> with ones fellow man, and shows itself in the
> gentlemanly traditions of Ham Radio.
>
> Radio Hams are in a unique privileged position in that
> they can construct and operate their own equipment! No-one
> else has this privilege. Users, such as broadcasters,
> the po lice and armed farces, CBers and mobile phone
> users have to purchase ready-made gear. Manufacturers
> are not licensed to operate their gear. Radio Hams
> are qualified to design, build and then
> operate their own pieces of equipment. They do this
> with gusto, and also repair and modify their own
> equipment. This is a privilege well worth the effort
> to gain, and one to be jealously guarded.
>
> The excitement that drives a Radio Ham starts with
> relatively simple technologies at first, perhaps making
> his own Wimshurst machine and primary cells. Small pieces
> of test equipment follow, possibly multimeters and signal
> generators. Then comes receivers and transmitters. It is with
> the latter that communication with like-minded technically

> motivated people takes off. The scope for technical
> development grows with the years
> and now encompasses DSP and DDS. There is also a great deal
> of excitement in the areas of computer programming to
> be learnt and applied.
>
> The technical excitement motivates Radio Hams to compete
> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.
>
> -----OOOOO----
>
> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large
> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
> repaired; they are not interested in technical discussion
> and sneer at those who are; they have no idea how
> their radios work inside and have no wish to find out;
> they are free with rather silly personal insults;
> they have not satisfied any technical qualification
> and their licences prevent the use of
> self-designed-and-built equipment.
>
> These CB types engage in the competitive activities
> with their Cheque-Book-purchased off-the-shelf radios
> in a forlorn effort to prove that they are Radio Hams.
>
> No _REAL_ Radio Hams are deceived by such people!
>
> -----ooooo-----
>
> One infallible way to disambiguate the CB Radio Hobbyist
> from the _REAL_ Radio Ham is to solicit their view of the
> difference between CB Radio and Ham Radio. A Radio Ham will
> perceive Ham Radio to be a technical pursuit and will
> perceive CB Radio to be a social communications facility
> no different in essence to a land-line telephone or a
> GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
> could also hold a CB licence safe in the knowledge that
> such a licence says no more about him than having a land-line
> telephone, whilst continuing to regard Ham Radio as a separate
> technical pursuit.
>
> A CB Radio hobbyist, on the other hand, sees no difference between
> a Ham Radio licence and a CB Radio licence. To him, they are

> sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
> tries to classify himself as the equal of the Radio
> Ham when, in fact, he is nothing of the kind. A sure sign of
> a CB Radio hobbyist is if he holds, or has ever held, a licence
> issued under the gangrenous degeneration that is the
> M3/CB Fools' Licence scheme.
>
> -----ooooo-----
>
> One group of people who claim to be of the standard of
> Radio Hams but who are in reality nothing more than an
> apology for the failure of a CBer are those class B
> licensees who falsely proclaimed that they were against
> the use of a Morse Test to control access to the HF
> bands, until, that is, a test was introduced at their
> intellectual level, the intellectual level of 6-year-olds.
>
> 6 year-olds simply lack the mathematical tool kit to
> enable them to handle even the simplest algebraic manipulation
> for Ohm's Law and thus, the disgraceful Class Ber's in
> the aforementioned category are not Radio Hams by any stretch
> of the imagination!
>
> Remember - A sure sign of a CB Radio hobbyist is if he holds,
> or has ever held, a licence issued under the gangrenous
> degeneration that is the M3/CB Fools' Licence scheme!
>

5489. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 14:25:04 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <ihqgo1dr8leibn846dhc15utpdeq8hokfh@4ax.com>
Source record: 15972
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Sat, 26 Nov 2005 21:19:18 +1000, Murray <me@erewhon.net> wrote:

>Frithiof Andreas Jensen wrote:

>E.G the CMOS 4007. See the old handbooks for a '100dB
>amplifier' based on a RCA chip - there was a wiring
>error in that old description - IIRC it was 3800? -
>whatever, the 4007 is the same chip.

The Motorola McMOS handbook (2nd edition 1974) warns about this usage
by pointing out that by cascading three such AC coupled stages, the
last stage will be saturated by the noise from the first stage.

Paul OH3LWR

5490. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 15:10:34 UTC
From: "wa2mze(spamless)" <"wa2mze(spamless)"@bellsouth.net>
Message-ID: <tT_hf.27576$s92.24482@bignews6.bellsouth.net>
Source record: 15973
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Henry Kiefer wrote:
> Hi all -
>
> After my first thread going from "standard" cheap parts for up to vhf
> frequency to a discussion about the usefulness of Spice simulator..... I
> try it another time hopefully get attention of frustrated co-readers:
>
> For example the rechtifier diode 1N4007 can be used as a rf switching diode,
> for example as rx/tx-switch. This is because it is a pin structure diode.
> This type is cheap and you can get it almost everywhere. It shows good
> performance for the price. Surely for high-end you should do it with another
> type tuned to the application it is made for. But anyway it works in some
> circuits.
>
> Do you know of other interesting devices or circuits good for misuse?
>
> Best regards -
> Henry
>
>
Take one P channel Jfet and one N channel Jfet and connect them
in series so the two sources are together, connect the gate of
each transistor to the other one's drain. This is known as a lambda
connection, and if you plot the voltage vs current from drain to drain
you will see a negative resistance region, usually around 3v
(depending on the transistors). The circuit will work as a tunnel
diode oscillator up to 100-200mhz.

5491. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 15:12:35 UTC
From: "wa2mze(spamless)" <"wa2mze(spamless)"@bellsouth.net>
Message-ID: <mV_hf.27577$s92.11709@bignews6.bellsouth.net>
Source record: 15974

nospam@nouce.bellatlantic.net wrote:
> 1n914/4148 as silicon temperature sensor. (forward bias)
I used a 1n4007 as a temperature sensor to repair a water bed
heater.

5492. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 15:16:23 UTC
From: "wa2mze(spamless)" <"wa2mze(spamless)"@bellsouth.net>
Message-ID: <WY_hf.27578$s92.17829@bignews6.bellsouth.net>
Source record: 15975
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

> You must have quite slow fuses in 110 V land if you can do a reliable
> ignition without blowing the fuse. For 230 V operation, I would
> suggest using a current limiting resistor (such as a large heater) or
> an inductance (such as fluorescent light ballast) during the ignition.
> When there is a solid arc, the current limiter can be shorted out.
>
> Paul
>

Did you know that a carbon arc acts as a negative resistance? Run the
arc on DC and put an LC tuned circuit in series with the arc (coil of
heavy copper tubing) and you have a powerful oscillator.

5493. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 15:43:48 UTC
From: Rick <notta@goodone.com>
Message-ID: <Uo%hf.5744$wf.1854@newsread3.news.atl.earthlink.net>
Source record: 15976
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

"Si Ballenger" <shb*NO*SPAM*@comporium.net> wrote in message
news:4387be6d.204451325@news.comporium.net...
> On Fri, 25 Nov 2005 20:48:19 GMT, Al <no.spam@wanted.com> wrote:
>
> >In article <clieo1lq869ialc6um02omsfdt266dvr2c@4ax.com>,
> > Paul Keinanen <keinanen@sci.fi> wrote:
> >
> >> On Thu, 24 Nov 2005 18:49:24 -0500, Jon Yaeger
<jono_1@bellsouth.net>
> >> wrote:
> >>
> >> >Take apart a couple of D cell carbon-zinc batteries.
> >> >
> >> >Wash off the carbon rods. Put each in a wooden clothes pin and
connect the
> >> >attached ends to the mains voltage (US customers only, please).
> >>
> >> The problem is that the carbon rod conducts heat quite well, so
after
> >> a while, any wooden object will catch fire :-).
> >>
> >> >Tap the free ends of the rods together. Move them apart as
necessary.
> >>
> >> You must have quite slow fuses in 110 V land if you can do a
reliable
> >> ignition without blowing the fuse. For 230 V operation, I would
> >> suggest using a current limiting resistor (such as a large
heater) or
> >> an inductance (such as fluorescent light ballast) during the
ignition.
> >> When there is a solid arc, the current limiter can be shorted
out.
> >>
> >> Paul
> >>
> >
> >I would put a 100 watt lamp in series thereby limiting the current.
I
> >would shave the ends down to points so they heated up rapidly. I
put
> >them into a hollowed out fire brick and made a cheap furnace. Of
course

> >don't look at it; it's like looking at the sun.
>
> The current limiter I saw used a glass pie pan with pieces copper
> metal on each side with salty water as the electrolyte. It would
> start to steam some when in operation. The furnace was a small
> clay flower pot with holes in each side with the carbon rods
> sticking inside until they touched.

Exactly-when I was a kid we made them like this all the time. As I
recall, it came from "700 scientific experiments, with
illustrations"...

>

5494. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 15:52:36 UTC
From: "Pete C." <aux3.DOH.4@snet.net>
Message-ID: <438884C3.E55FDD3C@snet.net>
Source record: 15977
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

nospam.clare.nce@sny.der.on.ca wrote:
>
>
> Too bad all you've met are the bad ones. There are a few good ones
> left - but most of US have gotten out.(which leaves only the bad ones
> for you to deal with).
> I got out, largely, because the CUSTOMERS are unpolite,
> demanding,dishonest, cheap, and generally impossible to satisfy - even
> when you do something for nothing.
> They book their car for 3 hours of work and don't show up, after you
> have made room in your busy schedule to get them in NOW - and that is
> only because it is IMPOSSIBLE to do it yesterday. Then they want you
> to diagnose the problem over the phone and guarantee the price - AND
> be cheaper than the other 10 or 12 mechanics they have done the same
> thing to. If you can't get the parts PRONTO, they cry and complain -
> and you can NOT have every possible part available - the dealers don't
> either. Then they lie about what has happened to the car, because they
> want it to be someone elses fault and problem, not their own.
> You fix the car and they leave and stop payment on the check or
> dispute the charge on their credit card. Not only that, they bad-mouth
> you to everyone who will listen when at the bar, a party, or wherever,
> whenever the subject of auto repair or car problems comes up - which
> is ANY time. Then 3 months later, after you have fixed, say the
> brakes, they come back with the wiper motor not working - and - you
> guessed it - its YOUR fault!!!!
> >

Not entirely true, the few lucky people who have been able to find
honest, reliable mechanics do tend to speak highly of them.

>
> It just wasn't fun any more after 25 years - and its gotten a whole
> lot worse in the last 15 or more years.

Remember that the people bringing in the cars in the last 15 years or so
as you have noted, are the parents (or now their children) from the
generation that has deluded themselves into the belief that mechanical
trades (dirty jobs) are somehow devoid of education and skill and have
actively discouraged their children from having any interest in such
things.

This delusion of the PYVs (plastic yuppie vermin) is furthered by the
increasing complexity of cars and the thought that the grease monkeys
couldn't possibly understand anything about computers so they must just

be swapping parts until things magically start working.

It's only going to get worse too...

Pete C.

5495. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 15:55:15 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <a31ho15ffe25ojjsbghn2khqon4mrkm17d@4ax.com>
Source record: 15978
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Fri, 25 Nov 2005 22:13:38 -0500, Phil Hobbs
<pcdhSpamMeSenseless@us.ibm.com> wrote:

>Si Ballenger wrote:
>
>>>I would put a 100 watt lamp in series thereby limiting the current. I
>>>would shave the ends down to points so they heated up rapidly. I put
>>>them into a hollowed out fire brick and made a cheap furnace. Of course
>>>don't look at it; it's like looking at the sun.
>>
>>
>> The current limiter I saw used a glass pie pan with pieces copper
>> metal on each side with salty water as the electrolyte. It would
>> start to steam some when in operation. The furnace was a small
>> clay flower pot with holes in each side with the carbon rods
>> sticking inside until they touched.
>>
>
>As a boy, I used an electric teakettle as a ballast for a two-D-cell carbon
>arc lamp--worked great.
>
>Cheers,
>
>Phil Hobbs

I've used a light bulb in series with a rectifier to charge a car
battery (just make sure that line ground goes to chassis ground ;-)

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

5496. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 16:16:27 UTC
From: Matthias Weingart <mwnews@pentax.boerde.de>
Message-ID: <Xns971AAF8B69212AlwLookOnTBrightSide@penthouse.boerde.de>
Source record: 15979
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

John Devereux <jdREMOVE@THISdevereux.me.uk> wrote in
news:8764qh82fw.fsf@cordelia.devereux.me.uk:

> ehsjr <ehsjr@bellatlantic.net> writes:
>> Henry Kiefer wrote:
>> > Do you know of other interesting devices or circuits good for
>> > misuse? Best regards -
>> > Henry
>>
>> An LED as a shunt regulator. Also, as a varicap.
>> Ed
>
> Also a photodetector that is insensitive to long wavelengths
> (because of the high bandgap).

To save power, use the LEDs of a backlight to measure the ambient light
to decide to switch the backlight on or not.

M.
--
Bitte auf mwnews2@pentax.boerde.de antworten.

5497. Re: FAQ - Is anyone interested in _REAL_ Ham Radio any more?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 16:56:03 UTC
From: "Harold E. Johnson" <w4zcb@mchsi.com>
Message-ID: <Ds0if.603919$xm3.137601@attbi_s21>
Source record: 15980
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

> (1) Please do not top post. It makes you look like a clueless newbie.
> The other main top-poster in this newsgroup is the very person that
> you seek to criticise!
>
> (2) Please do not quote more than 100 lines of text, just to add your
> own two-line comment. It adds insult to injury.
>
> 73 de G3NYY

Sorry Walt, the SOB got to me again.

W4ZCB

5498. AWA Contest- Caution

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 18:01:08 UTC
From: Carl WA1KPD <nantucketbound@yahoo.com>
Message-ID: <iLedna3pm_G1PxXeRVn-tg@comcast.com>
Source record: 15981
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

To those of you who were planning to join the AWA CW contest over the next two weekends be aware that it is a members only event. I just learned so today. Be careful not to intrude and work someone.(see emails below)

I will be testing out my new Hartley and look forward to anyone else (Member or not) who want to communicate with Old Time rigs.I will try not to intrude upon their contest frequencies

This is in no way a shot at Marc who was kind enough to point out the rules to me.

As a former (for no particular reason) member who has attended the Rochester meet I have listened to the complaints about AWA over the last few years and not thought much about them one way or the other. But I now do see why people complain that they act as an exclusive group.

Yes, I know I could join again and play in the sandbox the next two weekends, but to be honest I'm not sure I care to anymore.

From: Carl Nord [mailto:chnord@comcast.net]
Sent: Saturday, November 26, 2005 12:11 PM
To: 'antiquewirelessassociation@yahoogroups.com'
Subject: RE: [AWA] Contest

Marc,

In all sincerity, thank you for the clarification as well as the others who were kind enough to fully respond to my question. There certainly were some rather unhelpful initial responses.

I will continue to finish my HB Hartley this weekend but will make sure (as a former member) that I abide by the AWA rules and endeavor not to intrude on the frequencies and work any of the AWA members.

That being said I will be on the air next weekend and perhaps some of the other non- AWA members might like to pick a frequency to exercise our OT equipment?

Carl
WA1KPD
Visit My Boatanchor Collection at
http://home.comcast.net/~chnord/wa1kpd.html

From: antiquewirelessassociation@yahoogroups.com
[mailto:antiquewirelessassociation@yahoogroups.com] On Behalf Of MARC ELLIS

Sent: Saturday, November 26, 2005 11:53 AM
To: antiquewirelessassociation@yahoogroups.com
Subject: RE: [AWA] Contest

Hello all--

I've seen the recent queries posted about the AWA 1929 QSO party.

I guess I should jump in and try to clear this up, though I have no official connection with the AWA ham contests.

Our new AM QSO party, being chaired by Gary Carter, is the only one open to all hams. The other contests, including the 1929 QSO party, are open to members only.

The only reason you will find the dates of the QSO party on our web site is that we had to correct the wrong dates that were accidentally sent to the Journal and printed there. Frequencies, times, scoring info, etc are in the Journal but never posted on the site for obvious reasons.

Logs are sent out by contest chairman John Rollins only to previous participants or members who are newly applying for them.

Friends, this is a public service announcement only. I definitely don't want to get involved in discussions about the right or wrong of this, nor would it be appropriate for me to do so. Suffice it to say that John and the AWA have very good reasons for restricting the contest , though I can also see the other side of the questrion.

Marc Ellis, N9EWJ
Editor, The AWA Journal

5499. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 18:28:23 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <46aho1p0i8k2r3apli37a7if8ap1kgfksl@4ax.com>
Source record: 15982
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Sat, 26 Nov 2005 11:56:55 +0200, Paul Keinanen <keinanen@sci.fi>
wrote:

>On Fri, 25 Nov 2005 12:29:52 -0800, Roy Lewallen <w7el@eznec.com>
>wrote:
>
>>Paul Keinanen wrote:
>>> . . .
>>> You must have quite slow fuses in 110 V land if you can do a reliable
>>> ignition without blowing the fuse. For 230 V operation, I would
>>> suggest using a current limiting resistor (such as a large heater) or
>>> an inductance (such as fluorescent light ballast) during the ignition.
>>> When there is a solid arc, the current limiter can be shorted out.
>>>
>>
>>Aren't you in danger of damaging your eyes from the UV emitted from the arc?
>
>Certainly.
>
>I used arc welding glasses when conducing these experiments.
>
>Some trivia:
>
>In the silent film era, actors had eye problems due to the UV
>radiation from arc studio lamps.
>
>Most of the usable illumination from the arc lights is actually from
>the glowing carbon electrodes.
>
>"Automatic arc lights" used a solenoid in series with the arc to keep
>the distance constant between the poles regardless of carbon electrode
>burnout. I assume that if this is to be used with a AC arc light, both
>the moving coil as well as the static coil should carry the arc
>current.
>
>Paul OH3LWR

We worked with a company that was developing an xray imager, and was
buying very expensive electrically conductive glass (gigohms per
square sort of range.) They discovered that certain welding glass was
identical and about 1/20 the price.

John

5500. Re: FAQ - Is anyone interested in _REAL_ Ham Radio any more?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 18:46:12 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <p4bho1t8j0qp14oi86o03vhshtv6sp4k2j@4ax.com>
Source record: 15983
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy

Heinrich Hurts wrote:

>What is Ham Radio?
>
>Ham Radio is a technical pursuit...

This is the chappie that calculated the length of the day on this
planet was 23H20.

He's also the chappie that couldn't operate an FT101 because some
pages of the manual were missing.

I'd suggest one takes his ramblings with a large pinch of salt.
from
Aero Spike

Blair: "Removing Saddam....will be....a blessing to the Iraqi people"

5501. Re: Trickle Charge Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 18:59:08 UTC
From: mcalhoun@ksu.edu
Message-ID: <dmab9s$baj@unix1.cc.ksu.edu>
Source record: 15984

>During a power outage, which occurs frequently in Florida, I would like to
>use a battery to power some communication gear. Although the battery is 12v
>....[snip]....

Although many have suggested you should use "deep cycle" (also called
"traction") batteries, be aware that the specifications for such batteries
are DIFFERENT in that they are rated to still be producing useable power
when their output voltage is somewhat LOWER than others. If your equipment
poops out before that lower voltage is reached, you won't get all the
output you've paid for. (My TenTek 540, for example, starts FM'ing at
about 11.5 volts, so the remaining output from a deep-cycle is totally
unuseable.)

The following is abstracted from a 3 Oct. 1992 post to
rec.radio.amateur.misc by Brian Kantor <brian@ucsd.edu>:

1. Automotive starting: formulated with thin pasted plates and designed
to supply high peak currents for brief periods of time while cranking
an engine. Designed to be discharged to more than perhaps 75% of
capacity and to be recharged immediately after discharge. Typically
discharged-rated at a 20-hour rate.

2. Traction (e.g., deep-cycle batteries): made with thick pasted plates
and with very rugged separators between the plates to make the battery
more immune to physical shock and vibration and to reduce the chance
of failure due to dendritic growth during recharging. Sold for use in
electric forklifts, golf carts, marine trolling motors, and RV power.
Designed to be discharged nearly fully each day and recharged each
night. Typically discharged-rated at a 5-hour rate.

3. Stationary: made with thick solid plates. Designed to be used as
standby power, supplying minimal power and kept in a state of nearly-
full ("float") charge until needed. Can take deep discharge. Because
of the solid-plate structure, they are bigger and heavier, but their
lifetime is much longer (10 years is not unusual). Typically
discharged-rated at a 10-hour rate.

Each type of battery has a specified voltage at which it is considered
to be completely discharged; if discharge continues below this voltage,
battery life may be considerably shortened, and repeated abuse of this
nature can result in a battery which cannot practically be recharged.
Each battery manufacturer specifies this voltage; in general, the final
voltages for the three general types of batteries are:
Automotive: 1.75 volts per cell
Traction: 1.70 volts per cell
Stationary: 1.85 volts per cell

A typical traction-type cell shows the following voltages:
2.12 Fully charged, open circuit, at rest with no charge
or discharge for at least 12 hours
2.00 As soon as load is applied (internal voltage drop)
1.70 Fully discharged, under load
1.99 Fully discharged, open circuit
2.10 Beginning of charging after full discharge
2.35 70-80% charged; gassing begins
2.65 Fully charged

The following assumes 12 volt negative-grounded "automobile" batteries as
found in most cars, light trucks, and vans in North America.

Liquid-electrolyte lead-acid batteries can be recharged at any rate
exceeding internal- and surface-discharge rates and which does not cause
"excessive" gassing (liberation of oxygen, hydrogen, and steam).

In NON-float service, there are several simple chargers:
* A single-rate constant-current charger limits its charge rate to about
7% of the battery's ampere-hour capacity. Thus, for a 100 Ah battery,
the charger would supply about 7 amperes and must be able to supply
voltages between 12.6 and 16 volts over the duration of the charge.
Charging is complete when the battery reached 2.65-2.70 volts per cell.

* A simple taper charger is a constant-voltage source set to 2.8 volts
per cell with a series ballast (typically a resistor, but a choke or
the internal resistance of the supply can be used) which limits the
output current to 7% of capacity when charging is started at 2.1 volts
per cell. Again, charging is complete at 2.7 volts per cell.

* Trickle-charging (supplying 0.5-1 milliampere per ampere-hour capacity)
of a fully-charged battery can be done to keep it charged. Trickle
charging should be discontinued when it has continued for at least 24
hours and the battery has reached 2.25 volts per cell. Typically,
trickle chargers are set to run perhaps once a week. Because of their
thin plate construction, automotive-type batteries will deteriorate if
trickle-charged for more than perhaps six months. (However, using
pulsating rectified AC or superimposing a small AC current on pure DC
charging current increases battery life by up to 30%. It is postulated
that this reduces gassing, leads to more porous lower-resistance
plates, and lessens the tendency to form dendrites during charging.)

In FLOAT service, where the battery is in parallel with the mains supply,
the supply voltage must be set to 2.15-2.20 volts per cell. This charges
the battery and avoids excessive gassing, but does not serve to "freshen"
the cells--there is not enough gassing activity to move electrolyte
around and clear the beginning of deposits from the surfaces of the
plates. It is recommended that batteries in float service occasionally
(perhaps once a month) be charged to 2.65 volts per cell to freshen and
equalize the charges. In large installations, this is done by switching
parts of the battery banks out of service in rotation; in smaller systems
that can tolerate the voltage excursion (about 16 volts!), it can be done
by simply boosting the output of the mains supply.

Charging inevitably leads to some water loss due to gassing: 100 ampere-hours of a gassing charge (2.4 or more volts per cell) causes a water loss of about 1.2 ounces. Hydrocap Corp (975 NW 95th Street, Miami FL, 303-696-2504) makes replacement filler caps ($5-10 each) containing a catalytic material which recondenses emitted steam and recombines hydrogen and oxygen gasses back into pure water which then dribbles back into the cell, greatly reducing the required maintenance.

For further information:
Smith, George. "Storage Batteries, including Operation, Charging, Maintenance, and Repair". ISBN 273-43448-9, TK2941.S57, 1978.

Aguf, I.A. and M.A. Dasoyan. "The Lead Accumulator" (translated from Russian byu S. Sathyanarayana). Calcutta, 1968.

Longrigg, Paul. "Rapid Charging of Lead-Acid Batteries for Electric Vehicle Propulsion and Solar Energy Storage." DOE/NTIS 1981.

Darden, Bill (bjb_darden@yahoo.com) battery FAQ's found on the WWW.

--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

5502. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 19:07:31 UTC
From: mcalhoun@ksu.edu
Message-ID: <dmabpj$bj7@unix1.cc.ksu.edu>
Source record: 15985
Body handling: HTML body converted to readable text

```
>> 1n914/4148 as silicon temperature sensor. (forward bias)
```

5503. Re: Conductive plastic/cermet pots

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 19:23:30 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1133033010.681420.148660@z14g2000cwz.googlegroups.com>
Source record: 15986

Small cermet pots should be no trouble at 50MHz, assuming you aren't going to extreme resistance values. You will always have parasitic inductance and capacitance, but if a carbon pot would work in your application, a cermet of the same size and general design should behave similarly.

Beware of the conductive plastic ones...some of those are "hybrid" pots that have a wirewound element under the plastic, to get very good linearity, and the conductive plastic provides interpolation between the turns of wire. I once used one of those to read out an angle, and it worked great, but I wouldn't consider trying to use it at RF. If it's not a hybrid (no wirewound element under the plastic), it should be OK.

You may also want to consider the amount of (RF?) current in the wiper. It's generally a good idea to keep the wiper current low, unless the pot is specifically designed for high wiper current.

Cheers,
Tom

5504. Re: AWA Contest- Caution

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 20:35:11 UTC
From: YT <YTay@kaboom.net>
Message-ID: <3G3if.2291$Y%5.161@newssvr17.news.prodigy.com>
Source record: 15987
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

>members only event

HA HA HA my ass!

No such thing on the ham bands.

"Carl WA1KPD" <nantucketbound@yahoo.com> wrote in message
news:iLedna3pm_G1PxXeRVn-tg@comcast.com...
> To those of you who were planning to join the AWA CW contest over the next
> two weekends be aware that it is a members only event. I just learned so
> today. Be careful not to intrude and work someone.(see emails below)
>
> I will be testing out my new Hartley and look forward to anyone else
> (Member or not) who want to communicate with Old Time rigs.I will try not
> to intrude upon their contest frequencies
>
> This is in no way a shot at Marc who was kind enough to point out the
> rules to me.
>
> As a former (for no particular reason) member who has attended the
> Rochester meet I have listened to the complaints about AWA over the last
> few years and not thought much about them one way or the other. But I now
> do see why people complain that they act as an exclusive group.
>
> Yes, I know I could join again and play in the sandbox the next two
> weekends, but to be honest I'm not sure I care to anymore.
>
>
> From: Carl Nord [mailto:chnord@comcast.net]
> Sent: Saturday, November 26, 2005 12:11 PM
> To: 'antiquewirelessassociation@yahoogroups.com'
> Subject: RE: [AWA] Contest
>
> Marc,
>
> In all sincerity, thank you for the clarification as well as the others
> who were kind enough to fully respond to my question. There certainly were
> some rather unhelpful initial responses.
>
> I will continue to finish my HB Hartley this weekend but will make sure
> (as a former member) that I abide by the AWA rules and endeavor not to
> intrude on the frequencies and work any of the AWA members.
>
> That being said I will be on the air next weekend and perhaps some of the

> other non- AWA members might like to pick a frequency to exercise our OT
> equipment?
>
> Carl
> WA1KPD
> Visit My Boatanchor Collection at
> http://home.comcast.net/~chnord/wa1kpd.html
>
>
> ---
>
> From: antiquewirelessassociation@yahoogroups.com
> [mailto:antiquewirelessassociation@yahoogroups.com] On Behalf Of MARC
> ELLIS
> Sent: Saturday, November 26, 2005 11:53 AM
> To: antiquewirelessassociation@yahoogroups.com
> Subject: RE: [AWA] Contest
>
> Hello all--
>
> I've seen the recent queries posted about the AWA 1929 QSO party.
>
> I guess I should jump in and try to clear this up, though I have no
> official connection with the AWA ham contests.
>
> Our new AM QSO party, being chaired by Gary Carter, is the only one open
> to all hams. The other contests, including the 1929 QSO party, are open to
> members only.
>
> The only reason you will find the dates of the QSO party on our web site
> is that we had to correct the wrong dates that were accidentally sent to
> the Journal and printed there. Frequencies, times, scoring info, etc are
> in the Journal but never posted on the site for obvious reasons.
>
> Logs are sent out by contest chairman John Rollins only to previous
> participants or members who are newly applying for them.
>
> Friends, this is a public service announcement only. I definitely don't
> want to get involved in discussions about the right or wrong of this, nor
> would it be appropriate for me to do so. Suffice it to say that John and
> the AWA have very good reasons for restricting the contest , though I can
> also see the other side of the questrion.
>
> Marc Ellis, N9EWJ
> Editor, The AWA Journal
>
>
>

5505. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 20:41:06 UTC
From: Winfried Salomon <wsalomontrashcan@t-online.de>
Message-ID: <dmah97osl01$1@news.t-online.com>
Source record: 15988
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Hello Jorgen,

Jorgen Lund-Nielsen wrote:

[.....]
> 2N2369 for fast pulses.

btw, do you know a standard complementary pnp-transistor for the 2N2369,
such like 2N3905 but with higher ft and less feedback capacitance? It
seems that the manufactorers have almost no data on their internet pages.

mfg. Winfried

5506. Re: AWA Contest- Caution

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 20:49:26 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <1T3if.2204$1x.2138@fed1read06>
Source record: 15989
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

"Carl WA1KPD" <nantucketbound@yahoo.com> wrote in message

Hey Carl

Let's see some photos of that Hartley rig!!

Pete

5507. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 20:51:01 UTC
From: John - KD5YI <groups5munge@verizon.net>
Message-ID: <VU3if.1983$tg3.1639@trnddc02>
Source record: 15990
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Jim Thompson wrote:
> On Fri, 25 Nov 2005 22:13:38 -0500, Phil Hobbs
> <pcdhSpamMeSenseless@us.ibm.com> wrote:
>
>
>>Si Ballenger wrote:
>>
>>
>>>>I would put a 100 watt lamp in series thereby limiting the current. I
>>>>would shave the ends down to points so they heated up rapidly. I put
>>>>them into a hollowed out fire brick and made a cheap furnace. Of course
>>>>don't look at it; it's like looking at the sun.
>>>
>>>
>>>The current limiter I saw used a glass pie pan with pieces copper
>>>metal on each side with salty water as the electrolyte. It would
>>>start to steam some when in operation. The furnace was a small
>>>clay flower pot with holes in each side with the carbon rods
>>>sticking inside until they touched.
>>>
>>
>>As a boy, I used an electric teakettle as a ballast for a two-D-cell carbon
>>arc lamp--worked great.
>>
>>Cheers,
>>
>>Phil Hobbs
>
>
> I've used a light bulb in series with a rectifier to charge a car
> battery (just make sure that line ground goes to chassis ground ;-)
>
> ...Jim Thompson

Going the other direction, I used the elements from a toaster as a load to discharge wet-cell lead-acid batteries. It was a discharge/charge cycling test.

John

5508. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 20:53:25 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <pmiho1552tvfjg70bdou5c6fvodmvbmpnj@4ax.com>
Source record: 15991
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Sat, 26 Nov 2005 21:41:06 +0100, Winfried Salomon
<wsalomontrashcan@t-online.de> wrote:

>Hello Jorgen,
>
>Jorgen Lund-Nielsen wrote:
>
>[.....]
>> 2N2369 for fast pulses.
>
>btw, do you know a standard complementary pnp-transistor for the 2N2369,
>such like 2N3905 but with higher ft and less feedback capacitance? It
>seems that the manufactorers have almost no data on their internet pages.
>
>mfg. Winfried

A 2N2369 is a gold-doped NPN, gold-doped to kill storage time and
improve recovery from saturation. I don't recall any PNP device with
gold-doping... or the equivalent.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

5509. Re: AWA Contest- Caution

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 21:13:37 UTC
From: Carl WA1KPD <nantucketbound@yahoo.com>
Message-ID: <NfidnVS0VcHbUhXeRVn-iQ@comcast.com>
Source record: 15992
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Will do when it is finished. I am using a mil surplus VT-127AZ. About the oddest looking triode I have ever seen

--
Carl
WA1KPD
Visit My Boatanchor Collection at
http://home.comcast.net/~chnord/wa1kpd.html

" Uncle Peter" <radioconnectionNO@cox.netSPAM> wrote in message news:1T3if.2204$1x.2138@fed1read06...
>
> "Carl WA1KPD" <nantucketbound@yahoo.com> wrote in message
>
>
>
> Hey Carl
>
> Let's see some photos of that Hartley rig!!
>
> Pete
>
>

5510. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 22:15:31 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4388e1fd$0$27881$9b4e6d93@newsread4.arcor-online.net>
Source record: 15994
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

And why, Jim, you don't comment my effort?

Maybe I'm newer to rf as you but where is the difference between a microprocessor decoupling from the power supply at 100MegHz and a rf stage at the same frequency? Truly the cpu is more challenging because of the broad used spectrum above 100MegHz.

Done PowerPC, PCI stuff and others....

- Henry

5511. Re: AWA Contest- Caution

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 22:24:16 UTC
From: Brian Hill <jonnysocko@jps.net>
Message-ID: <hg5if.4655$Mj.3316@fe04.lga>
Source record: 15993
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

"Carl WA1KPD" <nantucketbound@yahoo.com> wrote in message
news:NfidnVS0VcHbUhXeRVn-iQ@comcast.com...
> Will do when it is finished. I am using a mil surplus VT-127AZ. About the
> oddest looking triode I have ever seen
>
> --
> Carl
> WA1KPD
> Visit My Boatanchor Collection at
> http://home.comcast.net/~chnord/wa1kpd.html

Hi Carl. How have you been? Any other good vintage finds lately?
--

Regards
B.H.

Brian's Radio Universe
http://webpages.charter.net/brianhill/500.htm

5512. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 22:57:19 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4388e913$0$20852$9b4e6d93@newsread2.arcor-online.net>
Source record: 15995

A metal case of a crystal should never soldered!! This may break the
oscillation characteristics. At least you must know what you're doing here.
This type of built-in failure mode is often seen in products.
Otherwise it is interesting!

Another error with crystals is to ultrasonic the populated pcb. With the
right sonic frequency the crystals comes in resonance - cracking of parts or
wires!

- Henry

"RST Engineering" <jim@rstengineering.com> schrieb im Newsbeitrag
news:11oeib193nk1ua7@corp.supernews.com...
> Take a crystal for which you need a constant temperature. Solder the
> cathode of a cheap diode (1N4148 etc.) to the crystal case. Solder one
end
> of a moderately low value half-watt resistor to the case. Bring out the
> anode of the diode, the free end of the resistor, and the crystal case on
> wire leads and encapsulate the crystal-diode-resistor in heat shrink. Use
> the diode as your temperature sensor, the resistor as your heating
element,
> an opamp/driver transistor as the comparator/amplifier and bingo, the
> world's cheapest crystal oven. Bang-bang or linear, your choice.
>
> Jim
>
>
> >
> > eh> Henry Kiefer wrote:
> > > Hi all -
> > >
> > >
> > > Do you know of other interesting devices or circuits good for misuse?
> > >
> > > Best regards -
> > > Henry
>
>

5513. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 23:02:26 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4388f066$0$27889$9b4e6d93@newsread4.arcor-online.net>
Source record: 15996
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

As a youngster I played with TTL DIP-ICs in my chamber and my parents next
room felt that the tv was going crazy. The pins had long wires...

- Henry

<skavanagh72nospam@yahoo.ca> schrieb im Newsbeitrag
news:1132928901.255333.129630@g43g2000cwa.googlegroups.com...
> As an addition to the various mentions of common diodes as varactors
> there is a well publicized British design for a frequency tripler that
> will put out 2 watts at 1.3 GHz and uses five 1N914's in parallel.
>
> I once built an HF transceiver that used CMOS logic chips for all
> functions except an audio low noise amp and a voltage regulator...with
> further thought those two could likely be done with CMOS logic too.
>

5514. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 23:04:18 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4388f067$0$27889$9b4e6d93@newsread4.arcor-online.net>
Source record: 15997
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

The 4007 is the classic crystal oscillator circuit.
Don't forget the temperature characteristics!

- Henry

"Murray" <me@erewhon.net> schrieb im Newsbeitrag
news:43884488$0$12455$5a62ac22@per-qv1-newsreader-01.iinet.net.au...
> Frithiof Andreas Jensen wrote:
>
> > "Henry Kiefer" <otc_friend@gmx.net> skrev i en meddelelse
> > news:4385b3b1$1$27887$9b4e6d93@newsread4.arcor-online.net...
> >
> >
> >>Do you know of other interesting devices or circuits good for misuse?
> >
> >
> > Unbuffered logic gates can make a really bad but still useful analogue
> > amplifier by adding feedback and bias.
> >
> >
> E.G the CMOS 4007. See the old handbooks for a '100dB
> amplifier' based on a RCA chip - there was a wiring
> error in that old description - IIRC it was 3800? -
> whatever, the 4007 is the same chip.
>
> Murray vk4aok

5515. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 23:06:24 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4388f068$0$27889$9b4e6d93@newsread4.arcor-online.net>
Source record: 15898
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

That is not new to me but thanks!
Is the oscillator useful at 150MegHz? Modulable? Maybe I can make
transmitter...
Tell us more, please.

cu -
Henry

"wa2mze(spamless)" <"wa2mze(spamless)"@bellsouth.net> schrieb im Newsbeitrag
news:tT_hf.27576$s92.24482@bignews6.bellsouth.net...
> Henry Kiefer wrote:
> > Hi all -
> >
> > After my first thread going from "standard" cheap parts for up to vhf
> > frequency to a discussion about the usefulness of Spice simulator......
I
> > try it another time hopefully get attention of frustrated co-readers:
> >
> > For example the rechtifier diode 1N4007 can be used as a rf switching
diode,
> > for example as rx/tx-switch. This is because it is a pin structure
diode.
> > This type is cheap and you can get it almost everywhere. It shows good
> > performance for the price. Surely for high-end you should do it with
another
> > type tuned to the application it is made for. But anyway it works in
some
> > circuits.
> >
> > Do you know of other interesting devices or circuits good for misuse?
> >
> > Best regards -
> > Henry
> >
> >
> Take one P channel Jfet and one N channel Jfet and connect them
> in series so the two sources are together, connect the gate of
> each transistor to the other one's drain. This is known as a lambda
> connection, and if you plot the voltage vs current from drain to drain
> you will see a negative resistance region, usually around 3v
> (depending on the transistors). The circuit will work as a tunnel
> diode oscillator up to 100-200mhz.

5516. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 23:08:24 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4388f068$1$27889$9b4e6d93@newsread4.arcor-online.net>
Source record: 15899
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Don't forget the LED as an low-noise zener diode with integrated function
control. Some high-fidelity enthusiasts use this in good audio amplifiers.

- Henry

"ehsjr" <ehsjr@bellatlantic.net> schrieb im Newsbeitrag
news:R3thf.9922$BU2.983@trndny01...
> Henry Kiefer wrote:
> > Hi all -
> >
> > After my first thread going from "standard" cheap parts for up to vhf
> > frequency to a discussion about the usefulness of Spice simulator......
I
> > try it another time hopefully get attention of frustrated co-readers:
> >
> > For example the rechtifier diode 1N4007 can be used as a rf switching
diode,
> > for example as rx/tx-switch. This is because it is a pin structure
diode.
> > This type is cheap and you can get it almost everywhere. It shows good
> > performance for the price. Surely for high-end you should do it with
another
> > type tuned to the application it is made for. But anyway it works in
some
> > circuits.
> >
> > Do you know of other interesting devices or circuits good for misuse?
> >
> > Best regards -
> > Henry
> >
> >
>
> An LED as a shunt regulator. Also, as a varicap.
> Ed

5517. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 23:10:03 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4388f069$0$27889$9b4e6d93@newsread4.arcor-online.net>
Source record: 15900
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

There even exists LED specially taylored to the needs of doing duplex
operation.

- Henry

"Frithiof Andreas Jensen" <frithiof.jensen@die_spammer_die.ericsson.com>
schrieb im Newsbeitrag news:dm6msqbvk1@news.al.sw.ericsson.se...
>
> "Henry Kiefer" <otc_friend@gmx.net> wrote in message
> news:4385b3b1$1$27887$9b4e6d93@newsread4.arcor-online.net...
>
> > Do you know of other interesting devices or circuits good for misuse?
>
> LED's work both ways, as a light emitter and a photodiode.
>
> The inbuilt colour filter can be used to distinguish between Grass and Not
> grass f.ex. by comparing output from a red and a green LED using white
light
> as illumination.
>
> Back when fiber was ex$$$pensive one often saw clever circuitry using two
> transmitters to form a duplex connection over a single fiber.
>
> The USD 10 solar powered garden lamps will, with a little persuation,
yield
> a nice solar cell well below the price of a similar unit in the shops -
> and - two 600 mAh NiMh batteries and a grotty circuit for switching the
LED.
>
>

5518. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 23:39:24 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4388fc27$0$20854$9b4e6d93@newsread2.arcor-online.net>
Source record: 15905
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Bob Pease of National Semi mentioned a ONE AND ONLY transistor circuit above/under voltage rail converter (with detailed theory). I cannot remember the details. But interesting if sometime a slightly voltage behind the power rail is needed. For example to power a CMOS Opamp now doing rail-input.

- Henry

5519. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 23:41:27 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <nasho1do5hpdjfa6iq5tjsqadruc4taqai@4ax.com>
Source record: 15901
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Fri, 25 Nov 2005 10:52:26 +0100, "Frithiof Andreas Jensen"
<frithiof.jensen@die_spammer_die.ericsson.com> wrote:

>
>"Henry Kiefer" <otc_friend@gmx.net> wrote in message
>news:4385b3b1$1$27887$9b4e6d93@newsread4.arcor-online.net...
>
>> Do you know of other interesting devices or circuits good for misuse?
>
>LED's work both ways, as a light emitter and a photodiode.
>

And optocouplers can do interesting things:

Very simple high-voltage opamp, up to 400 volts p-p.

Isolated totem-pole driver, from a few volts up to 400.

Current limiter.

Low-leakage diode, sort of like an LED painted black.

John

5520. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 23:44:45 UTC
From: Chris Jones <lugnut808@nospam.yahoo.com>
Message-ID: <11ohspndtsatffc@corp.supernews.com>
Source record: 15902
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

RST Engineering (jw) wrote:

>
> "Winfield Hill" <Winfield_member@newsguy.com> wrote in message
> news:dm367b01hj7@drn.newsguy.com...
>
>> jw\ wrote...
>>>
>>> The question was to simulate a 1000 pf (1 nf) capacitor at
>>> 150 MHz. with an inch of lead or an inch of normal pcb trace
>>> and tell me what you get.
>>
>> Such a question is stupid and incomplete.
>
> No, Win, the question is well formed and quite complete. Sleep off the
> ten shots of Old Rammycackle and let's have the discussion when you are
> sober.

It is not a complete question. You could get all sorts of different
parasitic inductance values by putting the component near or far from other
metallic objects, which usually occurs to some extent in any practical
situation. Many other things will affect the answer.

You have not yet supplied anything other than a single dimension measurement
for the component. If you want the inductance, skin effect, etc. then you
would have to give me a dimensioned drawing showing the placement of the
wires, the plating material, plating thickness and the internal
construction of the capacitor. (You would also have to pay me enough to
make it worth me bothering to simulate it.) Your question is incomplete.

> First of all, in
>> cases where impedance matters, one wouldn't dare use an inch
>> of lead at 150MHz, we'd cut that short, 0.1-inch max.
>
> No, Win, neither you nor I would do such a thing. But somebody who is (as
> the OP posted) new to the RF world would do so without a second thought.
> You and I have been playing this game all our lives and take
> self-resonance
> into account without even thinking about it. However, a student new to
> the field (as my freshman engineering students are) makes the mistake
> repeatedly, even when using a decent text called ... um ... The Art Of
> Something Or Other. When their RF amplifier starts squeeging or
> motorboating, I tell them that the power supply isn't bypassed well
> enough, and I'll be damned if the first thing they do is put a BIGGER

> capacitor on the supply line.
>
> I'll then ask them what they think the bypass impedance is and get the
> stock
> answer "1/(2*pi*f*c)". Hm, says I, how about the three inches of wire
> between the capacitor and the supply line. Oh, says them, that's a direct
> short. Straight wire doesn't have a reactive component. Hm, says I,
> let's
> see what the network analyzer says about that. Hm, says student, it says
> 60
> nanohenries. How can that be? Mm, 20 nanohenries per inch for #20 wire
> sounds about right, so what does that series circuit look like? Hm.
> Inductive at the frequency of interest. Now, grasshopper, tell me about
> self-resonance of capacitors with long leads.
>
>
>
>
> And
>> we certainly wouldn't use an inch of pcb trace unless it was
>> field-controlled with a ground plane.
>
> That's not always an option in commercial gear, Win.
Well as you have not specified whether this is "commercial gear" and what type of PCB material, dielectric thickness, trace width etc. of course we can't tell you the answer. Neither could a guy who was going to answer your question by building one and measuring it. He could find one possible answer but there are lots of possible answers which differ because you have not given us a complete problem to solve.

> This is true whether a
>> 1nF cap is involved or not. If you were to insist on analyzing
>> an inch of lead, we'd insist on knowing *all* about the ground
>> scene. Since you aggressively put your question without any
>> relevant information about what the ground is like, and where
>> it is, the question is intrinsically-stupid and incomplete.
>>
>
> If I didn't say what the ground is, then we can assume that I formulated
> the
> question without ground plane. 99% of the commercial products run this
> way.
You still gave insufficient information on the wire geometry. I would refute your claim that 99% of commercial products don't use a ground plane. The cell-phone market is in the high hundreds of millions of units this year, and is likely to reach 1 billion units per year next year, and I guarantee you that every one will contain a multi-layer PCB with ground planes and microstrip traces etc. every one of them designed using field simulators and some version of SPICE to model the integrated circuit packages and bondwires, as well as the antenna. I don't believe that this

one billion units would fit into the 1% minority of products that you think have ground planes!

>> Sorry, jw\, but that's the way it is.
>
> Sorry, Win, that's NOT the real world.
>
> Jim

Anyhow, until you tell me how long a piece of string is, (to the nearest micron or micro-inch whichever you prefer), I have had enough of this thread.

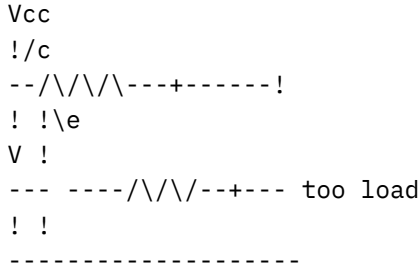
Chris

5521. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 23:51:41 UTC
From: kensmith@green.rahul.net
Message-ID: <dmased$11d$3@blue.rahul.net>
Source record: 15903
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

In article <4388f068$1$27889$9b4e6d93@newsread4.arcor-online.net>,
Henry Kiefer <otc_friend@gmx.net> wrote:
>Don't forget the LED as an low-noise zener diode with integrated function
>control. Some high-fidelity enthusiasts use this in good audio amplifiers.

It also works for this:



You get a current limit and an indicator light.

--
--
kensmith@rahul.net forging knowledge

5522. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 23:54:27 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4388fc2a$0$20854$9b4e6d93@newsread2.arcor-online.net>
Source record: 15906
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Can you give details?

- Henry

"John Larkin" <jjlarkin@highNOTlandTHIStechnologyPART.com> schrieb im
Newsbeitrag news:nasho1do5hpdjfa6iq5tjsqadruc4taqai@4ax.com...
> On Fri, 25 Nov 2005 10:52:26 +0100, "Frithiof Andreas Jensen"
> <frithiof.jensen@die_spammer_die.ericsson.com> wrote:
>
> >
> >"Henry Kiefer" <otc_friend@gmx.net> wrote in message
> >news:4385b3b1$1$27887$9b4e6d93@newsread4.arcor-online.net...
> >
> >> Do you know of other interesting devices or circuits good for misuse?
> >
> >LED's work both ways, as a light emitter and a photodiode.
> >
>
> And optocouplers can do interesting things:
>
> Very simple high-voltage opamp, up to 400 volts p-p.
>
> Isolated totem-pole driver, from a few volts up to 400.
>
> Current limiter.
>
> Low-leakage diode, sort of like an LED painted black.
>
> John
>

5523. Re: Conductive plastic/cermet pots

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-26 23:56:20 UTC
From: Ivan Makarov <miv@hotmail.com>
Message-ID: <qI6dneBRfs6DaxXeRVn-jA@rogers.com>
Source record: 15904

Tom,

how does one know if it is of a 'hybrid' type? Is it in the datasheet?

Thks

"K7ITM" <k7itm@msn.com> wrote in message
news:1133033010.681420.148660@z14g2000cwz.googlegroups.com...
> Small cermet pots should be no trouble at 50MHz, assuming you aren't
> going to extreme resistance values. You will always have parasitic
> inductance and capacitance, but if a carbon pot would work in your
> application, a cermet of the same size and general design should behave
> similarly.
>
> Beware of the conductive plastic ones...some of those are "hybrid" pots
> that have a wirewound element under the plastic, to get very good
> linearity, and the conductive plastic provides interpolation between
> the turns of wire. I once used one of those to read out an angle, and
> it worked great, but I wouldn't consider trying to use it at RF. If
> it's not a hybrid (no wirewound element under the plastic), it should
> be OK.
>
> You may also want to consider the amount of (RF?) current in the wiper.
> It's generally a good idea to keep the wiper current low, unless the
> pot is specifically designed for high wiper current.
>
> Cheers,
> Tom
>

5524. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 00:30:16 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <levho1lskjv62qj0g93kqdgsain9hn3c6f@4ax.com>
Source record: 15907
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Sun, 27 Nov 2005 00:54:27 +0100, "Henry Kiefer"
<otc_friend@gmx.net> wrote:

>Can you give details?
>
>- Henry
>
>
>"John Larkin" <jjlarkin@highNOTlandTHIStechnologyPART.com> schrieb im
>Newsbeitrag news:nasho1do5hpdjfa6iq5tjsqadruc4taqai@4ax.com...
>> On Fri, 25 Nov 2005 10:52:26 +0100, "Frithiof Andreas Jensen"
>> <frithiof.jensen@die_spammer_die.ericsson.com> wrote:
>>
>> >
>> >"Henry Kiefer" <otc_friend@gmx.net> wrote in message
>> >news:4385b3b1$1$27887$9b4e6d93@newsread4.arcor-online.net...
>> >
>> >> Do you know of other interesting devices or circuits good for misuse?
>> >
>> >LED's work both ways, as a light emitter and a photodiode.
>> >
>>
>> And optocouplers can do interesting things:
>>
>> Very simple high-voltage opamp, up to 400 volts p-p.
>>
>> Isolated totem-pole driver, from a few volts up to 400.
>>
>> Current limiter.
>>
>> Low-leakage diode, sort of like an LED painted black.
>>
>> John
>>
>

I posted some opamp schematics to abse a while back. I guess I could
do it again if they're no longer available.

The others chould be fairly obvious.

John

5525. Re: AWA Contest- Caution

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 01:46:54 UTC
From: Ron in Radio Heaven <kc4yoy@spam.carolina.rr.com>
Message-ID: <ie8if.7164$xD5.2251274@twister.southeast.rr.com>
Source record: 15908
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

YT wrote:
> >members only event
> HA HA HA my ass!
> No such thing on the ham bands.
>

That's right, any body can work any body else,
but only AWA members can submit logs for scoring
in the contest.
Who cares about the score, get on the air and have FUN.

73, Ron

5526. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 02:40:53 UTC
From: Boris Mohar <borism_-void-_@sympatico.ca>
Message-ID: <047io1lsm3e5nad9dr3247e2j3j63cf740@4ax.com>
Source record: 15910
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Sat, 26 Nov 2005 15:41:27 -0800, John Larkin
<jjlarkin@highNOTlandTHIStechnologyPART.com> wrote:

>On Fri, 25 Nov 2005 10:52:26 +0100, "Frithiof Andreas Jensen"
><frithiof.jensen@die_spammer_die.ericsson.com> wrote:
>
>>
>>"Henry Kiefer" <otc_friend@gmx.net> wrote in message
>>news:4385b3b1$1$27887$9b4e6d93@newsread4.arcor-online.net...
>>
>>> Do you know of other interesting devices or circuits good for misuse?
>>
>>LED's work both ways, as a light emitter and a photodiode.
>>
>
>And optocouplers can do interesting things:
>
>Very simple high-voltage opamp, up to 400 volts p-p.
>
>Isolated totem-pole driver, from a few volts up to 400.
>
>Current limiter.
>
>Low-leakage diode, sort of like an LED painted black.
>
>John

A latch.

--

Boris Mohar

5527. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 02:54:18 UTC
From: Martin <martin.lenz@gmx.at>
Message-ID: <ops0vo0sbk8lri9x@news.gmx.at>
Source record: 15909
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Am 25 Nov 2005 06:28:21 -0800 schrieb <skavanagh72nospam@yahoo.ca>:

> As an addition to the various mentions of common diodes as varactors
> there is a well publicized British design for a frequency tripler that
> will put out 2 watts at 1.3 GHz and uses five 1N914's in parallel.
>
> I once built an HF transceiver that used CMOS logic chips for all
> functions except an audio low noise amp and a voltage regulator...with
> further thought those two could likely be done with CMOS logic too.
>
At least the audio amp, this is nice to build with some Inverters (4069)
with resistive Feedback.

--
Martin

5528. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 03:21:57 UTC
From: Martin <martin.lenz@gmx.at>
Message-ID: <ops0vqaviy8lri9x@news.gmx.at>
Source record: 15911
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Am Fri, 25 Nov 2005 22:13:38 -0500 schrieb Phil Hobbs
<pcdhSpamMeSenseless@us.ibm.com>:

> Si Ballenger wrote:
>
>>> I would put a 100 watt lamp in series thereby limiting the current. I
>>> would shave the ends down to points so they heated up rapidly. I put
>>> them into a hollowed out fire brick and made a cheap furnace. Of
>>> course don't look at it; it's like looking at the sun.
>> The current limiter I saw used a glass pie pan with pieces copper
>> metal on each side with salty water as the electrolyte. It would
>> start to steam some when in operation. The furnace was a small
>> clay flower pot with holes in each side with the carbon rods
>> sticking inside until they touched.
>>
>
> As a boy, I used an electric teakettle as a ballast for a two-D-cell
> carbon arc lamp--worked great.
>
An electric arc with just 3V from two D-cells? I thought the arc needs at
lesat 20V burning voltage.

--
Martin

5529. Re: AWA Contest- Caution

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 03:34:19 UTC
From: COLIN LAMB <k7fm@teleport.com>
Message-ID: <%O9if.1603$Hk1.721@newsread1.news.pas.earthlink.net>
Source record: 15912
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Hi Carl:

The VT-127A is a good tube. It was a repackaged Eimac 100TL for radar use. Just more filament current. They were cheap after the war, but got sidetracked because the 304TL was also cheap and ran more power.

Love to see a photo when you get done as I have a few sitting in storage that belong in a rig.

73, Colin K7FM

5530. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 03:35:18 UTC
From: Phil Hobbs <pcdhSpamMeSenseless@us.ibm.com>
Message-ID: <43892976.802@us.ibm.com>
Source record: 15913
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Martin wrote:
> Am Fri, 25 Nov 2005 22:13:38 -0500 schrieb Phil Hobbs
> <pcdhSpamMeSenseless@us.ibm.com>:
>
>> Si Ballenger wrote:
>>
>>>> I would put a 100 watt lamp in series thereby limiting the current.
>>>> I would shave the ends down to points so they heated up rapidly. I
>>>> put them into a hollowed out fire brick and made a cheap furnace.
>>>> Of course don't look at it; it's like looking at the sun.
>>>
>>> The current limiter I saw used a glass pie pan with pieces copper
>>> metal on each side with salty water as the electrolyte. It would
>>> start to steam some when in operation. The furnace was a small
>>> clay flower pot with holes in each side with the carbon rods
>>> sticking inside until they touched.
>>>
>>
>> As a boy, I used an electric teakettle as a ballast for a two-D-cell
>> carbon arc lamp--worked great.
>>
> An electric arc with just 3V from two D-cells? I thought the arc needs
> at lesat 20V burning voltage.
>

It ran off 120 V. Parse the sentence as "two D-cell-carbon arc lamp." An earlier poster talked about building AC-powered arc lamps using the carbon rods from dry cells.

Cheers,

Phil Hobbs

5531. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 03:44:55 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <5saio1l9hsp1per3tbk2qud2ej9m9j3mh0@4ax.com>
Source record: 15914
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Sat, 26 Nov 2005 21:40:53 -0500, Boris Mohar
<borism_-void-_@sympatico.ca> wrote:

>On Sat, 26 Nov 2005 15:41:27 -0800, John Larkin
><jjlarkin@highNOTlandTHIStechnologyPART.com> wrote:
>
>>On Fri, 25 Nov 2005 10:52:26 +0100, "Frithiof Andreas Jensen"
>><frithiof.jensen@die_spammer_die.ericsson.com> wrote:
>>
>>>
>>>>"Henry Kiefer" <otc_friend@gmx.net> wrote in message
>>>news:4385b3b1$1$27887$9b4e6d93@newsread4.arcor-online.net...
>>>
>>>> Do you know of other interesting devices or circuits good for misuse?
>>>
>>>LED's work both ways, as a light emitter and a photodiode.
>>>
>>
>>And optocouplers can do interesting things:
>>
>>Very simple high-voltage opamp, up to 400 volts p-p.
>>
>>Isolated totem-pole driver, from a few volts up to 400.
>>
>>Current limiter.
>>
>>Low-leakage diode, sort of like an LED painted black.
>>
>>John
>
> A latch.

Right, if CTR > 1.

John

5532. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 03:53:40 UTC
From: Martin <martin.lenz@gmx.at>
Message-ID: <ops0vrrqii8lri9x@news.gmx.at>
Source record: 15915
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Am Thu, 24 Nov 2005 09:55:13 -0800 schrieb RST Engineering (jw)
<jim@rstengineering.com>:

> into account without even thinking about it. However, a student new to
> the
> field (as my freshman engineering students are) makes the mistake
> repeatedly, even when using a decent text called ... um ... The Art Of
> Something Or Other. When their RF amplifier starts squeeging or
> motorboating, I tell them that the power supply isn't bypassed well
> enough,
> and I'll be damned if the first thing they do is put a BIGGER capacitor
> on
> the supply line.
>
Like some of us could lough nicely, when a new guy at a customer
(semiconductor fab/asics) of the last company I worked for had to test an
RF Chip. Another engineer came to look what the guy is doing, saw he
didn't bypass the power supply and recommended to do so. The young
engineer put a nice 2200ï¿œF electrolytic at the terminals of the
lab-power-supply.

--
Martin

5533. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 04:13:03 UTC
From: Martin <martin.lenz@gmx.at>
Message-ID: <ops0vsn10r8lri9x@news.gmx.at>
Source record: 15916
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Am Sat, 26 Nov 2005 16:16:27 +0000 (UTC) schrieb Matthias Weingart
<mwnews@pentax.boerde.de>:

> John Devereux <jdREMOVE@THISdevereux.me.uk> wrote in
> news:8764qh82fw.fsf@cordelia.devereux.me.uk:
>
>> ehsjr <ehsjr@bellatlantic.net> writes:
>>> Henry Kiefer wrote:
>>> > Do you know of other interesting devices or circuits good for
>>> > misuse? Best regards -
>>> > Henry
>>>
>>> An LED as a shunt regulator. Also, as a varicap.
>>> Ed
>>
>> Also a photodetector that is insensitive to long wavelengths
>> (because of the high bandgap).
>
> To save power, use the LEDs of a backlight to measure the ambient light
> to decide to switch the backlight on or not.
>
But how to decide to switch it off? I think there you have to sample -
switch of for a short time and test. This could give a flickering
backlight.

--
Martin

5534. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 05:11:59 UTC
From: nospam.clare.nce@sny.der.on.ca
Message-ID: <6jfio11jtsvknlr7mc7fd2p7cac37t23v6@4ax.com>
Source record: 15917
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

On Sat, 26 Nov 2005 15:52:36 GMT, "Pete C." <aux3.DOH.4@snet.net>
wrote:

>Not entirely true, the few lucky people who have been able to find
>honest, reliable mechanics do tend to speak highly of them.
>

Only those who have the sense to know the value of finding and keeping
a good mechanic (or any other tradesman/proffessional) There are fewer
of THEM out there than there are honest reliable mechanics.
>>
>> It just wasn't fun any more after 25 years - and its gotten a whole
>> lot worse in the last 15 or more years.
>
>Remember that the people bringing in the cars in the last 15 years or so
>as you have noted, are the parents (or now their children) from the
>generation that has deluded themselves into the belief that mechanical
>trades (dirty jobs) are somehow devoid of education and skill and have
>actively discouraged their children from having any interest in such
>things.
>
>This delusion of the PYVs (plastic yuppie vermin) is furthered by the
>increasing complexity of cars and the thought that the grease monkeys
>couldn't possibly understand anything about computers so they must just
>be swapping parts until things magically start working.

And I got out of the mechanics trade and into the computer service
world - - -.
>
>It's only going to get worse too...

That's what I decided 17 years ago. And I was right.

Now everybody's kid wants to be a computer tech instead of a mechanic
- and for the same reason kids wanted to be mechanics 40 years ago. 40
years ago the "gearheads" wanted to be mechanics to fool around with
their first love - the CAR.
Now the "computer nerds" want to be able to play with THEIR first love
- the Computer / Game console/ Whatever.
And they will work for almost nothing just to be able to do it. and
their method of repair??? "swapping parts until things magically start
working"

Time for a THIRD career?? (4th if you include teaching)
>

>Pete C.

5535. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 05:23:57 UTC
From: david@slack.com
Message-ID: <11oignd5ao6q7d5@corp.supernews.com>
Source record: 15918
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

In article <4388fc27$0$20854$9b4e6d93@newsread2.arcor-online.net>,
Henry Kiefer <otc_friend@gmx.net> wrote:
>Bob Pease of National Semi mentioned a ONE AND ONLY transistor circuit
>above/under voltage rail converter (with detailed theory). I cannot remember
>the details. But interesting if sometime a slightly voltage behind the power
>rail is needed. For example to power a CMOS Opamp now doing rail-input.

For a good discussion of Bob Pease's "April Fool" negative voltage
generator, see:

http://www.edaboard.com/viewtopic.php?p=423522

Unfortunately you have to log in to the site to see the drawings & photos.

I don't think it produces nearly enough current to power an opamp.

5536. freedom and independence

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 06:11:45 UTC
From: Life in America <goodwordusa@gmail.com>
Message-ID: <B6cif.176379$zb5.57252@bgtnsc04-news.ops.worldnet.att.net>
Source record: 15919

Have you ever thought much about how communication is changing?

You're reading a message I posted on the usenet. The usenet is a grand expression of freedom and independence. It extends, of course, beyond national borders.

Not so long ago, all long distance communication (including news information) relied on much slower and more expensive means. But today we can enjoy the internet and usenet, communicating freely to the whole world at once. Even radio communication continues to move forward with leaps and bounds, assisted, in many cases by computer technology and even by the internet and/or usenet.

Other things can change, as well.

The same kind of freedom and independence can be had when it comes to the energy required to heat and power our homes -- and our automotive vehicles. That day, I fully believe, is coming. We can work to bring it about so that we can enjoy it now, or we can sit back and continue our bondage to big corporations (and their methods), paying way too much for power and not enjoying the freedom of having our own private sources at home.

To me, as an American, it's all about freedom and independence.

What do you think? Are the people of America still independence-minded? I mean, really?

Here in America we have a reputation for holding the idea of independence pretty high. But we need to be careful not to give too much power to corporations that love to keep a hold on our lives.

Think about it. There are the credit agencies, such as banks, credit card issuers, etc. that can end up with a lot of power over a person, or even over an entire family. There are the advertisers who work very hard to persuade us that we need to be thinking about this, buying that, and so on. And along those same lines, there are the media people who very much want to sway folks as to what we should think and feel about various issues.

But my main thought right now is the power companies themselves. The utility companies and oil companies. We tend to gripe about these guys but then we do very little to shake off the hold they can have over our entire household.

When I see the grip that electric companies and gas companies have, for example, I wonder just how much we really cherish our freedom in this country. It's not like we have no alternatives.

Alternative power is here. Some of our neighbors are using solar, wind power, various geo-thermal power, and so on to either supplement or supply their household power. The technology is here. It's working. But only a relatively small number of people are going for it.

It's possible to heat your home all winter by using passive solar, wind powered generators, and solar panels. Of course, the other big alternative is also in place and being used by a larger number of people: wood heat.

Only when enough people are switching from total dependence on the electric grid and/or gas lines to private power will we begin to see a real return to independence-minded America.

Griping about poor leadership, griping about high prices, griping about the economy -- none of this gets anything accomplished. Personal freedom & independence never comes without a struggle. The "fight" has to be inside of us before we will emerge as a free people. We can see this when we look at nations such as Iraq. Why can't we see it in ourselves?

Real freedom cannot be given to us by other people. Politicians will never be able to do it for us. It must be earned, forged, built with our own hands. That's demonstrated in the history of our own nation. It's just as true today as it ever was.

Anyway, just thinking about these things.

Jim
www.jimsdesk.com

Here's a partial list of alternative energy information sources (there are, of course, many, many more)
http://homestead.goodwordusa.org/energy/listing.htm

Start your own small newspaper business
free online help at:
http://www.newspaper-info.com

free 13-month 2006 calendar (pdf file)
download at:
http://www.jimsgraphix.com/lowcal.htm

5537. Re: Conductive plastic/cermet pots

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 06:42:28 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1133073748.084348.195720@z14g2000cwz.googlegroups.com>
Source record: 15920

Hi Ivan,

Yes, I'd expect it to say its a hybrid pot in the data sheet. They tend to be quite expensive.

What are you doing with this particular pot? It always helps in giving a useful answer if we have all the relevant information, and "50MHz" isn't a whole lot of information.

Cheers,
Tom

5538. Re: Conductive plastic/cermet pots

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 07:06:27 UTC
From: Ivan Makarov <miv@hotmail.com>
Message-ID: <1MqdnXDj-YR2xxTeRVn-rw@rogers.com>
Source record: 15921

Tom,

it is the old good ARRL noise bridge. It has a pot in its output bridge
circuit.
I changed the layout of the elements a little from what is in the Handbook,
and found it works reasonably well up to 50MHz. The signal is still audible
on 2m, but I did not concentrated on evaluation of the circuit on that band.
The original question came up because I had unacceptable results with the
carbon pots (they are not good at their minimum level). My hope was cermets
or plastic ones may have better stability.
Unless the pot is of a wirewound type, parasitic inductance of the element
could be compensated as described in the article.
And because the null can be very sharp, a multiturn pot would be of a big
help.

My best regards,
Ivan

"K7ITM" <k7itm@msn.com> wrote in message
news:1133073748.084348.195720@z14g2000cwz.googlegroups.com...
> Hi Ivan,
>
> Yes, I'd expect it to say its a hybrid pot in the data sheet. They
> tend to be quite expensive.
>
> What are you doing with this particular pot? It always helps in giving
> a useful answer if we have all the relevant information, and "50MHz"
> isn't a whole lot of information.
>
> Cheers,
> Tom
>

5539. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 07:46:09 UTC
From: Ivan Makarov <miv@hotmail.com>
Message-ID: <ZuGdnSKjleyn-RTenZ2dnUVZ_sidnZ2d@rogers.com>
Source record: 15922

When I was a teenager and my brothers started bothering me with their loud TV, I took a 220V relay, put one of the coil leads through its normally closed contact group, and plugged the relay into the mains behind the wall where the TV was. Made an exelent TVI/RFI generator, I thought the TV is going to blow up.

"Henry Kiefer" <otc_friend@gmx.net> wrote in message
news:4385b3b1$1$27887$9b4e6d93@newsread4.arcor-online.net...
> Hi all -
>
> After my first thread going from "standard" cheap parts for up to vhf
> frequency to a discussion about the usefulness of Spice simulator..... I
> try it another time hopefully get attention of frustrated co-readers:
>
> For example the rechtifier diode 1N4007 can be used as a rf switching
diode,
> for example as rx/tx-switch. This is because it is a pin structure diode.
> This type is cheap and you can get it almost everywhere. It shows good
> performance for the price. Surely for high-end you should do it with
another
> type tuned to the application it is made for. But anyway it works in some
> circuits.
>
> Do you know of other interesting devices or circuits good for misuse?
>
> Best regards -
> Henry
>
>

5540. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 09:57:23 UTC
From: Matthias Weingart <mwnews@pentax.boerde.de>
Message-ID: <Xns971B6F46173CAAlwLookOnTBrightSide@penthouse.boerde.de>
Source record: 15923
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Martin <martin.lenz@gmx.at> wrote in
news:ops0vsn10r8lri9x@news.gmx.at:

>> To save power, use the LEDs of a backlight to measure the ambient
>> light to decide to switch the backlight on or not.
>>
> But how to decide to switch it off? I think there you have to
> sample - switch of for a short time and test. This could give a
> flickering backlight.

Ok, you found the skeleton in the closet. :-) You can not use
this method to switch it off - but it is not required in most cases.
Think of a cell phone - the backlight goes on every time you press a
key, and it is going off after 10 seconds.

M.
--
Bitte auf mwnews2@pentax.boerde.de antworten.

5541. Re: freedom and independence (OT !)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 11:48:34 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <ududnSSdj4d2ARTeRVnyjA@pipex.net>
Source record: 15924

> Jim
> www.jimsdesk.com
>
>
> Here's a partial list of alternative energy information sources (there
> are, of course, many, many more)
> http://homestead.goodwordusa.org/energy/listing.htm
>
> Start your own small newspaper business
> free online help at:
> http://www.newspaper-info.com
>
> free 13-month 2006 calendar (pdf file)
> download at:
> http://www.jimsgraphix.com/lowcal.htm
==========
The above is OT , nevertheless , tnx Jim for the above web references

Frank GM&#65533;CSZ / KN6WH

>

5542. What's in a battery, these days?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 11:48:53 UTC
From: MonoCalculus <aiyr.r.bean@lycos.co.uk>
Message-ID: <1133092133.664785.269860@z14g2000cwz.googlegroups.com>
Source record: 15925
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

When I was a lad, old dry cells were a source of interesting scrap,
carbon rods, zinc flashing, brass strips and brass terminals.

Are zinc-carbon cells still sold today, or are the AA, A, C and D
cells made up of more insidious (and poisonous) compounds?

The metallically-sealed cells look a little more daunting
than the bitumen-sealed zinc cans of yore.

What do we get when we rush down to our local hardware stores
apart from fork handles?

PS. I'm interested in getting hold of one of those wet Leclanche
cells, the sort with the baekelite moulded tops, that were
used to power door bells. Anybody got one for disposal? ISTR
that there was no depolarising agent fitted which served a useful
purpose - that of preventing annoying long presses of the bell-push.

5543. Re: What's in a battery, these days?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 11:53:04 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <dbWdnfGpMZe9AxTeRVn-rg@giganews.com>
Source record: 15926
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

MonoCalculus wrote:
>
> PS. I'm interested in getting hold of one of those wet Leclanche
> cells, the sort with the baekelite moulded tops, that were
> used to power door bells. Anybody got one for disposal? ISTR
> that there was no depolarising agent fitted which served a useful
> purpose - that of preventing annoying long presses of the bell-push.

I thought the police didn't bother ringing the doorbell as you are so well
known to them?
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

5544. Re: What's in a battery, these days?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 12:00:41 UTC
From: "MattD.." <mattd145@gmail.com>
Message-ID: <dmc759$1mal$1@mattsnetwork.co.uk>
Source record: 15927
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

After replacing MonoCalculus with a small shell script on Sunday 27 Nov 2005 11:48, the following appeared on stdout:

> Are zinc-carbon cells still sold today, or are the AA, A, C and D
> cells made up of more insidious (and poisonous) compounds?

Just don't start prying Li-Ion cells to bits. They're rather nasty if you manage to puncture them.
--
Radio glossary #13
Integrated circuit: You have the only one in existence. This theory will be borne out when you try to obtain a replacement.

5545. Re: What's in a battery, these days?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 12:53:44 UTC
From: MonoCalculus <aiyr.r.bean@lycos.co.uk>
Message-ID: <1133096023.988400.269740@g49g2000cwa.googlegroups.com>
Source record: 15928
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

I have two editions of "The Boy Electrician". The 1940's edition
is full of doing interesting things such as you describe, and
includes info on setting up your own X-Ray tubes with
attendant HT supplies!

The 1960's edition has been fully sanitised (Odd, because if
predates the Health and Safety paranoia by several years) and
all experiments revolve around 9 volt batteries.

Walt Davidson wrote:
> On 27 Nov 2005 03:48:53 -0800, "MonoCalculus"
> <aiyr.r.bean@lycos.co.uk> wrote:
>
> >When I was a lad, old dry cells were a source of interesting scrap,
> >carbon rods, zinc flashing, brass strips and brass terminals.
>
> I remember, as a child, taking apart the cells from Ever-Ready "Number
> 8" batteries. There was a carbon rod with a small brass cap fitted to
> the top. Surrounding this, there was a paste of manganese dioxide and
> carbon powder, contained in a gauze bag that resembled a piece of
> old-fashioned roller bandage. The remainder of the space inside the
> zinc can was filled with a paste of ammonium chloride mixed with some
> inert powder. The whole thing was sealed with a substance like
> Vaseline to keep the contents moist, and a circular cardboard cover
> with a hole in the centre for the carbon rod to pass through.
>
> I once succeeded in making an arc lamp with two of the carbon rods!
> I made hydrogen by dissolving the zinc cans in sulphuric acid (battery
> acid).
> :-)
>
> --
> Walt Davidson Email: g3nyy @despammed.com

5546. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 13:06:09 UTC
From: Martin <martin.lenz@gmx.at>
Message-ID: <ops0whcjol8lri9x@news.gmx.at>
Source record: 15929
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Am Sun, 27 Nov 2005 09:57:23 +0000 (UTC) schrieb Matthias Weingart
<mwnews@pentax.boerde.de>:

> Martin <martin.lenz@gmx.at> wrote in
> news:ops0vsn10r8lri9x@news.gmx.at:
>
>>> To save power, use the LEDs of a backlight to measure the ambient
>>> light to decide to switch the backlight on or not.
>>>
>> But how to decide to switch it off? I think there you have to
>> sample - switch of for a short time and test. This could give a
>> flickering backlight.
> Ok, you found the skeleton in the closet. :-) You can not use
> this method to switch it off - but it is not required in most cases.
> Think of a cell phone - the backlight goes on every time you press a
> key, and it is going off after 10 seconds.

OK, so you can decide to not switch it on and save some mAs.

--
Martin

5547. Re: What's in a battery, these days?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 14:29:13 UTC
From: "jim.gm4dhj" <jim.gm4dhj@ntlworld.com>
Message-ID: <Zojif.6366$0o2.5244@newsfe3-gui.ntli.net>
Source record: 15930
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

don't know but they die after about 3 years.....

5548. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 14:32:08 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4389C360.29C054E@earthlink.net>
Source record: 15931
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

"Pete C." wrote:
>
> Not entirely true, the few lucky people who have been able to find
> honest, reliable mechanics do tend to speak highly of them.
>

>
> Remember that the people bringing in the cars in the last 15 years or so
> as you have noted, are the parents (or now their children) from the
> generation that has deluded themselves into the belief that mechanical
> trades (dirty jobs) are somehow devoid of education and skill and have
> actively discouraged their children from having any interest in such
> things.
>
> This delusion of the PYVs (plastic yuppie vermin) is furthered by the
> increasing complexity of cars and the thought that the grease monkeys
> couldn't possibly understand anything about computers so they must just
> be swapping parts until things magically start working.
>
> It's only going to get worse too...
>
> Pete C.

Seven or eight years ago the gas gauge quit on my dad's jeep. He
took it to the dealer. The changed the sending unit. Then they changed
the gauge. They had it over a week and still hadn't fixed it, so he paid
them over $400 to get it back. I took a look at it and found the problem
in 15 seconds. The lug on the ground wire to the sending unit had
snapped, and the wire was hanging down, in plain sight. A new lug took a
few minutes to install and it worked fine, till he traded it in on a new
car a few years later.
--
?

Michael A. Terrell
Central Florida

5549. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 14:52:11 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <4389C813.CE397027@earthlink.net>
Source record: 15932
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

nospam.clare.nce@sny.der.on.ca wrote:
>
> On Sat, 26 Nov 2005 15:52:36 GMT, "Pete C." <aux3.DOH.4@snet.net>
> wrote:
>
> >Not entirely true, the few lucky people who have been able to find
> >honest, reliable mechanics do tend to speak highly of them.
> >
>
> Only those who have the sense to know the value of finding and keeping
> a good mechanic (or any other tradesman/proffessional) There are fewer
> of THEM out there than there are honest reliable mechanics.

Its like the days when there were real TV shops. The techs knew what they were doing, and went to every available factory school to keep up with the new designs. Most people thought you just shoved tubes in till the set worked, and that it was criminal to even want to make minimum wage. They were rude, ignorant, and price shopped for the cheapest service calls. Well, guess what? The cheapest service calls were the fly by night operators who worked out of the trunk of their car, or in one case, a dirty old hippie in a VW van that reeked of marijuana some. It was rare to find a good customer who understood that it took time to repair something, and some parts took time to find.

We had a "Customer" take us to small claims court because we charged for an estimate. He claimed that his mechanic didn't charge for an estimate, so we had no right to, either. He and the judge had big smiles on their faces as they told my boss he was wrong. My boss plopped a RCA CTC38 series chassis on the Judge's bench and said, Well, in that case would you mind telling me what's wrong with this set? The judge started yelling that he had no idea what was wrong so my boss asked, If you can't tell by looking, how can we? We have to find the problem, replace the part and make sure there are no other problems before we can give you an accurate estimate. He won the case.

> >>
> >> It just wasn't fun any more after 25 years - and its gotten a whole
> >> lot worse in the last 15 or more years.
> >
> >Remember that the people bringing in the cars in the last 15 years or so
> >as you have noted, are the parents (or now their children) from the
> >generation that has deluded themselves into the belief that mechanical
> >trades (dirty jobs) are somehow devoid of education and skill and have
> >actively discouraged their children from having any interest in such

> >things.
> >
> >This delusion of the PYVs (plastic yuppie vermin) is furthered by the
> >increasing complexity of cars and the thought that the grease monkeys
> >couldn't possibly understand anything about computers so they must just
> >be swapping parts until things magically start working.
>
> And I got out of the mechanics trade and into the computer service
> world - - -.
> >
> >It's only going to get worse too...
>
> That's what I decided 17 years ago. And I was right.
>
> Now everybody's kid wants to be a computer tech instead of a mechanic
> - and for the same reason kids wanted to be mechanics 40 years ago. 40
> years ago the "gearheads" wanted to be mechanics to fool around with
> their first love - the CAR.
> Now the "computer nerds" want to be able to play with THEIR first love
> - the Computer / Game console/ Whatever.
> And they will work for almost nothing just to be able to do it. and
> their method of repair??? "swapping parts until things magically start
> working"

I started computer repair on the old Commodore 64. A scope and good soldering skills were a must. I built a test bed with ZIF sockets to test the different chips so I could verify that they were bad, and to test new chips when they arrived for wherever I could buy them. Now, I'm old and disabled so I repair PCs as a hobby. I collect dead and half stripped computers and build working systems from the parts. They are given to the local "Vets helping Vets" program so they can be given to disabled Veterans who can not afford to buy a computer. It gives me something to do for a few hours a day, but I really miss building TV stations and telemetry equipment for the aerospace industry.

> Time for a THIRD career?? (4th if you include teaching)
> >
> >Pete C.

--
?

Michael A. Terrell
Central Florida

5550. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 15:02:30 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1133100597.328737.283960@g14g2000cwa.googlegroups.com>
Source record: 15933
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Martin wrote:

> > I once built an HF transceiver that used CMOS logic chips for all
> > functions except an audio low noise amp and a voltage regulator...with
> > further thought those two could likely be done with CMOS logic too.
> >
> At least the audio amp, this is nice to build with some Inverters (4069)
> with resistive Feedback.

Most of the audio section was done that way. But the product detector had low impedance output and the CMOS amp was too noisy at 50 ohms. A transformer might have done the job but a common-base amp seemed more practical and less prone to picking up hum.

Steve

5551. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 15:21:05 UTC
From: Fred Bloggs <nospam@nospam.com>
Message-ID: <4389CED3.5080805@nospam.com>
Source record: 15934
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

Pete C. wrote:

> Remember that the people bringing in the cars in the last 15 years or so
> as you have noted, are the parents (or now their children) from the
> generation that has deluded themselves into the belief that mechanical
> trades (dirty jobs) are somehow devoid of education and skill and have
> actively discouraged their children from having any interest in such
> things.

I think you mean they are the "children (or now parents)"- this type of
mental dyslexia is disturbing to the meticulous reader.

>
> This delusion of the PYVs (plastic yuppie vermin) is furthered by the
> increasing complexity of cars and the thought that the grease monkeys
> couldn't possibly understand anything about computers so they must just
> be swapping parts until things magically start working.

I like that- PYV- good acronym- or "awesome" as the PYV say.

5552. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 15:29:26 UTC
From: Fred Bloggs <nospam@nospam.com>
Message-ID: <4389D0D3.4050305@nospam.com>
Source record: 15935
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

Ignoramus12834 wrote:
> On Sat, 26 Nov 2005 15:52:36 GMT, Pete C. <aux3.DOH.4@snet.net> wrote:
>
>>This delusion of the PYVs (plastic yuppie vermin) is furthered by the
>>increasing complexity of cars and the thought that the grease monkeys
>>couldn't possibly understand anything about computers so they must just
>>be swapping parts until things magically start working.
>
>
> They keep swapping parts because it makes them money.
>
> A true story. A couple of years ago, a lightning struck a big tree in
> our yard:
>
> http://igor.chudov.com/tmp/lightning/
>
> That also knocked out our central A/C.
>
> So, I went in with a multimeter and tried tracing just where does not
> signal go etc. I learned that the control board was sending proper
> signal to the motor drive board, etc.
>
> Then we called an A/C guy. He calls me at work and says stuff like
> "the main board is probably knocked out and needs replacement", lets
> replace this and that etc.
>
> I asked him just what basis do you have for saying so. (because I knew
> that it was bullshit). He mumbled some nonsense. I decided not to hire
> him, although I paid his visit fee. I did not feel like hiring someone
> who is either incompetent or a crook. I called another A/C company and
> explained them my findings etc.
>
> He replaced the motor drive board, it was covered by warranty (but
> labor was not), and everything works fine to date. Some other things
> failed since, such as quick disconnect terminals fell apart on the
> main contactor, but the control system is fine.
>
> The moral of the story, they want replacing parts because it makes $$
> for them.
>
> i
>

The moral of the story is that you are PYV. All the electronic boards are LRUs in the mechanical trades and there is no way that repair could be cost effective any other way, parts are way below labor costs. In the case of a lightning strike where one board has failed, it is good practice to yank *all* of them and be done with it. You are getting *new* boards at reasonable markup, you pay a single labor charge, and there is no possibility of less than a durable fix or additional damage being done due to faulty drive. I can see the HVAC tech breaking out the oxy-acetylene torch to solder components...too funny.

5553. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 15:31:12 UTC
From: "wa2mze(spamless)" <"wa2mze(spamless)"@bellsouth.net>
Message-ID: <Ogkif.10652$KP1.6885@bignews5.bellsouth.net>
Source record: 15936
Body handling: HTML body converted to readable text

mcalhoun@ksu.edu wrote:
>>>1n914/4148 as silicon temperature sensor. (forward bias)
>
>
>
> What is the rest of the circuit you used?
>
A 741 op amp was used as a comparator driving an opto-isolator
triac driver. A triac then controlled the heater. The op amp
compared the voltage across the diode to a fixed voltage provided
by a three terminal regulator and a 10 turn pot. The wiper of
the 10 turn pot was connected to a single turn pot that
then provided the temperature setting. The two pots in series
were needed because the range of adjustment was very small
(the voltage across the diode varies with tempature, but the
change is small over the range we are interested in for
a heater controller.)

5554. Re: AWA Contest- Caution

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 17:01:32 UTC
From: Bill Janssen <billj9@ieee.org>
Message-ID: <MDlif.418$kV7.64@news02.roc.ny>
Source record: 15937
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

COLIN LAMB wrote:

>Hi Carl:
>
>The VT-127A is a good tube. It was a repackaged Eimac 100TL for radar use.
>Just more filament current. They were cheap after the war, but got
>sidetracked because the 304TL was also cheap and ran more power.
>
>Love to see a photo when you get done as I have a few sitting in storage
>that belong in a rig.
>
>73, Colin K7FM
>
>
>
>
I have a couple of 100xx also and some tunning capacitors and coils and
transformers etc.
I have been keeping these for an old time rig that probably will never
get built.

Anyone want to build a tube rig? I already have too many projects.

Bill K7NOM

5555. Re: What's in a battery, these days?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 17:10:01 UTC
From: "wa2mze(spamless)" <"wa2mze(spamless)"@bellsouth.net>
Message-ID: <sJlif.22175$i7.18004@bignews2.bellsouth.net>
Source record: 15938
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

MonoCalculus wrote:
> I have two editions of "The Boy Electrician". The 1940's edition
> is full of doing interesting things such as you describe, and
> includes info on setting up your own X-Ray tubes with
> attendant HT supplies!
>
> The 1960's edition has been fully sanitised (Odd, because if
> predates the Health and Safety paranoia by several years) and
> all experiments revolve around 9 volt batteries.
>
They published a 1960's edition?!
The last version of TBE I saw was published in the '50s and
still had all the 'nasty' stuff. This version had a one tube
regenerative receiver using a 1H4G tube that was nearly obsolete
at the time. In fact, A. Morgan also published a set of books
called the Boy's 1st - 4th books of radio and electronics.
In the first book he had a similar radio, but in latter editions
of that book the tube was changed to a 6 volt 7 pin mini type.

Lindsay books (www.lindsaybks.com) is now selling a reprint in paperback
of the 40's BE, which has several radios using the type 30 tube
(same as 1H4G with 4 pin base). Except for the sections on radio,
the 40's and 50's editions are the same.

5556. Re: What's in a battery, these days?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 17:12:26 UTC
From: Bill Janssen <billj9@ieee.org>
Message-ID: <_Nlif.408$OO6.179@news01.roc.ny>
Source record: 15939
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

MonoCalculus wrote:

>When I was a lad, old dry cells were a source of interesting scrap,
>carbon rods, zinc flashing, brass strips and brass terminals.
>
>Are zinc-carbon cells still sold today, or are the AA, A, C and D
>cells made up of more insidious (and poisonous) compounds?
>
>The metallically-sealed cells look a little more daunting
>than the bitumen-sealed zinc cans of yore.
>
>What do we get when we rush down to our local hardware stores
>apart from fork handles?
>
>PS. I'm interested in getting hold of one of those wet Leclanche
>cells, the sort with the baekelite moulded tops, that were
>used to power door bells. Anybody got one for disposal? ISTR
>that there was no depolarising agent fitted which served a useful
>purpose - that of preventing annoying long presses of the bell-push.
>
>
>
I understand that the old design cells are still made. If you buy the
cheap cells ($1.00 a dozen or so)
then you get the old style. But if you buy Alkaline batteries you get a
cell that has the Zinc in the center
and Carbon around the outside. Most of the Zinc and Carbon is powdered
in the Alkaline cells

Bill K7NOM

5557. Re: What's in a battery, these days?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 17:22:38 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1133112158.687700.21810@g44g2000cwa.googlegroups.com>
Source record: 15940
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

The 1965 edition is still pub. by George Harrap,
but is "completely revised" from the original
work by J.W.Sim.

wa2mze(spamless) wrote:
> MonoCalculus wrote:
> > I have two editions of "The Boy Electrician". The 1940's edition
> > is full of doing interesting things such as you describe, and
> > includes info on setting up your own X-Ray tubes with
> > attendant HT supplies!
> >
> > The 1960's edition has been fully sanitised (Odd, because if
> > predates the Health and Safety paranoia by several years) and
> > all experiments revolve around 9 volt batteries.
> >
> They published a 1960's edition?!
> The last version of TBE I saw was published in the '50s and
> still had all the 'nasty' stuff. This version had a one tube
> regenerative receiver using a 1H4G tube that was nearly obsolete
> at the time. In fact, A. Morgan also published a set of books
> called the Boy's 1st - 4th books of radio and electronics.
> In the first book he had a similar radio, but in latter editions
> of that book the tube was changed to a 6 volt 7 pin mini type.
>
> Lindsay books (www.lindsaybks.com) is now selling a reprint in paperback
> of the 40's BE, which has several radios using the type 30 tube
> (same as 1H4G with 4 pin base). Except for the sections on radio,
> the 40's and 50's editions are the same.

5558. Re: AWA Contest- Caution

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 17:59:10 UTC
From: de Mac <de.Mac.1z6c5e@news.radiobanter.com>
Message-ID: <de.Mac.1z6c5e@news.radiobanter.com>
Source record: 15943

Hello

members only idea is foolish
seeing as the am test is not members only

am op running St. James Gray play for free
cw ops running home brew must pay!

use to be a member of the AWA
just to be able to join in on the contests

can no longer justify the dues
to just join in one or two contests

will start running my TNT job more this winter
its from a

George Grammer article, Dec 1929 QST
some small changes, link coupled output
insted of taped coil output
use VT4C/211C aprox 750 volts on the plate
lock the kittens out of the shack ma!
look for me around 3540 to 3550 late nights

cul de mac w8znx

--
de Mac

5559. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 18:11:30 UTC
From: "Pete C." <aux3.DOH.4@snet.net>
Message-ID: <438A2EAE.8CEF6418@snet.net>
Source record: 15944
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

Fred Bloggs wrote:
>
> Pete C. wrote:
>
> > Remember that the people bringing in the cars in the last 15 years or so
> > as you have noted, are the parents (or now their children) from the
> > generation that has deluded themselves into the belief that mechanical
> > trades (dirty jobs) are somehow devoid of education and skill and have
> > actively discouraged their children from having any interest in such
> > things.
>
> I think you mean they are the "children (or now parents)"- this type of
> mental dyslexia is disturbing to the meticulous reader.

No, I meant it in the order it was in. The PYV parents came first 15 or
so years ago, followed later by the children of the PYVs once they were
old enough to have cars needing repairing.

>
> >
> > This delusion of the PYVs (plastic yuppie vermin) is furthered by the
> > increasing complexity of cars and the thought that the grease monkeys
> > couldn't possibly understand anything about computers so they must just
> > be swapping parts until things magically start working.
>
> I like that- PYV- good acronym- or "awesome" as the PYV say.

It's quick, descriptive and accurate.

Pete C.

5560. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 18:29:30 UTC
From: Gunner Asch <gunner@lightspeed.net>
Message-ID: <ckujo15eqgb9a828331m2plv4dfsjb5qdl@4ax.com>
Source record: 15941
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

On Sun, 27 Nov 2005 14:32:08 GMT, "Michael A. Terrell"
<mike.terrell@earthlink.net> wrote:

>"Pete C." wrote:
>>
>> Not entirely true, the few lucky people who have been able to find
>> honest, reliable mechanics do tend to speak highly of them.
>>
>
>
>
>>
>> Remember that the people bringing in the cars in the last 15 years or so
>> as you have noted, are the parents (or now their children) from the
>> generation that has deluded themselves into the belief that mechanical
>> trades (dirty jobs) are somehow devoid of education and skill and have
>> actively discouraged their children from having any interest in such
>> things.
>>
>> This delusion of the PYVs (plastic yuppie vermin) is furthered by the
>> increasing complexity of cars and the thought that the grease monkeys
>> couldn't possibly understand anything about computers so they must just
>> be swapping parts until things magically start working.
>>
>> It's only going to get worse too...
>>
>> Pete C.
>
>
> Seven or eight years ago the gas gauge quit on my dad's jeep. He
>took it to the dealer. The changed the sending unit. Then they changed
>the gauge. They had it over a week and still hadn't fixed it, so he paid
>them over $400 to get it back. I took a look at it and found the problem
>in 15 seconds. The lug on the ground wire to the sending unit had
>snapped, and the wire was hanging down, in plain sight. A new lug took a
>few minutes to install and it worked fine, till he traded it in on a new
>car a few years later.

Shrug...I spent $65 to have my truck run though the computer
diagnostics. They couldnt find the problem, suggested some high dollar
repairs..shotgun approach.

I replaced the badly worn distro cap and the rotor. Ran fine after
than.

Im starting to think that there are more button pushers than actual tradesmen in auto mechanics.

Gunner

"Pax Americana is a philosophy. Hardly an empire.
Making sure other people play nice and dont kill each other (and us) off in job lots is hardly empire building, particularly when you give them self determination under "play nice" rules.

Think of it as having your older brother knock the shit out of you for torturing the cat." Gunner

5561. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 19:30:48 UTC
From: dplatt@radagast.org
Message-ID: <11ok2b86im6hae3@corp.supernews.com>
Source record: 15942

In article <ZuGdnSKjleyn-RTenZ2dnUVZ_sidnZ2d@rogers.com>,
Ivan Makarov <miv@hotmail.com> wrote:

>When I was a teenager and my brothers started bothering me with their loud
>TV, I took a 220V relay, put one of the coil leads through its normally
>closed contact group, and plugged the relay into the mains behind the wall
>where the TV was. Made an exelent TVI/RFI generator, I thought the TV is
>going to blow up.

#chuckle#

Back when I was living in a college dorm, the guy in the next room had pretensions of being a musician - specifically, a drummer. His way of "practicing" was to turn up his stereo - really loud - so he could feel the bass, then put on headphones (so that the highs wouldn't hurt his ears) and then drum along with the music.

Needless to say, this did not make him popular with me or my roommate, the people on the other side of his room, or the folks downstairs (or, I suspect, people in the next county). Numerous complaints were filed; he kept on drumming.

The guy on the other side realized that the drummer's stereo was plugged into an outlet on one side of their shared wall, and that he had an outlet on the same circuit. The next time the booming started up, he plugged his old fluorescent desk light into the outlet, and then started vibrating his thumb on the pushbutton make/break "start" switch.

BRRZZBuzzzBZAP.

Stereo goes off suddenly. Two minutes of blessed silence. Stereo goes back on and the drumming starts again.

BURZZRfffBUZZT.

Lather, rinse, repeat. Eventually, the drummer gives up for the day.

I understand that the drummer never did figure out what was wrong with the stereo, despite two trips to the repair depot. He left the dorm at the end of the quarter (I suspect he was "asked" to depart by the Powers That Be) and we could sleep and study in peace once again.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5562. Re: What's in a battery, these days?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 22:51:04 UTC
From: Dave <davenpat@btopenworld.com>
Message-ID: <dmdd8o$6p0$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 15945
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

jim.gm4dhj wrote:

> don't know but they die after about 3 years.....
>
>
What do?

Dave

5563. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-27 23:50:43 UTC
From: Martin <martin.lenz@gmx.at>
Message-ID: <ops0xa6tt88lri9x@news.gmx.at>
Source record: 15946
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Am Sat, 26 Nov 2005 22:35:18 -0500 schrieb Phil Hobbs
<pcdhSpamMeSenseless@us.ibm.com>:

> Martin wrote:
>> Am Fri, 25 Nov 2005 22:13:38 -0500 schrieb Phil Hobbs
>> <pcdhSpamMeSenseless@us.ibm.com>:
>>
>>> Si Ballenger wrote:
>>>
>>>>> I would put a 100 watt lamp in series thereby limiting the current.
>>>>> I would shave the ends down to points so they heated up rapidly. I
>>>>> put them into a hollowed out fire brick and made a cheap furnace.
>>>>> Of course don't look at it; it's like looking at the sun.
>>>>
>>>> The current limiter I saw used a glass pie pan with pieces copper
>>>> metal on each side with salty water as the electrolyte. It would
>>>> start to steam some when in operation. The furnace was a small
>>>> clay flower pot with holes in each side with the carbon rods
>>>> sticking inside until they touched.
>>>>
>>>
>>> As a boy, I used an electric teakettle as a ballast for a two-D-cell
>>> carbon arc lamp--worked great.
>>>
>> An electric arc with just 3V from two D-cells? I thought the arc needs
>> at lesat 20V burning voltage.
>>
>
> It ran off 120 V. Parse the sentence as "two D-cell-carbon arc lamp."
> An earlier poster talked about building AC-powered arc lamps using the
> carbon rods from dry cells.
>
OK :-) I liked to do that myself, but not from our 230V mains power, but
with a transformer, 22V, and 30A short circuit.
--
Martin

5564. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-28 01:16:46 UTC
From: "H. P. Friedrichs" <noemail@please.com>
Message-ID: <S96dncyOgPfkxxfenZ2dnUVZ_s6dnZ2d@velocitywest.com>
Source record: 15947

Many years ago, I lived on the 2nd floor of a 3-story apartment building. A guy moved in above me who worked some strange shift such that he generally slept during the day, and at night, when the rest of us were trying to sleep, he'd blast his stereo until the early dawn. I tried reasoning with him a few times, but when it became evident that he didn't care about anyone but himself, I decided that he needed a taste of his own medicine.

I wired up a 555 timer, a driver transistor, and a 12-volt solenoid that I had harvested out of an old VCR. The body of the solenoid was fitted with a couple of alligator clips, so that the coil could be attached to grill of a heating duct near the ceiling of my apartment. Every half minute or so, (adjustable with a pot) the timer would fire and the solenoid would contract, making a loud, obnoxious ker-chunk that resonated through the furnace duct.

Whenever I left the apartment for work, I'd install the gizmo on the vent, and let it run all day while the guy upstairs was trying to sleep. The beauty of it was that the guy above could not complain about anything I was doing, he could only complain that the "furnace was making strange noises" that kept him awake.

A couple of times the management asked to inspect my furnace, and of course, I let them. Needless to say, the gizmo was turned off and had been removed from the vent in preparation for their visit.

Eventually, in true Pavlov-ian fashion, the guy upstairs learned that the strange "furnace noises" seemed to coincide with the abuse of his stereo. He noticed that when his stereo kept me up at night, the "furnace" kept him up during the day. Hmmm..... An unspoken understanding was reached and everyone lived happily ever after.

Dave Platt wrote:
> In article <ZuGdnSKjleyn-RTenZ2dnUVZ_sidnZ2d@rogers.com>,
> Ivan Makarov <miv@hotmail.com> wrote:
>
>
>>When I was a teenager and my brothers started bothering me with their loud
>>TV, I took a 220V relay, put one of the coil leads through its normally
>>closed contact group, and plugged the relay into the mains behind the wall
>>where the TV was. Made an exelent TVI/RFI generator, I thought the TV is
>>going to blow up.
>
>
> #chuckle#
>

> Back when I was living in a college dorm, the guy in the next room had
> pretensions of being a musician - specifically, a drummer. His way of
> "practicing" was to turn up his stereo - really loud - so he could
> feel the bass, then put on headphones (so that the highs wouldn't hurt
> his ears) and then drum along with the music.
>
> Needless to say, this did not make him popular with me or my roommate,
> the people on the other side of his room, or the folks downstairs (or,
> I suspect, people in the next county). Numerous complaints were filed;
> he kept on drumming.
>
> The guy on the other side realized that the drummer's stereo was
> plugged into an outlet on one side of their shared wall, and that he
> had an outlet on the same circuit. The next time the booming started
> up, he plugged his old fluorescent desk light into the outlet, and
> then started vibrating his thumb on the pushbutton make/break "start"
> switch.
>
> BRRZZBuzzzBZAP.
>
> Stereo goes off suddenly. Two minutes of blessed silence. Stereo
> goes back on and the drumming starts again.
>
> BURZZRfffBUZZT.
>
> Lather, rinse, repeat. Eventually, the drummer gives up for the day.
>
> I understand that the drummer never did figure out what was wrong with
> the stereo, despite two trips to the repair depot. He left the dorm
> at the end of the quarter (I suspect he was "asked" to depart by the
> Powers That Be) and we could sleep and study in peace once again.
>

5565. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-28 01:27:24 UTC
From: "H. P. Friedrichs" <noemail@please.com>
Message-ID: <ntWdnYGMB5dmwRfenZ2dnUVZ_sWdnZ2d@velocitywest.com>
Source record: 15798
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

I had a mid-90's Chevy S-10 with antilock brakes. One day, the brakes made a funny sound and the service light came on. I noticed that the brakes were not behaving properly.

I took the truck in for "Mr. Goodwrench" to take a look. They told me that I would need a new antilock computer and the cost was something on the order of $1000. I told them to forget it.

I limped the truck home and later, curiosity got the better of me. I jacked up the truck so that the front wheels could spin, and then I went hunting for wheel rotation sensors. Connecting my scope, I could see a nice, clean sine wave coming off the front right wheel. The waveform from the front left wheel, however, had a a very irregular shape that was much lower in amplitude.

I purchased a new rotation sensor for $75 bucks, pulled the wheel and brake disk, and installed it. Everything worked like a champ after that.

It appeared that the old sensor had been struck by rock, and the core of the sense coil had probably been fractured. I was left to wonder how it is that, without the benefit of factory training, documentation, or diagnostic equipment I could troubleshoot and repair the problem when the dealership could not....

Michael A. Terrell wrote:

> "Pete C." wrote:
>
>>Not entirely true, the few lucky people who have been able to find
>>honest, reliable mechanics do tend to speak highly of them.
>>
>
>
>
>
>
>>Remember that the people bringing in the cars in the last 15 years or so
>>as you have noted, are the parents (or now their children) from the
>>generation that has deluded themselves into the belief that mechanical
>>trades (dirty jobs) are somehow devoid of education and skill and have
>>actively discouraged their children from having any interest in such
>>things.
>>
>>This delusion of the PYVs (plastic yuppie vermin) is furthered by the
>>increasing complexity of cars and the thought that the grease monkeys
>>couldn't possibly understand anything about computers so they must just

>>be swapping parts until things magically start working.
>>
>>It's only going to get worse too...
>>
>>Pete C.
>
>
>
> Seven or eight years ago the gas gauge quit on my dad's jeep. He
> took it to the dealer. The changed the sending unit. Then they changed
> the gauge. They had it over a week and still hadn't fixed it, so he paid
> them over $400 to get it back. I took a look at it and found the problem
> in 15 seconds. The lug on the ground wire to the sending unit had
> snapped, and the wire was hanging down, in plain sight. A new lug took a
> few minutes to install and it worked fine, till he traded it in on a new
> car a few years later.

5566. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-28 01:42:41 UTC
From: "Pete C." <aux3.DOH.4@snet.net>
Message-ID: <438A6089.15016CBB@snet.net>
Source record: 15799
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

"H. P. Friedrichs" wrote:
>
> I had a mid-90's Chevy S-10 with antilock brakes. One day, the brakes
> made a funny sound and the service light came on. I noticed that the
> brakes were not behaving properly.
>
> I took the truck in for "Mr. Goodwrench" to take a look. They told me
> that I would need a new antilock computer and the cost was something on
> the order of $1000. I told them to forget it.
>
> I limped the truck home and later, curiosity got the better of me. I
> jacked up the truck so that the front wheels could spin, and then I went
> hunting for wheel rotation sensors. Connecting my scope, I could see a
> nice, clean sine wave coming off the front right wheel. The waveform
> from the front left wheel, however, had a a very irregular shape that
> was much lower in amplitude.
>
> I purchased a new rotation sensor for $75 bucks, pulled the wheel and
> brake disk, and installed it. Everything worked like a champ after that.
>
> It appeared that the old sensor had been struck by rock, and the core of
> the sense coil had probably been fractured. I was left to wonder how it
> is that, without the benefit of factory training, documentation, or
> diagnostic equipment I could troubleshoot and repair the problem when
> the dealership could not....
>
> Michael A. Terrell wrote:
>

That is why for the few things on my truck that I don't have the
facilities to do myself and can't justify buying new tools, when I take
it to the dealer for service I give them a specific set of instructions
on what to do and clear warning that they are *not* to attempt any
diagnosis or deviate from the exact work order I give them.

Pete C.

5567. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-28 02:01:56 UTC
From: Winfried Salomon <wsalomontrashcan@t-online.de>
Message-ID: <dmdoeo$h2h$01$1@news.t-online.com>
Source record: 15800
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Hello Jim,

Jim Thompson wrote:
[...]
>>btw, do you know a standard complementary pnp-transistor for the 2N2369,
>>such like 2N3905 but with higher ft and less feedback capacitance? It
>>seems that the manufactorers have almost no data on their internet pages.

[...]
>
>
> A 2N2369 is a gold-doped NPN, gold-doped to kill storage time and
> improve recovery from saturation. I don't recall any PNP device with
> gold-doping... or the equivalent.

thank you, then I suppose the 2N3905 oder 2N2905 are fitting for a large
signal amplifier.

mfg. Winfried

5568. Re: Trickle Charge Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-28 03:51:45 UTC
From: west <westley@tampabay.rr.com>
Message-ID: <l9vif.23393$dT3.4409@tornado.tampabay.rr.com>
Source record: 15801

Wow Myron,
That was the most comprehensive battery post I ever seen. I makes me want
to add (oh boy, some more drain) a circuit that will cut off the battery
when a small percentage down. Now... how will I do it?

west

<mcalhoun@ksu.edu> wrote in message news:dmab9s$baj@unix1.cc.ksu.edu...
> >During a power outage, which occurs frequently in Florida, I would like
to
> >use a battery to power some communication gear. Although the battery is
12v
> >....[snip]....
>
> Although many have suggested you should use "deep cycle" (also called
> "traction") batteries, be aware that the specifications for such batteries
> are DIFFERENT in that they are rated to still be producing useable power
> when their output voltage is somewhat LOWER than others. If your
equipment
> poops out before that lower voltage is reached, you won't get all the
> output you've paid for. (My TenTek 540, for example, starts FM'ing at
> about 11.5 volts, so the remaining output from a deep-cycle is totally
> unuseable.)
>
> The following is abstracted from a 3 Oct. 1992 post to
> rec.radio.amateur.misc by Brian Kantor <brian@ucsd.edu>:
>
> 1. Automotive starting: formulated with thin pasted plates and designed
> to supply high peak currents for brief periods of time while cranking
> an engine. Designed to be discharged to more than perhaps 75% of
> capacity and to be recharged immediately after discharge. Typically
> discharged-rated at a 20-hour rate.
>
> 2. Traction (e.g., deep-cycle batteries): made with thick pasted plates
> and with very rugged separators between the plates to make the battery
> more immune to physical shock and vibration and to reduce the chance
> of failure due to dendritic growth during recharging. Sold for use in
> electric forklifts, golf carts, marine trolling motors, and RV power.
> Designed to be discharged nearly fully each day and recharged each
> night. Typically discharged-rated at a 5-hour rate.
>
> 3. Stationary: made with thick solid plates. Designed to be used as
> standby power, supplying minimal power and kept in a state of nearly-
> full ("float") charge until needed. Can take deep discharge. Because
> of the solid-plate structure, they are bigger and heavier, but their

> lifetime is much longer (10 years is not unusual). Typically
> discharged-rated at a 10-hour rate.
>
> Each type of battery has a specified voltage at which it is considered
> to be completely discharged; if discharge continues below this voltage,
> battery life may be considerably shortened, and repeated abuse of this
> nature can result in a battery which cannot practically be recharged.
> Each battery manufacturer specifies this voltage; in general, the final
> voltages for the three general types of batteries are:
> Automotive: 1.75 volts per cell
> Traction: 1.70 volts per cell
> Stationary: 1.85 volts per cell
>
> A typical traction-type cell shows the following voltages:
> 2.12 Fully charged, open circuit, at rest with no charge
> or discharge for at least 12 hours
> 2.00 As soon as load is applied (internal voltage drop)
> 1.70 Fully discharged, under load
> 1.99 Fully discharged, open circuit
> 2.10 Beginning of charging after full discharge
> 2.35 70-80% charged; gassing begins
> 2.65 Fully charged
>
> # The following assumes 12 volt negative-grounded "automobile" batteries
as
> # found in most cars, light trucks, and vans in North America.
>
> Liquid-electrolyte lead-acid batteries can be recharged at any rate
> exceeding internal- and surface-discharge rates and which does not cause
> "excessive" gassing (liberation of oxygen, hydrogen, and steam).
>
> In NON-float service, there are several simple chargers:
> * A single-rate constant-current charger limits its charge rate to about
> 7% of the battery's ampere-hour capacity. Thus, for a 100 Ah battery,
> the charger would supply about 7 amperes and must be able to supply
> voltages between 12.6 and 16 volts over the duration of the charge.
> Charging is complete when the battery reached 2.65-2.70 volts per cell.
>
> * A simple taper charger is a constant-voltage source set to 2.8 volts
> per cell with a series ballast (typically a resistor, but a choke or
> the internal resistance of the supply can be used) which limits the
> output current to 7% of capacity when charging is started at 2.1 volts
> per cell. Again, charging is complete at 2.7 volts per cell.
>
> * Trickle-charging (supplying 0.5-1 milliampere per ampere-hour capacity)
> of a fully-charged battery can be done to keep it charged. Trickle
> charging should be discontinued when it has continued for at least 24
> hours and the battery has reached 2.25 volts per cell. Typically,
> trickle chargers are set to run perhaps once a week. Because of their
> thin plate construction, automotive-type batteries will deteriorate if

> trickle-charged for more than perhaps six months. (However, using
> pulsating rectified AC or superimposing a small AC current on pure DC
> charging current increases battery life by up to 30%. It is postulated
> that this reduces gassing, leads to more porous lower-resistance
> plates, and lessens the tendency to form dendrites during charging.)
>
> In FLOAT service, where the battery is in parallel with the mains supply,
> the supply voltage must be set to 2.15-2.20 volts per cell. This charges
> the battery and avoids excessive gassing, but does not serve to "freshen"
> the cells--there is not enough gassing activity to move electrolyte
> around and clear the beginning of deposits from the surfaces of the
> plates. It is recommended that batteries in float service occasionally
> (perhaps once a month) be charged to 2.65 volts per cell to freshen and
> equalize the charges. In large installations, this is done by switching
> parts of the battery banks out of service in rotation; in smaller systems
> that can tolerate the voltage excursion (about 16 volts!), it can be done
> by simply boosting the output of the mains supply.
>
> Charging inevitably leads to some water loss due to gassing: 100 ampere-
> hours of a gassing charge (2.4 or more volts per cell) causes a water
> loss of about 1.2 ounces. Hydrocap Corp (975 NW 95th Street, Miami FL,
> 303-696-2504) makes replacement filler caps ($5-10 each) containing a
> catalytic material which recondenses emitted steam and recombines hydrogen
> and oxygen gasses back into pure water which then dribbles back into the
> cell, greatly reducing the required maintenance.
>
> For further information:
> Smith, George. "Storage Batteries, including Operation, Charging,
> Maintenance, and Repair". ISBN 273-43448-9, TK2941.S57, 1978.
>
> Aguf, I.A. and M.A. Dasoyan. "The Lead Accumulator" (translated from
> Russian byu S. Sathyanarayana). Calcutta, 1968.
>
> Longrigg, Paul. "Rapid Charging of Lead-Acid Batteries for Electric
> Vehicle Propulsion and Solar Energy Storage." DOE/NTIS 1981.
>
> Darden, Bill (bjb_darden@yahoo.com) battery FAQ's found on the WWW.
>
> --
> --Myron A. Calhoun.
> Five boxes preserve our freedoms: soap, ballot, witness, jury, and
cartridge
> PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785)
539-4448
> NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle,
Pistol)

5569. Re: What's in a battery, these days?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-28 06:26:26 UTC
From: "jim.gm4dhj" <jim.gm4dhj@ntlworld.com>
Message-ID: <mqxif.8056$pc1.675@newsfe4-gui.ntli.net>
Source record: 15802
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Dave" <davenpat@btopenworld.com> wrote in message
news:dmdd8o$6p0$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com...
> jim.gm4dhj wrote:
>
>> don't know but they die after about 3 years.....
> What do?
>
> Dave

They do.....

5570. Re: freedom and independence (OT !)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-28 08:42:06 UTC
From: Roger <Delete-Invallid.stuff.groups@tm.net>
Message-ID: <iaglo1l5ts7pa9oobrfvd6pc4i8fqm0ir7@4ax.com>
Source record: 15803

On Sun, 27 Nov 2005 11:48:34 -0000, "Highland Ham"
<abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:

>> Jim
>> www.jimsdesk.com
>>
>>
>> Here's a partial list of alternative energy information sources (there
>> are, of course, many, many more)
>> http://homestead.goodwordusa.org/energy/listing.htm
>>
>> Start your own small newspaper business
>> free online help at:
>> http://www.newspaper-info.com
>>
>> free 13-month 2006 calendar (pdf file)
>> download at:
>> http://www.jimsgraphix.com/lowcal.htm

Unfortunately most alternative energy sources are efficient on a local
basis only.

Alcohol is expensive to make and low octane. Hydrogen is plentiful
and very expensive to make and store although metal sponges may offer
some hope.

Methane recovery from land fills works very well, but again on a
localized basis.

Over all, at present, nearly all alternative energy sources are much
more expensive than gas and contrary to the sites I don't see that
changing any time soon.

Wind and solar are very localized. Here in most of Michigan, neither
is of much use over most of the area. Solar is expensive to install.
Depending on your climate it may be expensive to maintain. Our wind
average is ideal for wind generation, with the exception that the wind
alternates between very high and nothing, neither of which is
practical.

The one good thing is they do help reduce our dependence on foreign
oil, but in general they have a very long way to go to become cost
competitive.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com

>==============================
>The above is OT , nevertheless , tnx Jim for the above web references
>
>Frank GMï¿½CSZ / KN6WH
>
>>
>

5571. Re: Crystal VCO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-28 10:39:43 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1133174383.779261.37480@g44g2000cwa.googlegroups.com>
Source record: 15804

...usually, a crystal oscillator has a quite high voltage developing
across the crystal AND the varicap which is in parallel with it. this
AC voltage adds and substracts from the DC control voltage, causing the
instantaneous voltage to change and thus vary the capacitance. the net
result is a damping effect of the oscillations' amplitude.
when you have two diodes in series the AC is causing the voltage to
increase on one diode and decrease on the other. being in series, they
compnesate each other in some measure thus reducing the effect.the
additional cap you mention is more of a DC blocking capacitor, more
than anything else.
As for frequency measurement, the only real way is a counter. lacking
one, zer boat the oscillator on you radio, change the tuning voltage to
the other extreme and guesstimate the pitch of the beat note. nothing
much else you can do, except, may be, see if it works OK when
modulated.
Alex 4Z5KS

5572. Re: Conductive plastic/cermet pots

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-28 10:50:15 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1133175015.107877.74230@g44g2000cwa.googlegroups.com>
Source record: 15805

the single turn variety and the cemets are non inductive
Saandy 4Z5KS

5573. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-28 15:40:14 UTC
From: Keith Williams <krw@att.bizzzz>
Message-ID: <MPG.1df4eed5c98bdb0c9896cf@News.Individual.NET>
Source record: 15806
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

In article <VUoif.10669$Jb.217@fe28.usenetserver.com>,
ignoramus18456@NOSPAM.18456.invalid says...
>
> Once my wife's car developed some sort of a fault light. Since I had
> this code reader, I determined that the problem was with the fuel tank
> and after googling, it turned out that her fuel tank cap was not fully
> screwed in. Properly tightening it took care of the problem. Had I
> not owned it, it would be a whole evening ruined, at least $50-100
> paid to a car mechanic (that's assuming an honest car mechanic who
> would not ask for unnecessary repairs), etc.
>
An honest mechanic would first tell you to tighten the fuel cap
before they look at it and charge nothing for the advice. This is
a *very* common proglem; BTDT. Here, most of the bigger auto parts
stores will read out the computer as a free service. They won't
reset the codes, but will tell you what the computer "thinks".

OTOH, my '93 Eagle Vision had an intermittent in the flywheel
sensor (no RPMs -> no ignition/fuel) that didn't show up on the
computer until it failed with the computer attached. The shop
drove the thing for a week before the failure occured.

--
Keith

5574. Re: Trickle Charge Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-28 17:02:52 UTC
From: mcalhoun@ksu.edu
Message-ID: <dmfd7s$gta@unix2.cc.ksu.edu>
Source record: 15807

>That was the most comprehensive battery post I ever seen. I makes me want
>to add (oh boy, some more drain) a circuit that will cut off the battery
>when a small percentage down. Now... how will I do it?

Thanks, but all I did was archive and repost! (Although I did incorporate
it in a much-bigger battery "article" I've been accumulating from many
sources [including one video from, IIRC, the Ford Motor Company on the
batteries they put in Ford vehicles] for my own use and for sharing at
the local ham club.)

If **I** had to do that, I'd use a plain ol' 555 "timer" IC as a threshold
voltage detector and use it to drive relay(s) to do the cut-off, but more-
modern designers would use a little more circuitry to drive an FET.

--Myron.
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

5575. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-28 18:33:50 UTC
From: nospam.clare.nce@sny.der.on.ca
Message-ID: <i4jmo11svheofnfndi82h949jeei9sjiui@4ax.com>
Source record: 15808
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

On Sun, 27 Nov 2005 18:29:30 GMT, Gunner Asch <gunner@lightspeed.net>
wrote:

>On Sun, 27 Nov 2005 14:32:08 GMT, "Michael A. Terrell"
><mike.terrell@earthlink.net> wrote:
>
>>"Pete C." wrote:
>>>
>>> Not entirely true, the few lucky people who have been able to find
>>> honest, reliable mechanics do tend to speak highly of them.
>>>
>>
>>
>>
>>>
>>> Remember that the people bringing in the cars in the last 15 years or so
>>> as you have noted, are the parents (or now their children) from the
>>> generation that has deluded themselves into the belief that mechanical
>>> trades (dirty jobs) are somehow devoid of education and skill and have
>>> actively discouraged their children from having any interest in such
>>> things.
>>>
>>> This delusion of the PYVs (plastic yuppie vermin) is furthered by the
>>> increasing complexity of cars and the thought that the grease monkeys
>>> couldn't possibly understand anything about computers so they must just
>>> be swapping parts until things magically start working.
>>>
>>> It's only going to get worse too...
>>>
>>> Pete C.
>>
>>
>> Seven or eight years ago the gas gauge quit on my dad's jeep. He
>>took it to the dealer. The changed the sending unit. Then they changed
>>the gauge. They had it over a week and still hadn't fixed it, so he paid
>>them over $400 to get it back. I took a look at it and found the problem
>>in 15 seconds. The lug on the ground wire to the sending unit had
>>snapped, and the wire was hanging down, in plain sight. A new lug took a
>>few minutes to install and it worked fine, till he traded it in on a new
>>car a few years later.
>
>Shrug...I spent $65 to have my truck run though the computer
>diagnostics. They couldnt find the problem, suggested some high dollar

>repairs..shotgun approach.
>
>I replaced the badly worn distro cap and the rotor. Ran fine after
>than.
>
>Im starting to think that there are more button pushers than actual
>tradesmen in auto mechanics.
>
>Gunner

And you need to ask why??????
Anyone with half a brain got out of the business 15 or 20 years ago.
ANd not too many with half a brain or more are getting into the
business over the last 20 years.

When I started in the late sixties, it was the lowest paid trade - bar
none.
When I taught the trade in the seventies, the attitude at the schools
was "he's too dumb to make a scientist, plumber, electrician, or
machinist out of - and too smart to be a lawyer, so we'll put him in
Auto Mechanics.

So I had to teach them electrical, plumbing, physics, machining, math,
and all the rest to make mechanics out of them.
>
>"Pax Americana is a philosophy. Hardly an empire.
>Making sure other people play nice and dont kill each other (and us)
>off in job lots is hardly empire building, particularly when you give
>them self determination under "play nice" rules.
>
>Think of it as having your older brother knock the shit out of you
>for torturing the cat." Gunner

5576. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-28 19:37:24 UTC
From: "B.B." <DoNotSpamthegoat4@airmail.net.com.org.gov.tw.ch.ru>
Message-ID: <DoNotSpamthegoat4-0F5870.13372428112005@news-ia.supernews.net>
Source record: 15809
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

In article <ntWdnYGMB5dmwRfenZ2dnUVZ_sWdnZ2d@velocitywest.com>,
"H. P. Friedrichs" <noemail@please.com> wrote:

[...]

>I was left to wonder how it
>is that, without the benefit of factory training, documentation, or
>diagnostic equipment I could troubleshoot and repair the problem when
>the dealership could not....

Depends heavily on the tech who looks at it. I was handed a truck a
couple of weeks ago that someone had spent all day trying to
troubleshoot. No cruise control, no Jake brakes. He'd thrashed around
for eight hours, running diagnostics, checking sensors, even popped the
valve covers to check the brake solenoids.
I found the broken clutch pedal return spring in less than a minute.
$12 part, five minutes to install.

--
B.B. --I am not a goat! thegoat4 at airmail dot net

5577. Re: CRT tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-28 20:00:59 UTC
From: mrhaney <w4pqw@cox.net>
Message-ID: <1133208059.835440.306470@g47g2000cwa.googlegroups.com>
Source record: 15810

OK, so I can`t give them away, To the trash bin they go.. W4PQW

5578. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-28 22:14:17 UTC
From: Rich the Newsgroup Wacko <gfy@example.net>
Message-ID: <pan.2005.11.28.21.17.14.95752@example.net>
Source record: 15811
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Thu, 24 Nov 2005 18:49:24 -0500, Jon Yaeger wrote:

> Take apart a couple of D cell carbon-zinc batteries.
>
> Wash off the carbon rods. Put each in a wooden clothes pin and connect the
> attached ends to the mains voltage (US customers only, please).
>
> Tap the free ends of the rods together. Move them apart as necessary. Very
> bright! Much brighter than you are.

I put mine in series with Mom's iron, but the thermostat kept turning
it off.
--
Cheers!
Rich

"I don't drink water; fish fuck in it."
-- W.C. Fields

5579. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-28 22:21:15 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2005.11.28.21.24.10.738439@example.net>
Source record: 15812
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Fri, 25 Nov 2005 00:43:52 -0800, Bob Monsen wrote:

> On Thu, 24 Nov 2005 18:49:24 -0500, Jon Yaeger wrote:
>
>> Take apart a couple of D cell carbon-zinc batteries.
>>
>> Wash off the carbon rods. Put each in a wooden clothes pin and connect the
>> attached ends to the mains voltage (US customers only, please).
>>
>> Tap the free ends of the rods together. Move them apart as necessary. Very
>> bright! Much brighter than you are.
>
> One of the MIT EE course videos on the web shows a demonstration of AC
> across a pickle... it is an interesting effect. Not sure how the pickle
> tastes afterward. Cooking hotdogs with AC is similar, but the pickle gives
> off a much nicer translucent flickering glow. Very pretty.
>

But who wants a cooked pickle? ;-)

Thanks,
Rich

5580. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-28 22:32:10 UTC
From: nospam.clare.nce@sny.der.on.ca
Message-ID: <f21no1lufd4pdtp70m3ahbvua2umg36nha@4ax.com>
Source record: 15813
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

On Mon, 28 Nov 2005 19:50:03 GMT, Ignoramus4324
<ignoramus4324@NOSPAM.4324.invalid> wrote:

>On Sun, 27 Nov 2005 18:27:24 -0700, H. P. Friedrichs <noemail@please.com> wrote:
>> It appeared that the old sensor had been struck by rock, and the core of
>> the sense coil had probably been fractured. I was left to wonder how it
>> is that, without the benefit of factory training, documentation, or
>> diagnostic equipment I could troubleshoot and repair the problem when
>> the dealership could not....
>
>It is not true that you did not have diagnostic equipment, you had a
>scope. You also had enough training to figure out where to look.
>
>As for documentation, everyone would benefit from owning proper repair
>manuals.
>
>What these techs do is, for the most part, not magic, they follow a
>[well designed] procedure -- except when the dishonest ones suggest
>unnecessary repairs, as in proposing to start swapping one part after
>another.
>
>i

In many cases these mechanics are not so much dishonest as ignorant.
They just plain do NOT know how to troubleshoot.
The ones that have the manual, and know how to read it (that is an art
in itself - particularly with FORD Manuals) they blindly follow the
pinpoint tests - which can send you in 15 interlocking circles at the
same time if you do not use your PDT (Primary Diagnostic Tool)
(Otherwize known as the brain God gave you). Blindly following the
manual can cause you to replace many parts that are not part of the
problem.

In order to effectively troubleshoot today's systems, you MUST have an
understanding of how it is SUPPOSED to work, so when it doesn't, you
have a clue as to why.

5581. Re: CRT tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-28 22:56:20 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <EqydnU7wVuD-FxbenZ2dnUVZ_tWdnZ2d@adelphia.com>
Source record: 15814

mrhaney wrote:
> OK, so I can`t give them away, To the trash bin they go.. W4PQW
>
I missed your first post. If you still have them, please email me
with the amount of postage you need to send them to zip 22980.

5582. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-28 23:24:52 UTC
From: John Perry <jp@no.spam>
Message-ID: <NkMif.76176$0l5.21028@dukeread06>
Source record: 15815
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Rich Grise wrote:
> ...
>
> But who wants a cooked pickle? ;-)
>

My ethnic Russian daughter-in-law, just arrived from Tatarstan, made a
Russian soup, into which she chopped several dill pickles.

Wonderful stuff!

John Perry

5583. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-28 23:40:51 UTC
From: langwadt@ieee.org
Message-ID: <1133221251.560151.35960@z14g2000cwz.googlegroups.com>
Source record: 15817
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Jim Thompson skrev:

> On Fri, 25 Nov 2005 22:13:38 -0500, Phil Hobbs
> <pcdhSpamMeSenseless@us.ibm.com> wrote:
>
> >Si Ballenger wrote:
> >
> >>>I would put a 100 watt lamp in series thereby limiting the current. I
> >>>would shave the ends down to points so they heated up rapidly. I put
> >>>them into a hollowed out fire brick and made a cheap furnace. Of course
> >>>don't look at it; it's like looking at the sun.
> >>
> >>
> >> The current limiter I saw used a glass pie pan with pieces copper
> >> metal on each side with salty water as the electrolyte. It would
> >> start to steam some when in operation. The furnace was a small
> >> clay flower pot with holes in each side with the carbon rods
> >> sticking inside until they touched.
> >>
> >
> >As a boy, I used an electric teakettle as a ballast for a two-D-cell carbon
> >arc lamp--worked great.
> >
> >Cheers,
> >
> >Phil Hobbs
>
> I've used a light bulb in series with a rectifier to charge a car
> battery (just make sure that line ground goes to chassis ground ;-)
>

I've seen several speakers where there was a light bulb, in series with
the tweeter, as a power limiter

-Lasse

5584. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-28 23:48:02 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <6f5no1lme86457m7pm2j2m0s5pt7ua5rcv@4ax.com>
Source record: 15818
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Mon, 28 Nov 2005 18:48:05 -0500, Spehro Pefhany
<speffSNIP@interlogDOTyou.knowwhat> wrote:

>On Mon, 28 Nov 2005 18:24:52 -0500, the renowned John Perry
><jp@no.spam> wrote:
>
>>Rich Grise wrote:
>>> ...
>>>
>>> But who wants a cooked pickle? ;-)
>>>
>>
>>My ethnic Russian daughter-in-law, just arrived from Tatarstan, made a
>>Russian soup, into which she chopped several dill pickles.
>>
>>Wonderful stuff!
>>
>>John Perry
>
>Recipe? ;-) It's getting into soup/curry/stew weather here in the
>frozen* north.
>
>* Actually just cold nasty rain, but there was some snow earlier this
>week.
>
>
>Best regards,
>Spehro Pefhany

Expect more nasty weather... it's heading your way. Here on Saturday
night... very windy, Sunday night plunged to about 25ï¿½F.

Got in the wife's car on Saturday and backed out into the street, and
commented, "Why is the AC blowing warm air?"

Wife replies, " I don't know, it did that for awhile yesterday, too."

I pushed the Ambient button on the dash... it was 65ï¿½F outside...
winter has arrived in Arizona ;-)

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus

Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

5585. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-28 23:48:05 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <sk5no19tod6bucttsrqt9tt4gv9qom8889@4ax.com>
Source record: 15816
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Mon, 28 Nov 2005 18:24:52 -0500, the renowned John Perry
<jp@no.spam> wrote:

>Rich Grise wrote:
>> ...
>>
>> But who wants a cooked pickle? ;-)
>>
>
>My ethnic Russian daughter-in-law, just arrived from Tatarstan, made a
>Russian soup, into which she chopped several dill pickles.
>
>Wonderful stuff!
>
>John Perry

Recipe? ;-) It's getting into soup/curry/stew weather here in the
frozen* north.

* Actually just cold nasty rain, but there was some snow earlier this
week.

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

5586. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-28 23:58:45 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <ha6no19fbjvu3kt1v4k4o149mfg5l7gp7d@4ax.com>
Source record: 15820
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Mon, 28 Nov 2005 19:03:28 -0500, Spehro Pefhany
<speffSNIP@interlogDOTyou.knowwhat> wrote:

>On Mon, 28 Nov 2005 16:48:02 -0700, the renowned Jim Thompson
><To-Email-Use-The-Envelope-Icon@My-Web-Site.com> wrote:
>
>>On Mon, 28 Nov 2005 18:48:05 -0500, Spehro Pefhany
>><speffSNIP@interlogDOTyou.knowwhat> wrote:
>>
>>>On Mon, 28 Nov 2005 18:24:52 -0500, the renowned John Perry
>>><jp@no.spam> wrote:
>>>
>>>>Rich Grise wrote:
>>>> ...
>>>>
>>>> But who wants a cooked pickle? ;-)
>>>>
>>>>
>>>>My ethnic Russian daughter-in-law, just arrived from Tatarstan, made a
>>>>Russian soup, into which she chopped several dill pickles.
>>>>
>>>>Wonderful stuff!
>>>>
>>>>John Perry
>>>
>>>Recipe? ;-) It's getting into soup/curry/stew weather here in the
>>>frozen* north.
>>>
>>>* Actually just cold nasty rain, but there was some snow earlier this
>>>week.
>>>
>>>
>>>Best regards,
>>>Spehro Pefhany
>>
>>Expect more nasty weather... it's heading your way. Here on Saturday
>>night... very windy, Sunday night plunged to about 25ï¿½F.
>>
>>Got in the wife's car on Saturday and backed out into the street, and
>>commented, "Why is the AC blowing warm air?"
>>
>>Wife replies, " I don't know, it did that for awhile yesterday, too."
>>

>>I pushed the Ambient button on the dash... it was 65ï¿½F outside...
>>winter has arrived in Arizona ;-)
>>
>> ...Jim Thompson
>
>Ha. Well, there's a nice dry maple log in the fireplace, an ice-cold
>Sapporo in one of my Royal Selangor double-wall frozen pewter
>tankards, my VHDL code is working with minimal tweaking and all is
>right with the world. ;-)
>
>
>Best regards,
>Spehro Pefhany

We burned a log in the fireplace last night also. It was sufficient
to keep the inside temperature above 68ï¿½F. Don't know yet if I'll
need to turn on the heat this year or not.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

5587. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-29 00:03:28 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <hd6no1pob6virpp89j096p9lgdbbnif08q@4ax.com>
Source record: 15819
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Mon, 28 Nov 2005 16:48:02 -0700, the renowned Jim Thompson
<To-Email-Use-The-Envelope-Icon@My-Web-Site.com> wrote:

>On Mon, 28 Nov 2005 18:48:05 -0500, Spehro Pefhany
><speffSNIP@interlogDOTyou.knowwhat> wrote:
>
>>On Mon, 28 Nov 2005 18:24:52 -0500, the renowned John Perry
>><jp@no.spam> wrote:
>>
>>>Rich Grise wrote:
>>>> ...
>>>>
>>>> But who wants a cooked pickle? ;-)
>>>>
>>>
>>>My ethnic Russian daughter-in-law, just arrived from Tatarstan, made a
>>>Russian soup, into which she chopped several dill pickles.
>>>
>>>Wonderful stuff!
>>>
>>>John Perry
>>
>>Recipe? ;-) It's getting into soup/curry/stew weather here in the
>>frozen* north.
>>
>>* Actually just cold nasty rain, but there was some snow earlier this
>>week.
>>
>>
>>Best regards,
>>Spehro Pefhany
>
>Expect more nasty weather... it's heading your way. Here on Saturday
>night... very windy, Sunday night plunged to about 25ï¿½F.
>
>Got in the wife's car on Saturday and backed out into the street, and
>commented, "Why is the AC blowing warm air?"
>
>Wife replies, " I don't know, it did that for awhile yesterday, too."
>
>I pushed the Ambient button on the dash... it was 65ï¿½F outside...
>winter has arrived in Arizona ;-)
>

> ...Jim Thompson

Ha. Well, there's a nice dry maple log in the fireplace, an ice-cold Sapporo in one of my Royal Selangor double-wall frozen pewter tankards, my VHDL code is working with minimal tweaking and all is right with the world. ;-)

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

5588. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-29 01:59:25 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2005.11.29.01.02.23.122157@example.net>
Source record: 15821
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

On Mon, 28 Nov 2005 19:50:03 +0000, Ignoramus4324 wrote:

> On Sun, 27 Nov 2005 18:27:24 -0700, H. P. Friedrichs <noemail@please.com> wrote:
>> It appeared that the old sensor had been struck by rock, and the core of
>> the sense coil had probably been fractured. I was left to wonder how it
>> is that, without the benefit of factory training, documentation, or
>> diagnostic equipment I could troubleshoot and repair the problem when
>> the dealership could not....
>
> It is not true that you did not have diagnostic equipment, you had a
> scope. You also had enough training to figure out where to look.
>
> As for documentation, everyone would benefit from owning proper repair
> manuals.
>
> What these techs do is, for the most part, not magic, they follow a
> [well designed] procedure -- except when the dishonest ones suggest
> unnecessary repairs, as in proposing to start swapping one part after
> another.
>

Yeah, I went to Midas for a "$39.99" muffler. When I finally got the
car back, the bill was over $400.00. I should have sued the bastards.

Don't ever go to Midas, and tell your friends, relatives, and what the
heck, people on the street: Don't go to Midas - they're thieves.

Thanks,
Rich

5589. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-29 02:13:41 UTC
From: Martin <martin.lenz@gmx.at>
Message-ID: <ops0zcg3mf8lri9x@news.gmx.at>
Source record: 15822
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Am Mon, 28 Nov 2005 22:14:17 GMT schrieb Rich the Newsgroup Wacko
<gfy@example.net>:

> On Thu, 24 Nov 2005 18:49:24 -0500, Jon Yaeger wrote:
>
>> Take apart a couple of D cell carbon-zinc batteries.
>>
>> Wash off the carbon rods. Put each in a wooden clothes pin and connect
>> the
>> attached ends to the mains voltage (US customers only, please).
>>
>> Tap the free ends of the rods together. Move them apart as necessary.
>> Very
>> bright! Much brighter than you are.
>
> I put mine in series with Mom's iron, but the thermostat kept turning
> it off.

One time I used an old Iron as a dummy-load for a 230V/1kW TRIAC power
control circuit (we had it in the lab for improvised BGA soldering). To
"satisfy" the thermostat I used a 30cm room fan.

--
Martin

5590. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-29 03:18:12 UTC
From: Jon Yaeger <jono_1@bellsouth.net>
Message-ID: <BFB132A4.43C18%jono_1@bellsouth.net>
Source record: 15823
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

<snip>
>
> I've seen several speakers where there was a light bulb, in series with
> the tweeter, as a power limiter
>
> -Lasse

I once owned a Knight transistorized amp that used incandescent bulbs in the output stage to limit current. When you had some brighteness, you had a problem.

I remember that it was the very worst-sounding amplifier that I ever owned.

jon

5591. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-29 03:23:06 UTC
From: "Rich Grise, Plainclothes Hippie" <fff@example.com>
Message-ID: <pan.2005.11.29.02.26.03.970984@example.com>
Source record: 15824
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Mon, 28 Nov 2005 18:24:52 -0500, John Perry wrote:
> Rich Grise wrote:
>>
>> But who wants a cooked pickle? ;-)
>
> My ethnic Russian daughter-in-law, just arrived from Tatarstan, made a
> Russian soup, into which she chopped several dill pickles.
>
> Wonderful stuff!

You must have to cook the bejabbers out of them - I chopped up a dill pickle once into a stew I was concocting from leftovers ane expired stuff in the pantry, and it was kind unnerving every time I bit into a pickle chunk. Or maybe I didn't chop them finely enough. (more like I "cubed" them.) My Mom [RIP] used to put weiners and sweet pickles through the meat grinder. Simultaneously. I refused to even taste the stuff. ;-)

Thanks!
Rich

5592. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-29 03:30:31 UTC
From: "Rich Grise, Plainclothes Hippie" <fff@example.com>
Message-ID: <pan.2005.11.29.02.33.28.518867@example.com>
Source record: 15825
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Mon, 28 Nov 2005 18:48:05 -0500, Spehro Pefhany wrote:

> On Mon, 28 Nov 2005 18:24:52 -0500, the renowned John Perry
> <jp@no.spam> wrote:
>
>>Rich Grise wrote:
>>> ...
>>>
>>> But who wants a cooked pickle? ;-)
>>>
>>
>>My ethnic Russian daughter-in-law, just arrived from Tatarstan, made a
>>Russian soup, into which she chopped several dill pickles.
>>
>>Wonderful stuff!
>>
>>John Perry
>
> Recipe? ;-) It's getting into soup/curry/stew weather here in the
> frozen* north.
>
> * Actually just cold nasty rain, but there was some snow earlier this
> week.

Recipe? For _STEW_??!!?????

You brown some meat, throw it into a pot with some veggies, add enough
water so it doesn't boil dry, cover it, and simmer it until it starts to
smell like food. ;-)

(Then again, I used to watch Mom cook. ;-))

Cheers!
Rich

5593. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-29 04:34:50 UTC
From: Tim Williams <tmoranwms@charter.net>
Message-ID: <TTQif.10528$Mj.10149@fe04.lga>
Source record: 15826
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

"Jon Yaeger" <jono_1@bellsouth.net> wrote in message
news:BFB132A4.43C18%jono_1@bellsouth.net...
> I once owned a Knight transistorized amp that used incandescent bulbs
> in the output stage to limit current. When you had some brighteness,
> you had a problem.
>
> I remember that it was the very worst-sounding amplifier that I ever
> owned.

Heh heh. I have a Knight kit-built amp that glows too, but that's a bias problem in the tube output...

...No, I don't use it regularly...

Tim

--
Deep Fryer: a very philosophical monk.
Website: http://webpages.charter.net/dawill/tmoranwms

5594. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-29 05:27:50 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <pcjno1974rpgh2dr8i3c92s2iikpgvvv70@4ax.com>
Source record: 15827
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Tue, 29 Nov 2005 03:23:06 GMT, the renowned "Rich Grise,
Plainclothes Hippie" <fff@example.com> wrote:

>On Mon, 28 Nov 2005 18:24:52 -0500, John Perry wrote:
>> Rich Grise wrote:
>>>
>>> But who wants a cooked pickle? ;-)
>>
>> My ethnic Russian daughter-in-law, just arrived from Tatarstan, made a
>> Russian soup, into which she chopped several dill pickles.
>>
>> Wonderful stuff!
>
>You must have to cook the bejabbers out of them - I chopped up a dill
>pickle once into a stew I was concocting from leftovers ane expired stuff
>in the pantry, and it was kind unnerving every time I bit into a pickle
>chunk. Or maybe I didn't chop them finely enough. (more like I "cubed"
>them.) My Mom [RIP] used to put weiners and sweet pickles through the meat
>grinder. Simultaneously. I refused to even taste the stuff. ;-)
>
>Thanks!
>Rich

I think I remember something like that, maybe with ground beef.

Here's a recipe for 'Solianka' soup with dill pickle, pickle juice and
a bunch of hearty stuff. They might make it differently in Tartarstan
though (home of Tartar sauce, I presume):

http://soup.allrecipes.com/AZ/SoliankaRussianBeefSoup.asp

From other recipes for Solyanka (or however it's spelt/spelled) the
common factors are beef broth, pickles, olives, capers, onions, garlic
and some kind of meat-- other winter veggies are fair game. And a
dollop of sour cream.

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

5595. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-29 05:52:31 UTC
From: John Perry <jp@no.spam>
Message-ID: <b0Sif.76211$0l5.21065@dukeread06>
Source record: 15828
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Spehro Pefhany wrote:
> On Tue, 29 Nov 2005 03:23:06 GMT, the renowned "Rich Grise,
> Plainclothes Hippie" <fff@example.com> wrote:
>
>
>>On Mon, 28 Nov 2005 18:24:52 -0500, John Perry wrote:
>>
>>>Rich Grise wrote:
>>>
>>>>But who wants a cooked pickle? ;-)
>>>
>>>My ethnic Russian daughter-in-law, just arrived from Tatarstan, made a
>>>Russian soup, into which she chopped several dill pickles.
>>>
>>>Wonderful stuff!
>>
>>You must have to cook the bejabbers out of them - I chopped up a dill
>>pickle once into a stew I was concocting from leftovers ane expired stuff
>>...
> From other recipes for Solyanka (or however it's spelt/spelled) the
> common factors are beef broth, pickles, olives, capers, onions, garlic
> and some kind of meat-- other winter veggies are fair game. And a
> dollop of sour cream.
>

Well, Galya's was all vegetable except for a cube or two of bouillon (I
don't know what kind). She had chopped the vegetables so finely that I
didn't notice the pickles until she showed me the jar she took them from
(I couldn't understand her description of "spiced cucumbers" :-).

I don't know how she made it, since I had put her son, my step-grandson,
to work with me raking a ton or so of oak leaves from my six 100+-foot
trees.

Even a lovely season like autumn has its price.

John Perry

5596. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-29 12:16:55 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <S8Wdnet6jKIl2xHenZ2dnUVZ8qOdnZ2d@pipex.net>
Source record: 15829
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

> I pushed the Ambient button on the dash... it was 65°F outside...
> winter has arrived in Arizona ;-)
==========

Winter ? That's a comfortable Summer temp. here in northern Scotland.

Frank GM0CSZ / KN6WH

5597. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-29 13:46:44 UTC
From: Jorgen Lund-Nielsen <jorgen.lund-nielsen@xxxxxxxxxxxxdesy.de>
Message-ID: <dmhm69$duss$1@claire.desy.de>
Source record: 15830
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Winfried Salomon wrote:
> Hello Jorgen,
>
> Jorgen Lund-Nielsen wrote:
>
> [.....]
>
>> 2N2369 for fast pulses.
>
>
> btw, do you know a standard complementary pnp-transistor for the 2N2369,
> such like 2N3905 but with higher ft and less feedback capacitance? It
> seems that the manufactorers have almost no data on their internet pages.
>
> mfg. Winfried

Maybe 2N4261 ? Have not looked into the datasheet, but as i remember,
i have seen them sometimes in complementary with the 2N2369

Jorgen

5598. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-29 17:00:50 UTC
From: Henning Paul <henningpaul@gmx.de>
Message-ID: <23eu53-eq8.ln1@fump.de.vu>
Source record: 15831
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Spehro Pefhany schrieb:

> I think I remember something like that, maybe with ground beef.

You mean Labskaus?
http://en.wikipedia.org/wiki/Labskaus

Here in Bremen/Germany we usually leave away the fish and use just Corned
Beef (the brazilian Corned Beef is just fine). And sometimes, you find
diced pickles in it. Tastes even better, then.

regards
Henning
--
henning paul home: http://www.geocities.com/hennichodernich
PM: henningpaul@gmx.de , ICQ: 111044613

5599. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-29 19:16:53 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <72apo1p50gto0plsrb0nc9q8j9a75hs72c@4ax.com>
Source record: 15832
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Tue, 29 Nov 2005 03:30:31 GMT, the renowned "Rich Grise,
Plainclothes Hippie" <fff@example.com> wrote:

>On Mon, 28 Nov 2005 18:48:05 -0500, Spehro Pefhany wrote:
>
>> On Mon, 28 Nov 2005 18:24:52 -0500, the renowned John Perry
>> <jp@no.spam> wrote:
>>
>>>Rich Grise wrote:
>>>> ...
>>>>
>>>> But who wants a cooked pickle? ;-)
>>>>
>>>
>>>My ethnic Russian daughter-in-law, just arrived from Tatarstan, made a
>>>Russian soup, into which she chopped several dill pickles.
>>>
>>>Wonderful stuff!
>>>
>>>John Perry
>>
>> Recipe? ;-) It's getting into soup/curry/stew weather here in the
>> frozen* north.
>>
>> * Actually just cold nasty rain, but there was some snow earlier this
>> week.
>
>Recipe? For _STEW_??!!?????
>
>You brown some meat, throw it into a pot with some veggies, add enough
>water so it doesn't boil dry, cover it, and simmer it until it starts to
>smell like food. ;-)

I know how to make stew, without a recipe, but it wouldn't taste like
Russian stuff with capers, olives and pickles. I guess you have to
make it only from stuff that would be available in the Russian
countryside in February, and spice it up with the appropriate
crunchy/salty bits.

>(Then again, I used to watch Mom cook. ;-))
>
>Cheers!
>Rich

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

5600. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-29 19:26:26 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <v9apo11smnm2l029gbk9eoq5eqgjt9cpv0@4ax.com>
Source record: 15833
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Tue, 29 Nov 2005 18:00:50 +0100, the renowned Henning Paul
<henningpaul@gmx.de> wrote:

>Spehro Pefhany schrieb:
>
>> I think I remember something like that, maybe with ground beef.
>
>You mean Labskaus?
>http://en.wikipedia.org/wiki/Labskaus

Noo.... I think I would have remembered something which looked like
that.

>Here in Bremen/Germany we usually leave away the fish and use just Corned
>Beef (the brazilian Corned Beef is just fine). And sometimes, you find
>diced pickles in it. Tastes even better, then.
>
>regards
>Henning

Sounds basically like corned beef hash with sides of fried egg, pickle
and perhaps rollmop herring. Though more gooey with mashed potatoes
used rather than chopped.

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

5601. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-29 21:14:32 UTC
From: Oliver Betz <OBetz@despammed.com>
Message-ID: <438dbed0.545459789@z1.oliverbetz.de>
Source record: 15834
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Henning Paul <henningpaul@gmx.de> wrote:

>You mean Labskaus?
>http://en.wikipedia.org/wiki/Labskaus

Uh, real Labskaus doesn't contain fish. And the picture is
unappetizing.

Oliver
--
Oliver Betz, Muenchen (oliverbetz.de)

5602. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-29 22:19:34 UTC
From: Günther Dietrich <guenther_dietrich@despammed.com>
Message-ID: <m5kimd.ul2.ln@520042650687.t-online.de>
Source record: 15835
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Oliver Betz <OBetz@despammed.com> wrote:

>>You mean Labskaus?
>>http://en.wikipedia.org/wiki/Labskaus
>
>Uh, real Labskaus doesn't contain fish. And the picture is
>unappetizing.

During my time in the german military, I had some courses of instruction on a base near Hamburg. One day they served Labskaus in the staff canteen there. That stuff looked just like that on the wiki photo.
This was the event when I learned why they had roller blinds made of solid steel between kitchen and refectory.
One of the comrades said: 'I won't eat this. That's food for pigs!' And he threw his dish into the kitchen. Most others followed.
The officer of the guard, whom the cooks called after closing the roller blinds, had to draw his gun and shoot in the ceiling to calm the riot down.
Since I had been near the end of the queue, I had no opportunity to try this Labskaus. I still don't know what it does taste of.

Best regards,
Gï¿½nther

5603. Good general purpose TO-92 p-channel FET?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 01:56:19 UTC
From: Ben Jackson <ben@ben.com>
Message-ID: <slrndoq1m3.1oaj.ben@saturn.home.ben.com>
Source record: 15836

Is there a good, small, p-channel FET in TO-92 to complement the 2N7000?

--
Ben Jackson
<ben@ben.com>
http://www.ben.com/

5604. Re: Good general purpose TO-92 p-channel FET?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 02:35:45 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <0vqdnfdHUdHNkhDenZ2dnUVZ_v-dnZ2d@adelphia.com>
Source record: 15837

Ben Jackson wrote:
> Is there a good, small, p-channel FET in TO-92 to complement the 2N7000?

It may not be as common as the 2N7000, but it has fairly similar specs:
http://www.zetex.com/3.0/pdf/ZVP2106A.pdf

5605. Re: Crystal VCO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 02:53:20 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11oq541qtqr56ce@corp.supernews.com>
Source record: 15838

"Scott" <acepilot@bloomer.net> wrote in message
news:p6WdndH2jbo9whXeRVn-og@bright.net...
> Wouldn't it be easier to use a frequency counter? If one is not available,
> but a general coverage HF receiver or transceiver with a digital readout is
> available, you could zero beat the oscillator, note the reading on the
> display, cause the oscillator to shift to your other frequency, zero beat
> that signal, note the display reading and subtract to find the difference in
> frequency.

I'm told that 'zero beating' typically has accuracy not much better than some tens of Hz due to the limited lower frequency response of the human ear... has anyone tried zero beating a signal from above and below and taking the average to get what might be a more accurate frequency estimate?

5606. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 02:57:42 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11oq5cb7j9a4815@corp.supernews.com>
Source record: 15839
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

"John Larkin" <jjlarkin@highNOTlandTHIStechnologyPART.com> wrote in message
news:9u5co19jkjoep5n68ddmk71vh709v2eatk@4ax.com...
> Tell me about it. I tried some pins to see if they would snap, and
> they turn out to have incredibly mushy reverse recovery, Slop Recovery
> Diodes.

I've always been led to believe that this wasn't a bug, but a feature.
Really! (E.g., you can often get away with one diode when you'd otherwise
need two if the things actually recovered quickly...)

5607. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 03:17:39 UTC
From: Phil Hobbs <pcdhSpamMeSenseless@us.ibm.com>
Message-ID: <438D19D3.2090308@us.ibm.com>
Source record: 15840
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Oliver Betz wrote:
> Henning Paul <henningpaul@gmx.de> wrote:
>
>
>>You mean Labskaus?
>>http://en.wikipedia.org/wiki/Labskaus
>
>
> Uh, real Labskaus doesn't contain fish. And the picture is
> unappetizing.

You said it. "Um, do I eat this, or did I"

Cheers,

Phil Hobbs

5608. Re: Crystal VCO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 03:26:04 UTC
From: budgie <me@privacy.net>
Message-ID: <bt6qo11gtvp41q8kurkhc0n0d0pjdcipkj@4ax.com>
Source record: 15841

On Tue, 29 Nov 2005 18:53:20 -0800, "Joel Kolstad"
<JKolstad71HatesSpam@yahoo.com> wrote:

>"Scott" <acepilot@bloomer.net> wrote in message
>news:p6WdndH2jbo9whXeRVn-og@bright.net...
>> Wouldn't it be easier to use a frequency counter? If one is not available,
>> but a general coverage HF receiver or transceiver with a digital readout is
>> available, you could zero beat the oscillator, note the reading on the
>> display, cause the oscillator to shift to your other frequency, zero beat
>> that signal, note the display reading and subtract to find the difference in
>> frequency.
>
>I'm told that 'zero beating' typically has accuracy not much better than some
>tens of Hz due to the limited lower frequency response of the human ear... has
>anyone tried zero beating a signal from above and below and taking the average
>to get what might be a more accurate frequency estimate?

When the frequencies are close, a CRO is a great zero beat detector.

5609. Re: Crystal VCO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 03:46:55 UTC
From: dplatt@radagast.org
Message-ID: <11oq85fpkmr2o3d@corp.supernews.com>
Source record: 15842

In article <bt6qo11gtvp41q8kurkhc0n0d0pjdcipkj@4ax.com>,
budgie <me@privacy.net> wrote:

>>I'm told that 'zero beating' typically has accuracy not much better than some
>>tens of Hz due to the limited lower frequency response of the human ear... has
>>anyone tried zero beating a signal from above and below and taking the average
>>to get what might be a more accurate frequency estimate?
>
>When the frequencies are close, a CRO is a great zero beat detector.

Yup.

It's a bit easier if your crystal happens to be on a frequency which
lets you zero-beat against an AM-modulated carrier signal, such as WWV
(during the early part of each minute, when it's sending a tone
burst). You don't have to try to pick out the beat frequency
directly... instead, you listen for the tone to waver in and out, and
tweak for the slowest wavering.

It's not hard to get the zero-beating accurate to within 1 Hz or
better with a bit of patience.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5610. Re: Crystal VCO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 05:28:24 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <438D386F.1E9BFFC2@earthlink.net>
Source record: 15843

Joel Kolstad wrote:
>
> I'm told that 'zero beating' typically has accuracy not much better than some
> tens of Hz due to the limited lower frequency response of the human ear... has
> anyone tried zero beating a signal from above and below and taking the average
> to get what might be a more accurate frequency estimate?

Use an analog comparator to drive a LED so you can see the difference
when you can no longer hear it. Add a counter if you want to get fancy,
and you can count the number of beats per minute, hour or even day.
--
?

Michael A. Terrell
Central Florida

5611. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 08:13:36 UTC
From: Ed ke6bnl <ke6bnl@juno.com>
Message-ID: <1133338416.153464.229160@z14g2000cwz.googlegroups.com>
Source record: 15844
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

Ed Huntress wrote:
> "Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
> news:1132550073.630433.132830@g49g2000cwa.googlegroups.com...
> > I am the "lucky" owner of a number of older UPSes.
> >
> > So what can a person build out of these?
> >
> > The batteries are for the most part dead but the remainder of the
> > components seem to be in good condition.
> >
> > Any suggestions?
> >
> > Thanks
> >
> > TMT
>
> If you can get your hands on a copy of the 2005 ARRL Handbook, there are
> several suggestions in there (radio-related, but you can improvise from
> them), and some information about UPS's.
>
> One is a charger for 12V storage batteries in general, including car
> batteries. Another is an emergency power supply (you can just run two wires
> to your car battery, or a bank of deep-discharge batteries wired in parallel
> if you're so inclined). Depending on the model you have, you can get 160 W
> to over 300 W of 120 VAC and/or 12VDC from them.
>
> Mine (an APC Back-UPS 600) is now wired to an old car battery. It will run
> my computer for a lot longer than the old gel-cell that came with it. Since
> we're on the end of a power transmission line, it gets a fair amount of use.
>
> --
> Ed Huntress

Ed from Ed I just picked up a apc bk500. I charged it most of the night
and the voltage only shows 98 volt on battery. The instructions on the
internet show some sort of cd disc for windows which I do not have with
a good battery can I just use it as it is for a usp for the computer.
no alarm led lights on and it appears to be working fine thanks Ed

5612. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 08:16:13 UTC
From: Paul Burke <paul@scazon.com>
Message-ID: <3v55eoF13vibuU1@individual.net>
Source record: 15845
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Henning Paul wrote:

> You mean Labskaus?
> http://en.wikipedia.org/wiki/Labskaus
>
> Here in Bremen/Germany we usually leave away the fish and use just Corned
> Beef (the brazilian Corned Beef is just fine).

Citizens of Liverpool are called 'Scousers' (when they aren't called worse), this derived from the local delicacy lobscouse. Corned beef stew with chips in it.

Paul Burke

5613. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 08:46:26 UTC
From: Ed Huntress <huntres23@optonline.net>
Message-ID: <FHdjf.35086$7n6.18099@fe08.lga>
Source record: 15846
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

```
"Ed ke6bnl" <ke6bnl@juno.com> wrote in message
news:1133338416.153464.229160@z14g2000cwz.googlegroups.com...
>
> Ed Huntress wrote:
> > "Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
> > news:1132550073.630433.132830@g49g2000cwa.googlegroups.com...
> > > I am the "lucky" owner of a number of older UPSes.
> > >
> > > So what can a person build out of these?
> > >
> > > The batteries are for the most part dead but the remainder of the
> > > components seem to be in good condition.
> > >
> > > Any suggestions?
> > >
> > > Thanks
> > >
> > > TMT
> >
> > If you can get your hands on a copy of the 2005 ARRL Handbook, there are
> > several suggestions in there (radio-related, but you can improvise from
> > them), and some information about UPS's.
> >
> > One is a charger for 12V storage batteries in general, including car
> > batteries. Another is an emergency power supply (you can just run two
wires
> > to your car battery, or a bank of deep-discharge batteries wired in
parallel
> > if you're so inclined). Depending on the model you have, you can get 160
W
> > to over 300 W of 120 VAC and/or 12VDC from them.
> >
> > Mine (an APC Back-UPS 600) is now wired to an old car battery. It will
run
> > my computer for a lot longer than the old gel-cell that came with it.
Since
> > we're on the end of a power transmission line, it gets a fair amount of
use.
> >
> > --
> > Ed Huntress
>
> Ed from Ed I just picked up a apc bk500. I charged it most of the night
```

> and the voltage only shows 98 volt on battery. The instructions on the
> internet show some sort of cd disc for windows which I do not have with
> a good battery can I just use it as it is for a usp for the computer.
> no alarm led lights on and it appears to be working fine thanks Ed

I'm not aware of the inner workings of these things, Ed, nor have I put an AC voltmeter on the output, running off the car battery, to see what actual voltage I'm getting. The computer runs fine off of it but now you have my curiosity going.

--
Ed Huntress

5614. Re: Crystal VCO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 13:32:12 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <wRhjf.581223$x96.399083@attbi_s72>
Source record: 15847

My homebrew receiver (see QRZ.COM, W0IYH) has a 1.0 MHz xtal osc and a divide by 10 to 100 kHz. I can get the beats from WWV at 10 MHZ and set to zero beat using a front panel (lower right hand corner) trimmer capacitor and ON/OFF switch. The 100 kHz marker is then within several Hz on any ham band, including a possible small doppler shift of the sky wave signal from Colorado. The accuracy and short term stability are more than good enough for 100 kHz harmonics in the ham bands. In CW mode the zero beat is offset by 500 Hz and I can use an audio freq counter to get a 500 Hz count. The 1.0 MHz freq goes to a jack on the back of the rcvr and I use that to set the reference freq on my Heath freq counter while I am at the same time monitoring WWV at 10 MHz. A digital counter in the rcvr indicates signal freq with a 100 Hz resolution. To avoid possible accumulated frequency counting errors I stay 1 kHz away from band edges.

Bill W0IYH

"Dave Platt" <dplatt@radagast.org> wrote in message
news:11oq85fpkmr2o3d@corp.supernews.com...
> In article <bt6qo11gtvp41q8kurkhc0n0d0pjdcipkj@4ax.com>,
> budgie <me@privacy.net> wrote:
>
>>>I'm told that 'zero beating' typically has accuracy not much better than
>>>some
>>>tens of Hz due to the limited lower frequency response of the human
>>>ear... has
>>>anyone tried zero beating a signal from above and below and taking the
>>>average
>>>to get what might be a more accurate frequency estimate?
>>
>>When the frequencies are close, a CRO is a great zero beat detector.
>
> Yup.
>
> It's a bit easier if your crystal happens to be on a frequency which
> lets you zero-beat against an AM-modulated carrier signal, such as WWV
> (during the early part of each minute, when it's sending a tone
> burst). You don't have to try to pick out the beat frequency
> directly... instead, you listen for the tone to waver in and out, and
> tweak for the slowest wavering.
>
> It's not hard to get the zero-beating accurate to within 1 Hz or
> better with a bit of patience.
>
> --
> Dave Platt <dplatt@radagast.org> AE6EO

> Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

5615. FA: Tubes: 811A, 572B,6V6Y,45+stuff....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 14:09:03 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <3oijf.197325$zb5.134336@bgtnsc04-news.ops.worldnet.att.net>
Source record: 15748
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Have these tubes listed + other stuff and others coming as well. Tnx for looking and 'Merry Christmas to all':

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

73 heytubeguy, Joe

5616. Re: Good general purpose TO-92 p-channel FET?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 14:53:17 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1133362397.471983.21570@g44g2000cwa.googlegroups.com>
Source record: 15749

another good one is the BSS84 from Fairchild www.Fairchildsemi.com

5617. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 14:57:58 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <438dbfb4$0$20849$9b4e6d93@newsread2.arcor-online.net>
Source record: 15750
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Hi Jim -

And on what delay timescale it works?

regards -
Henry

"RST Engineering" <jim@rstengineering.com> schrieb im Newsbeitrag
news:11oehva6fhp3523@corp.supernews.com...
> And by varying the reverse bias through a current source (or moderately
> large fixed resistor) you can make them into nifty phase shifters.
>
> Jim
>
>
> > I wrote: NOT PIN - Diodes - as they wouldn't snap.
> >
> > i mean Band Switching diodes for TV-Tuners like the BA244 and the
BA682.
> >
> > BA682 Datasheet:
> >
> > http://www.vishay.com/docs/85530/85530.pdf
> >
> > - and they snap! Try it!
> >
> > Jorgen
> > dj0ud
> >
> >
>
>

5618. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 15:11:23 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_438daf20@fidonet.org>
Source record: 15751

"G|nther Dietrich" bravely wrote to "All" (29 Nov 05 23:19:34)
--- on the heady topic of "Re: Unusual functions of cheap parts"

GD> From: "G|nther Dietrich" <guenther_dietrich@despammed.com>
GD> Xref: core-easynews de.sci.electronics:308835
GD> rec.radio.amateur.homebrew:89433 sci.electronics.components:102901
GD> sci.electronics.design:527075

GD> Oliver Betz <OBetz@despammed.com> wrote:

>>You mean Labskaus?
>>http://en.wikipedia.org/wiki/Labskaus
>
>Uh, real Labskaus doesn't contain fish. And the picture is
>unappetizing.

GD> During my time in the german military, I had some courses of
GD> instruction on a base near Hamburg. One day they served Labskaus in
GD> the staff canteen there. That stuff looked just like that on the wiki
GD> photo. This was the event when I learned why they had roller blinds
GD> made of solid steel between kitchen and refectory.
GD> One of the comrades said: 'I won't eat this. That's food for pigs!'
GD> And he threw his dish into the kitchen. Most others followed.
GD> The officer of the guard, whom the cooks called after closing the
GD> roller blinds, had to draw his gun and shoot in the ceiling to calm
GD> the riot down.
GD> Since I had been near the end of the queue, I had no opportunity to
GD> try this Labskaus. I still don't know what it does taste of.

The Roman legionaires a long time ago learned that an army marches on
its stomach. Since Roman soldiers would march 30 kilometers per day
they had to keep fit and good nutrition was a primorial concern for
the generals. It isn't suprising then that soldiers are ready to riot
and mutiny over their grub with such a longstanding tradition.

A*s*i*m*o*v

... Combat the greenhouse effect - eat a cow.

5619. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 17:12:27 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <11ornbrrr5mv976@corp.supernews.com>
Source record: 15752
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

A step-recovery ("snap") diode works on the principle of stored charge in the diode. During the forward biased half of the AC waveform, the diode is a very low impedance and it stores excess charge; during the reverse biased half of the waveform, the diode remains a low impedance until the stored charge is depleted, at which time the diode "snaps" into high impedance. This snap acts much like a spark-gap transmitter, in that a tremendous number of higher order harmonics are generated. In general (and there are ways to enhance this), the power available from any harmonic is around 1/n * Pin, where n is the order of the harmonic and Pin is the RF power input to the diode.

Biasing the diode simply varies the point on the reverse cycle of the AC waveform where the diode snaps. For maximum power, you try to get the diode to snap at the peak of the waveform. However, by varying the diode bias, you can get it to snap before or after the peak of the waveform. Generally you can get it to snap plus or minus about 30 degrees about the peak before the snap action degrades.

60 degrees of phase shift is nothing to talk about unless you are working with the 10th harmonic, which means a phase shift of 600 degrees. Now you've got something to work with.

Jim

5620. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 17:20:54 UTC
From: Oliver Betz <OBetz@despammed.com>
Message-ID: <438eda39.618012945@z1.oliverbetz.de>
Source record: 15753
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

"Gï¿½nther Dietrich" <guenther_dietrich@despammed.com> wrote:

>>>http://en.wikipedia.org/wiki/Labskaus
>>
>>Uh, real Labskaus doesn't contain fish. And the picture is
>>unappetizing.
>
>During my time in the german military, I had some courses of instruction
>on a base near Hamburg. One day they served Labskaus in the staff
>canteen there. That stuff looked just like that on the wiki photo.

Well, then the cook is to blame, not Labskaus per se. Go to Hamburg
and visit the "Old Commercial Room". I guess they make still delicious
Labskaus.

Oliver
--
Oliver Betz, Muenchen (oliverbetz.de)

5621. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 18:23:05 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2005.11.30.17.26.17.252069@example.net>
Source record: 15754
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Tue, 29 Nov 2005 18:00:50 +0100, Henning Paul wrote:

> Spehro Pefhany schrieb:
>
>> I think I remember something like that, maybe with ground beef.
>
> You mean Labskaus?
> http://en.wikipedia.org/wiki/Labskaus
>
> Here in Bremen/Germany we usually leave away the fish and use just Corned
> Beef (the brazilian Corned Beef is just fine). And sometimes, you find
> diced pickles in it. Tastes even better, then.

Looks a lot like ordinary corned beef hash to me, if a little less
coarsely chopped.

But I wonder why they serve it with one of these?

http://www2.catalognavigator.com/libertyindustries/viewitems/tacky-mats/hand-held-tacky-roll-mop?plpver=1001

;-)
Rich

5622. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 19:10:58 UTC
From: dplatt@radagast.org
Message-ID: <11orua2o68kt9ab@corp.supernews.com>
Source record: 15755
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

>> Ed from Ed I just picked up a apc bk500. I charged it most of the night
>> and the voltage only shows 98 volt on battery. The instructions on the
>> internet show some sort of cd disc for windows which I do not have with
>> a good battery can I just use it as it is for a usp for the computer.
>> no alarm led lights on and it appears to be working fine thanks Ed
>
>I'm not aware of the inner workings of these things, Ed, nor have I put an
>AC voltmeter on the output, running off the car battery, to see what actual
>voltage I'm getting. The computer runs fine off of it but now you have my
>curiosity going.

It might be worth re-checking the AC output voltage using a voltmeter
which reads "true RMS". Most inexpensive voltmeters actually read the
peak voltage, and display an RMS value calculated based on the
assumption that the waveform is sinusoidal.

A lot of backup power supplies use inverters that create a distinctly
non-sinusoidal waveform... it's sometimes a square wave, and sometimes
a "stepped" waveform which crudely approximates a sinusoid.

It's entirely possible that the APC BK500 creates a non-sinusoidal
waveform, whose RMS value is close to the nominal 120 VAC, but whose
peak voltage is lower than that of a true sinusoid having 120 VAC RMS.
This could cause most inexpensive voltmeters to read a value that's
too low.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5623. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 20:09:49 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <qn1so1lm4nblkff6gdfdspli6lkfujon4v@4ax.com>
Source record: 15756
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Wed, 30 Nov 2005 18:23:05 GMT, the renowned Rich Grise
<rich@example.net> wrote:

>On Tue, 29 Nov 2005 18:00:50 +0100, Henning Paul wrote:
>
>> Spehro Pefhany schrieb:
>>
>>> I think I remember something like that, maybe with ground beef.
>>
>> You mean Labskaus?
>> http://en.wikipedia.org/wiki/Labskaus
>>
>> Here in Bremen/Germany we usually leave away the fish and use just Corned
>> Beef (the brazilian Corned Beef is just fine). And sometimes, you find
>> diced pickles in it. Tastes even better, then.
>
>Looks a lot like ordinary corned beef hash to me, if a little less
>coarsely chopped.
>
>But I wonder why they serve it with one of these?
>
>http://www2.catalognavigator.com/libertyindustries/viewitems/tacky-mats/hand-held-tacky-roll-mop?plpver=1001
>
>;-)
>Rich

You could also serve with one of these:

http://upload.wikimedia.org/wikipedia/commons/5/50/BismarckArbeitszimmer1886.jpg

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

5624. Re: Uses for Old UPSes

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 20:14:54 UTC
From: Lew <lew_jean@bellsouth.net>
Message-ID: <ylnjf.6330$wi2.6118@bignews1.bellsouth.net>
Source record: 15757
Cross-posted to: sci.electronics.design,rec.crafts.metalworking,rec.radio.amateur.homebrew,sci.engr.joining.welding

The APC BK500 has a step Output waveform that would be no problem for a
computer and monitor.
MGE UPS systems are a sinewave

"Dave Platt" <dplatt@radagast.org> wrote in message
news:11orua2o68kt9ab@corp.supernews.com...
>>> Ed from Ed I just picked up a apc bk500. I charged it most of the night
>>> and the voltage only shows 98 volt on battery. The instructions on the
>>> internet show some sort of cd disc for windows which I do not have with
>>> a good battery can I just use it as it is for a usp for the computer.
>>> no alarm led lights on and it appears to be working fine thanks Ed
>>
>>I'm not aware of the inner workings of these things, Ed, nor have I put an
>>AC voltmeter on the output, running off the car battery, to see what
>>actual
>>voltage I'm getting. The computer runs fine off of it but now you have my
>>curiosity going.
>
> It might be worth re-checking the AC output voltage using a voltmeter
> which reads "true RMS". Most inexpensive voltmeters actually read the
> peak voltage, and display an RMS value calculated based on the
> assumption that the waveform is sinusoidal.
>
> A lot of backup power supplies use inverters that create a distinctly
> non-sinusoidal waveform... it's sometimes a square wave, and sometimes
> a "stepped" waveform which crudely approximates a sinusoid.
>
> It's entirely possible that the APC BK500 creates a non-sinusoidal
> waveform, whose RMS value is close to the nominal 120 VAC, but whose
> peak voltage is lower than that of a true sinusoid having 120 VAC RMS.
> This could cause most inexpensive voltmeters to read a value that's
> too low.
>
> --
> Dave Platt <dplatt@radagast.org> AE6EO
> Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

5625. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 21:05:14 UTC
From: Winfried Salomon <wsalomontrashcan@t-online.de>
Message-ID: <dml46g$o78$02$1@news.t-online.com>
Source record: 15758
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Hello Jorgen,

Jorgen Lund-Nielsen wrote:

>
>
> Winfried Salomon wrote:
>
>> Hello Jorgen,
>>
>> Jorgen Lund-Nielsen wrote:
>>
>> [.....]
>>
>>> 2N2369 for fast pulses.
>>
>>
>>
>> btw, do you know a standard complementary pnp-transistor for the
>> 2N2369, such like 2N3905 but with higher ft and less feedback
>> capacitance? It seems that the manufactorers have almost no data on
>> their internet pages.
>>
>> mfg. Winfried
>
>
> Maybe 2N4261 ? Have not looked into the datasheet, but as i remember,
> i have seen them sometimes in complementary with the 2N2369
>

the problem is, that it is an rf-transistor and can't be driven at
30V/0.2A, I found a complementary in an old table KTT, the 2N2894A, but
it also has max. 12V, so I find no other than the 2N3906.

If I simulate with the 2N3906, the frequency response is not worse than
with the 2N2894A.

mfg. Winfried

5626. Knight Star Roamer II manuals needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 21:30:18 UTC
From: WJ2D <buzzards@optonline.net>
Message-ID: <1133386217.980738.33310@g43g2000cwa.googlegroups.com>
Source record: 15759

Does anyone have the assembly and alignment manuals for the Knight Kit Star Roamer II and the R195 receiver. These solid state receivers are of 1970's vintage. Good clean copies and or clear scans would be appreciated. Will pay for copies etc. Thank you.

5627. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 21:57:50 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2005.11.30.21.01.02.982483@example.net>
Source record: 15760
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Wed, 30 Nov 2005 15:09:49 -0500, Spehro Pefhany wrote:

> On Wed, 30 Nov 2005 18:23:05 GMT, the renowned Rich Grise
> <rich@example.net> wrote:
>
>>On Tue, 29 Nov 2005 18:00:50 +0100, Henning Paul wrote:
>>
>>> Spehro Pefhany schrieb:
>>>
>>>> I think I remember something like that, maybe with ground beef.
>>>
>>> You mean Labskaus?
>>> http://en.wikipedia.org/wiki/Labskaus
>>>
>>> Here in Bremen/Germany we usually leave away the fish and use just Corned
>>> Beef (the brazilian Corned Beef is just fine). And sometimes, you find
>>> diced pickles in it. Tastes even better, then.
>>
>>Looks a lot like ordinary corned beef hash to me, if a little less
>>coarsely chopped.
>>
>>But I wonder why they serve it with one of these?
>>
>>http://www2.catalognavigator.com/libertyindustries/viewitems/tacky-mats/hand-held-tacky-roll-mop?plpver=1001
>>
>>;-)
>>Rich
>
> You could also serve with one of these:
>
> http://upload.wikimedia.org/wikipedia/commons/5/50/BismarckArbeitszimmer1886.jpg
>
>
From a cursory search, it looks like it'd be kinda hard to find one
these days. ;-)

Cheers!
Rich

5628. Re: Crystal VCO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 22:08:58 UTC
From: LenAnderson@ieee.org
Message-ID: <1133388538.881519.38060@g49g2000cwa.googlegroups.com>
Source record: 15762

From: "Joel Kolstad" on Tues, Nov 29 2005 6:53 pm

>"Scott" <acepilot@bloomer.net> wrote in message

>> Wouldn't it be easier to use a frequency counter? If one is not available,
>> but a general coverage HF receiver or transceiver with a digital readout is
>> available, you could zero beat the oscillator, note the reading on the
>> display, cause the oscillator to shift to your other frequency, zero beat
>> that signal, note the display reading and subtract to find the difference in
>> frequency.
>
>I'm told that 'zero beating' typically has accuracy not much better than some
>tens of Hz due to the limited lower frequency response of the human ear... has
>anyone tried zero beating a signal from above and below and taking the average
>to get what might be a more accurate frequency estimate?

On zero-beating very low beat rates: The only perceived problem is the stability of the receiver and manual control of finding an "exact" zero-beat. Other than that, cranking up the audio level will let you know - by the background hiss intensity changes during zero beat - when the zero point is reached. With manual tuning and a crystal-controlled BFO that could be done to about +/- 0.1 Hz if the receiver is kept at an even temperature and power line voltage kept stable. [the metrologist's patience is a factor there as well]

There is a problem with modern receivers using PLL or DDS sub-system tuning: The resolution of the control system (typically 10 Hz on HF receivers). That limits the precision of zero-beating...unless the beat difference itself is measured with a counter.

"Time interval averaging" has been used for 3 decades in frequency and time interval counters to increase accuracy limits caused by the +/- one count on the display. Statistically, that can be improved by a factor of the square-root of the number of times it is measured. For example, taking the square-root of 100 measurements will increase the accuracy by 10 times; 10,000 measurements will increase by 100 times, etc. That averaging is automatic on base ten displays in modern frequency counters made since the 1970s.

Example of determining accuracy of frequency standards beat against WWVB on 60 KHz: An early H-P WWVB receiver and strip-chart recorder read-out for phase difference against WWVB. A nice little overlay scale was provided to lay on the strip-chart recording.

Find the slope of the phase comparison plot on the overlay and
determine the error of the local standard down to Parts Per Billion
no problem. [extreme example of "low-frequency" zero-beat...:-)]

LenAnderson@ieee.org

Two years in Standards Lab at Ramo-Wooldridge Corp. in early 1960s.

5629. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 22:11:17 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <hq8so1p6lfv0ivv3mohu33jegnh1jjjv44@4ax.com>
Source record: 15761
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Wed, 30 Nov 2005 21:57:50 GMT, the renowned Rich Grise
<rich@example.net> wrote:

>On Wed, 30 Nov 2005 15:09:49 -0500, Spehro Pefhany wrote:
>
>> On Wed, 30 Nov 2005 18:23:05 GMT, the renowned Rich Grise
>> <rich@example.net> wrote:
>>
>>>On Tue, 29 Nov 2005 18:00:50 +0100, Henning Paul wrote:
>>>
>>>> Spehro Pefhany schrieb:
>>>>
>>>>> I think I remember something like that, maybe with ground beef.
>>>>
>>>> You mean Labskaus?
>>>> http://en.wikipedia.org/wiki/Labskaus
>>>>
>>>> Here in Bremen/Germany we usually leave away the fish and use just Corned
>>>> Beef (the brazilian Corned Beef is just fine). And sometimes, you find
>>>> diced pickles in it. Tastes even better, then.
>>>
>>>Looks a lot like ordinary corned beef hash to me, if a little less
>>>coarsely chopped.
>>>
>>>But I wonder why they serve it with one of these?
>>>
>>>http://www2.catalognavigator.com/libertyindustries/viewitems/tacky-mats/hand-held-tacky
-roll-mop?plpver=1001
>>>
>>>;-)
>>>Rich
>>
>> You could also serve with one of these:
>>
>> http://upload.wikimedia.org/wikipedia/commons/5/50/BismarckArbeitszimmer1886.jpg
>>
>>
>From a cursory search, it looks like it'd be kinda hard to find one
>these days. ;-)
>
>Cheers!
>Rich

He looks like this these days:

http://www.gdh-imports.com/acatalog/04GE01.jpg

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

5630. Re: Crystal VCO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 22:22:06 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <b9GdnRszg_1MuBPeRVn-gw@web-ster.com>
Source record: 15763

Joel Kolstad wrote:
> "Scott" <acepilot@bloomer.net> wrote in message
> news:p6WdndH2jbo9whXeRVn-og@bright.net...
>
>>Wouldn't it be easier to use a frequency counter? If one is not available,
>>but a general coverage HF receiver or transceiver with a digital readout is
>>available, you could zero beat the oscillator, note the reading on the
>>display, cause the oscillator to shift to your other frequency, zero beat
>>that signal, note the display reading and subtract to find the difference in
>>frequency.
>
>
> I'm told that 'zero beating' typically has accuracy not much better than some
> tens of Hz due to the limited lower frequency response of the human ear... has
> anyone tried zero beating a signal from above and below and taking the average
> to get what might be a more accurate frequency estimate?
>
>
If you have the right kind of AGC you can listen to the noise getting
stronger/softer and go for the slowest variation -- this will get you as
fine a zero beat as you have patience for.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

5631. FREE: RF Connector, Adapter & Cable Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 22:29:00 UTC
From: AAA RF Products <sales@aaarfproducts.com>
Message-ID: <DIpjf.9785$Wu.6130@fed1read05>
Source record: 15764

For your free copy of our new catalog,

please email sales@AAARFProducts.com

or see www.aaarfproducts.com

or call 949 481 3154 (San Clemente, CA)

No minimum order.

No handling charges.

5632. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 22:32:29 UTC
From: dagmargoodboat@yahoo.com
Message-ID: <1133389949.659104.207130@g47g2000cwa.googlegroups.com>
Source record: 15765
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Jim Thompson wrote:
> On Sat, 26 Nov 2005 21:41:06 +0100, Winfried Salomon
> <wsalomontrashcan@t-online.de> wrote:
>
> >Hello Jorgen,
> >
> >Jorgen Lund-Nielsen wrote:
> >
> >[.....]
> >> 2N2369 for fast pulses.
> >
> >btw, do you know a standard complementary pnp-transistor for the 2N2369,
> >such like 2N3905 but with higher ft and less feedback capacitance? It
> >seems that the manufactorers have almost no data on their internet pages.
> >
> >mfg. Winfried
>
> A 2N2369 is a gold-doped NPN, gold-doped to kill storage time and
> improve recovery from saturation. I don't recall any PNP device with
> gold-doping... or the equivalent.
>
> ...Jim Thompson

National Semi's (now Fairchild) 2n5771 was a gold-doped PNP.
ft>=850MHz. For avalanche mode one might try the lower-Vce-rated
PN3640 (12v), or PN3639 (6v).

I might even have notes on this. I tested/compared various BJTs in
avalanche mode some years ago, trying to find the "best." ISTR picking
the 2n2369, both because it was fast, and because it avalanched
reliably where other types wouldn't.

James Arthur

5633. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 22:45:54 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <6oaso1ti3m6kb59oklq01at7si07bi5uj3@4ax.com>
Source record: 15766
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On 30 Nov 2005 14:32:29 -0800, dagmargoodboat@yahoo.com wrote:

>
>Jim Thompson wrote:
>> On Sat, 26 Nov 2005 21:41:06 +0100, Winfried Salomon
>> <wsalomontrashcan@t-online.de> wrote:
>>
>> >Hello Jorgen,
>> >
>> >Jorgen Lund-Nielsen wrote:
>> >
>> >[.....]
>> >> 2N2369 for fast pulses.
>> >
>> >btw, do you know a standard complementary pnp-transistor for the 2N2369,
>> >such like 2N3905 but with higher ft and less feedback capacitance? It
>> >seems that the manufactorers have almost no data on their internet pages.
>> >
>> >mfg. Winfried
>>
>> A 2N2369 is a gold-doped NPN, gold-doped to kill storage time and
>> improve recovery from saturation. I don't recall any PNP device with
>> gold-doping... or the equivalent.
>>
>> ...Jim Thompson
>
> National Semi's (now Fairchild) 2n5771 was a gold-doped PNP.
>ft>=850MHz. For avalanche mode one might try the lower-Vce-rated
>PN3640 (12v), or PN3639 (6v).
>
> I might even have notes on this. I tested/compared various BJTs in
>avalanche mode some years ago, trying to find the "best." ISTR picking
>the 2n2369, both because it was fast, and because it avalanched
>reliably where other types wouldn't.
>
> James Arthur

Hi, James,

Interestingly, the best avalanchers aren't usually super-fast
transistors, but old klunky things. The Zetex avalanche transistors
have lowish Ft's and are made in Russia, maybe on an old process.

John

5634. Re: For sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 22:50:24 UTC
From: wb5cys <wb5cys@sbcglobal.net>
Message-ID: <Q0qjf.34583$6e1.2483@newssvr14.news.prodigy.com>
Source record: 15767

How can you expect someone to make an offer on a piece of equipment they have never seen? All we have to go on is your description. You see the equipment, you know it's condition, you know how it performs, you know what you will take for it - why not just say? Or are you hoping for the proverbial sucker?

"David J Windisch" <davidjw@cinci.rr.com> wrote in message news:g_Dhf.233897$lI5.95863@tornado.ohiordc.rr.com...
> Hi, all concerned:
>
> For sale:
>
> 1. 80-10M Drake L-4B amplifier, sn 1010, Eimac tubes, pwr supply sn 1000,
> book, in good condition electrically; cosmetically, a few scuffs around
> the front edges. No issues with it; I simply got an amp with 160M. If
> you pick it up, I could demonstrate its 600W out on c-w and 1100W out on
> ssb. 10-day money-back warranty, provided it comes back in the same
> condition it leaves.
>
> 2. Meissner Signal Shifter exciter in good working and physical
> condition; 3.4-30 MHz, copy of book. I got it to drive a homebrew 4-400
> to a KW on c-w, but that's not going to happen.
>
> 3. ESS TIME MACHINE: complete info at:
> http://www.expandedspectrumsystems.com/prod2.html
> I have band-filters and 9 different crystals for 40-30-20-15-10M, FLX-90,
> LO1 external-lo buffer, wall wart, all manuals. Got this for
> experimenting with homebrew software-defined-radio, also not going to
> happen.
>
> 4. Original service manual for Kenwood TS850SAT. Sold rigs; buyers didn't
> want it.
>
> 5. Before-MFJ HyGain TH7DX broadband tri-band antenna, good condition,
> original book.
>
> 6. Cushcraft 402CD pre-XM240 2-element 40M yagi, good condition, with CC
> 40M rotatable dipole I got to make 3L yagi out of 2L.
>
> 7. TMC IPA r-f deck, uses PL-172/8295A (no tube; same *socket* as 8877;
> chimney could have 4-inch OD-3-1/2orso-ID machined hi-temp non-conductive
> ring sitting on 8877 to cover over difference in tube diameters), 750pF
> Tune/1000pF vac variables with turns-counters in 2-30MHz bandswitched
> tank which has 3/8-in silver-plated conductors, 2 multi-meters, 6CL6/6146

> bandswitched driver, no power supplies.
>
> Pls make offers, and remember shipping from 45251. Antennas can be
> disassembled far enough to fit in those concrete-form tubes, for shipping.
> You know; those ones you've seen in bigboxhardware :o)
>
> Tks for reading.
>
> 73, Dave, N3HE
> Cincinnati, OH
> 513-674-7202
>
>

5635. Re: For sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 23:33:46 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11osdmukrl3bp12@corp.supernews.com>
Source record: 15768

wb5cys wrote:
> How can you expect someone to make an offer on a piece of equipment they
> have never seen? All we have to go on is your description. You see the
> equipment, you know it's condition, you know how it performs, you know what
> you will take for it - why not just say? Or are you hoping for the
> proverbial sucker?

Are you saying that the thousands upon thousands of people bidding
(making offers) on eBay are all suckers? (Admittedly, some are. But all?)

Roy Lewallen, W7EL

5636. Re: For sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 23:49:19 UTC
From: Bill <exray@coqui.net>
Message-ID: <a8f3f$438e3a82$4232be59$7338@COQUI.NET>
Source record: 15769

Roy Lewallen wrote:
> wb5cys wrote:
>
>> How can you expect someone to make an offer on a piece of equipment
>> they have never seen?
>
> Are you saying that the thousands upon thousands of people bidding
> (making offers) on eBay are all suckers? (Admittedly, some are. But all?)
>
> Roy Lewallen, W7EL

Hmmm....
At least there's photos...fwiw.

-Bill

5637. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-11-30 23:53:16 UTC
From: dagmargoodboat@yahoo.com
Message-ID: <1133394796.776921.286160@g14g2000cwa.googlegroups.com>
Source record: 15770
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

John Larkin wrote:
> On 30 Nov 2005 14:32:29 -0800, dagmargoodboat@yahoo.com wrote:
>
> >
> >Jim Thompson wrote:

<snip quote>

> >> A 2N2369 is a gold-doped NPN, gold-doped to kill storage time and
> >> improve recovery from saturation. I don't recall any PNP device with
> >> gold-doping... or the equivalent.
> >>
> >> ...Jim Thompson
> >
> > National Semi's (now Fairchild) 2n5771 was a gold-doped PNP.
> >ft>=850MHz. For avalanche mode one might try the lower-Vce-rated
> >PN3640 (12v), or PN3639 (6v).
> >
> > I might even have notes on this. I tested/compared various BJTs in
> >avalanche mode some years ago, trying to find the "best." ISTR picking
> >the 2n2369, both because it was fast, and because it avalanched
> >reliably where other types wouldn't.
> >
> > James Arthur
>
>
> Hi, James,
>
> Interestingly, the best avalanchers aren't usually super-fast
> transistors, but old klunky things. The Zetex avalanche transistors
> have lowish Ft's and are made in Russia, maybe on an old process.
>
> John

Howdy John,
I was unclear: by "...it was fast..." I meant the 2n2369 was one of
the devices with the fastest avalanche edges.

Digging through some of my notes, I don't see the BJT comparison, but
a 2n2222 biased to +100Vce, banged / triggered by a 74HC-series gate,
gave synchronous 750pS risetime pulses. Not very impressive, really,
though good for higher-power stuff than I needed.

Interestingly, I found a 74AC00 driving an MPS2369 was faster & less
trouble: 360pS fall (turn on) time, & 570pS rise (turn off) time, and

no nasty high voltage supplies. It was possibly even a little faster than measured--at 360pS I was pushing my poor little 7S14 1-GHz sampling plug-in pretty hard.

Best,
James

5638. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-01 02:46:34 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <dmlo6a01sk3@drn.newsguy.com>
Source record: 15771
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Winfried Salomon wrote...
> Jorgen Lund-Nielsen wrote:
>> Winfried Salomon wrote:
>>
>>> btw, do you know a standard complementary pnp-transistor for the
>>> 2N2369, such like 2N3905 but with higher ft and less feedback
>>> capacitance? It seems that the manufactorers have almost no data
>>> on their internet pages.
>>
>> Maybe 2N4261? Have not looked into the datasheet, but as i remember,
>> i have seen them sometimes in complementary with the 2N2369

That was a high-frequency part for the time, spec'd at 1200MHz...

> the problem is, that it is an rf-transistor and can't be driven at
> 30V/0.2A, I found a complementary in an old table KTT, the 2N2894A,
> but it also has max. 12V, so I find no other than the 2N3906.

An old Raytheon datasheet says the 2N2894 was doped with platinum.

BTW -- in AoE, we list the 2n5771 as a PNP complement to the NPN
2n5769, both 15V plastic versions of older metal-can parts.

--
Thanks,
- Win

5639. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-01 03:28:15 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2005.12.01.02.31.31.437373@example.net>
Source record: 15772
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

```
On Wed, 30 Nov 2005 17:11:17 -0500, Spehro Pefhany wrote:

> On Wed, 30 Nov 2005 21:57:50 GMT, the renowned Rich Grise
> <rich@example.net> wrote:
>
>>On Wed, 30 Nov 2005 15:09:49 -0500, Spehro Pefhany wrote:
>>
>>> On Wed, 30 Nov 2005 18:23:05 GMT, the renowned Rich Grise
>>> <rich@example.net> wrote:
>>>
>>>>On Tue, 29 Nov 2005 18:00:50 +0100, Henning Paul wrote:
>>>>
>>>>> Spehro Pefhany schrieb:
>>>>>
>>>>>> I think I remember something like that, maybe with ground beef.
>>>>>
>>>>> You mean Labskaus?
>>>>> http://en.wikipedia.org/wiki/Labskaus
>>>>>
>>>>> Here in Bremen/Germany we usually leave away the fish and use just Corned
>>>>> Beef (the brazilian Corned Beef is just fine). And sometimes, you find
>>>>> diced pickles in it. Tastes even better, then.
>>>>
>>>>Looks a lot like ordinary corned beef hash to me, if a little less
>>>>coarsely chopped.
>>>>
>>>>But I wonder why they serve it with one of these?
>>>>
>>>>http://www2.catalognavigator.com/libertyindustries/viewitems/tacky-mats/hand-held-tack
y-roll-mop?plpver=1001
>>>>
>>>>;-)
>>>>Rich
>>>
>>> You could also serve with one of these:
>>>
>>> http://upload.wikimedia.org/wikipedia/commons/5/50/BismarckArbeitszimmer1886.jpg
>>>
>>>
>>>From a cursory search, it looks like it'd be kinda hard to find one
>>>these days. ;-)
>>
>>Cheers!
```

>>Rich
>
> He looks like this these days:
>
> http://www.gdh-imports.com/acatalog/04GE01.jpg
>

I was thinking of the "bismark roll", which I had thought was some kind of jelly donut, or "bismark donut", which would be like a jelly roll.

But I can't find a single reference to the thing except at the wikipedia disambiguator page, and all it has is the blurb, something like what I said.

Oh, well. :-)

Thanks!
Rich

5640. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-01 09:07:56 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <438ebfc2$0$27907$9b4e6d93@newsread4.arcor-online.net>
Source record: 15773
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Thank you Jim for your longly explanations. I already knew the charge storage process, but the phasing aspect was new and interesting.
My question about phase delay was in another direction.
To be concrete:
How to delay (=phase shift) a 145MegHz signal (mostly sinus waveform) with a snap diode? After reading your explanation I cannot see how to achieve a non-snapping action here. Maybe that would work with the diode if you modulate it with dc current getting delay in the ps timescale.
Another question would be if it possible with the snap diode to make a power amp in some form of ringing oscillator. Of course, it should be modulable at least with FM.

- Henry

"RST Engineering" <jim@rstengineering.com> schrieb im Newsbeitrag news:11ornbrrr5mv976@corp.supernews.com...
> A step-recovery ("snap") diode works on the principle of stored charge in
> the diode. During the forward biased half of the AC waveform, the diode is
> a very low impedance and it stores excess charge; during the reverse biased
> half of the waveform, the diode remains a low impedance until the stored
> charge is depleted, at which time the diode "snaps" into high impedance.
> This snap acts much like a spark-gap transmitter, in that a tremendous
> number of higher order harmonics are generated. In general (and there are
> ways to enhance this), the power available from any harmonic is around 1/n *
> Pin, where n is the order of the harmonic and Pin is the RF power input to
> the diode.
>
> Biasing the diode simply varies the point on the reverse cycle of the AC
> waveform where the diode snaps. For maximum power, you try to get the diode
> to snap at the peak of the waveform. However, by varying the diode bias,
> you can get it to snap before or after the peak of the waveform. Generally
> you can get it to snap plus or minus about 30 degrees about the peak before
> the snap action degrades.
>
> 60 degrees of phase shift is nothing to talk about unless you are working
> with the 10th harmonic, which means a phase shift of 600 degrees. Now
> you've got something to work with.
>

> Jim
>
>

5641. Re: High-insulation 1:1 wideband transformer?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-01 10:04:45 UTC
From: SpamHog <n1jpr@hotmail.com>
Message-ID: <1133431485.799947.78260@g43g2000cwa.googlegroups.com>
Source record: 15774

SpamHog wrote:

> Now off to buy some CRT high voltage wire for the DC grounding / DC
> block wideband transformer.

I have also been advised to look into NEON LIGHT WIRE. Working
voltages in the 7000-9000 V range, bearkup must be much higher.
Available in high current versions as well. For a big neon sign, 1A @
7000V is not unusual.

I suspect CRT wire is still better insulated, but neon is more easily
available.

5642. Re: For sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-01 13:43:59 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <0quto1pq19dffbukvnr5pf03it71vul052@4ax.com>
Source record: 15775

I read it as "If you are interested, lets talk". Between the lines I
read "I sure would like to find somebody local so I don't have to ship
this stuff".

Sometimes a guy will nearly give away gear to someone he is
comfortable with and sometimes I prefer not to sell items to some
people at any price!

If you are not comfortable with the circumstance, it would be best for
all if you just passed on the deals.
John Ferrell W8CCW
No offense intended...

On Wed, 30 Nov 2005 22:50:24 GMT, "wb5cys" <wb5cys@sbcglobal.net>
wrote:

>How can you expect someone to make an offer on a piece of equipment they
>have never seen? All we have to go on is your description. You see the
>equipment, you know it's condition, you know how it performs, you know what
>you will take for it - why not just say? Or are you hoping for the
>proverbial sucker?
>
>
>"David J Windisch" <davidjw@cinci.rr.com> wrote in message
>news:g_Dhf.233897$lI5.95863@tornado.ohiordc.rr.com...
>> Hi, all concerned:
>>
>> For sale:
>>
>
John Ferrell W8CCW

5643. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-01 15:05:55 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <c74uo1dj5ue99rcjrn63pq092sjfr4knhm@4ax.com>
Source record: 15776
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On 30 Nov 2005 18:46:34 -0800, Winfield Hill
<Winfield_member@newsguy.com> wrote:

>Winfried Salomon wrote...
>> Jorgen Lund-Nielsen wrote:
>>> Winfried Salomon wrote:
>>>
>>>> btw, do you know a standard complementary pnp-transistor for the
>>>> 2N2369, such like 2N3905 but with higher ft and less feedback
>>>> capacitance? It seems that the manufactorers have almost no data
>>>> on their internet pages.
>>>
>>> Maybe 2N4261? Have not looked into the datasheet, but as i remember,
>>> i have seen them sometimes in complementary with the 2N2369
>
> That was a high-frequency part for the time, spec'd at 1200MHz...
>
>> the problem is, that it is an rf-transistor and can't be driven at
>> 30V/0.2A, I found a complementary in an old table KTT, the 2N2894A,
>> but it also has max. 12V, so I find no other than the 2N3906.
>
> An old Raytheon datasheet says the 2N2894 was doped with platinum.
>
[snip]

Thanks for tracking that down, Win! Gold in a PNP was certainly
troubling my ancient remembrance of semiconductor chemistry.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

5644. OFF TOPIC, but how do y'all read these news groups?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-01 22:02:04 UTC
From: mcalhoun@ksu.edu
Message-ID: <dmnrss$lhp@unix1.cc.ksu.edu>
Source record: 15777
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Note the multi-group posting.

For 18 years, I've been reading newgroups on Unix (or Linux) machines,
first using "rn" (readnews) and later "nn" (netnews), but now my ISP
(Kansas State University) has notified me that, because their news server
is getting old and because I'm one of only a very few users, they are
dropping the service as of 28 December.

So I need to find an alternative way of getting my daily "fix";
I sure hope someone has suggestion(s)!
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTXS). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

5645. Re: OFF TOPIC, but how do y'all read these news groups?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-01 22:29:24 UTC
From: clifto <clifto@clifto.com>
Message-ID: <43a463-5ld.ln1@remote.clifto.com>
Source record: 15778
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

mcalhoun@ksu.edu wrote:
> So I need to find an alternative way of getting my daily "fix";
> I sure hope someone has suggestion(s)!

You can buy a super duper feed from Supernews. For less money, you can
get a good feed (text only IIRC) from news.individual.net.

Guess we're not in Kansas any more.

--
If John McCain gets the 2008 Republican Presidential nomination,
my vote for President will be a write-in for Jiang Zemin.

5646. Re: OFF TOPIC, but how do y'all read these news groups?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-01 22:36:05 UTC
From: Bill <exray@coqui.net>
Message-ID: <5ff07$438f7ad6$4232bd6c$7468@COQUI.NET>
Source record: 15779
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

clifto wrote:

> mcalhoun@ksu.edu wrote:
>
>>So I need to find an alternative way of getting my daily "fix";
>>I sure hope someone has suggestion(s)!
>
>
> You can buy a super duper feed from Supernews. For less money, you can
> get a good feed (text only IIRC) from news.individual.net.
>
> Guess we're not in Kansas any more.
>
add teranews.com to the list

5647. Re: OFF TOPIC, but how do y'all read these news groups?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-01 22:40:48 UTC
From: "John, N9JG" <john@gotwals.XremoveY.com>
Message-ID: <QZKjf.592291$_o.114273@attbi_s71>
Source record: 15780
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Check out https://www.altopia.com/

"Bill" <exray@coqui.net> wrote in message
news:5ff07$438f7ad6$4232bd6c$7468@COQUI.NET...
> clifto wrote:
>
>> mcalhoun@ksu.edu wrote:
>>
>>>So I need to find an alternative way of getting my daily "fix";
>>>I sure hope someone has suggestion(s)!
>>
>>
>> You can buy a super duper feed from Supernews. For less money, you can
>> get a good feed (text only IIRC) from news.individual.net.
>>
>> Guess we're not in Kansas any more.
>>
> add teranews.com to the list

5648. Re: OFF TOPIC, but how do y'all read these news groups?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-01 22:59:56 UTC
From: Chuck Harris <cf-NO-SPAM-harris@erols.com>
Message-ID: <vsCdnZ28ZP3xHRLeRVn-pw@rcn.net>
Source record: 15781
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

mcalhoun@ksu.edu wrote:
> Note the multi-group posting.
>
> For 18 years, I've been reading newgroups on Unix (or Linux) machines,
> first using "rn" (readnews) and later "nn" (netnews), but now my ISP
> (Kansas State University) has notified me that, because their news server
> is getting old and because I'm one of only a very few users, they are
> dropping the service as of 28 December.
>
> So I need to find an alternative way of getting my daily "fix";
> I sure hope someone has suggestion(s)!

My ISP still provides usenet, but you can always go to google groups,
and read and post for free. There are other free news providers that
have web portals as well.

-Chuck

5649. Re: OFF TOPIC, but how do y'all read these news groups?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-01 23:32:26 UTC
From: Cecil Moore <mycall@arrl.net>
Message-ID: <eKLjf.25163$dO2.13269@newssvr29.news.prodigy.net>
Source record: 15782
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

mcalhoun@ksu.edu wrote:
> So I need to find an alternative way of getting my daily "fix";
> I sure hope someone has suggestion(s)!

Who's your ISP? SBCGlobal.net supplies a news-server.
Google's newsgroup server is now close to real-time.
Or try: > http://www.usenet-access.com/contactus.asp
--
73, Cecil http://www.qsl.net/w5dxp

5650. Re: OFF TOPIC, but how do y'all read these news groups?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-01 23:42:46 UTC
From: kludge@panix.com
Message-ID: <dmo1pm$ge6$1@panix2.panix.com>
Source record: 15783
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

In article <dmnrss$lhp@unix1.cc.ksu.edu>, <mcalhoun@ksu.edu> wrote:
>For 18 years, I've been reading newgroups on Unix (or Linux) machines,
>first using "rn" (readnews) and later "nn" (netnews), but now my ISP
>(Kansas State University) has notified me that, because their news server
>is getting old and because I'm one of only a very few users, they are
>dropping the service as of 28 December.

If you like using the old rn, nn, and tin servers, get a shell account
from Panix. You can telnet or ssh in from anywhere in the world, type
"rn" at the shell prompt and go. And it's ten bucks a month and the
tech support is better than you've ever had from Computer Services at KSU.
--scott
--
"C'est un Nagra. C'est suisse, et tres, tres precis."

5651. Re: OFF TOPIC, but how do y'all read these news groups?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 03:39:58 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <_jPjf.8429$wi2.4833@bignews1.bellsouth.net>
Source record: 15784
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Bill wrote:
> clifto wrote:
>
>> mcalhoun@ksu.edu wrote:
>>
>>> So I need to find an alternative way of getting my daily "fix";
>>> I sure hope someone has suggestion(s)!
>>
>>
>>
>> You can buy a super duper feed from Supernews. For less money, you can
>> get a good feed (text only IIRC) from news.individual.net.
>>
>> Guess we're not in Kansas any more.
>>
> add teranews.com to the list
teranews.com is ok, free (nominal one time setup charge)
but they go up and down like a yo-yo.

5652. Toroids coating

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 04:47:59 UTC
From: Ivan Makarov <miv@hotmail.com>
Message-ID: <x_GdnXvnjfRiTBLenZ2dnUVZ_sGdnZ2d@rogers.com>
Source record: 15785

Hi,
does anybody know if coating on Amidon toroidal cores has any dielectric properties, such as a particular breakdown voltage rating, or it is not meant for electrical insulation.

Thks

5653. Re: Toroids coating

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 05:23:25 UTC
From: Tori <Tori@tori.com>
Message-ID: <438FDA4B.EE73C55B@tori.com>
Source record: 15786

Why not email or visit amidon.com ??

tori

Ivan Makarov wrote:

> Hi,
> does anybody know if coating on Amidon toroidal cores has any dielectric
> properties, such as a particular breakdown voltage rating, or it is not
> meant for electrical insulation.
>
> Thks

5654. Need to build 100 mW UHF power amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 06:27:23 UTC
From: Neil Preston <npreston@nospamgeocities.com>
Message-ID: <fPRjf.25242$dO2.3666@newssvr29.news.prodigy.net>
Source record: 15787

I want to be able to send a UHF TV signal (400-800 MHz) from one end of the house to the other. I have a UHF digital PLL modulator with an output level of 7dBmV minimum, and would like to use it to feed a small linear 100 mW "power" amp to a 1/4 wave whip.

I don't think I'll find such a critter very easily, (if at all) so I would like some suggestions as to how I might find resources to build one. (Of course, a pre-designed schematic and PCB layout would be ideal!)

Anyone have any suggestions as to where to start? (Besides Google... BTDT.)

Neil Preston, CET

5655. Re: Need to build 100 mW UHF power amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 12:29:52 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1133526592.765350.117170@f14g2000cwb.googlegroups.com>
Source record: 15788

My suggestion is don't start !

In most countries transmitting at that power level and frequency will require a radio station licence, which will not be available to you anyway, since it is within the UHF TV band (unless you own the TV station you wish to retransmit).

Steve

5656. Re: Need to build 100 mW UHF power amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 12:30:40 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <MpCdnWjrKufNow3enZ2dnUVZ8qmdnZ2d@pipex.net>
Source record: 15789

Within the confines of a house the best and cheapest way to send a TV
signal is via a low cost ready made 2.4 GHz system with a choice of a
number of freqs in the 2.4GHz band .
If you also have a wifi system through a wireless ADSL router you
must ensure that the freqs for both systems are well apart.
I do have these 2 systems in operation without interference problems

Frank (Highland Ham)

================================ Neil Preston wrote: ================
> I want to be able to send a UHF TV signal (400-800 MHz) from one end of the
> house to the other. I have a UHF digital PLL modulator with an output level
> of 7dBmV minimum, and would like to use it to feed a small linear 100 mW
> "power" amp to a 1/4 wave whip.
>
> I don't think I'll find such a critter very easily, (if at all) so I would
> like some suggestions as to how I might find resources to build one. (Of
> course, a pre-designed schematic and PCB layout would be ideal!)
>
> Anyone have any suggestions as to where to start? (Besides Google... BTDT.)

5657. Re: Need to build 100 mW UHF power amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 12:33:55 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1133526834.958541.126420@f14g2000cwb.googlegroups.com>
Source record: 15790

My suggestion is don't start !

In most countries transmitting at that power level and frequency will require a radio station licence, which will not be available to you anyway, since it is within the UHF TV band (unless you own the TV station you wish to retransmit).

Steve

5658. Re: OFF TOPIC, but how do y'all read these news groups?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 12:39:23 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <Ep6dnZP_ve_H3Q3eRVnyjw@pipex.net>
Source record: 15791
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

You can access newsgroups via Google ,but I believe you then need a
gmail e-mail address ,which is free anyway.

Frank GM0CSZ / KN6WH

====================mcalhoun@ksu.edu wrote:====================

> Note the multi-group posting.
>
> For 18 years, I've been reading newgroups on Unix (or Linux) machines,
> first using "rn" (readnews) and later "nn" (netnews), but now my ISP
> (Kansas State University) has notified me that, because their news server
> is getting old and because I'm one of only a very few users, they are
> dropping the service as of 28 December.
>
> So I need to find an alternative way of getting my daily "fix";
> I sure hope someone has suggestion(s)!

5659. Re: Toroids coating

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 14:37:54 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <dmpm82$j33$1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 15792

Amidon dust-iron cores are not uniformly coated.
It is just a colour-coding paint, sprayed on.
Otherwise the paint may just as well not be there.

5660. FA: Various items including some for homebrewers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 15:08:53 UTC
From: Philip de Cadenet <Philstheboss@thebbc.fslife.co.uk>
Message-ID: <tBGldOCFOGkDFwzD@philstheboss.freeserve.co.uk>
Source record: 15793

```
Full description and photo's here>

http://search.ebay.co.uk/_W0QQsassZphilsthebossQQhtZ-1

Good luck should you decide to bid.
--
Philip de Cadenet G4ZOW
Transmitters 'R' Us
http://www.transmittersrus.com
```

5661. Re: Need to build 100 mW UHF power amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 15:52:23 UTC
From: artie <artie.m@gmail.com>
Message-ID: <021220050752233238%artie.m@gmail.com>
Source record: 15794

In article <fPRjf.25242$dO2.3666@newssvr29.news.prodigy.net>, Neil
Preston <npreston@nospamgeocities.com> wrote:

> I want to be able to send a UHF TV signal (400-800 MHz) from one end of the
> house to the other. I have a UHF digital PLL modulator with an output level
> of 7dBmV minimum, and would like to use it to feed a small linear 100 mW
> "power" amp to a 1/4 wave whip.
>
> I don't think I'll find such a critter very easily, (if at all) so I would
> like some suggestions as to how I might find resources to build one. (Of
> course, a pre-designed schematic and PCB layout would be ideal!)
>
> Anyone have any suggestions as to where to start? (Besides Google... BTDT.)
>
> Neil Preston, CET
>

I'll take a wild ass guess that you don't want the signal propagating
equally in all directions, but that you have a particular signal path
in mind.

Putting something as simple as a corner reflector (or a parabolic
reflector) behind the transmitting antenna can give you an effective 10
to 12 dB signal increase. Focusing the receive antenna helps as well.
If you build a pair of reflectors, your total investment will be on the
order of 75 cents. Look at freeantennas.com for templates you can
scale for your frequency. Reflectors let you focus the rf energy where
you want it.

If you *really* want to use an amplifier, search ebay for minicircuits.
They make prepackaged rf amplifiers, along with a lot of other rf
goodies. But you're going to have to adapt your gadget and antenna
system to interconnect with 50 ohm lines and SMA connectors. And
somehow I doubt the output of the transmitter is spectrally pure. It's
bound to have *some* filtering in it (one would hope), but when you put
it into a very wideband amplifier (such as the MiniCircuits ZFL-1000GH)
that amp will amplify *ALL* the signal -- fundamental, spurs,
harmonics, you name it. And do you know what the output level of your
transmitter is (into a 50 ohm load)? You need to know that to properly
select the amplifier.

Try the reflector aproach first.

--
Namaste--

5662. Re: Need to build 100 mW UHF power amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 16:50:46 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <ulu0p1taae7jbuvts5f2c9glduu345pip7@4ax.com>
Source record: 15795

On Fri, 02 Dec 2005 06:27:23 GMT, "Neil Preston"
<npreston@nospamgeocities.com> wrote:

>I want to be able to send a UHF TV signal (400-800 MHz) from one end of the
>house to the other. I have a UHF digital PLL modulator with an output level
>of 7dBmV minimum, and would like to use it to feed a small linear 100 mW
>"power" amp to a 1/4 wave whip.
>
>I don't think I'll find such a critter very easily, (if at all) so I would
>like some suggestions as to how I might find resources to build one. (Of
>course, a pre-designed schematic and PCB layout would be ideal!)
>
>Anyone have any suggestions as to where to start? (Besides Google... BTDT.)
>
>Neil Preston, CET

There are legal issues to doing that in most countries. Besides 100mw
is a lot of power for maybe 100ft. You need maybe 10mw and thats a
lot less of an effort. Also if you target isn't moving a corner
reflector at each end will make a big difference.

One last thing most TV system antennas are dipoles and horizonatlly
polarized TX and RX antennas should have the same orientation.
Ignore the gastly bad monopole that comes with TVs for UHF.

Allison

5663. Re: OFF TOPIC, but how do y'all read these news groups?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 17:02:34 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrndp0vha.1a2r.bit-bucket@shell.config.com>
Source record: 15796
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

On Fri, 02 Dec 2005 12:39:23 +0000, Highland Ham wrote:
> You can access newsgroups via Google ,but I believe you then need a
> gmail e-mail address ,which is free anyway.
>
> Frank GM0CSZ / KN6WH
>
>====================mcalhoun@ksu.edu wrote:====================
>
>> Note the multi-group posting.
>>
>> For 18 years, I've been reading newgroups on Unix (or Linux) machines,
>> first using "rn" (readnews) and later "nn" (netnews), but now my ISP
>> (Kansas State University) has notified me that, because their news server
>> is getting old and because I'm one of only a very few users, they are
>> dropping the service as of 28 December.
>>
>> So I need to find an alternative way of getting my daily "fix";
>> I sure hope someone has suggestion(s)!

And, using Google, you run the risk of being killfiled by a Great Many
usenet denizens because of the gawd-awful defaults Google uses for
follow-ups in its posting configuration. But, then, you knew that...

So, you being a *nix user, I can't see you getting excited about doing
usenet 'text work' with a bloated cartoon interface. I'm a *nix user,
too, and I can recommend Individual.net (http://news.individual.net/).
It's is the follow-on/re-incarnation of the free news.cis.dfn.de. It
costs 10 Euro per year and it's well worth it. I used the online sign-up
and paid via the FirstgGate (http://firstgate.com/EU/en/info.html)
service they use.

Now, if only slrn could score on top-posters. sigh...

HTH
Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
Pueblo, Colorado | @ | Jonesy | OS/2 __
38.24N 104.55W | config.com | DM78rf | SK

5664. Re: For sale

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 17:22:35 UTC
From: Steve Reinhardt <Steve.Reinhardt@Motorola.com>
Message-ID: <dmq01m$t7u$1@newshost.mot.com>
Source record: 15797

For what it's worth, I just bought a TR-3, RV-3 and AC-3 from David. Came pretty much as advertised, and described to me on emails. One satisfied customer is a very small sample, but I think his appraisal of his equipment had less seller inflation than I've seen on ebay.

Your mileage may vary, of course...

Steve
AB1EN

"wb5cys" <wb5cys@sbcglobal.net> wrote in message
news:Q0qjf.34583$6e1.2483@newssvr14.news.prodigy.com...
> How can you expect someone to make an offer on a piece of equipment they
> have never seen? All we have to go on is your description. You see the
> equipment, you know it's condition, you know how it performs, you know
what
> you will take for it - why not just say? Or are you hoping for the
> proverbial sucker?
>
>
> "David J Windisch" <davidjw@cinci.rr.com> wrote in message
> news:g_Dhf.233897$lI5.95863@tornado.ohiordc.rr.com...
> > Hi, all concerned:
> >
> > For sale:
> >
> > 1. 80-10M Drake L-4B amplifier, sn 1010, Eimac tubes, pwr supply sn
1000,
> > book, in good condition electrically; cosmetically, a few scuffs around
> > the front edges. No issues with it; I simply got an amp with 160M. If
> > you pick it up, I could demonstrate its 600W out on c-w and 1100W out on
> > ssb. 10-day money-back warranty, provided it comes back in the same
> > condition it leaves.
> >
> > 2. Meissner Signal Shifter exciter in good working and physical
> > condition; 3.4-30 MHz, copy of book. I got it to drive a homebrew 4-400
> > to a KW on c-w, but that's not going to happen.
> >
> > 3. ESS TIME MACHINE: complete info at:
> > http://www.expandedspectrumsystems.com/prod2.html
> > I have band-filters and 9 different crystals for 40-30-20-15-10M,
FLX-90,
> > LO1 external-lo buffer, wall wart, all manuals. Got this for
> > experimenting with homebrew software-defined-radio, also not going to
> > happen.

> >
> > 4. Original service manual for Kenwood TS850SAT. Sold rigs; buyers
didn't
> > want it.
> >
> > 5. Before-MFJ HyGain TH7DX broadband tri-band antenna, good condition,
> > original book.
> >
> > 6. Cushcraft 402CD pre-XM240 2-element 40M yagi, good condition, with
CC
> > 40M rotatable dipole I got to make 3L yagi out of 2L.
> >
> > 7. TMC IPA r-f deck, uses PL-172/8295A (no tube; same *socket* as 8877;
> > chimney could have 4-inch OD-3-1/2orso-ID machined hi-temp
non-conductive
> > ring sitting on 8877 to cover over difference in tube diameters), 750pF
> > Tune/1000pF vac variables with turns-counters in 2-30MHz bandswitched
> > tank which has 3/8-in silver-plated conductors, 2 multi-meters,
6CL6/6146
> > bandswitched driver, no power supplies.
> >
> > Pls make offers, and remember shipping from 45251. Antennas can be
> > disassembled far enough to fit in those concrete-form tubes, for
shipping.
> > You know; those ones you've seen in bigboxhardware :o)
> >
> > Tks for reading.
> >
> > 73, Dave, N3HE
> > Cincinnati, OH
> > 513-674-7202
> >
> >
>
>

5665. FAQ - Important because of the CBers on the RSC Council

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 20:16:52 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1133554612.696150.28320@g44g2000cwa.googlegroups.com>
Source record: 15648
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,

competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B

licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

5666. Re: FAQ - Important because of the CBers on the RSC Council

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 21:20:25 UTC
From: Peckham Spring <nelson@mandela-house.co.com>
Message-ID: <tU2kf.8119$LO4.329@newsfe5-gui.ntli.net>
Source record: 15649
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1133554612.696150.28320@g44g2000cwa.googlegroups.com...
> What is Ham Radio?
>

You really are a 44 carat plonker!

5667. Re: Need to build 100 mW UHF power amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 21:27:35 UTC
From: Neil Preston <npreston@nospamgeocities.com>
Message-ID: <b%2kf.25376$dO2.2097@newssvr29.news.prodigy.net>
Source record: 15650

Hi, All;

Thanks for the responses so far.

The intent is to produce a device that will operate within the limits of Part 15 of FCC rules for unlicensed radiators. Somewhere in the back of my mind the 100 mW figure floated to the top, probably as a result of the old 100 mW unlicensed CB walkie-talkies we used to play with as kids.

It is probable in this case that a 10 mW output to a corner reflector at the transmitter site will suffice. The target is a standard residential TV receiving antenna connected to a household distribution system. The received signal needs to be large enough to drive a number of splitters and lengths of coax. This would allow us to view the image on any TV in the house.

The exciter is specified to produce a 7 dBmV output into a 75 ohm load, which I calculate to be about 2.2 mV or 67 nW. I don't believe this is enough to drive even a corner reflector to cover the distance we need. (It's barely enough to give a clean signal on the TV by direct coax connection!)

We have tried using a 2.4 GHz system, but we have several nearby WiFi systems here that it interferes with. We want to get completely away from the 2.4GHz range. My initial plan is to use UHF channel 14.

Thanks for the pointer to MiniCircuits. I've seen ads, but hadn't thought of them. I'll look into them.

Following are excerpts from FCC Part 15 regs (http://wireless.fcc.gov/rules.html) that I think would apply. Note that the allowable field strength is the same for both unintentional and intentional radiators in the frequency range of interest.

Subpart B_Unintentional Radiators

Sec. 15.109 Radiated emission limits.

(a) Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

[[Page 774]]

Field
strength
Frequency of emission (MHz) (microvolts/
meter)

30-88..... 100
88-216..... 150
216-960..... 200
Above 960..... 500

Subpart C_Intentional Radiators

Sec. 15.209 Radiated emission limits; general requirements.

(a) Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Measurement
Frequency (MHz) Field strength distance
(microvolts/meter) (meters)

0.009-0.490..... 2400/F(kHz) 300
0.490-1.705..... 24000/F(kHz) 30
1.705-30.0..... 30 30
30-88..... 100 ** 3
88-216..... 150 ** 3
216-960..... 200 ** 3
Above 960..... 500 3

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permItted under other sections of this part, e.g., Sec. Sec. 15.231 and 15.241.

Sec. 15.23 Home-built devices.

(a) Equipment authorization is not required for devices that are not marketed, are not constructed from a kit, and are built in quantities of five or less for personal use.
(b) It is recognized that the individual builder of home-built equipment may not possess the means to perform the measurements for determining compliance with the regulations. In this case, the builder is expected to employ good engineering practices to meet the specified technical standards to the greatest extent practicable. The provisions of Sec. 15.5 apply to this equipment.

5668. Re: FAQ - Important because of the CBers on the RSC Council

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 21:41:07 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1133559667.420521.112050@f14g2000cwb.googlegroups.com>
Source record: 15651
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

You really are the infantile fool, "Poxic Waste" who is incapable
of passing even the simple farce of the exam that is set for
6-year-olds.

The laughing stock, in fact, amongst all _REAL_ Radio Hams.

Stupid boy.

Peckham Spring wrote:
> "Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
> news:1133554612.696150.28320@g44g2000cwa.googlegroups.com...
> > What is Ham Radio?
> >
>
> You really are a 44 carat plonker!

5669. Re: FAQ - Important because of the CBers on the RSC Council

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 21:52:19 UTC
From: offspring <bed@spring.com.co>
Message-ID: <nm3kf.22325$uR.5095@newsfe7-gui.ntli.net>
Source record: 15652
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1133559667.420521.112050@f14g2000cwb.googlegroups.com...

Are you back on the dole again, Gareth?

offspring

5670. Re: FAQ - Important because of the CBers on the RSC Council

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 22:02:50 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1133560970.403341.143270@g43g2000cwa.googlegroups.com>
Source record: 15653
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Usually such people are a
variation of the CB Radio hobbyist; .....
they are free with rather silly personal insults;"

offspring wrote:
> "Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
> news:1133559667.420521.112050@f14g2000cwb.googlegroups.com...
>
> Are you back on the dole again, Gareth?
>
> offspring

5671. Re: FAQ - Important because of the CBers on the RSC Council

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 22:12:24 UTC
From: "G1LVN (for it is he)" <gareth.paley@gmail.com>
Message-ID: <dmqgs8nh1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 15654
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"offspring" <bed@spring.com.co> wrote in message
news:nm3kf.22325$uR.5095@newsfe7-gui.ntli.net...
>
> "Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
> news:1133559667.420521.112050@f14g2000cwb.googlegroups.com...
>
> Are you back on the dole again, Gareth?
>
> offspring
No I'm cleaning windows actually.....

--
--
73deG1LVN(M0WWS)
Xmas Lights de G1LVN QTH:
http://www.g1lvn.org.uk/xmas

5672. Re: FAQ - Important because of the CBers on the RSC Council

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 22:13:50 UTC
From: main spring <rock-around-the-clock@com.co.uk>
Message-ID: <yG3kf.12487$0o2.8799@newsfe3-gui.ntli.net>
Source record: 15655
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1133560970.403341.143270@g43g2000cwa.googlegroups.com...
> "Usually such people are a
> variation of the CB Radio hobbyist; .....
> they are free with rather silly personal insults;"
>
>
You really should take the time to read some of your own postings!

Main Spring

5673. Re: FAQ - Important because of the CBers on the RSC Council

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 22:29:14 UTC
From: "G1LVN (for it is he)" <gareth.paley@gmail.com>
Message-ID: <dmqhrq$b3l$1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 15656
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"G1LVN (for it is he)" <gareth.paley@gmail.com> wrote in message
news:dmqgs8nh1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com...
>
> "offspring" <bed@spring.com.co> wrote in message
> news:nm3kf.22325$uR.5095@newsfe7-gui.ntli.net...
>>
>> "Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
>> news:1133559667.420521.112050@f14g2000cwb.googlegroups.com...
>>
>> Are you back on the dole again, Gareth?
>>
>> offspring
> No I'm cleaning windows actually.......

--
--
73deG1LVN(M0WWS)
Xmas Lights de G1LVN QTH:
http://www.g1lvn.org.uk/xmas

5674. Re: FAQ - Important because of the CBers on the RSC Council

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 22:35:26 UTC
From: Conrad Poos <poos.conrad@gmail.com>
Message-ID: <O_3kf.2$Yo5.0@fe1.news.blueyonder.co.uk>
Source record: 15657
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:

> Thus a Radio Ham
> could also hold a CB licence safe in the knowledge that
> such a licence says no more about him than having a land-line
> telephone, whilst continuing to regard Ham Radio as a separate
> technical pursuit.

Ever since you were 'outed' as a CBer, you've been engaged in this damage limitation exercise which, to be quite honest, smacks of effort. Nobody really gives a toss whether you own a CB-set or not...its your 'holier than thou' attitude which people find 'old'.

However, at least I *can* criticise you without fear of having my door smashed down by the police and being arrested for intimidating you. You can also be sure that, should you criticise me, which you are equally entitled to do, I will take it on the chin like a decent chap and not get all stroppy about it at the local lodge.

10-10, high and low numbers, etc etc ;)

Poos

--
vy 73 de Conrad Poos

"Ich bin ein radio amateur"

5675. Re: FAQ - Important because of the CBers on the RSC Council

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-02 22:49:33 UTC
From: "MattD.." <mattd145@gmail.com>
Message-ID: <dmqj1tafv1@mattsnetwork.co.uk>
Source record: 15658
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

After replacing Conrad Poos with a small shell script on Friday 02 Dec 2005 22:35, the following appeared on stdout:

> However, at least I can criticise you without fear of having my door
> smashed down by the police and being arrested for intimidating you. You
> can also be sure that, should you criticise me, which you are equally
> entitled to do, I will take it on the chin like a decent chap and not
> get all stroppy about it at the local lodge.

Spoken like a gent, Poos. You're probably Jim's hero tonight.
--
Seasonal radio wishes #13
To be able to say "Christmas radio wishes" again without some half-wit taking offence at the simple terminology that has served this country well for centuries.

5676. Re: Toroids coating

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 00:02:34 UTC
From: LenAnderson@ieee.org
Message-ID: <1133565896.523456.69990@g14g2000cwa.googlegroups.com>
Source record: 15659

From: "Ivan Makarov" on Thurs, Dec 1 2005 11:47 pm

>Hi,
>does anybody know if coating on Amidon toroidal cores has any dielectric
>properties, such as a particular breakdown voltage rating, or it is not
>meant for electrical insulation.

Since Bill Amidon sold his business to another company, the "new"
Amidon company has been reselling another company's toroidal core
forms.

The original Amidon company resold Micrometals toroidal forms.*
Micrometals still very much in business in Anaheim, CA; website:

http://www.micrometals.com

Micrometals also makes power-application toroid forms for 60 Hz
and those are described as coated with Parylene C with a given
insulation rating of 500 V RMS at 60 Hz. By casual observation of
some Micrometals powdered iron toroid forms I have on-hand, the
coating appears to be the same. Parylene is a relatively inert
polymer which is unaffected by typical hydrocarbon solvents found
in varnishes and lacquers. I use McCloskey "Gym Seal" varnish
(oil based) as an over-coating of finished toroid windings with
great success in withstanding humidity and general aging. That
is available at most do-it-yourself hardware chain stores. The
same could be applied to the "standard" toroid forms if more
insulation of the core is desired.

The coatings on most toroidal cores is applied mainly to protect
the core material from oxidation. One can get uncoated cores
on special order but those unused cores should be sealed away
from air movement to avoid oxidation. The second reason for a
coating is to make winding easier and reduce sharp edges that
could stress the wires (true even with special toroid winding
machines)...especially if winding by hand.

There's not much need to worry about core insulation with
powdered iron materials. The powder itself is in a binder
which adds some isolation from breakdown in addition to holding
it all together. On actual application, check out one of the
early Amidon kits available in electronics stores, a 1 KW
Balun kit with huge core (to handle the RF power) and rather
ordinary coated solid wire. The RMS voltage at 1 KW in a
600 Ohm open-wire feedline application is 775 Volts. Given that
real-world antennas can get mismatched, high VSWR situations

could have double that voltage fairly easily. I've never heard of any such Amidon baluns that flashed-over in normal use (disregarding lightning strikes).

LenAnderson@ieee.org

* Micrometals has a minimum quantity requirement on orders, used to be minimum of 100 of any type core...that might have changed.

5677. Re: Need to build 100 mW UHF power amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 00:04:56 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <2OqdnYH89tImfQ3e4p2dnA@bright.net>
Source record: 15660

http://www.jameco.com/ sells video transmitters for 2.4 GHz. If you have composite video available, it would be easier and legal to go this route.

Scott

Neil Preston wrote:

> I want to be able to send a UHF TV signal (400-800 MHz) from one end of the
> house to the other. I have a UHF digital PLL modulator with an output level
> of 7dBmV minimum, and would like to use it to feed a small linear 100 mW
> "power" amp to a 1/4 wave whip.
>
> I don't think I'll find such a critter very easily, (if at all) so I would
> like some suggestions as to how I might find resources to build one. (Of
> course, a pre-designed schematic and PCB layout would be ideal!)
>
> Anyone have any suggestions as to where to start? (Besides Google... BTDT.)
>
> Neil Preston, CET
>
>
>
>

5678. Re: Toroids coating

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 00:20:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11p1p6blgqmrf9c@corp.supernews.com>
Source record: 15661

LenAnderson@ieee.org wrote:
>
> Since Bill Amidon sold his business to another company, the "new"
> Amidon company has been reselling another company's toroidal core
> forms.
> . . .

I didn't know that anyone else but Micrometals made powdered iron cores suitable for RF.

Amidon never manufactured their own cores. They used to carry Micrometals powdered iron and Fair-Rite ferrite cores, with a few other ferrite cores from Magnetics and other manufacturers. Whose cores are they selling now?

Roy Lewallen, W7EL

5679. Re: Need to build 100 mW UHF power amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 00:52:27 UTC
From: Neil Preston <npreston@nospamgeocities.com>
Message-ID: <f%5kf.25440$dO2.20650@newssvr29.news.prodigy.net>
Source record: 15662

2.4 GHz is the problem.

That frequency is too congested at this location.

I need to move the signal OUT of the 2.4 GHz band.

"Scott" <acepilot@bloomer.net> wrote in message
news:2OqdnYH89tImfQ3e4p2dnA@bright.net...
> http://www.jameco.com/ sells video transmitters for 2.4 GHz. If you
> have composite video available, it would be easier and legal to go this
> route.
>
> Scott
>
>
> Neil Preston wrote:
>
> > I want to be able to send a UHF TV signal (400-800 MHz) from one end of
the
> > house to the other. I have a UHF digital PLL modulator with an output
level
> > of 7dBmV minimum, and would like to use it to feed a small linear 100 mW
> > "power" amp to a 1/4 wave whip.
> >
> > I don't think I'll find such a critter very easily, (if at all) so I
would
> > like some suggestions as to how I might find resources to build one. (Of
> > course, a pre-designed schematic and PCB layout would be ideal!)
> >
> > Anyone have any suggestions as to where to start? (Besides Google...
BTDT.)
> >
> > Neil Preston, CET
> >
> >
> >
> >

5680. FS: HP Function Generators: (2) HP 3310A (1) HP 3311A

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 03:03:44 UTC
From: Al Schapira <a.d.schapira@worldnet.att.net>
Message-ID: <43910B3C.4000905@worldnet.att.net>
Source record: 15663
Cross-posted to:
rec.radio.swap,sci.electronics.repair,sci.electronics.equipment,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

The following equipment is offered for sale. Each is used, but
in working condition, with a complete *original* operating and
service manual and power cord. Shipping to a US address is
included.

Thanks for looking.

-Al Schapira, KC2HRH, a.d.schapira@worldnet.att.net
==========

HP 3310A Function Generator #1 (S/N #1151A08983)
Sine/square/triangle/ramp/pulse 0.0005 Hz to 5 Mhz, and external
VCO input. Working perfectly. Minor nicks and scrapes on the top
of the case from being stacked. About 7 lbs. $75.00.
See
http://home.att.net/~a.schapira/pix/HP/HP-3310A_1.jpg
http://home.att.net/~a.schapira/pix/HP/HP-3310A_manual.jpg

HP 3310A Function Generator #2 (S/N # 1151A08978)
Sine/square/triangle/ramp/pulse 0.0005 Hz to 5 Mhz, and external
VCO input. Working perfectly. Minor nicks and scrapes on the top
of the case from being stacked. Pilot lamp assembly has been
replaced with round red led. About 7 lbs. $65.00.
See
http://home.att.net/~a.schapira/pix/HP/HP-3310A_2.jpg
http://home.att.net/~a.schapira/pix/HP/HP-3310A_manual.jpg

HP 3311A Function Generator (S/N #1244A29453)
Sine/square/triangle to 0.1 Hz to 1 Mhz, and external VCO input.
Working perfectly. About 4 lbs, $75.00.
See
http://home.att.net/~a.schapira/pix/HP/HP-3311A.jpg
http://home.att.net/~a.schapira/pix/HP/HP-3311A_manual.jpg

5681. voltage drop of a old silenium rectifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 03:19:13 UTC
From: tucker@conninc.com
Message-ID: <1133579953.133312.236200@z14g2000cwz.googlegroups.com>
Source record: 15664

I want to build a hi current 12v supply, I know where i can buy a
6-12v 100amp battery
charger cheap. This charger had silenium (dont know the proper
spelling) rectifiers. Im
thinking the transformer must be alot higher voltage than a similar one
in a modern charger
using silicon diodes. If i know the drop than i can figure the
transformers output voltage.
So does anyone know the voltage drop of these old rectifiers?

5682. Re: voltage drop of a old silenium rectifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 04:01:34 UTC
From: Bill <exray@coqui.net>
Message-ID: <cd4e0$4391189f$4232bd18$18442@COQUI.NET>
Source record: 15665

tucker@conninc.com wrote:

> I want to build a hi current 12v supply, I know where i can buy a
> 6-12v 100amp battery
> charger cheap. This charger had silenium (dont know the proper
> spelling) rectifiers. Im
> thinking the transformer must be alot higher voltage than a similar one
> in a modern charger
> using silicon diodes. If i know the drop than i can figure the
> transformers output voltage.
> So does anyone know the voltage drop of these old rectifiers?
>
Typically about 0.9v per section...when new.

-Bill

5683. Re: voltage drop of a old silenium rectifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 04:06:39 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <1JmdnYnvDquFhAzeRVn-jA@adelphia.com>
Source record: 15666

tucker@conninc.com wrote:
> I want to build a hi current 12v supply, I know where i can buy a
> 6-12v 100amp battery
> charger cheap. This charger had silenium (dont know the proper
> spelling) rectifiers. Im
> thinking the transformer must be alot higher voltage than a similar one
> in a modern charger
> using silicon diodes. If i know the drop than i can figure the
> transformers output voltage.
> So does anyone know the voltage drop of these old rectifiers?

The normal drop (at rated current) of selenium rectifiers is about 2
volts per plate.

Silicon rectifiers drop about 1 volt.

Schottky rectifiers drop about .6 volt.

5684. Re: voltage drop of a old silenium rectifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 04:24:01 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <JdmdnYohya-3gAzenZ2dnUVZ_sudnZ2d@adelphia.com>
Source record: 15667

John Popelish wrote:
> tucker@conninc.com wrote:
>
>> I want to build a hi current 12v supply, I know where i can buy a
>> 6-12v 100amp battery
>> charger cheap. This charger had silenium (dont know the proper
>> spelling) rectifiers. Im
>> thinking the transformer must be alot higher voltage than a similar one
>> in a modern charger
>> using silicon diodes. If i know the drop than i can figure the
>> transformers output voltage.
>> So does anyone know the voltage drop of these old rectifiers?
>
>
> The normal drop (at rated current) of selenium rectifiers is about 2
> volts per plate.

After Bill posted .9 volts, I began to doubt my memory and looked it
up in a reference (Reference Data for Radio Engineers, 5th Addition).

A typical rating is 27 volts reverse per cell, 600 mA to 1950 mA per
square inch (that 100 amp supply must have a lot of square inches of
selenium) and with a capacitive or battery load, 1.6 volts drop at
rated average current. However, they have an essentially resistive
aspect from about .5 times rated current to 2.5 times rated current.
That is, the forward drop climbs linearly from about 1 volt at .4
times rated current to 3 volts at 2.5 times rated current.

5685. Re: Toroids coating

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 05:24:01 UTC
From: Ivan Makarov <miv@hotmail.com>
Message-ID: <7pednUlkc_hxtgzenZ2dnUVZ_tGdnZ2d@rogers.com>
Source record: 15668

Nice posting, Len, thank you.
Ivan

<LenAnderson@ieee.org> wrote in message
news:1133565896.523456.69990@g14g2000cwa.googlegroups.com...
> From: "Ivan Makarov" on Thurs, Dec 1 2005 11:47 pm
>
> >Hi,
> >does anybody know if coating on Amidon toroidal cores has any dielectric
> >properties, such as a particular breakdown voltage rating, or it is not
> >meant for electrical insulation.
>
> Since Bill Amidon sold his business to another company, the "new"
> Amidon company has been reselling another company's toroidal core
> forms.
..

5686. Re: Toroids coating

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 07:29:53 UTC
From: LenAnderson@ieee.org
Message-ID: <1133594993.819290.238220@g43g2000cwa.googlegroups.com>
Source record: 15669

From: Roy Lewallen on Fri, Dec 2 2005 4:20 pm

>LenAnderson@ieee.org wrote:

>> Since Bill Amidon sold his business to another company, the "new"
>> Amidon company has been reselling another company's toroidal core
>> forms.
>> . . .
>
>I didn't know that anyone else but Micrometals made powdered iron cores
>suitable for RF.

I have a few left-over Arnold Magnetics powdered-iron toroidal cores that were used by RCA Corporation back in the 70s. For the high end of HF for maximum Q.

Must have been a pot full of powdered iron core makers during WW2. I still have some screw-in "slugs" which were sold under "surplus" in 1948 at H & H Electronics in Rockford, IL. Their Qs peak at around the bottom of HF. The old AN/PRC-6 Handy-Talky of Korean War time had little powdered iron slugs for preset tuning...and it covered low VHF. Collins Radio used them quite a bit in the now-famous R-390 series of receivers (besides as permeability-tuned master oscillator).

I'd say that the ham magazine editors didn't get around to playing much with powdered-iron cores in the last half-century so not much was stated about them. Few hams had Q Meters at their disposal (way too expensive) and toroidal coil winding is a picky thing done by hand. Folks in the RF industry knew about them long ago.

>Amidon never manufactured their own cores. They used to carry
>Micrometals powdered iron and Fair-Rite ferrite cores, with a few other
>ferrite cores from Magnetics and other manufacturers. Whose cores are
>they selling now?

Bill Amidon set up a small packaging business as a sideline to working at NBC Western Hq in Burbank, CA, many years ago. He included data from Micrometals and Fair-Rite in those packages as they applied to the kit. Good deal for the average hobbyist. Micrometals turns out toroid cores almost like Krispy Kreme makes donuts in each shop...and they don't make real money selling in singles or very small quantities. A reseller/packager like Amidon could make some profit. It served the more serious home-builder very well, no minimum

quantities and rare Q curve info was included.

At www.amidoncorp.com you can find a line card on PDF as well as in HTML at that page. The PDF didn't want to download this night for me...:-) Amidon stocks/distributes Micrometals, Fair-Rite, Philips/Ferroxcube, Arnold, Ferronics, Chang Sung, American Cores & Electronics (located in China near Hong Kong), Associated Components, Coiltronics/Cooper, NEC/Tokin, Coilcraft, Mag-Layers, AEM, Magnetics Inc.

"Amidon Associates" (the old label for the plastic envelope kits) is now described as a custom winder of coils under the Amidon Corporation umbrella.

As to getting toroidal cores in small quantities, I found that www.partsandkits.com was quite good. Dieter Gentzow, W8DIZ, has that in Florida. Genuine Micrometals cores from what I could tell were in my order. Good prices, quick service.

LenAnderson@ieee.org

5687. Re: FAQ - Important because of the CBers on the RSC Council

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 09:30:32 UTC
From: Mr W Z Boson <WZ_Boson@yahoo.co.uk>
Message-ID: <1133602232.836372.26270@g47g2000cwa.googlegroups.com>
Source record: 15670
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:

<blah>
</blah>

A little Learning is a dang'rous Thing;
Drink deep, or taste not the Pierian Spring.
Alexander Pope

5688. Re: Toroids coating

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 09:48:34 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11p2qfme1dd7a2d@corp.supernews.com>
Source record: 15671

LenAnderson@ieee.org wrote:
> From: Roy Lewallen on Fri, Dec 2 2005 4:20 pm
>
>
>>LenAnderson@ieee.org wrote:
>
>
>>> Since Bill Amidon sold his business to another company, the "new"
>>> Amidon company has been reselling another company's toroidal core
>>> forms.
>>>. . .
>>
>>I didn't know that anyone else but Micrometals made powdered iron cores
>>suitable for RF.
>
>
> I have a few left-over Arnold Magnetics powdered-iron toroidal
> cores that were used by RCA Corporation back in the 70s. For
> the high end of HF for maximum Q.
> . . .

A look at Arnold Magnetics' current catalog doesn't show anything suitable for HF or above(*). Do you know of any company other than Micrometals that currently sells powdered iron cores suitable for HF? I'd guess that while low frequency powdered irons are still pretty widely used in power supplies, the market for RF powdered iron cores must be relatively small.

(*) That is, materials having low loss at HF and therefore suitable for use as cores for inductors in tuned or relatively high-Q circuits. Like ferrites, powdered irons having high loss at HF can be very useful as broadband transformer cores, chokes, and in EMI suppression.

Roy Lewallen, W7EL

5689. Re: FAQ - Important because of the CBers on the RSC Council

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 10:36:54 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <ois2p117amqh7guhlnmqts5jtpfv427vea@4ax.com>
Source record: 15672
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Mr W Z Boson wrote:

>Pierian Spring wrote:
>
><blah>
></blah>
>
>A little Learning is a dang'rous Thing;
>Drink deep, or taste not the Pierian Spring.
> Alexander Pope

The only thing I think we have on here that's relevant is a spring
full of crocodile tears.

I can remember someone on here who went 'screaming' to 'the plods'
when someone wrote a letter to a family member; who made a complaint
to a university vice-chancellor because an employee sent an e-mail
three minutes after the end of his working day (and so must have
written it in 'works time'); and who approached someone's head teacher
regarding his appearance on here. Doubtless there were other
incidents. He also referred to people who belonged to a tear-or-wrist
organisation as 'noble'. It seems that what was good enough for him is
not too good for anyone else.

Perhaps his latest sock-puppet is a reference to the time he dropped a
ball by saying that a spring-dashpot system was a mechanical analogue
of a coil-capacitor system, because they both exhibit 'resonance'.

from
Aero Spike

Blair: "(Saddam's) weapons of mass destruction programme is active, detailed and growing. The policy of containment is not working. The weapons of mass destruction programme is not shut down. It is up and running....The intelligence picture.....is extensive, detailed and authoritative."

5690. Re: FAQ - Important because of the CBers on the RSC Council

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 11:05:05 UTC
From: Mr W Z Boson <WZ_Boson@yahoo.co.uk>
Message-ID: <1133607905.315599.28980@g14g2000cwa.googlegroups.com>
Source record: 15673
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Spike wrote:

> Mr W Z Boson wrote:
>
> >Pierian Spring wrote:
> >
> ><blah>
> ></blah>
> >
> >A little Learning is a dang'rous Thing;
> >Drink deep, or taste not the Pierian Spring.
> > Alexander Pope
>
> The only thing I think we have on here that's relevant is a spring
> full of crocodile tears.
>
> I can remember someone on here who went 'screaming' to 'the plods'
> when someone wrote a letter to a family member; who made a complaint
> to a university vice-chancellor because an employee sent an e-mail
> three minutes after the end of his working day (and so must have
> written it in 'works time'); and who approached someone's head teacher
> regarding his appearance on here. Doubtless there were other
> incidents. He also referred to people who belonged to a tear-or-wrist
> organisation as 'noble'. It seems that what was good enough for him is
> not too good for anyone else.
>
> Perhaps his latest sock-puppet is a reference to the time he dropped a
> ball by saying that a spring-dashpot system was a mechanical analogue
> of a coil-capacitor system, because they both exhibit 'resonance'.
>
> from
> Aero Spike
>
> Blair: "(Saddam's) weapons of mass destruction programme is active, detailed and growing. The policy of containment is not working. The weapons of mass destruction programme is not shut down. It is up and running....The intelligence picture.....is extensive, detailed and authoritative."

I think I was commenting on the arrogance seemingly displayed by the
choice of name.

Despite having thrown off my ball and chain, I retain some old contacts
- I emailed one recently (a guy who has a research interest in
psychopathology) and directed him to this NG with particular reference

to certain topics.

His response was "... interesting"

5691. Re: OFF TOPIC, but how do y'all read these news groups?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 11:25:41 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <439182de$0$20842$9b4e6d93@newsread2.arcor-online.net>
Source record: 15674
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I used news.cis.dfn.de a while but changed to arcor-news later because of
the now charging at news.cis.dfn.de
Arcor is still free and fast, no reliable problems. You must have a Arcor
login but this is even a free mail-account. If you like I can you send
instructions where. I don't know it just if the head.
Maybe they filter not-german clients out via your IP-address. But why not
give it a try?

Sent via Arcor -
Henry

> So, you being a *nix user, I can't see you getting excited about doing
> usenet 'text work' with a bloated cartoon interface. I'm a *nix user,
> too, and I can recommend Individual.net (http://news.individual.net/).
> It's is the follow-on/re-incarnation of the free news.cis.dfn.de. It
> costs 10 Euro per year and it's well worth it. I used the online sign-up
> and paid via the FirstgGate (http://firstgate.com/EU/en/info.html)
> service they use.
>
> Now, if only slrn could score on top-posters. sigh...
>
> HTH
> Jonesy
> --
> Marvin L Jones | jonz | W3DHJ | linux
> Pueblo, Colorado | @ | Jonesy | OS/2 __
> 38.24N 104.55W | config.com | DM78rf | SK

5692. Re: Need to build 100 mW UHF power amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 13:15:24 UTC
From: skavanagh72nospam@yahoo.ca
Message-ID: <1133615724.944328.126180@g49g2000cwa.googlegroups.com>
Source record: 15675

Neil Preston wrote:

> ** Except as provided in paragraph (g), fundamental emissions from
> intentional radiators operating under this section shall not be
> located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or
> 470-806 MHz. However, operation within these frequency bands is
> permItted under other sections of this part, e.g., Sec. Sec. 15.231
> and 15.241.

Read carefully ! This specifically forbids operation in the TV bands
except as provided for in paragraph (g) and other sections.

Paragraph (g) does not provide for operation in the UHF band. The only
other sections I spotted that do permit operation in this band are
15.231, which permits only low duty cycle periodic operation, and
15.242, which permits operation only for biomedical devices operating
inside health care facilities.

Steve

5693. Re: FAQ - Important because of the CBers on the RSC Council

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 14:16:25 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <lt73p1td2lkuf8o3ef5pga229dqdtpuubj@4ax.com>
Source record: 15676
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Mr W Z Boson wrote:

>Spike wrote:
>
>> Mr W Z Boson wrote:
>>
>> >Pierian Spring wrote:
>> >
>> ><blah>
>> ></blah>
>> >
>> >A little Learning is a dang'rous Thing;
>> >Drink deep, or taste not the Pierian Spring.
>> > Alexander Pope
>>
>> The only thing I think we have on here that's relevant is a spring
>> full of crocodile tears.
>>
>> I can remember someone on here who went 'screaming' to 'the plods'
>> when someone wrote a letter to a family member; who made a complaint
>> to a university vice-chancellor because an employee sent an e-mail
>> three minutes after the end of his working day (and so must have
>> written it in 'works time'); and who approached someone's head teacher
>> regarding his appearance on here. Doubtless there were other
>> incidents. He also referred to people who belonged to a tear-or-wrist
>> organisation as 'noble'. It seems that what was good enough for him is
>> not too good for anyone else.
>>
>> Perhaps his latest sock-puppet is a reference to the time he dropped a
>> ball by saying that a spring-dashpot system was a mechanical analogue
>> of a coil-capacitor system, because they both exhibit 'resonance'.
>
>I think I was commenting on the arrogance seemingly displayed by the
>choice of name.

Last weekend he appeared on the models.engineering group as "Very
Sharp Tool".

Not in this toolbox!

>Despite having thrown off my ball and chain, I retain some old contacts
>- I emailed one recently (a guy who has a research interest in
>psychopathology) and directed him to this NG with particular reference
>to certain topics.

>
>His response was "... interesting"

I don't doubt it! Someone might take up a study of the ng for a PhD
thesis - except that some on here would claim in error that the
Literature Search is plagiarism of other people's work.

from
Aero Spike

Blair: "(Saddam's) weapons of mass destruction programme is active, detailed and growing. The policy of containment is not working. The weapons of mass destruction programme is not shut down. It is up and running....The intelligence picture.....is extensive, detailed and authoritative."

5694. Short coax interconnections - phase implications??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 16:19:29 UTC
From: Paul Burridge <pb@shove.your.spam.up.your.arse.atlanticstar.co.uk>
Message-ID: <1bh3p11kcftnc9rtrhfihqc7r2olhe2oqj@4ax.com>
Source record: 15678
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Hello guys,

I recently picked up an old vector network analyser in working order
but minus the 3 interconnects between it and the
transmission/reflection bridge. These are specified in the manual to
be exactly 24" long, 50 ohms and terminated by N-type plugs.
I've been told the length of these patch leads is quite critical to
getting accurate measurements with this VNA, but am at a loss to work
out why 24" is specified when the frequency range of this device is
4Mhz to 1300Mhz. If it were only capable of measuring at one fixed
frequency, I could understand the need for a specifically cut length
of some fraction of a wavelength.
Can anyone explain the relevance of 24" in this context?
Also, will *any* 50 ohm coax suffice for this purpose or has it got to
be something special?
Thanks,
P.
--

"What is now proved was once only imagin'd" - William Blake

5695. Re: OFF TOPIC, but how do y'all read these news groups?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 16:58:23 UTC
From: Al <no.spam@wanted.com>
Message-ID: <no.spam-FAB984.11582403122005@news.verizon.net>
Source record: 15677
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

In article <439182de$0$20842$9b4e6d93@newsread2.arcor-online.net>,
"Henry Kiefer" <otc_friend@gmx.net> wrote:

> I used news.cis.dfn.de a while but changed to arcor-news later because of
> the now charging at news.cis.dfn.de
> Arcor is still free and fast, no reliable problems. You must have a Arcor
> login but this is even a free mail-account. If you like I can you send
> instructions where. I don't know it just if the head.
> Maybe they filter not-german clients out via your IP-address. But why not
> give it a try?
>
> Sent via Arcor -
> Henry
>
>
> > So, you being a *nix user, I can't see you getting excited about doing
> > usenet 'text work' with a bloated cartoon interface. I'm a *nix user,
> > too, and I can recommend Individual.net (http://news.individual.net/).
> > It's is the follow-on/re-incarnation of the free news.cis.dfn.de. It
> > costs 10 Euro per year and it's well worth it. I used the online sign-up
> > and paid via the FirstgGate (http://firstgate.com/EU/en/info.html)
> > service they use.
> >
> > Now, if only slrn could score on top-posters. sigh...
> >
> > HTH
> > Jonesy
> > --
> > Marvin L Jones | jonz | W3DHJ | linux
> > Pueblo, Colorado | @ | Jonesy | OS/2 __
> > 38.24N 104.55W | config.com | DM78rf | SK
>
>

I have used the Google newsgroups on occasion. All you need is a
browser. I don't care for the interface though.

Al

5696. Re: Short coax interconnections - phase implications??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 18:00:05 UTC
From: Dave <noone@nowhere.com>
Message-ID: <HZudnQInwp6yQAzenZ2dnUVZ_sqdnZ2d@crocker.com>
Source record: 15679
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.homebrew

it is likely the 'real' requirement is that they be exactly the same length.
though there may be some maximum length because of attenuation at the top
end. there is also a possibility that they figure in some length of coax
and calibrate that into the system, though i would think that is less
likely.

"Paul Burridge" <pb@shove.your.spam.up.your.arse.atlanticstar.co.uk> wrote
in message news:1bh3p11kcftnc9rtrhfihqc7r2olhe2oqj@4ax.com...
> Hello guys,
>
> I recently picked up an old vector network analyser in working order
> but minus the 3 interconnects between it and the
> transmission/reflection bridge. These are specified in the manual to
> be exactly 24" long, 50 ohms and terminated by N-type plugs.
> I've been told the length of these patch leads is quite critical to
> getting accurate measurements with this VNA, but am at a loss to work
> out why 24" is specified when the frequency range of this device is
> 4Mhz to 1300Mhz. If it were only capable of measuring at one fixed
> frequency, I could understand the need for a specifically cut length
> of some fraction of a wavelength.
> Can anyone explain the relevance of 24" in this context?
> Also, will *any* 50 ohm coax suffice for this purpose or has it got to
> be something special?
> Thanks,
> P.
> --
>
> "What is now proved was once only imagin'd" - William Blake

5697. Re: FAQ - Important because of the CBers on the RSC Council

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 18:32:02 UTC
From: Alan Holmes <alan.holmes@virgin.net>
Message-ID: <Cwlkf.12450$GC1.731@newsfe6-gui.ntli.net>
Source record: 15680
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Peckham Spring" <nelson@mandela-house.co.com> wrote in message
news:tU2kf.8119$LO4.329@newsfe5-gui.ntli.net...
>
> "Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
> news:1133554612.696150.28320@g44g2000cwa.googlegroups.com...
>> What is Ham Radio?
>>
>
> You really are a 44 carat plonker!

And you aren't?

>
>

5698. Re: FAQ - Important because of the CBers on the RSC Council

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 18:37:42 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1133635062.575476.31830@g47g2000cwa.googlegroups.com>
Source record: 15681
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Poxic Waste" is one of life's failures who cannot even pass
the exams set for 6-year-olds, but somehow fools himself
into thinking that he is accepted widely by the fraternity of
Radio Hams, but the reality is that it is only CBers-Masquerading-As
-Radio-Hams who consort with him in this NG; Childish
Broadcasters (CBers) to a man.

Alan Holmes wrote:
> "Peckham Spring" <nelson@mandela-house.co.com> wrote in message
> news:tU2kf.8119$LO4.329@newsfe5-gui.ntli.net...
> > "Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
> > news:1133554612.696150.28320@g44g2000cwa.googlegroups.com...
> >> What is Ham Radio?
> > You really are a 44 carat plonker!
> And you aren't?

5699. Re: FAQ - Important because of the CBers on the RSC Council

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 18:49:07 UTC
From: tox <tox@eternal-flames.gov>
Message-ID: <DMlkf.22973$uR.5357@newsfe7-gui.ntli.net>
Source record: 15682
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1133635062.575476.31830@g47g2000cwa.googlegroups.com...
> "Poxic Waste" is one of life's failures who cannot even pass
> the exams set for 6-year-olds, but somehow fools himself
> into thinking that he is accepted widely by the fraternity of
> Radio Hams, but the reality is that it is only CBers-Masquerading-As
> -Radio-Hams who consort with him in this NG; Childish
> Broadcasters (CBers) to a man.

All of the 6-year-olds who have passed the M3 exam, know how to post
correctly.

HTH
tox (who can hold down a job)

5700. Re: FAQ - Important because of the CBers on the RSC Council

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 19:00:59 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <9hq3p1dqrj3i8j3hahh583jjd8hhjoi5b2@4ax.com>
Source record: 15683
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

tox wrote:

>
>"Pierian Spring of Crocodile Tears" <aiyr.r.bean@lycos.co.uk> wrote
>
>> "Poxic Waste" is one of life's failures.....<snip>
>
>All of the 6-year-olds who have passed the M3 exam, know how to post
>correctly.
>
>HTH
>tox (who can hold down a job)

Remind me again, tox, who was it that was arrested earlier this year?

from
Aero Spike

Blair: "(Saddam's) weapons of mass destruction programme is active, detailed and growing. The policy of containment is not working. The weapons of mass destruction programme is not shut down. It is up and running....The intelligence picture.....is extensive, detailed and authoritative."

5701. Re: Toroids coating

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 19:07:33 UTC
From: LenAnderson@ieee.org
Message-ID: <1133636853.180087.113390@g43g2000cwa.googlegroups.com>
Source record: 15684

From: Roy Lewallen on Sat, Dec 3 2005 1:48 am

>LenAnderson@ieee.org wrote:
>> From: Roy Lewallen on Fri, Dec 2 2005 4:20 pm
>>>LenAnderson@ieee.org wrote:

>>>I didn't know that anyone else but Micrometals made powdered iron cores
>>>suitable for RF.
>>
>> I have a few left-over Arnold Magnetics powdered-iron toroidal
>> cores that were used by RCA Corporation back in the 70s. For
>> the high end of HF for maximum Q.
>> . . .
>
>A look at Arnold Magnetics' current catalog doesn't show anything
>suitable for HF or above(*). Do you know of any company other than
>Micrometals that currently sells powdered iron cores suitable for HF?

At least a half dozen companies off-shore (to the USA). There's
probably three dozen (give or take) in the world that advertise
but their product lines vary according to which kind they are
able to sell.

>I'd guess that while low frequency powdered irons are still pretty
>widely used in power supplies, the market for RF powdered iron cores
>must be relatively small.

It's just a specialized area of electronic components that has
been around for at least seven decades. "Small" is a sometimes
a subjective thing...depending on one's collection of catalog
data...:-)

In 1950 I had a chance to visit two companies, one in my home
town of Rockford, IL, (Greenlee Tool Co. division of Greenlee
Inc), one a small BC-SW radio factory in a suburb of Stockholm,
Sweden where my uncle-in-law was boss and only engineer. The
radios used Philips IF cans which had powdered-iron "pot" cores
and excellent voice bandwidth, sharp skirt response, etc. Those
Philips cans weren't advertised at all in the popular press but
they were relatively cheap in large quantities. Of course,
Greenlee chassis punches had been widely advertised and much
talked about by home-brewers back then. The actual production
area for the Greenlee chassis punches (sold all over the USA)
was about the size of my home office (13' x 13')...and they
also made files in that same cubicle. From the ads one would
have thought they had thousands of square feet of production

space! :-) Advertising can be deceptive. <shrug>

Powdered-iron and ferrite material production is done in huge batches prior to molding (powdered) or sintering (ferrites). It is relatively cheap per end item to produce. The QC needed costs much more per unit item than many other components (such as axial-lead resistors) so the manufacturers want to sell that in large lots. The only ones buying large lots are the manufacturers...who plan ahead for large-run (thousands of units) production. [you know this, of course, Roy, I'm mentioning it for others]

Most production lines shun making their own toroidal inductors because they are time-consuming compared to axial or radial-lead inductors. That's a specialized area and it is generally cheaper for equipment makers to buy them from inductor-making specialist companies. For home-brewers making as many as a dozen toroidal inductors by hand for one project, it is quite easy to do with normal dexterity. Doing it for hundreds of equipment units in a factory run makes production costs go up since the number of toroids needed may be ten times that. So, despite the clear advantages of a toroid form and closeness of magnetic field that is natural to it, many designers opt for the cheaper solenoidal form inductors. Some get the idea that solenoidal forms are "better" and toroidal forms should be "avoided" which is contrary to what they do.

Getting into ferrites, the microwave area has long been a user of specialized GHz-range ferrites for isolators, phase-shifters, attenuators, dividers, etc., purchased in certain stock sizes and ground to fit necessary physical shape. The makers of those materials tended to keep advertising to the specialized micro-wave side of "radio." Those parts just wouldn't work for the HF spectrum.

>(*) That is, materials having low loss at HF and therefore suitable for
>use as cores for inductors in tuned or relatively high-Q circuits. Like
>ferrites, powdered irons having high loss at HF can be very useful as
>broadband transformer cores, chokes, and in EMI suppression.

Cable TV spread in North America has been a great boon to Asian component making and aiding consumers with low, low prices. A good example is the little balun in most TV receivers made for decades allowing 75 Ohm or 300 Ohm "antenna" connection. Cheap and works over nearly a decade of frequencies. The same with "splitters" and "line amplifiers" (for several TV sets). It is difficult to get ads from the component makers themselves but those are starting to appear in the industry trade press. With the explosion of PC-making came all kinds of relatively cheap EMI-suppression material and gadgets around cables and the like. Whatever their material is tends to be secondary if it works.

The search for the ultimate high-Q coils started around 1950, popular in the amateur radio press with the SSB "revolution" needing it for IF selectivity. Was a BIG thing then as I recall but that wound down as mechanical and quartz filters became available with their "textbook" filter responses. That led to a general feeling of "high Q is always better" for nearly every tuned circuit or low/high pass filter. Corners on bandpass filters HAD to be sharp according to "CW" (Conventional Wisdom). Not really so in practice. A few hours of experimentation on computers with CAE analysis modeling actual Q losses will show many misconceptions on the "necessity - always - of high Q." The same with "chokes" and even sharp tuned circuits for tubes (which need a high impedance tuned circuit for maximum gain).

To me, a toroidal form is superior for holding IN the magnetic field, thus enabling a toroid to be snugged down to a substrate with little effect on inductance or Q. That also allows toroids to be placed closer together with much less mutual interference. One just can't do that with solenoidal forms without individual inductor shielding. Philips has a couple of great application notes on broadband toroidal transformers and "how to do them" written back in the early 70s...reissued on their big website around Y2K. [links are buried in some archive CDs, not handy]

Please pardon a few "editorial comments" in here...it's a very quiet Saturday and I'm trying to procrastinate away from hitting the crowded stores for gifts. :-)

LenAnderson@ieee.org

5702. Re: Toroids coating

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 19:10:23 UTC
From: LenAnderson@ieee.org
Message-ID: <1133637023.843180.118810@g14g2000cwa.googlegroups.com>
Source record: 15685

From: Tori <T...@tori.com> Thurs, Dec 1 2005 9:23 pm

>Why not email or visit amidon.com ??

www.amidoncorp.com to reach the correct site.

LenAnderson@ieee.org

5703. Re: OFF TOPIC, but how do y'all read these news groups?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 19:22:09 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4391f3de$0$20858$9b4e6d93@newsread2.arcor-online.net>
Source record: 15686
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Google interface is nice but overloaded. I prefer to offline action what is
not possible with Google.

- Henry

"Al" <no.spam@wanted.com> schrieb im Newsbeitrag
news:no.spam-FAB984.11582403122005@news.verizon.net...
> In article <439182de$0$20842$9b4e6d93@newsread2.arcor-online.net>,
> "Henry Kiefer" <otc_friend@gmx.net> wrote:
>
> > I used news.cis.dfn.de a while but changed to arcor-news later because
of
> > the now charging at news.cis.dfn.de
> > Arcor is still free and fast, no reliable problems. You must have a
Arcor
> > login but this is even a free mail-account. If you like I can you send
> > instructions where. I don't know it just if the head.
> > Maybe they filter not-german clients out via your IP-address. But why
not
> > give it a try?
> >
> > Sent via Arcor -
> > Henry
> >
> >
> > > So, you being a *nix user, I can't see you getting excited about doing
> > > usenet 'text work' with a bloated cartoon interface. I'm a *nix user,
> > > too, and I can recommend Individual.net (
http://news.individual.net/).
> > > It's is the follow-on/re-incarnation of the free news.cis.dfn.de. It
> > > costs 10 Euro per year and it's well worth it. I used the online
sign-up
> > > and paid via the FirstgGate (http://firstgate.com/EU/en/info.html)
> > > service they use.
> > >
> > > Now, if only slrn could score on top-posters. sigh...
> > >
> > > HTH
> > > Jonesy
> > > --
> > > Marvin L Jones | jonz | W3DHJ | linux
> > > Pueblo, Colorado | @ | Jonesy | OS/2 __
> > > 38.24N 104.55W | config.com | DM78rf | SK
> >

> >
>
> I have used the Google newsgroups on occasion. All you need is a
> browser. I don't care for the interface though.
>
> Al

5704. Re: FAQ - Important because of the CBers on the RSC Council

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 19:42:04 UTC
From: tox <tox@tox.co.com>
Message-ID: <gymkf.17712$0o2.507@newsfe3-gui.ntli.net>
Source record: 15687
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Spike" <Aero.Spike@S&T.invalid> wrote in message
news:9hq3p1dqrj3i8j3hahh583jjd8hhjoi5b2@4ax.com...
>
> tox wrote:
>
>>
>>"Pierian Spring of Crocodile Tears" <aiyr.r.bean@lycos.co.uk> wrote
>>
>
> Remind me again, tox, who was it that was arrested earlier this year?
>
>
Indeed Spike. Words such as "memory" and "selective", springs to mind here!

tox

5705. Re: Short coax interconnections - phase implications??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 19:51:14 UTC
From: Jim <kill-spam@no-spam.org>
Message-ID: <2N2dnc9hUZCragzeRVn-rg@comcast.com>
Source record: 15688
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.homebrew

The phase shift due to the 24 inch coax cables are factored into the Network Analyzer for all frequencies and so any different lengths will cause the correction factor which is built into the analyzer to be wrong and that will make the reading displayed on the screen to be in error.

The phase velocity for most coax cables are similar, so I'd use RG-8 since that accepts type N connectors reasonably well. The impedance bump caused by a thinner cable being adapted to type N cables would be noticeable especially at higher frequencies.

The only major question is whether the original cables had a different velocity factor, and that I can't answer so I'd use the RG-8 and it should be close enough.

Jim Pennell
N6BIU

--

11:50 Pacific Time Zone
Dec 3 2005

International Time
19:50 UTC
03.12.2005

5706. FS: Bud equipment cabinets/enclosures, unused

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-03 22:40:58 UTC
From: Al Schapira <a.d.schapira@worldnet.att.net>
Message-ID: <43921F26.7040309@worldnet.att.net>
Source record: 15689
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.swap,sci.electronics.equipment

The cabinets below are *unused* and in near perfect condition, NOS.
Shipping to a US address is *included*. (Check a distributor for
retail prices or specs.)

Thanks for looking.

-Al Schapira, KC2HRH, a.d.schapira@worldnet.att.net
==========

Bud Equipment Enclosure, WA-1541, aluminum, 9 x 8.12 x 12, 3.5 lbs,
metalic gray hammertone finish, reinforced flexible recessed metal
handle. Very minor pits in handle bracket. Includes finished front
panel. Includes, rubber feet and screws. Unused. $35.
See
http://home.att.net/~a.schapira/pix/Cabinets/Bud-WA-1541_1.jpg
http://home.att.net/~a.schapira/pix/Cabinets/Bud-WA-1541_2.jpg
http://home.att.net/~a.schapira/pix/Cabinets/Bud-WA-1541_3.jpg

Bud Equipment Enclosure, WA-1540, aluminum, 8 x 6.12 x 8, 2 lbs,
metalic gray hammertone finish, reinforced flexible recessed
metal handle. Includes, rubber feet and screws. *Has no front
panel*. Unused. $25.
See
http://home.att.net/~a.schapira/pix/Cabinets/Bud-WA-1540_1.jpg
http://home.att.net/~a.schapira/pix/Cabinets/Bud-WA-1540_2.jpg

5707. Circuit for Telemobile TRX ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-04 01:33:30 UTC
From: Graeme Zimmer <gzimmer@wideband.net.au>
Message-ID: <1133660010.b1c70aa749fa91d2db13a367a5a9346b@fe5.teranews.com>
Source record: 15690
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew

Hi folks,

I have a Telemobile radio which is labeled "FCC I.D. D4T9MP725"
(I cant find any reference on the FCC web data base)

Looking at the PCB it apears to be: 6 channel, 25 Watt, FM, VHF high band.

It uses a 2SC1946A PA and a 2SC2237 driver. The IF is a MC3357

I'd like to convert it to 2 Mtrs, but first I need a circuit diagram.

Can anybody help please?

Would be happy to pay any reasonable costs.

Tks ..... Zim VK3GJZ

5708. Re: Need to build 100 mW UHF power amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-04 13:25:31 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <FtidnQKpVvhCcA_eRVn-vg@bright.net>
Source record: 15691

Why not feed your signal into an MATV (Master Antenna TV) amplifier and route coaxes to the rooms where you want to hook up a TV? You wouldn't need 100 mW to do that....of course, you would have to run coax throughout the building and in old construction, it could be a pain...

Scott

Neil Preston wrote:

> 2.4 GHz is the problem.
>
> That frequency is too congested at this location.
>
> I need to move the signal OUT of the 2.4 GHz band.
>
>
> "Scott" <acepilot@bloomer.net> wrote in message
> news:2OqdnYH89tImfQ3e4p2dnA@bright.net...
>
>>http://www.jameco.com/ sells video transmitters for 2.4 GHz. If you
>>have composite video available, it would be easier and legal to go this
>>route.
>>
>>Scott
>>
>>
>>Neil Preston wrote:
>>
>>
>>>I want to be able to send a UHF TV signal (400-800 MHz) from one end of
>
> the
>
>>>house to the other. I have a UHF digital PLL modulator with an output
>
> level
>
>>>of 7dBmV minimum, and would like to use it to feed a small linear 100 mW
>>>"power" amp to a 1/4 wave whip.
>>>
>>>I don't think I'll find such a critter very easily, (if at all) so I
>
> would
>
>>>like some suggestions as to how I might find resources to build one. (Of

>>>course, a pre-designed schematic and PCB layout would be ideal!)
>>>
>>>Anyone have any suggestions as to where to start? (Besides Google...
>
> BTDT.)
>
>>>Neil Preston, CET
>>>
>>>
>>>
>>>
>
>
>

5709. Re: Simple triggered sweep.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-04 16:52:26 UTC
From: novatech@eskimo.com
Message-ID: <dmv6sa$kh0$1@eskinews.eskimo.com>
Source record: 15692

I posted a schematic and theory of operation of an improved version of my attempt at this. It triggers nicely to about 1MHz with the parts as shown.

http://www.novatech-instr.com/Fun/trig.pdf

Thanks for all the feedback.

Steve.
--
Steven D. Swift, novatech@eskimo.com, http://www.novatech-instr.com
NOVATECH INSTRUMENTS, INC. P.O. Box 55997
206.301.8986, fax 206.363.4367 Seattle, Washington 98155 USA

5710. Ground resistance tester

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-04 20:43:47 UTC
From: AG4QC <Joel@cyberbest.com>
Message-ID: <dylkf.4473$lh.123001@news.sisna.com>
Source record: 15693

I was wondering if anyone built some sort of ground resistance tester? I read that the NEC requires 25 Ohms or less.. But I don't understand how to measure that. I certainly could use a ohm meter between a ground rod and the test subject, but then the ground rod I use as a reference could be faulty.. It seems to me it must be measured in some other manner. Maybe low frequency signal and then measure how much it's absorbed in the earth?.. I know they sell a clamp on ground resistance tester for big bucks. Considering it's a clamp on, it certainly don't have any external reference.. Anyway, I was wondering if anyone had any experience with these testers and maybe building one?

Joe AG4QC

5711. Re: Ground resistance tester

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-05 00:49:24 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11p73krhkuoqib9@corp.supernews.com>
Source record: 15694

Ground resistance varies considerably with frequency, and at HF it can be very different from the DC or 60 Hz value. (For example, pure water is virtually lossless at DC and low frequency, but very lossy at HF.) And in order to get a decent representation of ground, you also have to know its dielectric constant. The only reasonably accurate method I know of to make these measurements is a system using a buried transmission line, called an OWL tester. I've never seen or used one, just read some papers where it was used.

If your need is for an NEC model, you should realize that the skin depth of current in soil in the HF range is on the order of 10 - 20 feet, meaning that significant current exists to well below this depth. Soil is seldom homogeneous, so to make an accurate representation of real soil, you'd have to test the soil at various depths down to perhaps 30 - 50 feet or so, then make up some sort of average value for the program to use. I don't believe any single average value will really be a good representation of a typical stratified ground.

So the bottom line is that even if you could accurately measure the surface soil conductivity, you wouldn't have enough information for an accurate model. And in fact, even if you could measure the conductivity and dielectric constant to a great depth, the model still wouldn't be very good because of its assumption that the soil is homogeneous.

About the best you can do with currently available software is to estimate the best and worst likely soil characteristics which might occur from the surface to a few tens of feet depth. Run simulations with both. The antenna performance will probably end up somewhere between the results of the two. Even that isn't guaranteed, though, since any single value probably isn't adequate to represent a stratified ground.

Ground modeling is the weak point of all NEC-type programs. Don't put too much weight on results which are strongly dependent on ground characteristics.

Roy Lewallen, W7EL

AG4QC wrote:
> I was wondering if anyone built some sort of ground resistance tester? I
> read that the NEC requires 25 Ohms or less.. But I don't understand how to
> measure that. I certainly could use a ohm meter between a ground rod and the
> test subject, but then the ground rod I use as a reference could be faulty..
> It seems to me it must be measured in some other manner. Maybe low frequency
> signal and then measure how much it's absorbed in the earth?.. I know they
> sell a clamp on ground resistance tester for big bucks. Considering it's a
> clamp on, it certainly don't have any external reference.. Anyway, I was

> wondering if anyone had any experience with these testers and maybe building
> one?
>
> Joe AG4QC
>
>

5712. Re: Ground resistance tester

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-05 02:11:23 UTC
From: Ivan Makarov <miv@hotmail.com>
Message-ID: <YcWdnWUOpY4hPA7eRVn-uQ@rogers.com>
Source record: 15695

Apparently Joe is talking about contact resistance between a grounding rod and the soil. Is that correct, Joe? I also saw those ground rod clamp testers in the Inet, and is still puzzled how they claim accuracy down to 0.01 Ohm.

Thks,
Ivan

5713. Re: Short coax interconnections - phase implications??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-05 02:37:47 UTC
From: "Wayne P. Muckleroy" <wmuckleroy2@neo.rr.com>
Message-ID: <%JNkf.12425$lh.1687@tornado.ohiordc.rr.com>
Source record: 15696
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Did you also receive a calibration kit with the VNA? If you did so, then the lengths of these interconnect cables are not crucial for calibrated measurements. Only uncalibrated measurements will be affected.

It would help to know the manufacturer and model of the VNA.

Wayne
(KC8UIO)
"Paul Burridge" <pb@shove.your.spam.up.your.arse.atlanticstar.co.uk> wrote in message news:1bh3p11kcftnc9rtrhfihqc7r2olhe2oqj@4ax.com...
> Hello guys,
>
> I recently picked up an old vector network analyser in working order
> but minus the 3 interconnects between it and the
> transmission/reflection bridge. These are specified in the manual to
> be exactly 24" long, 50 ohms and terminated by N-type plugs.
> I've been told the length of these patch leads is quite critical to
> getting accurate measurements with this VNA, but am at a loss to work
> out why 24" is specified when the frequency range of this device is
> 4Mhz to 1300Mhz. If it were only capable of measuring at one fixed
> frequency, I could understand the need for a specifically cut length
> of some fraction of a wavelength.
> Can anyone explain the relevance of 24" in this context?
> Also, will *any* 50 ohm coax suffice for this purpose or has it got to
> be something special?
> Thanks,
> P.
> --
>
> "What is now proved was once only imagin'd" - William Blake

5714. Re: Ground resistance tester

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-05 03:06:16 UTC
From: AG4QC <Joel@cyberbest.com>
Message-ID: <S8Okf.8939$Bn4.238656@news.sisna.com>
Source record: 15698

Well, yes that's true.. In this case I was talking about the NEC (National Electrical Code).. Sort of a basic electrical question, from a ham radio prospective. They put up a Satellite Internet dish on my roof and it was too far away from the 'Service' protective ground so it's not grounded. So I ran my own bonding ground wire to tie it into the rest of my single point grounding system. It started me wondering just how affective all these ground rods were, even though they are all bonded together. So that started me looking around for a way to measure the resistance to ground, as I figure the less the better. Of course, in this case I am talking about 'protective' ground as required in the NEC handbook. The electricians around here eyes glaze over when I ask about the 25 ohm or less requirement.

So I figured maybe someone on here had experience measuring the required ground.. It would be my luck the house would take a minor lightning hit and the Insurance company would try to weasel out of there responsibilities by saying the ground didn't meet the NEC requirements not to mention I rather not have issues. While unlikely, I hear all sorts of horror stories on how they are trying to disallow claims for all sorts of reasons after Katrina.

Joe AG4QC

"Ivan Makarov" <miv@hotmail.com> wrote in message
news:YcWdnWUOpY4hPA7eRVn-uQ@rogers.com...
> Apparently Joe is talking about contact resistance between a grounding rod
> and the soil. Is that correct, Joe? I also saw those ground rod clamp
> testers in the Inet, and is still puzzled how they claim accuracy down to
> 0.01 Ohm.
>
> Thks,
> Ivan
>
>

5715. Re: Ground resistance tester

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-05 03:06:44 UTC
From: nothermark <trash@gnomex.cotse.net>
Message-ID: <o2b7p1dbgk2cr4shkrrcttdfms8b5c9ouv@4ax.com>
Source record: 15697

On Sun, 4 Dec 2005 21:11:23 -0500, "Ivan Makarov" <miv@hotmail.com>
wrote:

>Apparently Joe is talking about contact resistance between a grounding rod
>and the soil. Is that correct, Joe? I also saw those ground rod clamp
>testers in the Inet, and is still puzzled how they claim accuracy down to
>0.01 Ohm.
>
>Thks,
>Ivan
>

Accuracy as in reading + or - 0.01 vs reading of 0.01 ohms absolute -
very big difference in technology involved. ;-) You have to define
what they are doing.

5716. Re: Need to build 100 mW UHF power amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-05 09:02:24 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1133773344.468390.119560@g14g2000cwa.googlegroups.com>
Source record: 15699

try the RF 2360 from RF microdevices.
it looks scary but with a little bit of patience you can hand make a
small PCB for it. except for thr input and the output oins, all others
are grounded. if you make you PCB out of a 31mils thick board, all you
have to do is scribble a pair of 50 mils wide line and a few
noncritical pads to anchor the power decoupling componnets. it's
specifically designed for CATV use, good from 5 to 1500 MHz.
Alex 4Z5KS

5717. MESA Quartz Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-05 12:14:43 UTC
From: Mario Bros <rocco.calbe@tin.it>
Message-ID: <43942f33$0$16208$4fafbaef@reader3.news.tin.it>
Source record: 15700

Hi folks,
I have acquired of the MESA Quartz Crystals to approximately 160 Mhz
fundamental AT.
Someone knows some circuit for their use?
73's de IK6GQC Rocco

5718. Re: Ground resistance tester

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-05 13:15:32 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1133788532.955473.201840@g47g2000cwa.googlegroups.com>
Source record: 15701

> So I figured maybe someone on here had
> experience measuring the required ground..

Well, not a lot of experience, but the keywords you're looking for are "fall of potential".

Depending on which spec you're meeting, you drive multiple ground rods in at distances that are large compared to the length of the rods. Then you measure the resistance between the rods.

Just sticking your ohmmeter leads between two ground rods is not good enough. There is a substantial chunk of 60Hz AC and probably some DC current flowing in the ground and the little battery inside the ohmmeter will generally add nothing. Fall-of-potential meters use much larger currents (and usually measurement techniques, like using an AC frequency unrelated to 60Hz and harmonics) to overcome this.

My impression with antenna installations that I've been peripherally involved in is that NEC requirements (25 ohms) are generally easy to meet unless you've got dry rocky soil. And that the 25-ohm requriement is nowhere near good enough to protect your equipment/buildings from a direct hit.

Tim.

5719. Re: Ground resistance tester

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-05 14:00:51 UTC
From: "William E. Sabin" <w.sabin@mchsi.com>
Message-ID: <mKXkf.622774$xm3.508592@attbi_s21>
Source record: 15702

If a 60 Hz measurement is the only physical test that is available, that is better than nothing. The experts say that is useless, but I do not agree 100%.

Once upon a time I used a 12.6 V 60 Hz transformer and an AC ammeter to measure the current between some ham radio ground rods and the building utility ground and then calculated a resistance value of about 16 ohms. The substantial current flow helped to overcome an initial high value of resistance. The ground path did not seem to be perfectly linear at very low current values.

What the 2 to 30 MHz values were I have no idea. A high power (100 W) HF signal and an RF ammeter would have been a better approach. This test has to be carefully designed to reduce HF impedance effects.

The best approach, I believe, is to use an antenna design that does not utilize a ground path return impedance. In a balanced system the return current is through a transmission line, not the earth. A multi-wire ground plane with a transmission line return path is also a good approach that is very often used. Common-mode currents that try to return on the outside of the transmission line must be attenuated using a current balun.

Bill W0IYH

"AG4QC" <Joel@cyberbest.com> wrote in message
news:dyIkf.4473$lh.123001@news.sisna.com...
>I was wondering if anyone built some sort of ground resistance tester? I
>read that the NEC requires 25 Ohms or less.. But I don't understand how to
>measure that. I certainly could use a ohm meter between a ground rod and
>the test subject, but then the ground rod I use as a reference could be
>faulty.. It seems to me it must be measured in some other manner. Maybe low
>frequency signal and then measure how much it's absorbed in the earth?.. I
>know they sell a clamp on ground resistance tester for big bucks.
>Considering it's a clamp on, it certainly don't have any external
>reference.. Anyway, I was wondering if anyone had any experience with these
>testers and maybe building one?
>
> Joe AG4QC
>

5720. Re: Ground resistance tester

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-05 15:21:12 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <hdl8p1tc6ebptg00kkmnv94h6hukqn43da@4ax.com>
Source record: 15703

It sounds to me like you are looking for legal advice, not technical advice.

With that in mind, and a lot of bad experience with lightning, I take the attitude that the NEC establishes the minimums for protection. After all, what can an extra ground hurt?

Last summer I had lightning rods installed on my house. I live on a low ridge and have taken several (expensive) hits over the last few years. They installed ground rods on two corners of the house and tied one of them to the service ground. They also tied the Antenna tower to the opposite ground rod. I added another ground (#6 wire) from the Cable TV ground rod to the service ground. I also tied the Cable TV ground to the ground rod on the invisible fence (dog containment) with #6 wire.

With all of that I still don't have a good RF ground. I hope to put up a vertical antenna soon and the first thing I need to do is establish a system of radials. Of course, the first wire will be a #6 to the service ground.

BTW, I don't understand "too far away from the service ground to be connected."

John Ferrell W8CCW

On Sun, 4 Dec 2005 21:06:16 -0600, "AG4QC" <Joel@cyberbest.com> wrote:

>Well, yes that's true.. In this case I was talking about the NEC (National
>Electrical Code).. Sort of a basic electrical question, from a ham radio
>prospective. They put up a Satellite Internet dish on my roof and it was
>too far away from the 'Service' protective ground so it's not grounded. So I
>ran my own bonding ground wire to tie it into the rest of my single point
>grounding system. It started me wondering just how affective all these
>ground rods were, even though they are all bonded together. So that started
>me looking around for a way to measure the resistance to ground, as I figure
>the less the better. Of course, in this case I am talking about 'protective'
>ground as required in the NEC handbook. The electricians around here eyes
>glaze over when I ask about the 25 ohm or less requirement.
>
>So I figured maybe someone on here had experience measuring the required
>ground.. It would be my luck the house would take a minor lightning hit and
>the Insurance company would try to weasel out of there responsibilities by
>saying the ground didn't meet the NEC requirements not to mention I rather
>not have issues. While unlikely, I hear all sorts of horror stories on how

>they are trying to disallow claims for all sorts of reasons after Katrina.
>
>Joe AG4QC
>
>"Ivan Makarov" <miv@hotmail.com> wrote in message
>news:YcWdnWUOpY4hPA7eRVn-uQ@rogers.com...
>> Apparently Joe is talking about contact resistance between a grounding rod
>> and the soil. Is that correct, Joe? I also saw those ground rod clamp
>> testers in the Inet, and is still puzzled how they claim accuracy down to
>> 0.01 Ohm.
>>
>> Thks,
>> Ivan
>>
>>
>
John Ferrell W8CCW

5721. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-05 16:43:57 UTC
From: Andy Cowley <andy.cowley@uwe.ac.uk>
Message-ID: <Ir1AH8.Dzs@bath.ac.uk>
Source record: 15705
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

RST Engineering wrote:
> Well, just for starters, what does Spice say about a 1000 pf capacitor with
> either ï¿½" lead lengths or a total of 1" of PCB trace at 150 MHz.?
>
It's an inductor? ;-)

No such thing as a capacitor, or an inductor
or resistor for that matter. They all have
to be modelled as networks with L C and R
don't they?

vy 73

Andy, M1EBV

5722. Re: Ground resistance tester

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-05 16:45:46 UTC
From: Bill Janssen <billj9@ieee.org>
Message-ID: <_8_kf.442$OU3.330@news01.roc.ny>
Source record: 15704

AG4QC wrote:

>I was wondering if anyone built some sort of ground resistance tester? I
>read that the NEC requires 25 Ohms or less.. But I don't understand how to
>measure that. I certainly could use a ohm meter between a ground rod and the
>test subject, but then the ground rod I use as a reference could be faulty..
>It seems to me it must be measured in some other manner. Maybe low frequency
>signal and then measure how much it's absorbed in the earth?.. I know they
>sell a clamp on ground resistance tester for big bucks. Considering it's a
>clamp on, it certainly don't have any external reference.. Anyway, I was
>wondering if anyone had any experience with these testers and maybe building
>one?
>
>Joe AG4QC
>
>
>
>
I think others have touched on the key requirement of testing at least
three grounds rods. Then
from the three (or more) readings you can determine each resistance
value. As others have pointed out
you probably need a high current to mask the other currents in the soil.

Cheers.
Bill K7NOM

5723. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-05 16:49:20 UTC
From: Andy Cowley <andy.cowley@uwe.ac.uk>
Message-ID: <Ir1Aq8.E8q@bath.ac.uk>
Source record: 15706
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Henry Kiefer wrote:

> To come back to your question: Spice will give you better results than your
> real circuit!

Worked much DX with Spice, have you?

IMHO if the results from spice differ from the
real results then spice is wrong.

BTW have you got a realistic model for the
self-capacitance of an inductor? Can you
predict the self resonance within 5%?

vy 73

Andy, M1EBV

5724. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-05 17:14:15 UTC
From: Andy Cowley <andy.cowley@uwe.ac.uk>
Message-ID: <Ir1Bvq.Ey6@bath.ac.uk>
Source record: 15707
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

RST Engineering (jw) wrote:

> Agreed, John, 150 MHz is damned near DC for a lot of us, but as yet I have
> no answer from the "spice" folks for the 1 nf capacitor question. A lot of
> fancydancing but no answers.
>

Try them on a toroidal inductor, even at HF. I have good reason to
believe they won't have anything like a model to predict self
capacitance/resonance.

vy 73

Andy, M1EBV

5725. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-05 17:33:06 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <j9u8p15d9j8403qpcpm6iam7n925a4tc3p@4ax.com>
Source record: 15708
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Mon, 5 Dec 2005 17:14:15 GMT, Andy Cowley <andy.cowley@uwe.ac.uk>
wrote:

>RST Engineering (jw) wrote:
>
>> Agreed, John, 150 MHz is damned near DC for a lot of us, but as yet I have
>> no answer from the "spice" folks for the 1 nf capacitor question. A lot of
>> fancydancing but no answers.
>>
>
>
>Try them on a toroidal inductor, even at HF. I have good reason to
>believe they won't have anything like a model to predict self
>capacitance/resonance.
>
>vy 73
>
>Andy, M1EBV

Model making is driven by need. 1nF capacitors don't exist on-chip
(at least not very often :), so I don't have a model. But I have
built a model of a wirebond that is good up into the 3GHz range.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

5726. Re: Ground resistance tester

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-05 17:51:55 UTC
From: nobody <rhughes4-removeme@swbell.net>
Message-ID: <%6%kf.36217$6e1.7725@newssvr14.news.prodigy.com>
Source record: 15709

Here is a good overview technical article that discussing earth grounding
and how to measure it. This info is for 60Hz AC system and equipment
grounding saftey and protection grounding, not antenna ground systems.
Be sure to look at the pictures and figures.

http://www.duncaninstr.com/Gr_article.htm

Here is another useful paper. Item number 14, Ground System Testing.

http://www.kilowattclassroom.com/ArchiveCatalog.htm

Ronnie, N5CSE

"AG4QC" <Joel@cyberbest.com> wrote in message
news:dyIkf.4473$lh.123001@news.sisna.com...
>I was wondering if anyone built some sort of ground resistance tester? I
>read that the NEC requires 25 Ohms or less.. But I don't understand how to
>measure that. I certainly could use a ohm meter between a ground rod and
>the test subject, but then the ground rod I use as a reference could be
>faulty.. It seems to me it must be measured in some other manner. Maybe low
>frequency signal and then measure how much it's absorbed in the earth?.. I
>know they sell a clamp on ground resistance tester for big bucks.
>Considering it's a clamp on, it certainly don't have any external
>reference.. Anyway, I was wondering if anyone had any experience with these
>testers and maybe building one?
>
> Joe AG4QC
>

5727. Re: Ground resistance tester

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-05 19:32:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11p95ef7h1ti8b7@corp.supernews.com>
Source record: 15710

Please ignore my earlier posting. I saw NEC and thought the reference was to the program of that name (Numerical Electromagnetics Code). The other responses caused me to re-read your posting more carefully and I see you're referring instead to the National Electrical Code. 60 Hz measurement is of course what you want to do, and my response was entirely inappropriate in that context.

Roy Lewallen, W7EL

5728. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-05 19:35:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11p95keq1u9frfc@corp.supernews.com>
Source record: 15711
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Andy Cowley wrote:
> . . .
> IMHO if the results from spice differ from the
> real results then spice is wrong.
> . . .

If the results from SPICE differ from the real results, then your model is inadequate.

Roy Lewallen, W7EL

5729. Re: Short coax interconnections - phase implications??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-05 20:32:17 UTC
From: Paul Burridge <pb@shove.your.spam.up.your.arse.atlanticstar.co.uk>
Message-ID: <i989p1p90a2sim0s1hq71t0pge282j8qeb@4ax.com>
Source record: 15712
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.homebrew

On Mon, 05 Dec 2005 02:37:47 GMT, "Wayne P. Muckleroy"
<wmuckleroy2@neo.rr.com> wrote:

>Did you also receive a calibration kit with the VNA?

Nope.

> If you did so, then the
>lengths of these interconnect cables are not crucial for calibrated
>measurements. Only uncalibrated measurements will be affected.
>
>It would help to know the manufacturer and model of the VNA.

It's a good old HP 8754A
--

"What is now proved was once only imagin'd" - William Blake

5730. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-05 22:53:38 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <4394cac3$0$9646$9b4e6d93@newsread2.arcor-online.net>
Source record: 15713
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Spice is as good as the input is!
Spice is not a Maxwell field equations solver!

You can predict within 5% without Spice?? How?

- Henry

"Andy Cowley" <andy.cowley@uwe.ac.uk> schrieb im Newsbeitrag
news:Ir1Aq8.E8q@bath.ac.uk...
> Henry Kiefer wrote:
>
>
> > To come back to your question: Spice will give you better results than
your
> > real circuit!
>
> Worked much DX with Spice, have you?
>
> IMHO if the results from spice differ from the
> real results then spice is wrong.
>
> BTW have you got a realistic model for the
> self-capacitance of an inductor? Can you
> predict the self resonance within 5%?
>
>
> vy 73
>
> Andy, M1EBV

5731. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-05 23:34:52 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <dej9p1te7qiapphldsgvm3toip0usmeih9@4ax.com>
Source record: 15714
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Mon, 5 Dec 2005 23:53:38 +0100, "Henry Kiefer" <otc_friend@gmx.net>
wrote:

>Spice is as good as the input is!
>Spice is not a Maxwell field equations solver!
>
>You can predict within 5% without Spice?? How?
>
>- Henry
>
[snip]

Some of us have done better than 5% prediction BC (before CAD)... like
for close to 20 years before I ever saw a computer... and 25 years
before simulation software.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

5732. Re: Ground resistance tester

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-06 02:25:00 UTC
From: Ivan Makarov <miv@hotmail.com>
Message-ID: <6ridnZX4grr2awnenZ2dnUVZ_sCdnZ2d@rogers.com>
Source record: 15715

Here is a couple of links, just the first two Google hits

http://www.extech.com/instrument/products/310_399/382356SpecialMeters.html

http://www.stayonline.com/detail~ID~2048.html

"nothermark" <trash@gnomex.cotse.net> wrote in message
news:o2b7p1dbgk2cr4shkrrcttdfms8b5c9ouv@4ax.com...
> On Sun, 4 Dec 2005 21:11:23 -0500, "Ivan Makarov" <miv@hotmail.com>
> wrote:
>
> >Apparently Joe is talking about contact resistance between a grounding
rod
> >and the soil. Is that correct, Joe? I also saw those ground rod clamp
> >testers in the Inet, and is still puzzled how they claim accuracy down to
> >0.01 Ohm.
> >
> >Thks,
> >Ivan
> >
>
> Accuracy as in reading + or - 0.01 vs reading of 0.01 ohms absolute -
> very big difference in technology involved. ;-) You have to define
> what they are doing.

5733. Re: MESA Quartz Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-06 03:23:09 UTC
From: "Michael St. Angelo" <mstangelo@comcast.net>
Message-ID: <l72dnahykPCDmQjeRVn-uw@comcast.com>
Source record: 15716

Here is a low phase noise oscillator circuit for a Analog Devices AD9850
DDS:

http://www.analog.com/UploadedFiles/Application_Notes/377501052179934777265013367an419.pdf

73,

Mike N2MS

"Mario Bros" <rocco.calbe@tin.it> wrote in message
news:43942f33$0$16208$4fafbaef@reader3.news.tin.it...
> Hi folks,
> I have acquired of the MESA Quartz Crystals to approximately 160 Mhz
> fundamental AT.
> Someone knows some circuit for their use?
> 73's de IK6GQC Rocco
>
>

5734. Re: MESA Quartz Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-06 08:22:30 UTC
From: Mario Bros <rocco.calbe@tin.it>
Message-ID: <43954a45$0$7310$4fafbaef@reader4.news.tin.it>
Source record: 15717

Hi Mike, thank you.
I am not sure that the circuit is good also for the type of crystal that I
have.
That one used in this plan is a 7th while the mesa it is a fundamental AT.

73's de IK6GQC Rocco

"Michael St. Angelo" <mstangelo@comcast.net> ha scritto nel messaggio
news:l72dnahykPCDmQjeRVn-uw@comcast.com...
> Here is a low phase noise oscillator circuit for a Analog Devices AD9850
> DDS:
>
>
http://www.analog.com/UploadedFiles/Application_Notes/377501052179934777265013367an419.pdf
>
> 73,
>
> Mike N2MS
>
>
>
> "Mario Bros" <rocco.calbe@tin.it> wrote in message
> news:43942f33$0$16208$4fafbaef@reader3.news.tin.it...
>> Hi folks,
>> I have acquired of the MESA Quartz Crystals to approximately 160 Mhz
>> fundamental AT.
>> Someone knows some circuit for their use?
>> 73's de IK6GQC Rocco
>>
>>
>
>

5735. FS: Plate transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-06 09:24:30 UTC
From: GBrown <gkbrown@gwi.net>
Message-ID: <nbCdnTFtvJpyygjeRVn-tQ@gwi.net>
Source record: 15718

120 volt primary...
1440/2880 secondary.
1.63 KVA
Heavy iron.
Make an offer.
--
Regards,
Gary...WZ1M

5736. Re: Plate transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-06 09:28:01 UTC
From: GBrown <gkbrown@gwi.net>
Message-ID: <SKGdnYg7yKNexQjeRVn-gg@gwi.net>
Source record: 15719

OOPS, its 1.36 KVA, not 1.63

--
Regards,
Gary...WZ1M
"GBrown" <gkbrown@gwi.net> wrote in message
news:nbCdnTFtvJpyygjeRVn-tQ@gwi.net...
> 120 volt primary...
> 1440/2880 secondary.
> 1.63 KVA
> Heavy iron.
> Make an offer.
> --
> Regards,
> Gary...WZ1M
>
>

5737. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-06 12:05:41 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <43957f44$0$9636$9b4e6d93@newsread2.arcor-online.net>
Source record: 15720
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Sure Jim. I understand you. That was the time where time was cheaper. Once I programmed a Gauss linear equations system solver on my Casio FX-602P - having 512 bytes and even left one byte (for extensions ;-) It was with minimal input help system (Showing the indices to input) and the matrix was of dynamical order. (Sorry for my bad english)

I can buy resistors and capacitors with 5%, sometimes with 1%. If you build a rc oscillator with 1% component values, you get an error typical 1,5%. And then you add the active components with horrible semiconductor strayung values. Of course, it is possible with feedback structures to linearize and stabilize such systems.
So, where is the difference between measurement of the component values and calculating by hand the circuit OR setting the measured values in the Spice component dialog boxes? The difference is the time needed and the possibility to make errors.

5% is a real good value for an analog system.

Hey Jim - Why you don't answer my second private message? :-(

- Henry

"Jim Thompson" <To-Email-Use-The-Envelope-Icon@My-Web-Site.com> schrieb im Newsbeitrag news:dej9p1te7qiapphldsgvm3toip0usmeih9@4ax.com...
> On Mon, 5 Dec 2005 23:53:38 +0100, "Henry Kiefer" <otc_friend@gmx.net>
> wrote:
>
> >Spice is as good as the input is!
> >Spice is not a Maxwell field equations solver!
> >
> >You can predict within 5% without Spice?? How?
> >
> >- Henry
> >
> [snip]
>
> Some of us have done better than 5% prediction BC (before CAD)... like
> for close to 20 years before I ever saw a computer... and 25 years
> before simulation software.
>
> ...Jim Thompson
> --
> | James E.Thompson, P.E. | mens |
> | Analog Innovations, Inc. | et |
> | Analog/Mixed-Signal ASIC's and Discrete Systems | manus |

> | Phoenix, Arizona Voice:(480)460-2350 | |
> | E-mail Address at Website Fax:(480)460-2142 | Brass Rat |
> | http://www.analog-innovations.com | 1962 |
>
> I love to cook with wine. Sometimes I even put it in the food.

5738. broadband transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-06 16:17:20 UTC
From: gojamo <gojamo@peoplepc.com>
Message-ID: <1133885840.604319.174600@g47g2000cwa.googlegroups.com>
Source record: 15721

Can you connect a broadband rf transformer to a receiver front end tank circuit rather than to a resistive load? The inductance of the side of the transformer connected to the tank circuit would be several times the inductance in the tank circuit, and changes to the overall inductance (parallelled inductances) of the circuit would be taken into account. Thanks

5739. Re: broadband transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-06 17:06:42 UTC
From: Leon <leon_heller@hotmail.com>
Message-ID: <1133888802.532960.82220@g14g2000cwa.googlegroups.com>
Source record: 15722

It would have to be matched to it, of course. Combiners based on
broadband transformers are often used to feed receiver inputs, when
testing front-ends for intermodulation and so on.

Leon

5740. Re: MESA Quartz Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-06 17:56:37 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <PqSdnfr0qftRTQjeRVn-pA@web-ster.com>
Source record: 15723

A crystal running in 7th overtone mode has a narrow little resonance
surrounded by other resonances (the 9th and 5th) which must be filtered out.

A crystal running in fundamental mode has a pronounced resonance, with
no other significant resonances until you get to three times the
operating frequency.

If there's anything "wrong" with that circuit it's most likely that the
frequency selective elements to keep it from jumping to 89 or 161MHz.
It may also deliver more feedback to the crystal than absolutely
necessary (dunno about that). So if anything is bad about it it's just
that it has too many components.

It's probably a very good place to start, and should work as-is if you
get the tank tuned right.

Mario Bros wrote:

> Hi Mike, thank you.
> I am not sure that the circuit is good also for the type of crystal that I
> have.
> That one used in this plan is a 7th while the mesa it is a fundamental AT.
>
> 73's de IK6GQC Rocco
>
> "Michael St. Angelo" <mstangelo@comcast.net> ha scritto nel messaggio
> news:l72dnahykPCDmQjeRVn-uw@comcast.com...
>
>>Here is a low phase noise oscillator circuit for a Analog Devices AD9850
>>DDS:
>>
>>http://www.analog.com/UploadedFiles/Application_Notes/377501052179934777265013367an419.p
df
>>
>>73,
>>
>>Mike N2MS
>>
>>
>>
>>"Mario Bros" <rocco.calbe@tin.it> wrote in message
>>news:43942f33$0$16208$4fafbaef@reader3.news.tin.it...
>>
>>>Hi folks,
>>>I have acquired of the MESA Quartz Crystals to approximately 160 Mhz
>>>fundamental AT.

>>>Someone knows some circuit for their use?
>>>73's de IK6GQC Rocco
>>>
>>>
>>
>>
>
>

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

5741. Re: MESA Quartz Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-06 20:33:07 UTC
From: Mario Bros <rocco.calbe@tin.it>
Message-ID: <4395f57c$0$13265$4fafbaef@reader2.news.tin.it>
Source record: 15724

Ok! Tim. I will try.
What it interests to me is to try to use it x3 (480 Mhz) for reference DDS
AD9954.
Thanks

"Tim Wescott" <tim@seemywebsite.com> ha scritto nel messaggio
news:PqSdnfr0qftRTQjeRVn-pA@web-ster.com...
>A crystal running in 7th overtone mode has a narrow little resonance
>surrounded by other resonances (the 9th and 5th) which must be filtered
>out.
>
> A crystal running in fundamental mode has a pronounced resonance, with no
> other significant resonances until you get to three times the operating
> frequency.
>
> If there's anything "wrong" with that circuit it's most likely that the
> frequency selective elements to keep it from jumping to 89 or 161MHz. It
> may also deliver more feedback to the crystal than absolutely necessary
> (dunno about that). So if anything is bad about it it's just that it has
> too many components.
>
> It's probably a very good place to start, and should work as-is if you get
> the tank tuned right.
>
> Mario Bros wrote:
>
>> Hi Mike, thank you.
>> I am not sure that the circuit is good also for the type of crystal that
>> I have.
>> That one used in this plan is a 7th while the mesa it is a fundamental
>> AT.
>>
>> 73's de IK6GQC Rocco
>>
>> "Michael St. Angelo" <mstangelo@comcast.net> ha scritto nel messaggio
>> news:l72dnahykPCDmQjeRVn-uw@comcast.com...
>>
>>>Here is a low phase noise oscillator circuit for a Analog Devices AD9850
>>>DDS:
>>>
>>>http://www.analog.com/UploadedFiles/Application_Notes/37750105217993477726501336 7an419.
pdf
>>>
>>>73,

>>>
>>>Mike N2MS
>>>
>>>
>>>
>>>"Mario Bros" <rocco.calbe@tin.it> wrote in message
>>>news:43942f33$0$16208$4fafbaef@reader3.news.tin.it...
>>>
>>>>Hi folks,
>>>>I have acquired of the MESA Quartz Crystals to approximately 160 Mhz
>>>>fundamental AT.
>>>>Someone knows some circuit for their use?
>>>>73's de IK6GQC Rocco
>>>>
>>>>
>>>
>>>
>>
>>
>
>
> --
>
> Tim Wescott
> Wescott Design Services
> http://www.wescottdesign.com

5742. Re: broadband transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-06 21:39:40 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11pc18t7j7hrb98@corp.supernews.com>
Source record: 15725

gojamo wrote:
> Can you connect a broadband rf transformer to a receiver front end tank
> circuit rather than to a resistive load?

Yes.

The inductance of the side of
> the transformer connected to the tank circuit would be several times
> the inductance in the tank circuit, and changes to the overall
> inductance (parallelled inductances) of the circuit would be taken
> into account.

You can often make a better broadband transformer by using low-frequency, high-permeability ferrite for core material than by using higher-frequency, lower-permeability ferrite. This results in a winding impedance that's high, but primarily resistive through the HF range and above. The advantages are that a high winding impedance is relatively easy to achieve, and it stays quite constant over a very wide frequency range -- typically several decades -- since it's free of resonant effects. What you have to insure, then, is that the winding impedance is at least several times higher than the impedance seen by the circuit it's across. If it is, the fact that it's resistive rather than inductive is of no consequence as far as the external circuit is concerned.

Roy Lewallen, W7EL

5743. yahoo rfamplifiers group

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-06 23:58:53 UTC
From: Skipp is here <shamelessplug@yahoo.com>
Message-ID: <dn58jt$gi1$1@skeeter.ucdavis.edu>
Source record: 15726

Hello there,

Just a shameless plug for the Yahoo Groups... rfamplifiers
group on the web. Please feel free to join us if you're
interested in rf and audio amplifiers... both tube and
solid state.

http://groups.yahoo.com/group/rfamplifiers/

see ya' there.
cheers,
skipp

5744. Re: WANTED! Mostar Intrerface Box

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-07 00:05:29 UTC
From: Skipp from radiowrench dot com <spammenot@yahoo.com>
Message-ID: <dn5909$gi1$2@skeeter.ucdavis.edu>
Source record: 15727

You could use one of three mostar programming options... the Epson
Suitcase programmer (yuck... I hated using it), the Motorola R1800
suitcase programmer with the proper firmware installed or you'd receive
the proms from motorola direct.

We used to get the whisker problem all the time. A good blast of air in
the rx preselector would pretty much fix it.

The VCO Coil fix was a replacement retrofit coil Motorola would sell
pretty cheap. Never had the problem after that...

All things considered, they were pretty good radios really. If you had to
play with one now... I'd probaby remove the prom and replace it with an
eprom module I've seen offered for the MCX100 radio. You'd need to map the
prom into the eprom map, but it wouldn't be rocket science.

cheers,
skipp

www.radiowrench.com

> **THE-RFI-EMI-GUY** <rhyolite@nettally.com> wrote:
: The Mostars originally used an EPSON "computer" as a programmer. The
: program was on a tape drive. Very clunky. Later on the MIB programmer
: was developed. I am sure you had to burn a code plug in any event.

: The Mostars had a couple problems 1) The UHF ones had a problem with tin
: "whiskers" growing inside the helical preselector casting which would
: short out and detune the front end. It was impossible to repair this
: part as it was permanently attached to the main board. 2) the 800 MHz
: ones had a problem with thermal and mechanical expansion which affected
: the VCO helical coil which was housed in the casting called the
: "helical hotel" by the development engineer. This part you could solder
: with special solder but it would soon again fail. The symptom was an
: intermittent radio (no TX or RX). If you banged on it, it would start
: working again for days.

: Apart from these serious problems, the radios were quite an advancement
: from the previous Maxar radios which used crystals and leaded
: components. I believe the Mostars were the first Motorola radios to use
: surface mount components and metric fastners.

: SignalFerret wrote:

:>If recall Mostars had a PROM on the controller board. They're programmed
:>using a stand alone PROM programmer. As I recall it was a big suit case
:>looking monster.

:>
:>May I ask, what frequency band is the Mostar, and more importantly, why
:>bother. It's a Mostar. Worst Motorola radio ever!
:>
:>Robert N3LGC
:>
:>"Gene Rodgers" <oldcodger@verizon.net> wrote in message
:>news:4sVff.5408$BC2.1398@trnddc04...
:>
:>
:>>I want to find a schematic for the Motorola Mostar Interface Box. I need a
:>>MIB to program my Mostars.
:>>
:>>Thanks,
:>>
:>>Gene ke5bfa
:>>
:>>
:>>
:>
:>
:>
:>

: --
: Joe Leikhim K4SAT
: "The RFI-EMI-GUY"

: "Follow The Money"

5745. Re: Availability of DS1689S

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-07 00:07:57 UTC
From: Skipp says <stopspamplease@yahoo.com>
Message-ID: <dn594t$gi1$3@skeeter.ucdavis.edu>
Source record: 15728

Newark Farnell would be a place to check. I know you're in the UK, but a
place in the SF Bay Area called Brill Electronics often carries that sort
of stuff.

Hope that helps...
cheers,
skipp

www.radiowrench.com

: Philip de Cadenet <Philstheboss@thebbc.fslife.co.uk> wrote:
: I wonder if anyone on the brain trust knows of a possible source of this
: chip?

: Digikey, Mouser and Jameco in the US have been tried. Dallas/Maxim have
: them on a 6 week lead time.

: I need a few pieces rather urgently.

: Any suggested suppliers?
: --
: Philip de Cadenet G4ZOW
: Transmitters 'R' Us
: http://www.transmittersrus.com

5746. Re: Need help with Swan 350

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-07 00:15:23 UTC
From: Skipp is a Swan and Siltronix Radio Guy <nospam@yahoo.com>
Message-ID: <dn59ir$gi1$4@skeeter.ucdavis.edu>
Source record: 15729

Hi Steven,

Please read the Swan and Siltronix Radio "care and feeding"
information found on my Swan and Siltronix Radio web page.

www.radiowrench.com/siltronix

The drift fix should start off with a good cleaning and
conditioning using the information I describe in the pages.

Don't crack open the vfo box until you've read my information
and asked a few more people for help.

The radio probably hasn't run in a while... it might need
new filter caps in various places. The contacts all need to
be cleaned really well and restored using the proper chemicals
and lubricants.

The unit probably has a lot of moisture build up. When I
rebuild radios... a temp cycle and moisture bake out are
always part of the process.

Email me through the web page or through the yahoo groups
I frequent if you have more questions. You really don't
need the added vfo box mods if you're patient with the proper
rebuild.

cheers,
skipp

www.radiowrench.com/sonic
www.radiowrench.com/siltronix

: Steven Fritts <w4sef@bellsouth.net> wrote:
: Hello All,
: I picked up a really nice working Swan 350 at a hamfest this past
: weekend. I bought it for nostalgic reasons as it was the kind of rig
: my dad bought for me in 1965. I need info on how to fix the infamous
: "Swan drift problem". Anyone have any websites I can go to get mods
: for this rig including the drift fix?
: Any help will be appreciated!

: Steve W4SEF

5747. Re: Need help with Swan 350

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-07 04:49:35 UTC
From: KU2S <ku2s-unspammed@arrl.net>
Message-ID: <gpqcp1l168se2kliudpoilpmpl7i1i71t4@4ax.com>
Source record: 15730

To go Skipp one step better... After you've read his info, also stop
by and check out the Swan Tech website at
http://www.angelfire.com/ny2/hamradio/index.html. Stu (K4BOV) knows
his stuff when it comes to Swans, he's even added the 160 meter band
to his Swan 350. At the URL noted there's a link to "ask the tech."
If anybody knows how to cure the Swan drift phenomenon, it's Stu.

On Wed, 7 Dec 2005 00:15:23 +0000 (UTC), Skipp is a Swan and Siltronix
Radio Guy <nospam@yahoo.com> was heard to say:

>Hi Steven,
>
>Please read the Swan and Siltronix Radio "care and feeding"
>information found on my Swan and Siltronix Radio web page.
>
>www.radiowrench.com/siltronix
>
>The drift fix should start off with a good cleaning and
>conditioning using the information I describe in the pages.
>
>Don't crack open the vfo box until you've read my information
>and asked a few more people for help.
>
>The radio probably hasn't run in a while... it might need
>new filter caps in various places. The contacts all need to
>be cleaned really well and restored using the proper chemicals
>and lubricants.
>
>The unit probably has a lot of moisture build up. When I
>rebuild radios... a temp cycle and moisture bake out are
>always part of the process.
>
>Email me through the web page or through the yahoo groups
>I frequent if you have more questions. You really don't
>need the added vfo box mods if you're patient with the proper
>rebuild.
>
>cheers,
>skipp
>
>www.radiowrench.com/sonic
>www.radiowrench.com/siltronix
>
>: Steven Fritts <w4sef@bellsouth.net> wrote:
>: Hello All,

>: I picked up a really nice working Swan 350 at a hamfest this past
>: weekend. I bought it for nostalgic reasons as it was the kind of rig
>: my dad bought for me in 1965. I need info on how to fix the infamous
>: "Swan drift problem". Anyone have any websites I can go to get mods
>: for this rig including the drift fix?
>: Any help will be appreciated!
>
>: Steve W4SEF
Raymond Sirois Sr. KU2S
SysOp: The Lost Chord BBS
http://www.geocities.com/SiliconValley/Park/9257
telnet://thelostchord.dns2go.com:6023

5748. Re: Ground resistance tester

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-07 08:24:56 UTC
From: Lynn Coffelt <coffelt2@comcast.net>
Message-ID: <dn6693$9qd$1@domitilla.aioe.org>
Source record: 15731

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:11p95ef7h1ti8b7@corp.supernews.com...
> Please ignore my earlier posting. I saw NEC and thought the reference
> was to the program of that name (Numerical Electromagnetics Code). The
> other responses caused me to re-read your posting more carefully and I
> see you're referring instead to the National Electrical Code. 60 Hz
> measurement is of course what you want to do, and my response was
> entirely inappropriate in that context.

Whew, thanks, Roy, I thought you'd finally "lost" it! (hi hi and grin)
I wish I had something more solid to contribute, but I do remember my USAF days when the aircraft parking ramp static grounding rings required a scheduled resistance inspection, the date stenciled in black on yellow circle. The resistance had to be below 10,000 ohms. The instrument the civil engineers used to make the measurements was hand cranked, something like the "Megger" used for insulation break-down testing. I cannot say whether it was a regular "megger" or a specialized instrument.
Anyhow, we mechanics tried to do our own testing with an ordinary VOM and found the task quite vexing. One problem was that stray currents in the ground drove the ohmmeter crazy, and as if that wasn't enough, the ohmmeter probes current caused an electrolytic (?) reaction, sort of like trying to measure the resistance of a battery using a standard VOM.
Now I'm going to back up and read some of the references provided by previous responders.
Old Chief Lynn, W7LTQ (I still like Furuno, Roy!)

5749. Re: broadband transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-07 09:28:59 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1133947739.390935.280130@g47g2000cwa.googlegroups.com>
Source record: 15732

gojamo wrote:
> Can you connect a broadband rf transformer to a receiver front end tank
> circuit rather than to a resistive load? The inductance of the side of
> the transformer connected to the tank circuit would be several times
> the inductance in the tank circuit, and changes to the overall
> inductance (parallelled inductances) of the circuit would be taken
> into account. Thanks

...sure you can. I think you noticed that sometimes the antenna is
connected to a tap on the inductor, thus creating an autotransformer.
The one thing to beware of is to make sure that the input impedance,
reflected through the transformer is high enough, so as not to load the
tuned circuit. it's NOT a match. If matched, the impedance of the
transformer's secondary would be equal to the tuned circuit's
impedance, thus lowering the Q of the tuned circuit to one half the
original value.
Saandy 4Z5KS

5750. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-07 09:35:09 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1133948109.928371.287580@g43g2000cwa.googlegroups.com>
Source record: 15733
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

The NE85633 bipolar transistor from California Eastern Laboratories
(CEL) ! very cheap quite stable and with a good noise figure. very well
documented by the manufacturer!
try to fish a development kit of SMD coils from Murata, sometimes they
give them away for free.
I personally prefer to go with air wound inductors, they're better and
quite small at these frequencies.
Saandy 4Z5KS

5751. Re: Short coax interconnections - phase implications??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-07 11:28:08 UTC
From: Andy Cowley <andy.cowley@uwe.ac.uk>
Message-ID: <Ir4L6w.CLK@bath.ac.uk>
Source record: 15734
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Paul Burridge wrote:

> Hello guys,
>
> I recently picked up an old vector network analyser in working order
> but minus the 3 interconnects between it and the
> transmission/reflection bridge. These are specified in the manual to
> be exactly 24" long, 50 ohms and terminated by N-type plugs.
> I've been told the length of these patch leads is quite critical to
> getting accurate measurements with this VNA, but am at a loss to work
> out why 24" is specified when the frequency range of this device is
> 4Mhz to 1300Mhz. If it were only capable of measuring at one fixed
> frequency, I could understand the need for a specifically cut length
> of some fraction of a wavelength.
> Can anyone explain the relevance of 24" in this context?
> Also, will *any* 50 ohm coax suffice for this purpose or has it got to
> be something special?
> Thanks,
> P.

If they specify a physical length (24"), and nothing else will do, then the type of coax is absolutely critical as its velocity factor will determine the electrical length.

However I suspect the bridge output is not at signal frequency but DC so the cables will not be critical. It is very difficult to see how they could make it work to 4GHz with several wavelengths of coax in the signal path, acting as an impedance transformer. Two feet is a significant length even at HF, and will shift the phases considerably.

vy 73

Andy, M1EBV

5752. Re: Ground resistance tester

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-07 15:07:05 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_4396d241@fidonet.org>
Source record: 15735

"Lynn Coffelt" bravely wrote to "All" (07 Dec 05 00:24:56)
--- on the heady topic of "Re: Ground resistance tester"

LC> From: "Lynn Coffelt" <coffelt2@comcast.net>
LC> Xref: core-easynews rec.radio.amateur.homebrew:89630
[,,,]
LC> The
LC> instrument the civil engineers used to make the measurements was hand
LC> cranked, something like the "Megger" used for insulation break-down
LC> testing. I cannot say whether it was a regular "megger" or a
LC> specialized instrument. Anyhow, we mechanics tried to do our own
LC> testing with an ordinary VOM and found the task quite vexing. One
LC> problem was that stray currents in the ground drove the ohmmeter crazy,
LC> and as if that wasn't enough, the ohmmeter probes current caused an
LC> electrolytic (?) reaction, sort of like trying to measure the
LC> resistance of a battery using a standard VOM. Now I'm going to
LC> back up and read some of the references provided by previous
LC> responders. Old Chief Lynn, W7LTQ (I still like Furuno, Roy!)

Speaking of electrolytic reactions....
I would try a tool from the tv service industry called an ESR meter.
It measures the internal resistance of electrolytic capacitors by
using an ac signal of moderate frequency around 100K Hz. They can
typically measure from 0.09 ohms to 199 ohms.

A*s*i*m*o*v

... Useless Invention: Flashbulb tester.

5753. Re: Need help with Swan 350

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-07 15:48:44 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <atDlf.45682$i7.4026@bignews2.bellsouth.net>
Source record: 15736

"Bob" <balbert3@verizon.net> wrote in message
news:8Evef.21536$5R4.8753@trnddc06...
> Steven Fritts wrote:
>> Hello All,
>> I picked up a really nice working Swan 350 at a hamfest this past
>> weekend. I bought it for nostalgic reasons as it was the kind of rig
>> my dad bought for me in 1965. I need info on how to fix the infamous
>> "Swan drift problem". Anyone have any websites I can go to get mods
>> for this rig including the drift fix?
>> Any help will be appreciated!
>>
>> Steve W4SEF
> The problem is, for the most part, lack of proper temperature
> compensation. Sure, the voltage regulation isn't that great, but it's not
> the main problem.
>
> Looking at the diagram for the VFO you can see the tuned circuit
> components. You can add a negative temperature coefficient capacitor to
> the circuit to compensate for the (usually) positive coefficients of the
> parts.
>
> I did this successfully in a Viking Valiant. I reduced the drift from
> about 10kHz or more on 10 meters to about 1kHz. One thing I did was move
> a hot resistor out of the VFO compartment to reduce the amount of
> temperature rise of the critical parts.
>
> You can also leave the unit on, at least the VFO, at all times so the
> temperature will be more stable.
>
> 73, Bob K6DDX

While most tube rigs will drift *some*, I found that turning on my Swan 700CX about 30-45 minutes before using it did a LOT to reduce drift. I think, too, that newer hams, not being familiar with the old tube rigs, are more critical than those of us who are familiar with them. I hear people putting down Swans ("I HATE them old Swans cuz they drift"), but it isn't all *that* bad! :) I mean, just think, what did we DO back in the glowing tube days, right? If it had been THAT bad, we'd not been able to function. Sure---Swans drift and have a reputation for it, but I owned 3 of them and never had THAT much trouble. I HAVE had worse!

73

Jerry

5754. Re: MESA Quartz Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-07 16:36:29 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dn732d$2li$1@engnntp2.cig.mot.com>
Source record: 15738

Do you know what load they are cut for? That osc is for overtone operation
and those usually run the crystal in series mode.

Start using Google more... This may be just what you need.

http://www.sss-mag.com/pdf/saosc.pdf
I'm not familiar with MESA's, but If this is the crystal type, this may
help.
It is just for MESA resonators and appears to say they are series cut. It
also looks like a good general reference on crystal characteristics as it
shows the typical resonances at the overtones.

http://www.icmfg.com/crystaloscillatordata.html
If I thought they were parallel load xtals, I'd start with the fundamental
Colpitts if they are parallel crystals, but a tuned circuit may help to
improve the phase noise.

73, Steve K,9.D;C'I

"Mario Bros" <rocco.calbe@tin.it> wrote in message
news:43942f33$0$16208$4fafbaef@reader3.news.tin.it...
> Hi folks,
> I have acquired of the MESA Quartz Crystals to approximately 160 Mhz
> fundamental AT.
> Someone knows some circuit for their use?
> 73's de IK6GQC Rocco
>
>

5755. Re: broadband transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-07 16:41:15 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dn73bb$2q7$1@engnntp2.cig.mot.com>
Source record: 15740

Look at is when the receiver input is tuned. The receiver input will look
resistive (for example 50 ohms). The transformer is therefore loaded by a
resistive load (as it should).

73, Steve, K9DCI

"gojamo" <gojamo@peoplepc.com> wrote in message
news:1133885840.604319.174600@g47g2000cwa.googlegroups.com...
> Can you connect a broadband rf transformer to a receiver front end tank
> circuit rather than to a resistive load? The inductance of the side of
> the transformer connected to the tank circuit would be several times
> the inductance in the tank circuit, and changes to the overall
> inductance (parallelled inductances) of the circuit would be taken
> into account. Thanks
>

5756. Re: Alinco radio problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-07 16:56:59 UTC
From: Jumpster Jiver <me@no.spam.today>
Message-ID: <vvElf.6202$Jg5.5439@trnddc07>
Source record: 15737
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

stryped@hotmail.com wrote:

> x-no-archive:
> I bought an ALinco DR 590 dual band amature radio at a hamfest. It is a
>
> mobile. Got it home, hooked it up, everything on the display lit up. I
> mean everything, even things that were not supposed to. The frequency
> number has stange lines in it. It was not usable.
>
> Figured out that I could reset it. (Pressing function button with power
> button) and it would start working again like normal) If I left and
> came back even with leaving the radio on it would go back to not
> working.)
>
> I replaced the battery and this still did not fix the problem.
>
> Any ideas?
>

Not sure but here's a link to the sevice manual directly from the
manufacturer. Found it on google.

http://www.alinco.com/pdf.files/Service/dr590ser.pdf

I'm thinking maybe power supply problem or somewhere in system
control/microprocessor.
Sorry can't help more but I've never worked on one of those.

5757. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-07 17:09:01 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <43971923$0$9633$9b4e6d93@newsread2.arcor-online.net>
Source record: 15739
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Thanks Saandy! I knew CEL but forget them ;-)

Seems the NE85633 is really cheap and good performance. The package is
reasoable for hobbyists.
Do you already converted the parameters to spice and is it possible to
provide the file to me? Thank you!

Should be a good oscillator and all-purpose amp...

Sure, plain wire is better than the manufactured coils if possible to apply.

cu -
Henry

"Saandy , 4Z5KS" <hardware2@ift-int.com> schrieb im Newsbeitrag
news:1133948109.928371.287580@g43g2000cwa.googlegroups.com...
> The NE85633 bipolar transistor from California Eastern Laboratories
> (CEL) ! very cheap quite stable and with a good noise figure. very well
> documented by the manufacturer!
> try to fish a development kit of SMD coils from Murata, sometimes they
> give them away for free.
> I personally prefer to go with air wound inductors, they're better and
> quite small at these frequencies.
> Saandy 4Z5KS
>

5758. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-07 19:20:30 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <43974989$0$9632$9b4e6d93@newsread2.arcor-online.net>
Source record: 15741
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Sorry. I found the needed file at CEL website by searching for part number.
- Henry

"Henry Kiefer" <otc_friend@gmx.net> schrieb im Newsbeitrag
news:43971923$0$9633$9b4e6d93@newsread2.arcor-online.net...
> Thanks Saandy! I knew CEL but forget them ;-)
>
> Seems the NE85633 is really cheap and good performance. The package is
> reasoable for hobbyists.
> Do you already converted the parameters to spice and is it possible to
> provide the file to me? Thank you!
>
> Should be a good oscillator and all-purpose amp...
>
>
> Sure, plain wire is better than the manufactured coils if possible to
apply.
>
> cu -
> Henry
>
>
> "Saandy , 4Z5KS" <hardware2@ift-int.com> schrieb im Newsbeitrag
> news:1133948109.928371.287580@g43g2000cwa.googlegroups.com...
> > The NE85633 bipolar transistor from California Eastern Laboratories
> > (CEL) ! very cheap quite stable and with a good noise figure. very well
> > documented by the manufacturer!
> > try to fish a development kit of SMD coils from Murata, sometimes they
> > give them away for free.
> > I personally prefer to go with air wound inductors, they're better and
> > quite small at these frequencies.
> > Saandy 4Z5KS
> >
>
>

5759. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-08 00:05:19 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <dn7tbv01c7t@drn.newsguy.com>
Source record: 15743
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Henry Kiefer wrote...
>
> I can buy resistors and capacitors with 5%, sometimes with 1%.
> If you build a RC oscillator with 1% component values, you get
> an error typical 1,5%.

I have a nice line of 2% caps in stock, but where do you
get the elusive (affordable) 1% capacitors?

--
Thanks,
- Win

5760. Re: Plate transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-08 00:21:54 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <i_Klf.63065$Y82.22844@bignews4.bellsouth.net>
Source record: 15742

GBrown wrote:
> OOPS, its 1.36 KVA, not 1.63
>
Is that a 1400 volt center tapped secondary?

5761. Re: broadband transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-08 00:27:39 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dn7ulr$n5j$1@engnntp2.cig.mot.com>
Source record: 15745

Saandy,
I respectfully disagree, in part. I believe you want to re-think this.
I know it "looks like" you are just paralleling two inductors, but the whole thing must be considered.

There is such a thing as loaded Q which is what you will see when all is connected up. When un-connected, you have an "un-loaded Q" situation...and they are indeed different. The loaded Q is a very important and specific consideration when designing filters. The loading of the external circuitry (and resulting loaded Q) has to be taken into account when designing for a required bandwidth.
Also, there can be a match, and should be for sensitivity, aka maximum power transfer. Well done, the receiver input tuned circuit will appear resistive or nearly so. The tuned circuit(s) provide impedance matching between the antenna input (50 ohms) and the first device (usually higher Z), as well as filtering -- two functions for the price of one.
Side-bar: When considering noise figure, there can be a different ball game, but it is a relatively small difference - impedance wise.
A well designed RF transformer will reflect (look like) 50 ohms at its output (receiver input) due to the (supposedly) 50 ohm antenna/feed-line connected to its input (antenna side).

Obviously I am assuming a 50 ohm system, to explain.

A tap is a way of impedance matching and the auto-transformer analogy is a good way to look at it. I call this a "Mental Model" for better understanding what is going on - it works to analyze things. Because 50 ohms is a relatively low value, tapping a coil is a way to get to a lower impedance from the relatively high impedance at the top of the coil/tuned circuit. Capacitive tap is another common way (they just have differing secondary [side] effects in far-out attenuation).

Comments?
73, Steve, K,9.D;C'I

"Saandy , 4Z5KS" <hardware2@ift-int.com> wrote in message news:1133947739.390935.280130@g47g2000cwa.googlegroups.com...
>
> gojamo wrote:
> > Can you connect a broadband rf transformer to a receiver front end tank
> > circuit rather than to a resistive load? The inductance of the side of
> > the transformer connected to the tank circuit would be several times
> > the inductance in the tank circuit, and changes to the overall
> > inductance (parallelled inductances) of the circuit would be taken
> > into account. Thanks

>
> ...sure you can. I think you noticed that sometimes the antenna is
> connected to a tap on the inductor, thus creating an autotransformer.
> The one thing to beware of is to make sure that the input impedance,
> reflected through the transformer is high enough, so as not to load the
> tuned circuit. it's NOT a match. If matched, the impedance of the
> transformer's secondary would be equal to the tuned circuit's
> impedance, thus lowering the Q of the tuned circuit to one half the
> original value.
> Saandy 4Z5KS
>

5762. Re: Alinco radio problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-08 00:56:24 UTC
From: basfm6 <basfm6@postcards.net>
Message-ID: <11pf16cht40o775@corp.supernews.com>
Source record: 15744
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Anytime you buy something worth a pretty penny at a hamfest, get the seller's callsign and contact phone number. Don't know how many times I've had to contact hamfest sellers after the sale about broken items that were well advertised as "working perfectly". Many times you come across some insane deals, but you'd be surprised how much lying and deception occurs at hamfests especially with stuff that works, but has tons of little problems you don't realize until after you get home.

<stryped@hotmail.com> wrote in message
news:1133962039.740484.190950@g44g2000cwa.googlegroups.com...
> x-no-archive:

> I bought an ALinco DR 590 dual band amature radio at a hamfest.

5763. Re: Alinco radio problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-08 01:10:30 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <7IidnRhVGsJnGgreRVn-jg@web-ster.com>
Source record: 15746
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

basfm6 wrote:

> Anytime you buy something worth a pretty penny at a hamfest, get the
> seller's callsign and contact phone number. Don't know how many times I've
> had to contact hamfest sellers after the sale about broken items that were
> well advertised as "working perfectly". Many times you come across some
> insane deals, but you'd be surprised how much lying and deception occurs at
> hamfests especially with stuff that works, but has tons of little problems
> you don't realize until after you get home.
>
> <stryped@hotmail.com> wrote in message
> news:1133962039.740484.190950@g44g2000cwa.googlegroups.com...
>
>>x-no-archive:
>
>
>>I bought an ALinco DR 590 dual band amature radio at a hamfest.
>
>
>
I go to hamfests to buy clapped-out radios for parts.

To date I have not had one work worse than I expected.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

5764. Re: Alinco radio problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-08 01:23:45 UTC
From: dplatt@radagast.org
Message-ID: <11pf2p15fbp4q53@corp.supernews.com>
Source record: 15747
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

In article <1133962039.740484.190950@g44g2000cwa.googlegroups.com>,
<stryped@hotmail.com> wrote:

>I bought an ALinco DR 590 dual band amature radio at a hamfest. It is a
>mobile. Got it home, hooked it up, everything on the display lit up. I
>mean everything, even things that were not supposed to. The frequency
>number has stange lines in it. It was not usable.

You asked this same question, about what I assume is this same radio,
back in January of this year. There was a whole thread of discussion,
which lasted over a month.

The thread seems to have ended up with pretty much everybody
concluding that you'd have to send the radio back to the manufacturer
for repair, if you want it to work properly.

I think that's still your best choice. Asking the same questions over
and over again, and expecting people to be able to diagnose an
intermittent problem at a distance, seems unlikely to help matters.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5765. Re: Alinco radio problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-08 01:30:02 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <IIGdnaxGPNS6EQreRVn-hg@bright.net>
Source record: 15598
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Yup, buy it at scrap price and if it works when you get it home, you made out! What happened to the old days when hams would tell you this and that didn't work? I suspect it was about the same time that radio gear went to microproccesor control and things got to tiny for hams to see, let alone WORK on it! There's not too many Heathkits that an average ham couldn't fix, but nowadays it takes an engineer, a technician, a magifying glass, a tweezers and a cold to work on anything (the cold is so you can sneeze while unsoldering components and blow them off the board and out of the radio. Just worked on my Yaesu 857 tonight to modify for full coverage transmit to use with my transverters. They use jumpers that are about the size of a large piece of pepper...

Scott
N0EDV

Tim Wescott wrote:

> basfm6 wrote:
>
>> Anytime you buy something worth a pretty penny at a hamfest, get the
>> seller's callsign and contact phone number. Don't know how many times
>> I've had to contact hamfest sellers after the sale about broken items
>> that were well advertised as "working perfectly". Many times you come
>> across some insane deals, but you'd be surprised how much lying and
>> deception occurs at hamfests especially with stuff that works, but has
>> tons of little problems you don't realize until after you get home.
>>
>> <stryped@hotmail.com> wrote in message
>> news:1133962039.740484.190950@g44g2000cwa.googlegroups.com...
>>
>>> x-no-archive:
>>
>>
>>
>>> I bought an ALinco DR 590 dual band amature radio at a hamfest.
>>
>>
>>
>>
> I go to hamfests to buy clapped-out radios for parts.
>
> To date I have not had one work worse than I expected.
>

5766. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-08 01:51:44 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.12.08.01.55.48.951945@example.net>
Source record: 15599
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Wed, 07 Dec 2005 16:05:19 -0800, Winfield Hill wrote:

> Henry Kiefer wrote...
>>
>> I can buy resistors and capacitors with 5%, sometimes with 1%. If you
>> build a RC oscillator with 1% component values, you get an error typical
>> 1,5%.
>
> I have a nice line of 2% caps in stock, but where do you get the elusive
> (affordable) 1% capacitors?

You have undergrads select them. :-)

Cheers!
Rich

5767. Re: 96 chevy truck radio location

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-08 02:32:34 UTC
From: hhc314@yahoo.com
Message-ID: <1134001917.261754.243390@g14g2000cwa.googlegroups.com>
Source record: 15600

Are you joking?

If not, the best looking would be if you hide the antenna in the fender wells or under the truck.

Most of us are more concerned with the best performance, which likely will be on top of the cab.

Harry C.

5768. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-08 13:44:51 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <439842fe$0$9651$9b4e6d93@newsread2.arcor-online.net>
Source record: 15601
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

For example http://www.wima.de/fkp2.htm
But I think there are other manufacturers too.

- Henry

"Winfield Hill" <Winfield_member@newsguy.com> schrieb im Newsbeitrag
news:dn7tbv01c7t@drn.newsguy.com...
> Henry Kiefer wrote...
> >
> > I can buy resistors and capacitors with 5%, sometimes with 1%.
> > If you build a RC oscillator with 1% component values, you get
> > an error typical 1,5%.
>
> I have a nice line of 2% caps in stock, but where do you
> get the elusive (affordable) 1% capacitors?
>
>
> --
> Thanks,
> - Win

5769. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-08 13:46:14 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <439842ff$0$9651$9b4e6d93@newsread2.arcor-online.net>
Source record: 15602
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

OR two capacitors in parallel. The support cap has a nominal value of 1/100
of the bigger cap. So you can tune the bigger.

- Henry

"Rich Grise" <richgrise@example.net> schrieb im Newsbeitrag
news:pan.2005.12.08.01.55.48.951945@example.net...
> On Wed, 07 Dec 2005 16:05:19 -0800, Winfield Hill wrote:
>
> > Henry Kiefer wrote...
> >>
> >> I can buy resistors and capacitors with 5%, sometimes with 1%. If you
> >> build a RC oscillator with 1% component values, you get an error
typical
> >> 1,5%.
> >
> > I have a nice line of 2% caps in stock, but where do you get the
elusive
> > (affordable) 1% capacitors?
>
> You have undergrads select them. :-)
>
> Cheers!
> Rich
>
>

5770. Re: 96 chevy truck radio location

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-08 16:26:43 UTC
From: Larry Gagnon <lggagnon@fakeuniserve.com>
Message-ID: <pan.2005.12.08.16.26.43.474571@fakeuniserve.com>
Source record: 15603

On Wed, 07 Dec 2005 05:29:05 -0800, stryped wrote:

> x-no-archive:
>
> I just bought a 96 extended cab 4x4. Where would be the best looking
> and usable placement of my icom 2 meter radio? What would be the best
> looking antenna configuration.

My dear fellow hams. Please do not respond to this poster until you read his previous postings to this newsgroup. You can search for his posts at news.google.com . He is well worth a trip to the bit-bucket. PLONK!

Larry VE7EA

5771. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-09 02:25:37 UTC
From: hmurray@suespammers.org
Message-ID: <DcGdnSLPcsi8dgXeRVn-vw@megapath.net>
Source record: 15604
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

> I have a nice line of 2% caps in stock, but where do you
> get the elusive (affordable) 1% capacitors?

Digikey stocks a handful of Panasonic ECQ-P(Z),
POLYPROPYLENE, Radial, 0.001 to 0.47 uF.

Not a great selection, but probably good enough for
many timing applications if you do the fine tuning with
the size of the R.

--
The suespammers.org mail server is located in California. So are all my
other mailboxes. Please do not send unsolicited bulk e-mail or unsolicited
commercial e-mail to my suespammers.org address or any of my other addresses.
These are my opinions, not necessarily my employer's. I hate spam.

5772. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-09 03:12:59 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <dnasnr0gms@drn.newsguy.com>
Source record: 15605
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Hal Murray wrote...
>
>> I have a nice line of 2% caps in stock, but where do you
>> get the elusive (affordable) 1% capacitors?
>
> Digikey stocks a handful of Panasonic ECQ-P(Z),
> POLYPROPYLENE, Radial, 0.001 to 0.47 uF.

That's good to hear of, thanks! The 2% parts I have in stock
are the same series, but cheaper 2% parts. I didn't realize
DigiKey carried so many 1% film capacitor values in stock.

--
Thanks,
- Win

5773. G10 fiberglass rod needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-09 07:41:39 UTC
From: Bob <none@thistime>
Message-ID: <pbadnaFiiaGvqATeRVn-oQ@giganews.com>
Source record: 15606

I need about three feet (can be three pieces) of G10 rod about 1 1/2 to 2 inches in diameter. Any suggestions as to a reasonably priced source?
Thanks

5774. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-09 08:43:02 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <439943f3$0$27890$9b4e6d93@newsread4.arcor-online.net>
Source record: 15607
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

For timing purposes I suggest using a ready-to-use clock generator in tiny
SOT-23 or alike. For example from www.linear.com and www.maxim-ic.com
They have a accuracy well in the 2% range and can be tuned with a little
resistor 1%. Maxim sells a 32768Hz variant - crystal controlled.
They're all digital ouput!

Building a 32KHz oscillator with a clock crystal and having sinus output is
really simple with CMOS buffers.
You can mix the signal with RF getting an IF somewhere. Look at the app note
at www.cypress.com how to build a time-code receiver using that concept -
just of the cystral and cypress mixed-signal controller.

- Henry

"Winfield Hill" <Winfield_member@newsguy.com> schrieb im Newsbeitrag
news:dnasnr0gms@drn.newsguy.com...
> Hal Murray wrote...
> >
> >> I have a nice line of 2% caps in stock, but where do you
> >> get the elusive (affordable) 1% capacitors?
> >
> > Digikey stocks a handful of Panasonic ECQ-P(Z),
> > POLYPROPYLENE, Radial, 0.001 to 0.47 uF.
>
> That's good to hear of, thanks! The 2% parts I have in stock
> are the same series, but cheaper 2% parts. I didn't realize
> DigiKey carried so many 1% film capacitor values in stock.
>
>
> --
> Thanks,
> - Win

5775. Re: G10 fiberglass rod needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-09 10:02:57 UTC
From: Alain <alain@no_spam.fr>
Message-ID: <43995557$0$5841$636a15ce@news.free.fr>
Source record: 15608

hello,
Perhaps : http://www.wimo.com/framesetp_e.html (Glass fibre mast)
Alain

"Bob" <none@thistime> a écrit dans le message de news:
pbadnaFiiaGvqATeRVn-oQ@giganews.com...
>I need about three feet (can be three pieces) of G10 rod about 1 1/2 to 2
>inches in diameter. Any suggestions as to a reasonably priced source?
> Thanks
>

5776. Re: MESA Quartz Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-09 11:20:01 UTC
From: Mario Bros <rocco.calbe@tin.it>
Message-ID: <4399685e$0$16199$4fafbaef@reader3.news.tin.it>
Source record: 15609

Hi Steve,
you see this link
http://daten.ws-mack.de/Freigabe/kvg-gmbh/Kategorie-Eingabe/Quarze/Dateien/Kat2/8_F4.pdf

My crystal is 155.520 Mhz.

I will make some test as you have suggested to me.

Merry Christmas for all.

IK6GQC Rocco

"Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> ha scritto nel messaggio
news:dn732d$2li$1@engnntp2.cig.mot.com...
> Do you know what load they are cut for? That osc is for overtone
> operation
> and those usually run the crystal in series mode.
>
> Start using Google more... This may be just what you need.
>
> http://www.sss-mag.com/pdf/saosc.pdf
> I'm not familiar with MESA's, but If this is the crystal type, this may
> help.
> It is just for MESA resonators and appears to say they are series cut. It
> also looks like a good general reference on crystal characteristics as it
> shows the typical resonances at the overtones.
>
> http://www.icmfg.com/crystaloscillatordata.html
> If I thought they were parallel load xtals, I'd start with the fundamental
> Colpitts if they are parallel crystals, but a tuned circuit may help to
> improve the phase noise.
>
> 73, Steve K,9.D;C'I
>
>
>
> "Mario Bros" <rocco.calbe@tin.it> wrote in message
> news:43942f33$0$16208$4fafbaef@reader3.news.tin.it...
>> Hi folks,
>> I have acquired of the MESA Quartz Crystals to approximately 160 Mhz
>> fundamental AT.
>> Someone knows some circuit for their use?
>> 73's de IK6GQC Rocco
>>
>>
>

>

5777. Re: G10 fiberglass rod needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-09 13:31:06 UTC
From: Jose <jose@jose.com>
Message-ID: <43998719.173CE0BD@jose.com>
Source record: 15610

hi,

FYI, G10 non conductive, common use in PCB electronics, etc.

http://www.jjorly.com/ (lower side of screen g10) $$$

http://www.mcmaster.com/

Bob wrote:

> I need about three feet (can be three pieces) of G10 rod about 1 1/2 to 2
> inches in diameter. Any suggestions as to a reasonably priced source?
> Thanks

5778. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-09 13:49:39 UTC
From: Joel Kolstad <JKolstad71HatesSpam@yahoo.com>
Message-ID: <11pj2v9a93a7c70@corp.supernews.com>
Source record: 15612
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Henry,

"Henry Kiefer" <otc_friend@gmx.net> wrote in message
news:439943f3$0$27890$9b4e6d93@newsread4.arcor-online.net...
> Building a 32KHz oscillator with a clock crystal and having sinus output is
> really simple with CMOS buffers.
> You can mix the signal with RF getting an IF somewhere. Look at the app note
> at www.cypress.com how to build a time-code receiver using that concept -
> just of the cystral and cypress mixed-signal controller.

I don't suppose you have the name and/or number of that application note? I
did a little searching without success to find it.

---Joel Kolstad

5779. Re: G10 fiberglass rod needed

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-09 13:50:16 UTC
From: John Isenberg <ihi@frontiernet.net>
Message-ID: <sYfmf.777$OU3.749@news01.roc.ny>
Source record: 15611

Bob,

Alan Bond has a good supply of fiberglass rod and tube. Not sure it is G10,
but I have used it for microwave masts while roving with no problem. His
web site is:
http://www.mgs4u.com/

If you want to see some of my use, my web site is:

http://www.frontiernet.net/~ihi/

73
Jack
WA2IID

"Bob" <none@thistime> wrote in message
news:pbadnaFiiaGvqATeRVn-oQ@giganews.com...
>I need about three feet (can be three pieces) of G10 rod about 1 1/2 to 2
>inches in diameter. Any suggestions as to a reasonably priced source?
> Thanks
>

5780. FA:OLD DX QSL'S + OTHER STUFF TOO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-09 14:05:51 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <3bgmf.137706$qk4.34713@bgtnsc05-news.ops.worldnet.att.net>
Source record: 15613
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Old sets of DX QSL cards from 1939-40, 1945-46, 1945, 1948 (more coming)+ a few other things too:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking, Merry Christmas, Happy New Year,Happy Hanukkah!

heytubeguy

5781. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-09 15:07:55 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <43999e4e$0$27882$9b4e6d93@newsread4.arcor-online.net>
Source record: 15615
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Here it is Joel:
http://www.spectrum-benelux.com/docs/AppNote%20radioclock.pdf
(Seems that it is not on the cypress site)

If you realize something with the PSoC, then I would like to hear from you.

- Henry

"Joel Kolstad" <JKolstad71HatesSpam@yahoo.com> schrieb im Newsbeitrag
news:11pj2v9a93a7c70@corp.supernews.com...
> Henry,
>
> "Henry Kiefer" <otc_friend@gmx.net> wrote in message
> news:439943f3$0$27890$9b4e6d93@newsread4.arcor-online.net...
> > Building a 32KHz oscillator with a clock crystal and having sinus output
is
> > really simple with CMOS buffers.
> > You can mix the signal with RF getting an IF somewhere. Look at the app
note
> > at www.cypress.com how to build a time-code receiver using that
concept -
> > just of the cystral and cypress mixed-signal controller.
>
> I don't suppose you have the name and/or number of that application note?
I
> did a little searching without success to find it.
>
> ---Joel Kolstad
>
>

5782. Re: Plate transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-09 15:12:27 UTC
From: GBrown <gkbrown@gwi.net>
Message-ID: <ZvKdnaOnFq1IAATenZ2dnUVZ_tednZ2d@gwi.net>
Source record: 15614

1440-0-1440
It has been sold.

--
Regards,
Gary...WZ1M
"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
news:i_Klf.63065$Y82.22844@bignews4.bellsouth.net...
> GBrown wrote:
> > OOPS, its 1.36 KVA, not 1.63
> >
> Is that a 1400 volt center tapped secondary?

5783. Reading data back from HP4195A

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-09 15:57:17 UTC
From: Larry Martell <natkelcri@yahoo.com>
Message-ID: <1134143837.339943.191660@g49g2000cwa.googlegroups.com>
Source record: 15616

I am writing a program to control a 4195 over the HP-IB bus,
and I can't seem to find the command to return the data from
a sweep. I have worked with many other HP test instruments,
and usually there is a command that sends back the entire data
set after a sweep is completed (e.g. on the 3562A that command
is "DDAS"). Anyone know would I get the sweep data back from
the 4195A?

TIA!
-larry

5784. Re: MESA Quartz Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-09 16:25:14 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dncb5a$2er$1@engnntp2.cig.mot.com>
Source record: 15618

OK Rocco,
Now that I read the paper (URL below) on MESA crystals, I can comment better. They are nothing more than very thin AT crystals (in the center of a larger, thicker blank) and therefore have the normal AT cut characteristics.
The reference you give below is a general datasheet from the manufacturer. However, when crystals are manufactured they are made to a specific requirement with regard to what is called "load". This would have been at the request of the Engineer ordering the crystals. As explained in the paper I referenced, crystals can be used either in a parallel resonance mode or a series resonance mode.

Any crystal can be operated in either mode (any crystal can also be operated in one of its overtone modes - I have done this), but to get the frequency that it was manufactured for (and marked) you have to operate it in the mode it was made for. Therefore, if you expect to get the frequency on the crystal, you have to operate it in the correct mode. Just looking at the crystal, you can not tell for which mode or load capacitance it was made.

If you put a crystal in an oscillator which runs the crystal in series mode and the frequency is too low, then it was made for parallel operation and needs a parallel type circuit like the Collpits. If a crystal is put into a parallel mode circuit and it can't be brought down to the marked frequency, then it is a series mode crystal. If I recall, the Pierce operates the crystal in series mode. For reference, if I recall the difference between the parallel mode frequency and series mode frequency is around 200-300 ppm. for fundamental crystals in the 1-30 MHz range.

For lower frequency crystals it is common to specify in the range of 20-32 Pf load for parallel mode operation. There is no analogous "value" for a series operated crystal...just saying "series" is enough.

Another consideration not mentioned in the overview paper that I reference is that of power dissipation. Putting too much energy into the crystal will heat the material and cause frequency drift. Though not discussed, I can only speculate that the MESA construction requires a lower power operation than non MESA because of the thin blank.
73, Steve, K,9.D;C'I

"Mario Bros" <rocco.calbe@tin.it> wrote in message
news:4399685e$0$16199$4fafbaef@reader3.news.tin.it...
> Hi Steve,
> you see this link
>
http://daten.ws-mack.de/Freigabe/kvg-gmbh/Kategorie-Eingabe/Quarze/Dateien/Kat2/8_F4.pdf
>

> My crystal is 155.520 Mhz.
>
> I will make some test as you have suggested to me.
>
> Merry Christmas for all.
>
> IK6GQC Rocco
>
>
> "Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> ha scritto nel
messaggio
> news:dn732d$2li$1@engnntp2.cig.mot.com...
> > Do you know what load they are cut for? That osc is for overtone
> > operation
> > and those usually run the crystal in series mode.
> >
> > Start using Google more... This may be just what you need.
> >
> > http://www.sss-mag.com/pdf/saosc.pdf
> > I'm not familiar with MESA's, but If this is the crystal type, this may
> > help.
> > It is just for MESA resonators and appears to say they are series cut.
It
> > also looks like a good general reference on crystal characteristics as
it
> > shows the typical resonances at the overtones.
> >
> > http://www.icmfg.com/crystaloscillatordata.html
> > If I thought they were parallel load xtals, I'd start with the
fundamental
> > Colpitts if they are parallel crystals, but a tuned circuit may help to
> > improve the phase noise.
> >
> > 73, Steve K,9.D;C'I
> >
> >
> >
> > "Mario Bros" <rocco.calbe@tin.it> wrote in message
> > news:43942f33$0$16208$4fafbaef@reader3.news.tin.it...
> >> Hi folks,
> >> I have acquired of the MESA Quartz Crystals to approximately 160 Mhz
> >> fundamental AT.
> >> Someone knows some circuit for their use?
> >> 73's de IK6GQC Rocco
> >>
> >>
> > >
> > >
>
>

5785. electronics/rf coursework for hobbyist

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-09 16:50:34 UTC
From: Matt <mthomas@biocontrolsys.com>
Message-ID: <dnccl2gie1@domitilla.aioe.org>
Source record: 15617

Greetings,

I'm a relatively new ham with not much in the way of electronics knowledge who wants to be able to build and understand my equipment. I recently enrolled in an electronics program at the community college to try to change that. Unfortunately, there are no rf/antenna/wireless related courses (sadly the wireless program was cancelled last year). What kinds of general electronics classes (or other type) will best help me understand radio electronics? This quarter I took DC circuits. Next quarter will be solid state. I'll take an AC principles course later. While the local university has electrical engineering courses, they don't teach them at night, so I'm limited to what the community colleges can offer.

Thanks,
Matt
KD7PPK

5786. Re: electronics/rf coursework for hobbyist

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-09 17:10:46 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <L7mdnWy8ZKwVJwTenZ2dnUVZ_smdnZ2d@web-ster.com>
Source record: 15619

Matt wrote:

> Greetings,
>
> I'm a relatively new ham with not much in the way of electronics knowledge
> who wants to be able to build and understand my equipment. I recently
> enrolled in an electronics program at the community college to try to change
> that. Unfortunately, there are no rf/antenna/wireless related courses
> (sadly the wireless program was cancelled last year). What kinds of general
> electronics classes (or other type) will best help me understand radio
> electronics? This quarter I took DC circuits. Next quarter will be solid
> state. I'll take an AC principles course later. While the local university
> has electrical engineering courses, they don't teach them at night, so I'm
> limited to what the community colleges can offer.
>
> Thanks,
> Matt
> KD7PPK
>
>

It sounds like you're on the right track. If you can take a semiconductor devices course at the right time that'd be good, but they're usually 3rd-year courses & may not be taught at community college.

You should have a copy of the ARRL Handbook. The 2004 copy that I have does a pretty good job of presenting all of this stuff. From my perspective as a practicing EE it's a bit watered down, but the information is quite accurate as far as it goes and it's certainly adequate for a lot of design tasks. The handbook is a book that you can reasonably expect to see on the shelves of any EE active in RF design, and you can expect that it'll get referred to from time to time.

Going beyond the handbook Hayward's "Radio Frequency Design" is a good book to read after you get through the AC principals course. I have it and I like it, but it is written assuming you have quite a bit of EE coursework under your belt. If you can't take a devices course you'll either have to spend lots of quality time with the ARRL handbook or get a text from a devices course and ask lots of questions. I hear "Experimental Methods in RF Design" recommended here, although I don't have a copy myself.

If you really get serious about the handbook you should try getting one copy per decade going back to the 70's. Their opinion of what's "useful" changes from time to time, so it's not just the same book over and over again. If you go nuts about the handbook you should get one

copy per year, perhaps two or three (one for display behind glass, one to read in the living room, one for the shop...). I'm up to 9 copies, including the '76 copy from when I got interested and my uncle's '45 copy that I found in my grandmother's attic. I find I have a terrible fascination with the circuits in the '33 handbook with those open-air tank coils with 2kV on them -- and capacitors located so you have to reach over the coils to adjust them. It puts the term "electrical safety" into a very interesting perspective.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

5787. Re: electronics/rf coursework for hobbyist

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-09 17:36:54 UTC
From: Matt <mthomas@biocontrolsys.com>
Message-ID: <dncfbrilv1@domitilla.aioe.org>
Source record: 15620

"Tim Wescott" <tim@seemywebsite.com> wrote in message
news:L7mdnWy8ZKwVJwTenZ2dnUVZ_smdnZ2d@web-ster.com...
<snip>
>>
> It sounds like you're on the right track. If you can take a semiconductor
> devices course at the right time that'd be good, but they're usually
> 3rd-year courses & may not be taught at community college.
>
<snip>
> Tim Wescott

Thanks for the advice, Tim. It looks like the solid state class might be the same as your semiconductor devices course? From the course description: "Analyzes characteristics of semiconductor devices and their application in common electronic circuits. Covers construction of simple power supplies and more complex amplifier circuits and regulators. Includes construction and measurement of devices and circuit parameters to verify math analysis of circuits designed." There are also classes in analog circuits and devices and in digital circuits.

Thanks,
Matt

5788. Re: electronics/rf coursework for hobbyist

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-09 18:37:02 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <ys-dnWK8buIiUwTeRVn-vw@web-ster.com>
Source record: 15621

Matt wrote:

> "Tim Wescott" <tim@seemywebsite.com> wrote in message
> news:L7mdnWy8ZKwVJwTenZ2dnUVZ_smdnZ2d@web-ster.com...
> <snip>
>
>>It sounds like you're on the right track. If you can take a semiconductor
>>devices course at the right time that'd be good, but they're usually
>>3rd-year courses & may not be taught at community college.
>>
>
> <snip>
>
>>Tim Wescott
>
>
> Thanks for the advice, Tim. It looks like the solid state class might be
> the same as your semiconductor devices course? From the course description:
> "Analyzes characteristics of semiconductor devices and their application in
> common electronic circuits. Covers construction of simple power supplies and
> more complex amplifier circuits and regulators. Includes construction and
> measurement of devices and circuit parameters to verify math analysis of
> circuits designed."

That sounds like a match. Of course I can't answer for the quality of
the coursework compared to a Uni, but then it depends on which CC and
which Uni.

> There are also classes in analog circuits and devices
> and in digital circuits.

Take those, too.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

5789. A Frequently Asked Question (FAQ) (At least, by me, for the benefit of novices)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-09 18:43:37 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1134153817.613209.156800@g49g2000cwa.googlegroups.com>
Source record: 15622
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured

the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an

apology for the failure of a CBer are those class B licensees who falsely proclaimed that they were against the use of a Morse Test to control access to the HF bands, until, that is, a test was introduced at their intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to enable them to handle even the simplest algebraic manipulation for Ohm's Law and thus, the disgraceful Class Ber's in the aforementioned category are not Radio Hams by any stretch of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds, or has ever held, a licence issued under the gangrenous degeneration that is the M3/CB Fools' Licence scheme!

5790. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-09 21:13:42 UTC
From: Dana <dana@panix.com>
Message-ID: <Pine.NEB.4.63.0512091613250.28154@panix2.panix.com>
Source record: 15623
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

I enjoyed the code at 1 time, but not anymore.

On Sat, 12 Nov 2005, The Magnum wrote:

>
> "Dana" <dana@panix.com> wrote in message
> news:Pine.NEB.4.63.0511120301370.9170@panix1.panix.com...
>> The mistake the FCC made was dropping the code requirment down to 5 wpm.
>> Lots of nivices squeeked under the wire.
>
> What is this absurd fascination with Morse Code? Wouldnt you rather just
> talk to people? I know all about the arguements about it getting through
> when all else fails but is it really life and death?? If i cant get through
> on the radio I use a Phone or the Internet. After all its just a hobby.
> Besides, doesnt all that dot dot dot.. dash dash dash give you a headache
> after a while??
> Dont get me wrong, im not having a go at Amateurs im just asking the
> question.. why is it so important?
>
> Regards,
> Graham
>
>
>

5791. Re: electronics/rf coursework for hobbyist

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-09 21:14:32 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dncs3o$et4$1@engnntp2.cig.mot.com>
Source record: 15624

This one *may* be harder without the AC class under your belt.

Also talk to the instructors. They may suggest books or even give / lend
you something. Also ask about hams in the area.

73, Steve, K9DCI

"Matt" <mthomas@biocontrolsys.com> wrote in message
news:dncfbrilv1@domitilla.aioe.org...
> "Tim Wescott" <tim@seemywebsite.com> wrote in message
> news:L7mdnWy8ZKwVJwTenZ2dnUVZ_smdnZ2d@web-ster.com...
> <snip>
> >>
> > It sounds like you're on the right track. If you can take a
semiconductor
> > devices course at the right time that'd be good, but they're usually
> > 3rd-year courses & may not be taught at community college.
> >
> <snip>
> > Tim Wescott
>
> Thanks for the advice, Tim. It looks like the solid state class might be
> the same as your semiconductor devices course? From the course
description:
> "Analyzes characteristics of semiconductor devices and their application
in
> common electronic circuits. Covers construction of simple power supplies
and
> more complex amplifier circuits and regulators. Includes construction and
> measurement of devices and circuit parameters to verify math analysis of
> circuits designed." There are also classes in analog circuits and devices
> and in digital circuits.
>
> Thanks,
> Matt
>
>

5792. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-09 21:51:41 UTC
From: Dana <dana@panix.com>
Message-ID: <Pine.NEB.4.63.0512091650530.28154@panix2.panix.com>
Source record: 15625
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

You know what? I can't copy CW as fast as I used to either. I got into radio before some of you was born.

5793. The Boatanchor Classifieds

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-09 21:52:35 UTC
From: Jeff James <cbstv@optonline.net>
Message-ID: <F0nmf.5544$O05.4121@fe09.lga>
Source record: 15626

http://www.dealamerica.com/deal/cgi-bin/ads/bcads.cgi
Dedicated to vintage amateur radio!

5794. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-10 05:39:44 UTC
From: Steveo <moparholic@hotmail.com>
Message-ID: <20051210003944.435$t1@newsreader.com>
Source record: 15627
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

Dana <dana@panix.com> wrote:
> You know what? I can't copy CW
>
Not surprising, you can't quote the text you're responding to either, top X posting fuckwit.

5795. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-10 11:41:11 UTC
From: Paul Burridge <pb@shove.your.spam.up.your.arse.atlanticstar.co.uk>
Message-ID: <jgflp19o32p6bq9mdav71u4rpe774ddvq0@4ax.com>
Source record: 15628
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

>> What is this absurd fascination with Morse Code? Wouldnt you rather just
>> talk to people? I know all about the arguements about it getting through
>> when all else fails but is it really life and death?? If i cant get through
>> on the radio I use a Phone or the Internet. After all its just a hobby.
>> Besides, doesnt all that dot dot dot.. dash dash dash give you a headache
>> after a while??
>> Dont get me wrong, im not having a go at Amateurs im just asking the
>> question.. why is it so important?

It has its own abiding fascination for some of us. And if you get
selfish idiots on SSB encroaching on the CW end of bands, you can blow
them away without difficulty and still carry on an uninterrupted QSO
with fellow CWers.
--

"What is now proved was once only imagin'd" - William Blake

5796. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-10 13:36:30 UTC
From: The Magnum <magnum@NOSPAMmag2781.freeserve.co.uk>
Message-ID: <dnelij$7pa$1@newsg3.svr.pol.co.uk>
Source record: 15629
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

"Paul Burridge" <pb@shove.your.spam.up.your.arse.atlanticstar.co.uk> wrote
in message news:jgflp19o32p6bq9mdav71u4rpe774ddvq0@4ax.com...
>
> >> What is this absurd fascination with Morse Code? Wouldnt you rather
just
> >> talk to people? I know all about the arguements about it getting
through
> >> when all else fails but is it really life and death?? If i cant get
through
> >> on the radio I use a Phone or the Internet. After all its just a hobby.
> >> Besides, doesnt all that dot dot dot.. dash dash dash give you a
headache
> >> after a while??
> >> Dont get me wrong, im not having a go at Amateurs im just asking the
> >> question.. why is it so important?
>
> It has its own abiding fascination for some of us. And if you get
> selfish idiots on SSB encroaching on the CW end of bands, you can blow
> them away without difficulty and still carry on an uninterrupted QSO
> with fellow CWers.
> --
>
> "What is now proved was once only imagin'd" - William Blake

Then that's fine for you and your CW friends but is it really the top goal
all Amateurs set out to achieve... to go dah dah dah dit dit dit dah dah
dah? Don't you also enjoy talking to distance stations with your voice too?
I agree that the part of the spectrum allocated to Morse should be left for
Morse and those who wish to use Morse should have a slightly different level
of licence/callsign to acknowledge this but it seems its always but "always"
levelled at us with any discussion about seemingly low licensed
intermediates/M3's/general class that unless your an extra class/advanced
you are some sort of trailer park scum. Not for one minute am I saying you
say this but its the general impression most get from some "alleged" full
licence holders in these newsgroups.

Regards and Happy Christmas,
Graham

--

-.-. ---. .-. .- --. .. - - -

Radio is only a Hobby. Don't let it rule your life...

73's - Graham (www.open-channel.co.uk)

5797. Re: electronics/rf coursework for hobbyist

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-10 16:47:22 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreJerks@dev.null>
Message-ID: <MPG.1e04a673132ebdd0989724@192.168.42.131>
Source record: 15630

In article <dnccl2gie1@domitilla.aioe.org>, mthomas@biocontrolsys.com says...

> Greetings,
>
> I'm a relatively new ham with not much in the way of electronics knowledge
> who wants to be able to build and understand my equipment. I recently
> enrolled in an electronics program at the community college to try to change
> that. Unfortunately, there are no rf/antenna/wireless related courses
> (sadly the wireless program was cancelled last year). What kinds of general

<snippety>

Knowing the basics never hurts. My own electronics courses were generalized rather than aimed at radio, but I still learned a goodly amount from them.

Others have already pointed you in the same directions I would. My only other suggestion would be to, as your time and level of income allows, build up your workbench/lab with the best tools and equipment you can possibly afford.

Along those lines -- Learn how to take full advantage of the scrounging resources offered by ham radio swap meets (join a local club that does one a year, if possible) and electronic surplus stores. At the risk of shameless self-promotion, I have sections of my web site dedicated to such efforts.

http://www.bluefeathertech.com/technoid/swapindex.html

Some of your first investments, tool-wise, should include the basics -- screwdrivers in the flat, phillips, allen, and Torx varieties, diagonal cutters, both regular and flush, pliers, small wrenches (an ignition wrench set is very helpful).

I tend to avoid imported tools, with a few notable exceptions. I've found that the long-term quality just isn't there, notably in the junk we get from China and Taiwan. Buying US-made stuff is a bit pricier, but it's a far better long-term investment.

Some of the names I go for are: Bondhus (Allen wrenches), Wiha (regular and Torx screwdrivers, west German import, great stuff!), Cooper Tools (US-based, formerly known as Xcelite) and, for power tools such as drills, saws, etc., DeWalt.

As for test gear, I could probably write a book. At the very least, you're going to need a good multimeter (Fluke 87 series is my

personal favorite), probably a small bench power supply (or a large one, if you plan to run mobile gear on said bench).

As your skill level grows, you will likely find that you need more sophisticated stuff: Oscilloscope, signal generator, modulation analyzer, spectrum analyzer, LC meter, etc.

I could write a book on picking some of those, especially O-scopes. For now, suffice to say that you can get an awfully good 'scope for the $$ by going for older Tektronix equipment. Some favorites of mine are the 7000 series (7603, 7704, 7904, 7104) and their associated plug-ins for lab use. For portable (well, luggable anyway) use, have a look at the 465, 475, 485, 224x series, or the 246x series.

One excellent source of Tektronix information is the TekScopes group on Yahoo. I've been a member for years.

You're off to a wonderful start on a fascinating hobby. Oh, you'll hit bumps along the road -- we all do -- but keep up your interest in tinkering and you'll never lack for a learning experience.

Happy tweaking.

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped with surreal ports?"

5798. Re: electronics/rf coursework for hobbyist

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-10 18:59:12 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <nzFmf.892$Zv.322@fed1read07>
Source record: 15631

Matt here is an excellent on-line freebee
http://www.tpub.com/neets/

--
CL -- I doubt, therefore I might be !

"Matt" <mthomas@biocontrolsys.com> wrote in message
news:dnccl2gie1@domitilla.aioe.org...
> Greetings,
>
> I'm a relatively new ham with not much in the way of electronics knowledge
> who wants to be able to build and understand my equipment. I recently
> enrolled in an electronics program at the community college to try to
> change that. Unfortunately, there are no rf/antenna/wireless related
> courses (sadly the wireless program was cancelled last year). What kinds
> of general electronics classes (or other type) will best help me
> understand radio electronics? This quarter I took DC circuits. Next
> quarter will be solid state. I'll take an AC principles course later.
> While the local university has electrical engineering courses, they don't
> teach them at night, so I'm limited to what the community colleges can
> offer.
>
> Thanks,
> Matt
> KD7PPK
>

5799. FA:TUBES:5Z3, 811A, 45 +MO STUFF TOO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-10 21:32:31 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <OPHmf.142197$qk4.125732@bgtnsc05-news.ops.worldnet.att.net>
Source record: 15632
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Tubes offered: 3x 5Z3 NOS, 4x 811A NOS, 45 x2 NOS? + DX QSL cards 1940's
+ more stuff coming too. See at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking: Mery Christmas, Happy New Year, Happy Hanukkah, 73
heytubeguy

5800. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-11 01:11:28 UTC
From: Paul Burridge <pb@shove.your.spam.up.your.arse.atlanticstar.co.uk>
Message-ID: <84vmp1tcj0d3fchgb5td08p9gpojvj3cjj@4ax.com>
Source record: 15633
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

On Sat, 10 Dec 2005 13:36:30 -0000, "The Magnum"
<magnum@NOSPAMmag2781.freeserve.co.uk> wrote:

>Then that's fine for you and your CW friends but is it really the top goal
>all Amateurs set out to achieve... to go dah dah dah dit dit dit dah dah
>dah? Don't you also enjoy talking to distance stations with your voice too?

No. I know that sounds odd but it's true. Can't really explain it, I
guess. :-|
--

"What is now proved was once only imagin'd" - William Blake

5801. Re: FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-11 04:16:46 UTC
From: Dana <dana@panix.com>
Message-ID: <Pine.NEB.4.63.0512102316280.7753@panix3.panix.com>
Source record: 15634
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.cb

```
Well, not that old now, LOL. 49.

On Fri, 9 Dec 2005, Walt Davidson wrote:

> On Fri, 9 Dec 2005 16:51:41 -0500, Dana <dana@panix.com> wrote:
>
>> You know what? I can't copy CW as fast as I used to either. I got into
>> radio before some of you was born.
>
> Well, before most of the 6-year-old M3s, anyway.
>
> 73 de G3NYY
>
> --
> Walt Davidson Email: g3nyy @despammed.com
>
```

5802. Tripp Lite PR-25 Schematic wanted.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-11 07:32:27 UTC
From: Paul P <p.pinyotREMOVE@REMOVEworldnet.attREMOVE.netREMOVE>
Message-ID: <fCQmf.143521$qk4.55312@bgtnsc05-news.ops.worldnet.att.net>
Source record: 15635

Looking for Tripp Lite PR-25 dc supply schematic. I am repairing one for the club's repeater. I encountered a few crispy critters and want to verify the values.

Thanks
Paul.
paul at p pinyot dot com

5803. Marker precision on a HB8592B (HP859xb series)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-11 10:26:24 UTC
From: Salvador Ferrairo <sferrairo@hotmail.com>
Message-ID: <439bfed0_2@x-privat.org>
Source record: 15636

Hi I am using a HP8592B to do RF measurements and the marker, after a passed auto calibration, could be out 100 or 150 khz when measuring signals over the 300Mhz range.

This spectrum analiser is a non synthetised VCO type, and I don't quite know what frecuency measurement precision can be expected from it.

- Any experience on the marker frecuency precision on that type of spectrum analiser?

A link to the manual will be apperciated.

Tks in advance

Salva

5804. Re: Marker precision on a HB8592B (HP859xb series)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-11 16:13:29 UTC
From: Norm Mann <folder0735@hotmail.com>
Message-ID: <JeYmf.9018$Ea6.4054@trnddc08>
Source record: 15637

"Salvador Ferrairo" <sferrairo@hotmail.com> wrote in message
news:439bfed0_2@x-privat.org...
> Hi I am using a HP8592B to do RF measurements and the marker, after a
> passed auto calibration, could be out 100 or 150 khz when measuring
> signals over the 300Mhz range.
>
> This spectrum analiser is a non synthetised VCO type, and I don't quite
> know what frecuency measurement precision can be expected from it.
>
> - Any experience on the marker frecuency precision on that type of
> spectrum analiser?

Looking in a 1991 HP catalog, I see that you can expect a readout accuracy
of no better than 0.01% of center freqency + 2% of freqency span + 5 x N MHz
(this appears to be a term for the timebase accuracy). Keep in mind that
many spectrum analyzers are not precision measurement instruments.

-NM

5805. Re: Marker precision on a HB8592B (HP859xb series)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-11 23:18:22 UTC
From: Salvador Ferrairo <sferrairo@hotmail.com>
Message-ID: <439cb3be$1_3@x-privat.org>
Source record: 15638

Rigth, I have seen that info, (0.01% of center freqency + 2% of freqency span + 5 x N MHz), but I quite don't understand it ...

If say I am measuring a 300 Mhz signal, and I have a span of say 500 Khz..

- What is the precision or error that I can expect ?

Any hands on experience with that spectrum analizer, and in special regarding frecuency marker precision, will be welcomed.

Salva

"Norm Mann" <folder0735@hotmail.com> escribi&#65533; en el mensaje news:JeYmf.9018$Ea6.4054@trnddc08...
>
> "Salvador Ferrairo" <sferrairo@hotmail.com> wrote in message
> news:439bfed0_2@x-privat.org...
>> Hi I am using a HP8592B to do RF measurements and the marker, after a
>> passed auto calibration, could be out 100 or 150 khz when measuring
>> signals over the 300Mhz range.
>>
>> This spectrum analiser is a non synthetised VCO type, and I don't quite
>> know what frecuency measurement precision can be expected from it.
>>
>> - Any experience on the marker frecuency precision on that type of
>> spectrum analiser?
>
> Looking in a 1991 HP catalog, I see that you can expect a readout accuracy
> of no better than 0.01% of center freqency + 2% of freqency span + 5 x N
> MHz (this appears to be a term for the timebase accuracy). Keep in mind
> that many spectrum analyzers are not precision measurement instruments.
>
> -NM
>
>
>

5806. Re: Marker precision on a HB8592B (HP859xb series)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-12 02:25:58 UTC
From: Norm Mann <folder0735@hotmail.com>
Message-ID: <Wc5nf.36638$Y7.27808@trnddc02>
Source record: 15639

"Salvador Ferrairo" <sferrairo@hotmail.com> wrote in message
news:439cb3be$1_3@x-privat.org...
> Rigth, I have seen that info, (0.01% of center freqency + 2% of freqency
> span + 5 x N MHz), but I quite don't understand it ...
>
> If say I am measuring a 300 Mhz signal, and I have a span of say 500 Khz..
>
> - What is the precision or error that I can expect ?
>
> Any hands on experience with that spectrum analizer, and in special
> regarding frecuency marker precision, will be welcomed.

I haven't used that particular spectrum analyzer, but I've used similar
ones.
Let's deal with the first two terms:

0.01% of center frequency (300 MHz x .0001 = 30 KHz)
+ 5% of frequency span (500 KHz x .05 = 25 KHz)
= 55 KHz

Note: The catalog states that spans <10 MHz have 5% accuracy, not 2%.

This means that the readout may be 55 KHz off and still be within
tolerances. Added to this is the term: 5 x N MHz. What this is isn't
explained in the catalog, but there are other things which affect the
accuracy which may be included in this term. i.e.:
timebase accuracy/stability, readout precision and method of digitization.
Timebase accuracy (0.007%) and digitization (span/intervals) are probably
included in the first two terms. The last term might be concerned with the
frequency displays. Marker readout precision is a function of the number of
significant digits in the display. The display is essentially a frequency
counter and they typically are affected by the time base and have an
uncertainty of +/- one on the least significant digit. i.e.:
If the display shows 300, it may be 299 to 301. (3.33% error)
If the display shows 300.0, it may be 299.9 to 300.1. (0.333% error)
If the display shows 300.00, it may be 299.99 to 300.01. (0.0333% error)
... and so on.

Hope this helps, I'm not sure I can do more to help.

-NM

5807. Linear amplifier chain choices

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-12 09:30:54 UTC
From: kennnick@gmail.com
Message-ID: <1134379854.649360.281900@o13g2000cwo.googlegroups.com>
Source record: 15640

I'm doing my first SSB homebrew project and am learning a lot as I go. It's for 60 meters.

I've done the speech amp, DBM, crystal filter, transmit mixer, and one stage of post mixer amplification. This has taken me to about +6 dBm, and I want to get to +30 dBm. (I've already built a 1 watt in / 10 watt out "final" amplifier.)

My question has mostly to do with the number of stages and operating class. As I approach 1 watt, class A gets pretty impractical due to device dissipation, or so it seems. But I want to carry waveform faithfulness as far as possible. Is it accurate to say that if a class that doesn't give full swing in both directions is used, a harmonic filter should be used before the next stage? I'm trying to infer from what I see in the literature. I'm generally seeing a single device (not push pull) in AB (I think) just before the output filter, but not often at the lower levels.

I guess a push-pull stage could be used to give waveform linearity to get to the 1 watt level. I just don't know if that's needless complexity(?)

The next decision is whether to go from +6 to +30 dBm in one stage or not. I'm inclined to think 14 dB in one stage followed by 10 dB in the next would be best. Any guidance?

73--Nick, WA5BDU

5808. Is magnetic field affected by metal conductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-12 13:49:04 UTC
From: prem.sivasamy@gmail.com
Message-ID: <1134395344.665561.302220@f14g2000cwb.googlegroups.com>
Source record: 15641
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.misc

Hi,
Is magnetic field affected by metal conductor?
How metal works with electric field, magnetic field, and
electromagnetic field?
Thanks,
SP

5809. Re: Is magnetic field affected by metal conductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-12 13:59:39 UTC
From: Al <no.spam@wanted.com>
Message-ID: <no.spam-A55DFC.08593912122005@news.verizon.net>
Source record: 15642
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.misc

In article <1134395344.665561.302220@f14g2000cwb.googlegroups.com>,
prem.sivasamy@gmail.com wrote:

> Hi,
> Is magnetic field affected by metal conductor?
> How metal works with electric field, magnetic field, and
> electromagnetic field?
> Thanks,
> SP
>

repulsed by bismuth
attracted by iron
little effect by tin

different effects if magnetic field is dynamic

5810. Intermod problem on OHR Classic

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-12 14:35:59 UTC
From: Bob <wb0poq@visi.com>
Message-ID: <Xns972A577AD757Ewb0poqvisicom@216.168.3.73>
Source record: 15643

Hi Gang,
I have an old Oak Hills Research Classic 40/20 meter xcvr. I'm not sure if this is a new problem or something that has always plagued it, but I am getting several spurious signals on both 40 and 20. I have identified one of them as a local AMBC station at 1500KHz. After reviewing the schematic, it looks like the trouble could be in one of several areas. This unit makes wide use of diode switching for the Tx and Rx paths, and I'm suspecting the 50KW BC station is driving one of more of them into conduction.
The other possible culprit I see is that this rig has an untuned broadband BJT amp right after the LPF. This circuit is obviously biased at a fairly high level of current which I'm sure was intended to make it robust in the presence of >strong< signals, but I'm thinking it may not be able to handle all the RF it is seeing.
Before I tear into the rig and try some things, bypassing diode switching and/or adding a preselector to that RF amp, I wanted to check with you guys and see if someone has already 'invented this wheel'.

Tnx!

Bob WB0POQ

5811. Re: Is magnetic field affected by metal conductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-12 14:55:37 UTC
From: Don Stauffer <stauffer@usfamily.net>
Message-ID: <Mbgnf.9$h9.561@news.uswest.net>
Source record: 15644
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.misc

prem.sivasamy@gmail.com wrote:
> Hi,
> Is magnetic field affected by metal conductor?
> How metal works with electric field, magnetic field, and
> electromagnetic field?
> Thanks,
> SP
>
Depends on metal. A ferrous metal (like iron) WILL distort field lines.
A non ferrous conductor like copper or aluminum will not affect a
STEADY or DC magnetic field, but because of induction WILL effect an AC
magnetic field.

Curiously, however, it will affect the field in the opposite direction
to the effect of a ferrous metal.

5812. Re: Is magnetic field affected by metal conductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-12 15:13:12 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <NdGdnQ51XMxZDwDe4p2dnA@adelphia.com>
Source record: 15645
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.misc

prem.sivasamy@gmail.com wrote:
> Hi,
> Is magnetic field affected by metal conductor?
> How metal works with electric field, magnetic field, and
> electromagnetic field?
> Thanks,
> SP

Metals get involved with magnetic fields in two possible ways. All metals (and anything else with a finite conductivity) circulate current as any magnetic field passing through it changes strength. The circulating current creates a mirror image magnetic field that partially cancels the one trying to penetrate the metal. For any non superconducting metal, this process also consumes energy from the field. These circulating currents are referred to as eddy currents.

Ferromagnetic metals (ones that are attracted to a magnet) also have another effect. They act as a short cut for any magnetic field that lasts long enough for the above effect to fade out, at least for field strengths below their saturation limit. In other words, it takes more work to create a given flux in air than it does to create the same flux through iron. Since any effect that causes the total amount of flux to increase, generates a force in the direction of motion that allows the increase, this short cut effect is what causes iron to be attracted to a magnet. The work the magnet can do in attracting the iron is the work it took to build the field in air minus the lesser work it takes to build that field through iron.

Things get more complicated for electromagnetic waves. Both the electric field and magnetic field components of waves move surface charges around as they pass by or reflect off of conductors. Maxwell's equations are the most compact description that covers all these possibilities.

That's enough hand waving for now. My arms are tired. ;-)

5813. Re: Is magnetic field affected by metal conductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-12 15:32:37 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <dnk56l$c39$1@engnntp2.cig.mot.com>
Source record: 15646
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.misc

Yes.

<prem.sivasamy@gmail.com> wrote in message
news:1134395344.665561.302220@f14g2000cwb.googlegroups.com...
> Hi,
> Is magnetic field affected by metal conductor?

Yes.

> How metal works with electric field,

If you ask what is the effect of a conductor on a magnetic field,
then: Because metal conducts, it tends to block, divert, change the electric
field.

> magnetic field,

A changing magnetic field induces current in a conductor which in
turn causes a magnetic field that opposes the original magnetic field. This
new magnetic field sums with the original to form a completely new magnetic
field.

> electromagnetic field?

Currents are induced in the conductor which sum to arrive at a
completely new electromagnetic field around the conductor.

> Thanks,
> SP

You are welcome, 73, Steve, K,9.D;C'I

5814. Re: Is magnetic field affected by metal conductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-12 16:48:59 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <dnk9lrgsr1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 15647
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.misc

```
> Maxwell's equations are the most compact description that covers all
> these possibilities.
==============================

I'm not convinced. Who is Maxwell anyway?
----
```

5815. Re: electronics/rf coursework for hobbyist

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-12 16:59:58 UTC
From: Matt <mthomas@biocontrolsys.com>
Message-ID: <dnkaak$9ib$1@domitilla.aioe.org>
Source record: 15549

Thanks to everyone for the information and advice. I really do appreciate
it.

73,
Matt
KD7PPK

5816. Re: Is magnetic field affected by metal conductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-12 17:01:04 UTC
From: "James T. White" <SPAMjtwhiteGUARD@hal-pc.org>
Message-ID: <439dab86$0$502$a726171b@news.hal-pc.org>
Source record: 15548
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.misc

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:dnk9lrgsr1@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com...
> > Maxwell's equations are the most compact description that covers all
> > these possibilities.
> ==============================
>
> I'm not convinced. Who is Maxwell anyway?
> ----
>

http://en.wikipedia.org/wiki/James_Clerk_Maxwell

--
James T. White

5817. Re: Is magnetic field affected by metal conductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-12 17:24:01 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <439DB231.1060102@invalid.invalid>
Source record: 15550
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.misc

Reg Edwards wrote:
>>Maxwell's equations are the most compact description that covers all
>>these possibilities.
>
> ==========
>
> I'm not convinced. Who is Maxwell anyway?

The worst nightmare of many an engineering student?

--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

5818. Re: Is magnetic field affected by metal conductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-12 19:14:54 UTC
From: prem.sivasamy@gmail.com
Message-ID: <1134414894.642368.270990@g49g2000cwa.googlegroups.com>
Source record: 15551
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.misc

Thanks a lot for all your responses. I have better understanding now.
Some of you have really taken time to explain in detail, you all are
very helpful people.Thanks again
SP
Steve Nosko wrote:
> Yes.
>
> <prem.sivasamy@gmail.com> wrote in message
> news:1134395344.665561.302220@f14g2000cwb.googlegroups.com...
> > Hi,
> > Is magnetic field affected by metal conductor?
>
> Yes.
>
>
> > How metal works with electric field,
>
> If you ask what is the effect of a conductor on a magnetic field,
> then: Because metal conducts, it tends to block, divert, change the electric
> field.
>
>
> > magnetic field,
>
> A changing magnetic field induces current in a conductor which in
> turn causes a magnetic field that opposes the original magnetic field. This
> new magnetic field sums with the original to form a completely new magnetic
> field.
>
>
> > electromagnetic field?
>
> Currents are induced in the conductor which sum to arrive at a
> completely new electromagnetic field around the conductor.
>
> > Thanks,
> > SP
>
>
> You are welcome, 73, Steve, K,9.D;C'I

5819. Re: Marker precision on a HB8592B (HP859xb series)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-12 20:21:18 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e077b6cfe284b5b989710@news-central.giganews.com>
Source record: 15552

In article <Wc5nf.36638$Y7.27808@trnddc02>, folder0735@hotmail.com
says...
>
> "Salvador Ferrairo" <sferrairo@hotmail.com> wrote in message
> news:439cb3be$1_3@x-privat.org...
> > Rigth, I have seen that info, (0.01% of center freqency + 2% of freqency
> > span + 5 x N MHz), but I quite don't understand it ...
> >
> > If say I am measuring a 300 Mhz signal, and I have a span of say 500 Khz..
> >
> > - What is the precision or error that I can expect ?
> >
> > Any hands on experience with that spectrum analizer, and in special
> > regarding frecuency marker precision, will be welcomed.
> >

N is the 1st LO harmonic used for the front-end conversion. It is
always 1 for any frequency in the first band of coverage, so the
tolerance at 300 MHz would be +/- 5.055 MHz.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

5820. HF Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-12 20:44:28 UTC
From: Paul M0EME <m0eme432@tiscali.co.uk>
Message-ID: <439de12d_4@mk-nntp-2.news.uk.tiscali.com>
Source record: 15553

Im building a HF linear using four PL519's. Can i use 2oz copper PCB for the base to fit the valves too?????? as Im not very good at cutting and messing with metal.

--

Thanks and 73's de Paul M0EME
432MHz EME 4 times FO19,
FT847,
MGF1302,
100 Watts at feed,
Spectran.
Initials 432MHz #2 CW #4 JT65

http://myweb.tiscali.co.uk/m0eme

5821. Re: HF Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-12 22:37:43 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1134427063.652594.99620@z14g2000cwz.googlegroups.com>
Source record: 15554

Paul M0EME wrote:
> Im building a HF linear using four PL519's. Can i use 2oz copper PCB for the
> base to fit the valves too?????? as Im not very good at cutting and messing
> with metal.
>
>
> --
>

Hi Paul,
you can - but not recommended. Valves generate a lot of heat, and PCB
is not good at dissipating it - would have problems very soon. Why not
use aluminium sheet - easy to work as PCB, - I get mine form a local
scrap merchant, they have pieces big enuff to build any chassis I want,
and its a lot stronger AND cheaper than pcb.

73 de VK3BFA Andrew.

5822. Re: HF Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-13 00:36:31 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <y5adnRuh2YsBigPeRVnygg@pipex.net>
Source record: 15555

> Im building a HF linear using four PL519's. Can i use 2oz copper PCB for the
> base to fit the valves too?????? as Im not very good at cutting and messing
> with metal.
==========
Of course you can use (preferably double sided) PCB , also for
enclosures .

Good luck with your project

Frank KN6WH / GM0CSZ

5823. Re: Marker precision on a HB8592B (HP859xb series)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-13 00:48:17 UTC
From: Salvador Ferrairo <sferrairo@hotmail.com>
Message-ID: <439e1a51$1_1@x-privat.org>
Source record: 15556

Rigth, so if in doing the measurement of frecuency at 300 Mhz with a span of 500Khz I get say 299.870 my unit is OK, rigth ?

I don't see those big errors of 5 Mhz.

Any pointers to the user manualfor that unit ?

Salva

"John Miles" <jmiles@pop.removethistomailme.net> escribi&#65533; en el mensaje news:MPG.1e077b6cfe284b5b989710@news-central.giganews.com...
> In article <Wc5nf.36638$Y7.27808@trnddc02>, folder0735@hotmail.com
> says...
>>
>> "Salvador Ferrairo" <sferrairo@hotmail.com> wrote in message
>> news:439cb3be$1_3@x-privat.org...
>> > Rigth, I have seen that info, (0.01% of center freqency + 2% of
>> > freqency
>> > span + 5 x N MHz), but I quite don't understand it ...
>> >
>> > If say I am measuring a 300 Mhz signal, and I have a span of say 500
>> > Khz..
>> >
>> > - What is the precision or error that I can expect ?
>> >
>> > Any hands on experience with that spectrum analizer, and in special
>> > regarding frecuency marker precision, will be welcomed.
>> >
>
> N is the 1st LO harmonic used for the front-end conversion. It is
> always 1 for any frequency in the first band of coverage, so the
> tolerance at 300 MHz would be +/- 5.055 MHz.
>
> -- jm
>
> ----------
> http://www.qsl.net/ke5fx
> Note: My E-mail address has been altered to avoid spam
> ----------

5824. WTB: 222MHz. TRANSVERTER

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-13 00:56:00 UTC
From: KC0EH <cvest@cox.net>
Message-ID: <LXonf.1435$oz5.597@dukeread03>
Source record: 15557
Cross-posted to: alt.ham-radio.marketplace,rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I am interested in buying a 222 transverter to get on SSB/CW. Also
interested in amplifier and antennas.
Please state price and condition.
Thanks,

...Charlie...KC0EH...

5825. Test Equipment F.A.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-13 01:33:19 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <zxpnf.11579$Ea6.2281@trnddc08>
Source record: 15558

HP 3200B 10-500 MHz Signal generator:
http://cgi.ebay.com/HEWLETT-PACKARD-HP-HP-3200B-SIGNAL-GENERATOR_W0QQitemZ7571603260QQcategoryZ97198QQssPageNameZWDVWQQrdZ1QQcmdZViewItem

Systron Donner 3 GHz Freq Counter:
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&ssPageName=ADME:L:LCA:US:31&item=7571706367

Tektronix 60 MHz dual trace Scope:
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&ssPageName=ADME:L:LCA:US:31&item=7571701396

5826. Re: Linear amplifier chain choices

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-13 01:51:48 UTC
From: eternalsquire@comcast.net
Message-ID: <1134438708.307256.144980@g43g2000cwa.googlegroups.com>
Source record: 15559

Have you put up a page for the design?

The Eternal Squire

5827. can a picture tube be used as an RF amplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-13 01:57:15 UTC
From: eternalsquire@comcast.net
Message-ID: <1134439035.590187.148060@z14g2000cwz.googlegroups.com>
Source record: 15560

Hi,

I get a lot of broken TV's for scrapping from time to time, and it seems that just getting
rid of the tube in the trash is a shameful waste. But I do know that these are about the
only remaining vaccum tubes still in manufacture in this country. I understand that most
of the power is supposed to go through the electron gun of the tube, but I wonder if the
electron gun could be reconfigured as a linear final? Bad idea?

The Eternal Squire

5828. Re: Marker precision on a HB8592B (HP859xb series)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-13 02:32:48 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e07d2a8a06870f4989711@news-central.giganews.com>
Source record: 15561

In article <439e1a51$1_1@x-privat.org>, sferrairo@hotmail.com says...
> Rigth, so if in doing the measurement of frecuency at 300 Mhz with a span of
> 500Khz I get say 299.870 my unit is OK, rigth ?

Sure.

> I don't see those big errors of 5 Mhz.

If the analyzer doesn't have a stabilization feature, and its frequency
accuracy is that good, it is pure luck. Don't count on it being that
close at any other frequency, or remaining that close at 300 MHz for
very long.

> Any pointers to the user manualfor that unit ?

Try www.manualsplus.com for a hardcopy, or if a search at agilent.com
doesn't turn anything up, ftp://ftp.agilent.com/pub/manuals/ .

-- john, EK5FX

5829. Re: Linear amplifier chain choices

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-13 02:52:02 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrndpsdqi.2ksp.bit-bucket@shell.config.com>
Source record: 15562

On 12 Dec 2005 17:51:48 -0800, eternalsquire@comcast.net wrote:
> Have you put up a page for the design?

Does *who* have *what* page up for *which* design.

SHEESH!!
These sloppy-assed Goggle followups will be the death of usenet.

http://oakroadsystems.com/genl/unice.htm#quote
http://groups.google.com/googlegroups/posting_style.html#summarize

5830. Re: Linear amplifier chain choices

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-13 06:14:15 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <439E66AB.F529BA9D@earthlink.net>
Source record: 15563

Allodoxaphobia wrote:
>
> On 12 Dec 2005 17:51:48 -0800, eternalsquire@comcast.net wrote:
> > Have you put up a page for the design?
>
> Does *who* have *what* page up for *which* design.
>
> SHEESH!!
> These sloppy-assed Goggle followups will be the death of usenet.
>
> http://oakroadsystems.com/genl/unice.htm#quote
> http://groups.google.com/googlegroups/posting_style.html#summarize

You can always killfile everything from Google groups.

--
?

Michael A. Terrell
Central Florida

5831. Re: can a picture tube be used as an RF amplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-13 06:17:24 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <439E6768.63163AD@earthlink.net>
Source record: 15564

eternalsquire@comcast.net wrote:
>
> Hi,
>
> I get a lot of broken TV's for scrapping from time to time, and it
> seems that just getting
> rid of the tube in the trash is a shameful waste. But I do know that
> these are about the
> only remaining vaccum tubes still in manufacture in this country. I
> understand that most
> of the power is supposed to go through the electron gun of the tube,
> but I wonder if the
> electron gun could be reconfigured as a linear final? Bad idea?
>
> The Eternal Squire

Based on the filament power, how much output do you expect to get?

--
?

Michael A. Terrell
Central Florida

5832. Re: HF Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-13 07:21:43 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <e43$zaBHannDFAPI@ifwtech.co.uk>
Source record: 15565

Andrew VK3BFA wrote:
>
>Paul M0EME wrote:
>> Im building a HF linear using four PL519's. Can i use 2oz copper PCB for the
>> base to fit the valves too?????? as Im not very good at cutting and messing
>> with metal.
>>
>>
>> --
>>
>
>Hi Paul,
>you can - but not recommended. Valves generate a lot of heat, and PCB
>is not good at dissipating it - would have problems very soon.

...while others say "Go ahead".

For this application I'd agree with Andrew - the PC board is going to get HOT! I discovered this a long time ago, with a little VHF transverter that created much less than a tenth of the heat that a 300-400W PA will. Until then, I'd never appreciated how much we rely on an ordinary aluminium chassis to dissipate heat from the valve bases, or how well it does it.

Unless you use a blower is actively aiming to cool the board as well as the valves, the fibreglass is going to stew, turn brown and warp.

>Why not
>use aluminium sheet - easy to work as PCB, - I get mine form a local
>scrap merchant, they have pieces big enuff to build any chassis I want,
>and its a lot stronger AND cheaper than pcb.

That's basically true, but it just takes longer, and I don't suppose Paul will have all the metalworking tools we OFs have collected over the years. The main point is to make sure you get *soft* aluminium, and also try to get it cut to size. Or try to find some old radio gear that was built with a chassis and cabinet, and rebuild inside that... another honourable tradition.

There was once an SP station who soldered the bases of *ten* 807s on a sheet of PC board for his HF amp. But that was in another century, in a desperate country before the Wall came down. It can be done, but it isn't a good example to follow.

--
73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)

http://www.ifwtech.co.uk/g3sek

5833. How high Q can we expect from a coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-13 10:58:04 UTC
From: "somphopv@yahoo.com" <somphopv@yahoo.com>
Message-ID: <1134471484.165479.119440@g43g2000cwa.googlegroups.com>
Source record: 15566

Anyone has any information on how high Q can we expect from an open or a short quater wavelength coaxial stub? How can we achieve moderately high (200-300) Q by using a coax stub?

5834. Re: HF Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-13 11:08:12 UTC
From: Andrew VK3BFA <ablight@alphalink.com.au>
Message-ID: <1134472092.491573.171710@g47g2000cwa.googlegroups.com>
Source record: 15567

Ian White GM3SEK wrote:
> Andrew VK3BFA wrote:
> >

> >Why not
> >use aluminium sheet - easy to work as PCB, - I get mine form a local
> >scrap merchant, they have pieces big enuff to build any chassis I want,
> >and its a lot stronger AND cheaper than pcb.
>
> That's basically true, but it just takes longer, and I don't suppose
> Paul will have all the metalworking tools we OFs have collected over the
> years. The main point is to make sure you get *soft* aluminium, and also
> try to get it cut to size. Or try to find some old radio gear that was
> built with a chassis and cabinet, and rebuild inside that... another
> honourable tradition.
>
>
I would humbly disagree with this - aluminium is fairly easy to work. A metal cutting blade in your jigsaw, a set of drill bits, hole cutting saws are now very cheap (you dont need super HSS ones for soft aluminium, a rat tail file .. pretty basic tools...the stuff you need to work PCB into shape!

bending is a problem, I must admit - one day, will make a sheet metal bender - in the meantime, bits of angle iron clamped in a vise give reasonable results......

More fundamentally - why use PL519's - arent they TV sweep tubes, like 6JS6's - a poor choice in this day and age, unless you have a box of them cheap (plus the sockets...) Proper transmitting tubes are available at a reasonable price - even the humble old ones like 811A's would be a better choice!

de VK3BFA Andrew.

5835. Re: Linear amplifier chain choices

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-13 11:54:46 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1134474886.089131.125750@o13g2000cwo.googlegroups.com>
Source record: 15568

....so, first of all a class A amplifier would dissipate aproximately
1W which isn't so bad. any TO-5 transistor with a clip on heatsink will
take that. A 2N5109 would be ideal, being a quite rugged device. you
don't have to worry.
second, about 12-13 dB of gain in the HF range would be an approximate
maiximum for easy and comfortable construction. higher gains are
possible, but you start to endanger yourself with oscillations. better
a 2 stage amplifier, even though it sounds more expensive. it's only
one of a kind so cost shouldn't be a main concern.

5836. Re: can a picture tube be used as an RF amplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-13 11:59:24 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1134475164.205755.24290@g47g2000cwa.googlegroups.com>
Source record: 15569

usualy the electron gun is designed to generate a few tens of
microamperes of current. i don't suppose you'll get the full legal
power from it!

5837. Re: How high Q can we expect from a coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-13 14:43:58 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <dnmmne$3qn$1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 15570

> Anyone has any information on how high Q can we expect from an open
or
> a short quater wavelength coaxial stub? How can we achieve
moderately
> high (200-300) Q by using a coax stub?

==========

Program COAXTUNE calculates Q when the line is tuned to resonance by a capacitor across the open end. For practical purposes this is the same as Q when off-resonance at the same frequency.

Open-circuit and-short circuit stub lines have the same Q.

As a check on dimensions of the inner and outer conductors the program calculates line impedance Zo. If you are uncertain of dimensions then vary them to make Zo equal to what particular type of line you have in mind.

The velocity factor of solid polyethylene coax is 0.665

The program allows physical line length to be adjusted for resonance at any frequency, and for any length in wavelengths.

At HF, for typical types and sizes of coax, you will find Q to be very much lower than 200 or 300. High values of Q are obtainable only at UHF and above on large diameter lines.

Download program COAXTUNE from website below. It is very simple to use.

Program TWINTUNE does similar things with balanced pair lines.

For design of a complete impedance matching system using a stub-line, coax or balanced-twin, between main line and antenna, program STUMATCH may be of interest.

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

5838. Re: How high Q can we expect from a coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-13 15:21:21 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <7jptp1d16mek1onbhe15b450ed32grhp33@4ax.com>
Source record: 15571

On 13 Dec 2005 02:58:04 -0800, "somphopv@yahoo.com"
<somphopv@yahoo.com> wrote:

>Anyone has any information on how high Q can we expect from an open or
>a short quater wavelength coaxial stub? How can we achieve moderately
>high (200-300) Q by using a coax stub?

the uncomplicate answer is "depends on the COAX losses which is
related to inner conductor diameter and insulator used".

Example RG58 is a poorer than UT141 but 1" Hardline will be better.

Tools like coaxtune and others will get you a better ide of what will
achieve your specific goals.

Allison

5839. Re: can a picture tube be used as an RF amplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-13 16:16:12 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <439EF3AF.CB09B286@earthlink.net>
Source record: 15572

"Saandy , 4Z5KS" wrote:
>
> usualy the electron gun is designed to generate a few tens of
> microamperes of current. i don't suppose you'll get the full legal
> power from it!

I doubt that he would get more than a couple watts out of a CRT, even
if it has 30 KV on the second anode. The ICs used to drive a computer
monitor's CRT, on the other hand? Some will work on two meters, and
higher frequencies and can be found in dead monitors all over the place.

--
?

Michael A. Terrell
Central Florida

5840. Re: Is magnetic field affected by metal conductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-13 19:16:10 UTC
From: fmmck@aol.com
Message-ID: <fmmck-1312051416100001@acad8d33.ipt.aol.com>
Source record: 15502
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.misc

In article <dnk56l$c39$1@engnntp2.cig.mot.com>, "Steve Nosko"
<suteuve.nosukowicuz@moutouroula.com> wrote:

> A changing magnetic field induces current in a conductor which in
> turn causes a magnetic field that opposes the original magnetic field. This
> new magnetic field sums with the original to form a completely new magnetic
> field.

Conversely, a moving conductor interacts with a static magnetic field.

Fred

5841. Re: How high Q can we expect from a coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-13 19:41:10 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1134502870.109520.54470@g49g2000cwa.googlegroups.com>
Source record: 15573

I'm sure Reg's programs will give you a very good estimate. For a quick "rule of thumb" estimate, assuming ~77ohm air-insulated coax with an inside diameter of the outer conductor of D inches, at frequency f MHz, Qu will be about 100*D*sqrt(f). So a 1" line at 100MHz will give you Qu about 1000. This quick estimate may be all you need, and even quicker than loading a program.

I trust you are aware that the Qu won't tell you how sharp a filter will result; for that, you need to know the configuration and the loaded Q--or better, where the poles and zeros are. There are lots of ways to do that; RFSim99 might be a useful (and free) tool for you. By appropriately tapping the thru-line down on an appropriate stub, you can arrange to pass one specific frequency with very little disturbance while blocking one other specific frequency of your choice (and another you don't have so much control over, and of course others at multiples of the lowest freqs). Or you can combine a stub that blocks a particular frequency with a reactance (capacitor or inductor) that tunes out the reactance of the stub at the frequency you specifically want to pass.

For example, put a 77-ohm shorted stub that's a half-wave long at 125MHz across your line, and you notch 125MHz. Put an 18.8pF capacitance across that, and you will pass 150MHz with little effect, because the 18.8pF resonates the inductive reactance that the stub represents at 150MHz. But it will also pass 46.5MHz with little effect. Put about 27nH across the same stub and you'll notch 125 while nicely passing 115MHz. Include line and inductor loss in the model to see the depth of the notch and the attenuation at the "pass" frequency.

Cheers,
Tom

5842. Re: Linear amplifier chain choices

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-13 19:53:10 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrndpu9l6.2ff.bit-bucket@shell.config.com>
Source record: 15574

On Tue, 13 Dec 2005 06:14:15 GMT, Michael A. Terrell wrote:
> Allodoxaphobia wrote:
>>
>> On 12 Dec 2005 17:51:48 -0800, eternalsquire@comcast.net wrote:
>> > Have you put up a page for the design?
>>
>> Does *who* have *what* page up for *which* design.
>>
>> SHEESH!!
>> These sloppy-assed Goggle followups will be the death of usenet.
>>
>> http://oakroadsystems.com/genl/unice.htm#quote
>> http://groups.google.com/googlegroups/posting_style.html#summarize
>
> You can always killfile everything from Google groups.

Iive started doing that -- on a ng-by-ng basis -- when it appears to Get
Out Of Control. Now it looks like I need to start killfiling the google
followups in the rec.radio.amateur.* collection.

It's so frustrating to follow some 'interesting' thread over a period of
days and be forced to stumble through a number of thoughtless,
disembodied followups.

sigh...

5843. Re: How high Q can we expect from a coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-13 19:55:52 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrndpu9q8.2ff.bit-bucket@shell.config.com>
Source record: 15575

On 13 Dec 2005 02:58:04 -0800, somphopv@yahoo.com wrote:
> Anyone has any information on how high Q can we expect from an open or
> a short quater wavelength coaxial stub? How can we achieve moderately
> high (200-300) Q by using a coax stub?

Something like a 2" copper pipe centered in a metal garbage can?

Or, 19" of RG-174?

Jonesy

5844. Re: Linear amplifier chain choices

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-13 21:33:40 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <439F3E0D.38B686C3@earthlink.net>
Source record: 15576

Allodoxaphobia wrote:
>
> I've started doing that -- on a ng-by-ng basis -- when it appears to Get
> Out Of Control. Now it looks like I need to start killfiling the google
> followups in the rec.radio.amateur.* collection.
>
> It's so frustrating to follow some 'interesting' thread over a period of
> days and be forced to stumble through a number of thoughtless,
> disembodied followups.
>
> sigh...

I know what you mean. Take a look at news:sci.electronics.design
sometime at all the off topic questions and flame wars.

--
?

Michael A. Terrell
Central Florida

5845. Re: can a picture tube be used as an RF amplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 00:30:21 UTC
From: Dan Andersson <dan@andersson.co.uk>
Message-ID: <yKudndey6YI9-gLeSa8jmw@karoo.co.uk>
Source record: 15577

eternalsquire@comcast.net wrote:

> Hi,
>
> I get a lot of broken TV's for scrapping from time to time, and it
> seems that just getting
> rid of the tube in the trash is a shameful waste. But I do know that
> these are about the
> only remaining vaccum tubes still in manufacture in this country. I
> understand that most
> of the power is supposed to go through the electron gun of the tube,
> but I wonder if the
> electron gun could be reconfigured as a linear final? Bad idea?
>
> The Eternal Squire

Don't bother with the CRT, look for the drivers instead. These was typically a penthode PL509 tube or the US equivalent. These makes very nice linear pa's and was often parallell connected. Four of them made a good 500Watts pa when fed with 1300Volts. The power supply for these pa's is normally made by doubling the mains power... very nasty but also very very cheapo!

Cheers

M0DFI / Dan

5846. What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 00:30:39 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1134520239.071671.96720@g44g2000cwa.googlegroups.com>
Source record: 15578
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

With the holiday season here it is time to redo the workshop and the
workbench in particular.

So, what suggestions do you have for setting up a good efficient
workspace for electronics?

Here's an example that I found....

http://www.stevenjohnson.com/workbench.htm

So what does your workspace, test bench and layout look like?

Pictures and links would be great.

What has worked for you?...what hasn't?

Benches, racks, cabinets, tables, carts....

Any particular test equipment that you would recommend for or against?

Thanks

TMT

5847. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 00:35:44 UTC
From: "Mark D. Zacharias" <spammenot@nonsense.net>
Message-ID: <ANJnf.31482$7h7.28970@newssvr21.news.prodigy.com>
Source record: 15579
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
news:1134520239.071671.96720@g44g2000cwa.googlegroups.com...
> With the holiday season here it is time to redo the workshop and the
> workbench in particular.
>
> So, what suggestions do you have for setting up a good efficient
> workspace for electronics?
>
> Here's an example that I found....
>
> http://www.stevenjohnson.com/workbench.htm
>
> So what does your workspace, test bench and layout look like?
>
> Pictures and links would be great.
>
> What has worked for you?...what hasn't?
>
> Benches, racks, cabinets, tables, carts....
>
> Any particular test equipment that you would recommend for or against?
>
> Thanks
>
> TMT
>

Well, it's certainly cleaner and neater than MY bench!

Mark Z.

5848. Re: WTB: 222MHz. TRANSVERTER

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 01:04:26 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <xqWdndYkLOWD8gLeRVn-jQ@bright.net>
Source record: 15580
Cross-posted to: alt.ham-radio.marketplace,rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

If you're interested in building (with surface mount components), see:
http://www.w1ghz.org/222xvtr/222.htm

Small board. Designed to use Yaesu FT817 as an I.F. rig, but any rig that can provide 24 MHz at 1/2 Watt is useable. Transverter puts out 5 Watts, so an external amp could be used to boost output if desired. I have the circuit board for it, but it's not built yet, so I can't comment much. A friend has one and hasn't said anything bad about it that I'm aware of...

Scott
N0EDV

KC0EH wrote:

> I am interested in buying a 222 transverter to get on SSB/CW. Also
> interested in amplifier and antennas.
> Please state price and condition.
> Thanks,
>
> ...Charlie...KC0EH...
>
>

5849. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 01:10:56 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <AiKnf.16421$OK6.7756@trnddc03>
Source record: 15581
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
news:1134520239.071671.96720@g44g2000cwa.googlegroups.com...
> With the holiday season here it is time to redo the workshop and the
> workbench in particular.
>
> So, what suggestions do you have for setting up a good efficient
> workspace for electronics?
>
> Here's an example that I found....
>
> http://www.stevenjohnson.com/workbench.htm
>
> So what does your workspace, test bench and layout look like?
>
> Pictures and links would be great.
>
> What has worked for you?...what hasn't?
>
> Benches, racks, cabinets, tables, carts....
>
> Any particular test equipment that you would recommend for or against?
>
> Thanks
>
> TMT

Here's a couple pix of my shop. For test equipment- stick with the knowns-
HP/Agielnt, Tektronix etc.
http://www.w4dex.com/gallery/Dale-Parfitt/Dale_Parfitt_W4OP
http://www.w4dex.com/gallery/Dale-Parfitt/Dale_Parfitt_W4OP_3

W4OP
>

5850. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 01:13:57 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <gLydnT-cMZJR7ALeRVn-vA@web-ster.com>
Source record: 15582
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Too_Many_Tools wrote:
> With the holiday season here it is time to redo the workshop and the
> workbench in particular.
>
> So, what suggestions do you have for setting up a good efficient
> workspace for electronics?
>
> Here's an example that I found....
>
> http://www.stevenjohnson.com/workbench.htm
>
> So what does your workspace, test bench and layout look like?
>
> Pictures and links would be great.
>
> What has worked for you?...what hasn't?
>
> Benches, racks, cabinets, tables, carts....
>
> Any particular test equipment that you would recommend for or against?
>
> Thanks
>
> TMT
>
My workbench looks like an absolute fright unless I've been very
unproductive (and therefore have had time to clean), or I've reached a
standstill (and therefore must clean).

Otherwise I just look at the pile and ask myself how long ago I used a
particular tool, then I look that far down to find it.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

5851. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 01:20:18 UTC
From: w4pqw@cox.net
Message-ID: <1134523218.562034.52810@g49g2000cwa.googlegroups.com>
Source record: 15583
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I like the pictures of the shop..really neat and clean..I have worked in radio for about 60 years and you get sort of "set in your ways".. I like to work on a roll around cart about 24 X 30 in. 28 in. heigh.That way you can have test equip and tools within reach..I have all the digital test sets and I always have an analog meter,like Simpson 260 and Tripplet.630 ...Also I have a complete soldering station with everything modern,,but I always have a gun or two on the bench also..For boatanchors you really need some analog stuff,like HV multimeter to 6000 volts etc..A maglight is a must for close in work..A good assortment of power supplies,from 0 to 50 volts regulated and a good 12 volt PS at about 30 amps.or more..A good scope to at least 50 Mhz,preferabily 100/200 mhz.If you get a Tektronics scope you can attach a didital counter to the scope (ch.1 out)and read frequency as well as pattern.Helps when working on freq .multipliers etc..Just some ideas and suggestions..Good military Test equip. is available for pennies . repairing it ,not always easy..Good luck W4PQW

5852. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 01:25:06 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <439F7477.9ECE0621@shaw.ca>
Source record: 15584
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Too_Many_Tools wrote:
>
> With the holiday season here it is time to redo the workshop and the
> workbench in particular.
>
> So, what suggestions do you have for setting up a good efficient
> workspace for electronics?
>
> Here's an example that I found....
>
> http://www.stevenjohnson.com/workbench.htm
>
> So what does your workspace, test bench and layout look like?
>
> Pictures and links would be great.
>
> What has worked for you?...what hasn't?
>
> Benches, racks, cabinets, tables, carts....
>
> Any particular test equipment that you would recommend for or against?
>
> Thanks
>
> TMT

If I ever manage to get to the point where I can find the bench
underneath the clutter I will be more than happy to send you a photo
of it. I should have taken one when it was new for sentimental
reasons! :-)

Irv VE6BP

P.S. If you think the bench is bad, you should see the shack!
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/index.html
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/index.htm

Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/index.htm
---
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

5853. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 01:41:39 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <439F781E.5B795175@earthlink.net>
Source record: 15585
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Irv Finkleman wrote:
>
> If I ever manage to get to the point where I can find the bench
> underneath the clutter I will be more than happy to send you a photo
> of it. I should have taken one when it was new for sentimental
> reasons! :-)
>
> Irv VE6BP
>
> P.S. If you think the bench is bad, you should see the shack!

news:alt.binary.pictures.radio has a contest from time to time with
pictures of workbenches and home shops. Its about time for someone to
post another "My bench" photo and start another round over there.

--
?

Michael A. Terrell
Central Florida

5854. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 01:46:30 UTC
From: Arfa Daily <arfa.daily@ntlworld.com>
Message-ID: <WPKnf.27493$a15.12026@newsfe5-win.ntli.net>
Source record: 15586
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Tim Wescott" <tim@seemywebsite.com> wrote in message
news:gLydnT-cMZJR7ALeRVn-vA@web-ster.com...
> Too_Many_Tools wrote:
>> With the holiday season here it is time to redo the workshop and the
>> workbench in particular.
>>
>> So, what suggestions do you have for setting up a good efficient
>> workspace for electronics?
>>
>> Here's an example that I found....
>>
>> http://www.stevenjohnson.com/workbench.htm
>>
>> So what does your workspace, test bench and layout look like?
>>
>> Pictures and links would be great.
>>
>> What has worked for you?...what hasn't?
>>
>> Benches, racks, cabinets, tables, carts....
>>
>> Any particular test equipment that you would recommend for or against?
>>
>> Thanks
>>
>> TMT
>>
> My workbench looks like an absolute fright unless I've been very
> unproductive (and therefore have had time to clean), or I've reached a
> standstill (and therefore must clean).
>
> Otherwise I just look at the pile and ask myself how long ago I used a
> particular tool, then I look that far down to find it.
>
> --
>
> Tim Wescott
> Wescott Design Services
> http://www.wescottdesign.com

Oh deep joy !!! That is a perfect description of my workshop. I wish I
could keep it looking like the pictures in the post above. I have as much
benchspace, but on an average day, probably about 18" to 2 foot available

...

On another similar sized bench behind me, I have one of the workshop computers, the weather sat receiving equipment, and my amateur radio station. On that bench, on a good day, there's just about room for the station logbook !

Arfa

5855. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 02:13:09 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <sqvup15ojgkave2s0seqhbf9tka5b2fqsn@4ax.com>
Source record: 15587
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Wed, 14 Dec 2005 01:10:56 GMT, the renowned "Dale Parfitt"
<par@parelectronics.com> wrote:

>Here's a couple pix of my shop. For test equipment- stick with the knowns-
>HP/Agielnt, Tektronix etc.
>http://www.w4dex.com/gallery/Dale-Parfitt/Dale_Parfitt_W4OP
>http://www.w4dex.com/gallery/Dale-Parfitt/Dale_Parfitt_W4OP_3
>
>W4OP

Nice and neat. What are those cool vertical outlet boxes-- a
commercial product?

What kind of a critter lives in that bed beside the Tek scope?

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

5856. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 02:32:36 UTC
From: Jeff L <levy_jeff@hotmail.com>
Message-ID: <8vLnf.139159$Ph4.4254769@ursa-nb00s0.nbnet.nb.ca>
Source record: 15588
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Spehro Pefhany" <speffSNIP@interlogDOTyou.knowwhat> wrote in message
news:sqvup15ojgkave2s0seqhbf9tka5b2fqsn@4ax.com...
> On Wed, 14 Dec 2005 01:10:56 GMT, the renowned "Dale Parfitt"
> <par@parelectronics.com> wrote:
>
>
> >Here's a couple pix of my shop. For test equipment- stick with the
knowns-
> >HP/Agielnt, Tektronix etc.
> >http://www.w4dex.com/gallery/Dale-Parfitt/Dale_Parfitt_W4OP
> >http://www.w4dex.com/gallery/Dale-Parfitt/Dale_Parfitt_W4OP_3
> >
> >W4OP
>
> Nice and neat. What are those cool vertical outlet boxes-- a
> commercial product?
>

Those look like part of the bench - I know some of the brands of benches
available used to have the plugs there. My benches have a 6' strip with
plugs every 3 - 4" that we bought from I believe Tripp Lite last summer.
They were quite reasonable with a lighted, covered switch, circuit breaker,
a 10 to 15' long heavy grounded cord, with a nice extruded aluminum housing
for ~$70 CND @ something like 7 qty. They make many styles and lengths.

Jeff

> What kind of a critter lives in that bed beside the Tek scope?
>
>
> Best regards,
> Spehro Pefhany
> --
> "it's the network..." "The Journey is the reward"
> speff@interlog.com Info for manufacturers:
http://www.trexon.com
> Embedded software/hardware/analog Info for designers:
http://www.speff.com

5857. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 02:57:16 UTC
From: jpero@sympatico.ca
Message-ID: <439f8780.198399453@news1.on.sympatico.ca>
Source record: 15589
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On 13 Dec 2005 16:30:39 -0800, "Too_Many_Tools"
<too_many_tools@yahoo.com> wrote:

>With the holiday season here it is time to redo the workshop and the
>workbench in particular.
>
>So, what suggestions do you have for setting up a good efficient
>workspace for electronics?
>

Size of stuff to fix upon determines the design of bench and tools.

I'm TV tech;
Big ones like 36'ers demands at least 5 feet by 10 even more feet
bench to allow for tools to lay besides the unit. I have wished I had
that because of few CTC210/DTV306/etc that needed the depth so I can
push the unit way forward so I can eagle spread the crowded chassis
that weighs a tonne and clumsy to handle just to freaking replace 10
parts in worst places. Lot of chassis flipping just to see as you put
new parts in and remove and resolder transformer for that R14609 tiny
10 ohm resistor that's now a black crater, that D14611 did to
components in standby SMPS.

Be make sure the bench is high enough so you don't bend over so low
but not too high to heft heavy TV up there. Flat CRTs are heavy!

Cheers, Wizard

5858. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 03:08:12 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e092c73b2735673989712@news-central.giganews.com>
Source record: 15590
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

In article <439F781E.5B795175@earthlink.net>, mike.terrell@earthlink.net
says...
> Irv Finkleman wrote:
> >
> > If I ever manage to get to the point where I can find the bench
> > underneath the clutter I will be more than happy to send you a photo
> > of it. I should have taken one when it was new for sentimental
> > reasons! :-)
> >
> > Irv VE6BP
> >
> > P.S. If you think the bench is bad, you should see the shack!
>
>
> news:alt.binary.pictures.radio has a contest from time to time with
> pictures of workbenches and home shops. Its about time for someone to
> post another "My bench" photo and start another round over there.
>
>

The TekScopes group on Yahoo did this awhile back, too. Lots of fun to
look at other scope junkies' benches.

http://www.frappr.com/tekscopes

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

5859. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 04:30:50 UTC
From: meow2222@care2.com
Message-ID: <1134534650.642653.280610@g14g2000cwa.googlegroups.com>
Source record: 15591
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Too_Many_Tools wrote:
> With the holiday season here it is time to redo the workshop and the
> workbench in particular.
>
> So, what suggestions do you have for setting up a good efficient
> workspace for electronics?
>
> Here's an example that I found....
>
> http://www.stevenjohnson.com/workbench.htm
>
> So what does your workspace, test bench and layout look like?
>
> Pictures and links would be great.
>
> What has worked for you?...what hasn't?
>
> Benches, racks, cabinets, tables, carts....
>
> Any particular test equipment that you would recommend for or against?

I dont do much tronic work now, but just did some today. A lot of the
things I found are just as true in what I do now though.

The no. 1 handy thing is a little hand held probe that amplifies and
send the signal to a piezo. Its an imprecise but very quick way of
finding out roughly whats going on here there and almost everywhere.

The one thing I avoided like the plague, and still do, is those plastic
drawer racks with often open top drawer boxes. You've only got to move
one once to see what I mean! One spill and you'll never ever buy one
again. Small parts containers must have burst proof latches, I wont use
any that dont.

Domestic chipboard chests of drawers are a good quick cheap way to get
storage space in situations where you can be sure nothing will be put
in front of them. Especially good where your storage expands into
living space. They sometimes need reinforcing, ie more runner screws
and gluing draw bottoms in. Yes its ok to do that with chipboard
drawers (not with real wood ones tho).

Wooden shelving has the advantage that its easily made in any size,
weight and shape to suit your workshop. And with any features you want
on it. If you want large quantity or heavyweight, its also less money

than large amounts of steel. A lot slower to put up, but much more adaptable. Shelving racks of all kinds can have overhead linking bars betwen them to make them rock steady. Realise a shelving rack collapse can kill, they must be rock steady.

If you can take a photo of your workshop, youre failing to use a lot of the space.

Cardboard boxes have always been my favoured storage cases, as they offer some amount of protection in case one is dropped, and theyre freely available at any time, which is also important. And any size. As I've found, always label them!

For the ultimate in space efficient storage theres always tracked shelving racks, but theyre not cheap. Metal racks on tracked wheels, with a big knob/lever that you turn to move them. One only need maintain one gangway between the lot, move them to enable to get to where you want. Very effective if youre storing on a larger scale, and space is expensive, as it is here (very). A serious space saver, but access is slower. Fill them in order of whats most used to minimise moving.

Soldering guns I've found almost useless. Theyre not good performers, and how many jobs are done so fast there isnt time to do something else while an iron heats up? Havent used mine in so long I dont even know where it is.

Gas lighting has proven more reliable for power cuts than battery, though these days battery exit lights are now common.

NT

5860. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 04:41:22 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <439FA234.396EE28E@earthlink.net>
Source record: 15592
Cross-posted to: sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

meow2222@care2.com wrote:
>
> The one thing I avoided like the plague, and still do, is those plastic
> drawer racks with often open top drawer boxes. You've only got to move
> one once to see what I mean! One spill and you'll never ever buy one
> again. Small parts containers must have burst proof latches, I wont use
> any that dont.

I moved over 1000 miles in 1987 and I had 24 50 drawer Akro-Mills
cabinets full of parts. I cut pieces of cardboard to cover the front and
placed two of them face to face, then taped them together. I didn't
have even one part out of place when I arrived at my new place and set
up my shop. The move was done with my shop's step van and I hauled over
17,000 pounds of tools, parts, manuals and test equipment in two trips.
there is nothing wrong with parts cabinets, if you know how to pack
them.

--
?

Michael A. Terrell
Central Florida

5861. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 04:48:17 UTC
From: COLIN LAMB <k7fm@teleport.com>
Message-ID: <luNnf.3905$Tg2.2900@newsread1.news.pas.earthlink.net>
Source record: 15593
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

The last time my bench was clean was over a decade ago - after I learned I had a very aggressive form of cancer. I reluctantly cleaned off the bench to save my wife from having to do it.

But, through the miracles of drugs, the cancer went away. Now, my desks are all cluttered again. My wife fondly talks about how good life was when my desk was clean and I had sold much of my junk. I think she is kidding, but would not bet my life on it.

When I clean an area, it is only temporary.

At the constant prodding of my wife, I spend 3 months cleaning up the floor of my darkroom. I found things that had been missing for years. But, I could not clean up the desk, for it has all the little parts for which I do not have a place for.

In the end, messiness is really just the product of someone who has so much order that he insists upon a place for each item before he puts it away.

Colin K7FM

5862. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 05:10:21 UTC
From: Mr Fed UP <mrfedup@bellsouth.net>
Message-ID: <FMNnf.12707$Y72.3190@bignews1.bellsouth.net>
Source record: 15594
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Gee Whizz this 36 inch I have weighs in at 200 pounds.
Maybe you need to think about a motor hoist with straps or something.
I know by myself this TV will never be moved. Maybe it can sell
with the house some day. Good luck with the hernias.

I have a 12 X 24 patio I am thinking of enclosing and making a shop...
so I am following this thread too. lol where ever it goes

K4TWO Gary

"Jason D." <jpero@sympatico.ca> wrote in message
news:439f8780.198399453@news1.on.sympatico.ca...
> On 13 Dec 2005 16:30:39 -0800, "Too_Many_Tools"
> <too_many_tools@yahoo.com> wrote:
>
>>With the holiday season here it is time to redo the workshop and the
>>workbench in particular.
>>
>>So, what suggestions do you have for setting up a good efficient
>>workspace for electronics?
>>
>
> Size of stuff to fix upon determines the design of bench and tools.
>
> I'm TV tech;
> Big ones like 36'ers demands at least 5 feet by 10 even more feet
> bench to allow for tools to lay besides the unit. I have wished I had
> that because of few CTC210/DTV306/etc that needed the depth so I can
> push the unit way forward so I can eagle spread the crowded chassis
> that weighs a tonne and clumsy to handle just to freaking replace 10
> parts in worst places. Lot of chassis flipping just to see as you put
> new parts in and remove and resolder transformer for that R14609 tiny
> 10 ohm resistor that's now a black crater, that D14611 did to
> components in standby SMPS.
>
> Be make sure the bench is high enough so you don't bend over so low
> but not too high to heft heavy TV up there. Flat CRTs are heavy!
>
> Cheers, Wizard

5863. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 05:39:44 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <439FAFDB.4ABD655A@earthlink.net>
Source record: 15595
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

COLIN LAMB wrote:
>
> The last time my bench was clean was over a decade ago - after I learned I
> had a very aggressive form of cancer. I reluctantly cleaned off the bench
> to save my wife from having to do it.
>
> But, through the miracles of drugs, the cancer went away. Now, my desks are
> all cluttered again. My wife fondly talks about how good life was when my
> desk was clean and I had sold much of my junk. I think she is kidding, but
> would not bet my life on it.
>
> When I clean an area, it is only temporary.
>
> At the constant prodding of my wife, I spend 3 months cleaning up the floor
> of my darkroom. I found things that had been missing for years. But, I
> could not clean up the desk, for it has all the little parts for which I do
> not have a place for.
>
> In the end, messiness is really just the product of someone who has so much
> order that he insists upon a place for each item before he puts it away.
>
> Colin K7FM

A workbench is meant to be a living example of the moving hole
theory. ;-)

--
?

Michael A. Terrell
Central Florida

5864. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 05:56:04 UTC
From: meara.london@virgin.net
Message-ID: <1134539764.478884.131730@g14g2000cwa.googlegroups.com>
Source record: 15596
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Inspiring photos Dale! FB OM. Nice to see where my 17 meter Barbados
receiver came from! 73 Bill M0HBR
http://www.qsl.net/n2cqr

Spehro Pefhany wrote:
> On Wed, 14 Dec 2005 01:10:56 GMT, the renowned "Dale Parfitt"
> <par@parelectronics.com> wrote:
>
>
> >Here's a couple pix of my shop. For test equipment- stick with the knowns-
> >HP/Agielnt, Tektronix etc.
> >http://www.w4dex.com/gallery/Dale-Parfitt/Dale_Parfitt_W4OP
> >http://www.w4dex.com/gallery/Dale-Parfitt/Dale_Parfitt_W4OP_3
> >
> >W4OP
>
> Nice and neat. What are those cool vertical outlet boxes-- a
> commercial product?
>
> What kind of a critter lives in that bed beside the Tek scope?
>
>
> Best regards,
> Spehro Pefhany
> --
> "it's the network..." "The Journey is the reward"
> speff@interlog.com Info for manufacturers: http://www.trexon.com
> Embedded software/hardware/analog Info for designers: http://www.speff.com

5865. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 08:07:03 UTC
From: James Sweet <jamessweet@hotmail.com>
Message-ID: <HoQnf.45851$qF6.665@trnddc01>
Source record: 15597
Cross-posted to: sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Too_Many_Tools wrote:
> With the holiday season here it is time to redo the workshop and the
> workbench in particular.
>
> So, what suggestions do you have for setting up a good efficient
> workspace for electronics?
>
> Here's an example that I found....
>
> http://www.stevenjohnson.com/workbench.htm
>
> So what does your workspace, test bench and layout look like?
>
> Pictures and links would be great.
>
> What has worked for you?...what hasn't?
>
> Benches, racks, cabinets, tables, carts....
>
> Any particular test equipment that you would recommend for or against?
>
> Thanks
>
> TMT
>

That's an amazing shop. My own is unfortunately nothing like it, far more cluttered with junk piled all over the place, I suspect it's typical of other hobby techs here.

5866. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 10:02:29 UTC
From: meow2222@care2.com
Message-ID: <1134554549.758792.105750@g47g2000cwa.googlegroups.com>
Source record: 15498
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Michael A. Terrell wrote:
> meow2222@care2.com wrote:
> >
> > The one thing I avoided like the plague, and still do, is those plastic
> > drawer racks with often open top drawer boxes. You've only got to move
> > one once to see what I mean! One spill and you'll never ever buy one
> > again. Small parts containers must have burst proof latches, I wont use
> > any that dont.
>
>
> I moved over 1000 miles in 1987 and I had 24 50 drawer Akro-Mills
> cabinets full of parts. I cut pieces of cardboard to cover the front and
> placed two of them face to face, then taped them together. I didn't
> have even one part out of place when I arrived at my new place and set
> up my shop. The move was done with my shop's step van and I hauled over
> 17,000 pounds of tools, parts, manuals and test equipment in two trips.
> there is nothing wrong with parts cabinets, if you know how to pack
> them.

I suspect it all comes down to how you use them. Where I had mine,
there was no room to mount those cabs on the wall, so accidents were
inevitable... and could take forever to clear up. If yours are screwed
to the wall, no worry.

Space costs vary widely around the world, and here things are pretty
cramped. So much so I wouldnt really want to post a pic. Reading of
folk with 14' benches makes my brain boggle! Fanciest I ever had was
6', the worst was... well theres space on top of those boxes.

I imagine in Hong Kong it would be a case of, well, this one should fit
on the laps of your 4 roommates, who could sit their keyboard on top of
the screen so they can continue typing. Maybe one can rent desk space
there, wouldnt be surprised.

NT

5867. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 12:14:09 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1134562449.096696.326280@o13g2000cwo.googlegroups.com>
Source record: 15499
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

YOU CALL THIS A WORKBENCH!?!?!?
my Goodness, if the mess on mine is les than 5 inches deep I feel I
didn't do anything on that table! You know, I trained myself to
identify location of things by the sound they make when they fall on
something else when I throw it aside. If I were now to mop it up , I
wouldn't be able to find anything!
In any case I wish you good luck and I congratulate you for the
initiative.
Saandy 4Z5KS

5868. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 12:22:52 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1134562971.944325.34760@o13g2000cwo.googlegroups.com>
Source record: 15500
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

couldn't agree more!!!
an uncluttered desk is not a guarantee of an uncluttered mind. Or
something like it.
Saandy 4Z5KS

5869. Re: can a picture tube be used as an RF amplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 12:24:19 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1134563059.142246.286620@f14g2000cwb.googlegroups.com>
Source record: 15501

well, well!
never tought of it . thanks for the tip!!!
Saandy

5870. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 13:29:50 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <43A01E55.4C1DD7C3@shaw.ca>
Source record: 15503
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Saandy , 4Z5KS" wrote:
>
> YOU CALL THIS A WORKBENCH!?!?!?
> my Goodness, if the mess on mine is les than 5 inches deep I feel I
> didn't do anything on that table! You know, I trained myself to
> identify location of things by the sound they make when they fall on
> something else when I throw it aside. If I were now to mop it up , I
> wouldn't be able to find anything!
> In any case I wish you good luck and I congratulate you for the
> initiative.
> Saandy 4Z5KS

Reminds me of one guy who complained that he could never find the chuck
key for his drill, so begin buying them by the dozen -- that way, he said,
they normally last for a week or two! :-)

Irv VE6BP
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/index.html
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/index.htm
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/index.htm
---
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

5871. Help with Heath SB200

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 15:04:47 UTC
From: cas@w-sherwood.ih.lucent.com
Message-ID: <dnpcaf$r9s@netnews.net.lucent.com>
Source record: 15504
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have a Heath SB200 that has been modified a bit too much.
Someone replaced the stock fan with a muffin fan and they
cut a big hole for the fan in the RF chamber.

I want to replace the muffin fan with a fan resembling the
stock fan. Grainger sells motor and fan blades for appliances
that look close enough. I just need some data to choose the
right one. Most import is the fan blade size. Second would
be any specs for the motor. Stock motors range from 1/500Hp
to 1/20 HP. I suspect one of the smallers one based on physical
size.

Also the meter seems to stick in a couple spots. I don't
see anything obvious like a bent needle. Any hope of finding
a similar meter that I can move the faceplate? Any place that
can repair meters?

All help appreciated.
thanks
chuck

5872. Re: Help with Heath SB200

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 15:32:39 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1134574359.575250.129800@z14g2000cwz.googlegroups.com>
Source record: 15505
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

> Also the meter seems to stick in a couple spots.

Often, especially in the winter months, due to static electricity.

See if wiping it with water or an anti-static cloth helps.

Tim.

5873. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 16:40:41 UTC
From: Mike Andrews <mikea@mikea.ath.cx>
Message-ID: <dnphu8$9au$5@puck.litech.org>
Source record: 15506
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

In rec.radio.amateur.boatanchors Dale Parfitt <par@parelectronics.com> wrote:

> Here's a couple pix of my shop. For test equipment- stick with the knowns-
> HP/Agielnt, Tektronix etc.
> http://www.w4dex.com/gallery/Dale-Parfitt/Dale_Parfitt_W4OP
> http://www.w4dex.com/gallery/Dale-Parfitt/Dale_Parfitt_W4OP_3

In W4OP_2, what's the rightmost gadget? The one in the gray case,
with the meter(?), some gray knobs, and 2 toggle switches on the
front, and a black box on top of it? There's a printer behind it.

Looks like you've got good taste in CAD tablets, too.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

5874. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 16:44:23 UTC
From: John Hudak <jhudak@sei.cmu.edu>
Message-ID: <dnpi57$f6b$1@usenet02.sei.cmu.edu>
Source record: 15507
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

While I haven't built my bench yet, I've been planning it a Looooong time. I've assembled this list from having lived in my dads shop for 15 years and worked at various research labs for 20....

1. Desktop - I prefer a deep top, on the order of 40" or more. Reason being that when test equipment becomes attached to larger devices (i.e., TVs), space becomes a premium, and laying a schematic on a hot chassis is not a good idea ;).
2. I like the top shelf idea but would use it for test gear that doesn't need to be watched or interacted with a lot while in use. Scope and logic analyzer on the bottom, Frequency generators, PS, etc on the top. A verticle shelf of test gear along the side works good for me.

3. Lots of outlets/wire mold. Wiremold along the back with 1" x1" panduit wireway to keep the power cords routed.

4. Power cut off switches for parts of the bench.
5. power conditioning for all of the bench (CV transformer/harmonic neutralizer), Also GFI protected.
6. Work lights - magnifier, fluorescent and incandescent. Why incandescent? Floursecent are such great RF radiators and influence some of the gear I design/work on.
7. VTVM and DMM (I am old fashioned - Depending on what I am measuring, I like a meter that can withstand "hitting the wrong testpoint"
8. Test lead, jumper clips hanger - Use 1"x1" panduit with one side cut off for hanging test leads.
9. storage shelves. For components, I like 6-9" deep, for test gear, etc., I like 24" deep.
10. IC storage. I tend to keep lots of ICs around. I like to keep them in the plastic carrier strips, cut a hole in one end and hang them.
11. PC and inventory control. I know this sounds a bit overboard but...print out barcode and attach to every spare part before stored. Scan when used. Keeps an inventory in a DB of parts. You have no idea how many times it was my job in my dads store to look for a part that he 'knew' he had. Also, since I collect old computer 'stuff', It is nice to have an inventory list.
12. A separate section or separate bench for 'fabrication' that would contain drills, hammers, vise, etc.
13. One idea that I saw for a woodwork bench that I like is a number of verticle, slide out, pegboard pieces (about 2-3' high and 2' deep that sit under the bench. The are verticle, perhaps tilted back slightly, and can slide out. Organize tools, whatever. Keeps them from being piled in drawers and saves time hunting them.

14. Get service data in electronic format. Get a scanner and PC. I grew up with and still have tons of service manuals and data books. Using PDF versions of all this stuff saves time and space. If I could only get my 15 yo data books on DVDs I'd be soooo happy...
15. Antistaic mat on benchtop and also floor pad (or paint, depending on situation)
16. I have often found the need for a hefty heat gun (in lieu of a reflow furnace, and also to remove components in mass...lol)

17. A 'L' shaped bench works better for me than a long one. Also, ppl sometimes put pegboard on the back of benches to hang stuff..I don't like that because I don't like reaching across my work. Personal preference.

18. If you do serious work, I recommend mainstream test gear (HP, Tek, Fluke, etc.). You can trust what you measure. I know cost is an issue, which is why I'd get good used gear. For example, I'd get a good used Tek 465B, 475 or 485 over the newer DSOs. Most of the time, I don't need color, I don't need it connected to my network, etc. (But I do have one just in case...)

I've build this bench many times in my head and even started it in my basement, but never time to finish.
Good luck
John

Too_Many_Tools wrote:
> With the holiday season here it is time to redo the workshop and the
> workbench in particular.
>
> So, what suggestions do you have for setting up a good efficient
> workspace for electronics?
>
> Here's an example that I found....
>
> http://www.stevenjohnson.com/workbench.htm
>
> So what does your workspace, test bench and layout look like?
>
> Pictures and links would be great.
>
> What has worked for you?...what hasn't?
>
> Benches, racks, cabinets, tables, carts....
>
> Any particular test equipment that you would recommend for or against?
>
> Thanks
>
> TMT
>

5875. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 17:19:13 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.12.14.17.23.22.113185@example.net>
Source record: 15508
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Wed, 14 Dec 2005 13:29:50 +0000, Irv Finkleman wrote:

> "Saandy , 4Z5KS" wrote:
>>
>> YOU CALL THIS A WORKBENCH!?!?!?
>> my Goodness, if the mess on mine is les than 5 inches deep I feel I
>> didn't do anything on that table! You know, I trained myself to
>> identify location of things by the sound they make when they fall on
>> something else when I throw it aside. If I were now to mop it up , I
>> wouldn't be able to find anything!
>> In any case I wish you good luck and I congratulate you for the
>> initiative.
>> Saandy 4Z5KS
>
> Reminds me of one guy who complained that he could never find the chuck
> key for his drill, so begin buying them by the dozen -- that way, he said,
> they normally last for a week or two! :-)
>

You're supposed to ty-wrap it to the cord, out at the plug end, so that
you can't use it while the drill is plugged in. (Keeps your hands in
one piece.) :-)

Cheers!
Rich

5876. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 18:39:55 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <%FZnf.16500$OK6.7497@trnddc03>
Source record: 15509
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Mike Andrews" <mikea@mikea.ath.cx> wrote in message
news:dnphu8$9au$5@puck.litech.org...
> In rec.radio.amateur.boatanchors Dale Parfitt <par@parelectronics.com>
> wrote:
>
>> Here's a couple pix of my shop. For test equipment- stick with the
>> knowns-
>> HP/Agielnt, Tektronix etc.
>> http://www.w4dex.com/gallery/Dale-Parfitt/Dale_Parfitt_W4OP
>> http://www.w4dex.com/gallery/Dale-Parfitt/Dale_Parfitt_W4OP_3
>
> In W4OP_2, what's the rightmost gadget? The one in the gray case,
> with the meter(?), some gray knobs, and 2 toggle switches on the
> front, and a black box on top of it? There's a printer behind it.
>
> Looks like you've got good taste in CAD tablets, too.
>
> --
> Mike Andrews, W5EGO
> mikea@mikea.ath.cx
> Tired old sysadmin
Hi Mike,
That's a General Radio 1236 meter I use for measuring sun and moon noise on
my 1296MHz moonbounce station. It is a 30MHz IF amp with decibel meter. In
the extended mode, I can easily resolve 0.05dB changes. Sun noise
measurements are an excellent standard by which we judge system efficiency.
On 10GHz I can see about a dB of moon noise- which is also handy to keep the
dish trained on the moon.
That pix is pretty dated at this point- the 746 has been replaced by a
756PRO II and the SSB transverter has been replaced by a DEMI 1296-->28 MHz
transverter.
Dale W4OP

5877. Re: can a picture tube be used as an RF amplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 18:48:11 UTC
From: Korbin Dallas <korbindallas@null.org>
Message-ID: <pan.2005.12.14.18.48.09.719682@null.org>
Source record: 15510

On Wed, 14 Dec 2005 00:30:21 +0000, Dan Andersson wrote:

> eternalsquire@comcast.net wrote:
>
>> Hi,
>>
>> I get a lot of broken TV's for scrapping from time to time, and it
>> seems that just getting
>> rid of the tube in the trash is a shameful waste. But I do know that
>> these are about the
>> only remaining vaccum tubes still in manufacture in this country. I
>> understand that most
>> of the power is supposed to go through the electron gun of the tube,
>> but I wonder if the
>> electron gun could be reconfigured as a linear final? Bad idea?
>>
>> The Eternal Squire
>
>
> Don't bother with the CRT, look for the drivers instead. These was typically
> a penthode PL509 tube or the US equivalent. These makes very nice linear
> pa's and was often parallell connected. Four of them made a good 500Watts
> pa when fed with 1300Volts. The power supply for these pa's is normally
> made by doubling the mains power... very nasty but also very very cheapo!
>
> Cheers
>

Thats assuming that this is a Tube Chassis TV Set which are rare
collectors items these days.

Just junk the sets and start with some technology thats been used in the
last 25 years or so.

--
Korbin Dallas
The name was changed to protect the guilty.

5878. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 23:14:40 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <AH1of.31486$dO2.5885@newssvr29.news.prodigy.net>
Source record: 15511
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Michael A. Terrell wrote:
> COLIN LAMB wrote:
>
>>The last time my bench was clean was over a decade ago - after I learned I
>>had a very aggressive form of cancer. I reluctantly cleaned off the bench
>>to save my wife from having to do it.
>>
>>But, through the miracles of drugs, the cancer went away. Now, my desks are
>>all cluttered again. My wife fondly talks about how good life was when my
>>desk was clean and I had sold much of my junk. I think she is kidding, but
>>would not bet my life on it.
>>
>>When I clean an area, it is only temporary.
>>
>>At the constant prodding of my wife, I spend 3 months cleaning up the floor
>>of my darkroom. I found things that had been missing for years. But, I
>>could not clean up the desk, for it has all the little parts for which I do
>>not have a place for.
>>
>>In the end, messiness is really just the product of someone who has so much
>>order that he insists upon a place for each item before he puts it away.
>>
>>Colin K7FM
>
>
>
> A workbench is meant to be a living example of the moving hole
> theory. ;-)
>

A clean work bench like a clear desk is a sign of a sick mind. ;^)

Dave WD9BDZ

5879. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-14 23:26:10 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43A0AA0B.F1EB2614@earthlink.net>
Source record: 15512
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Rich Grise wrote:
>
> You're supposed to ty-wrap it to the cord, out at the plug end, so that
> you can't use it while the drill is plugged in. (Keeps your hands in
> one piece.) :-)

That doesn't work on my drill press. Its chained to the wiring cover
on the motor and only has a couple inches of slack to keep it out of the
way.

--
?

Michael A. Terrell
Central Florida

5880. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-15 01:52:06 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.12.15.01.56.12.384296@example.net>
Source record: 15513
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Wed, 14 Dec 2005 23:26:10 +0000, Michael A. Terrell wrote:

> Rich Grise wrote:
>>
>> You're supposed to ty-wrap it to the cord, out at the plug end, so that
>> you can't use it while the drill is plugged in. (Keeps your hands in
>> one piece.) :-)
>
> That doesn't work on my drill press. Its chained to the wiring cover
> on the motor and only has a couple inches of slack to keep it out of the
> way.

Hmm, then maybe you need a little bungee for it. :-)

Hey! I just had an invention! The chuck key plugs into a dead-man switch
socket! It's right there on the drill press, and you pull it out, it kills
the power, you use it, and you have to poke the chuck key back into its
socket or the drill press won't turn on! ;-)

Nah, they'd defeat it with a nail or something.

Good Luck!
Rich

5881. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-15 02:33:45 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <QuudncFLktqjSD3enZ2dnUVZ_sOdnZ2d@adelphia.com>
Source record: 15514
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Rich Grise wrote:
> On Wed, 14 Dec 2005 23:26:10 +0000, Michael A. Terrell wrote:
>
>
>>Rich Grise wrote:
>>
>>>You're supposed to ty-wrap it to the cord, out at the plug end, so that
>>>you can't use it while the drill is plugged in. (Keeps your hands in
>>>one piece.) :-)
>>
>> That doesn't work on my drill press. Its chained to the wiring cover
>>on the motor and only has a couple inches of slack to keep it out of the
>>way.
>
>
> Hmm, then maybe you need a little bungee for it. :-)
>
> Hey! I just had an invention! The chuck key plugs into a dead-man switch
> socket! It's right there on the drill press, and you pull it out, it kills
> the power, you use it, and you have to poke the chuck key back into its
> socket or the drill press won't turn on! ;-)
>
> Nah, they'd defeat it with a nail or something.
>

If you combine that with a self sealed relay as the run contact
(momentary N.O. pushbutton to start, momentary N.C. pushbutton or
pulled key to stop) I think it would be just great. I just wouldn't
want the motor to start at the moment I plugged the key in the hole.
I might just add that to my press.

5882. To build or not to build

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-15 02:36:20 UTC
From: yzordderrex@verizon.net
Message-ID: <1134614180.793472.212750@g44g2000cwa.googlegroups.com>
Source record: 15515

If everything works out this weekend I should have about 10w or so to drive into a linear. My friend here in town thinks I should buy used Dentron Clipperton or Heathkit. I don't think 10watts would do either justice. If 10w would give me a KW out with a commercial unit I would consider buying a good used unit.

Plan bravo is to build. I would have to do tubes in keeping with the theme of that side of the shack. CW, AM, & SSB are all modes that I would operate. I only need to operate 160m - 40m. I am experienced transistor engineer and my early schooling was in tubes , so not beyond my reach for this type of a project. I have plenty of other homebrew projects to keep me busy if this one gets scratched.

I need help picking a topology and a tube set. Price and likelyhood of getting the thing working are two top runners. From the 1965 ARRL Handbook I see a few different tubes that might qualify. A Pair of 813 in parallel, 3-400Z, 3-1000Z. I am soliciting some opinions on the topology. Again, all I got is about 10w am going into. I would like to do a kw or so pep. I am not looking to buy any parts at this time, so not looking for any 'sales calls'. I need comments like - look at this tube with this plate voltage kinda thing. Or try driving this toob with a such and such to get a kw out. I would like to keep the design required to a minimum and would consider some 'reverse engineering' a plus at this point. If I can get most of the design out of an old ARRL handbook then that would please me.

73
Bob
N9NEO

5883. Re: Is magnetic field affected by metal conductor?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-15 02:38:35 UTC
From: yzordderrex@verizon.net
Message-ID: <1134614315.438304.204530@g14g2000cwa.googlegroups.com>
Source record: 15516
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.misc

Heheh.

Good answer Doug!

5884. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-15 02:56:16 UTC
From: Ron in Radio Heaven <kc4yoy@spam.carolina.rr.com>
Message-ID: <kX4of.241$C55.178@tornado.southeast.rr.com>
Source record: 15517
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

John Popelish wrote:
> Rich Grise wrote:

>> Hey! I just had an invention! The chuck key plugs into a dead-man switch
>> socket!

Not new, I installed one of those on the drill press where I used to
work, more than 20 years ago. Guys kept leaving the key stuck in the
chuck and then turning to motor on... Not good.

Ron

5885. Re: To build or not to build

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-15 04:42:33 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <iKCdnfM67d_laT3eRVny1A@pipex.net>
Source record: 15518

> If everything works out this weekend I should have about 10w or so to
> drive into a linear. My friend here in town thinks I should buy used
> Dentron Clipperton or Heathkit. I don't think 10watts would do either
> justice. If 10w would give me a KW out with a commercial unit I would
> consider buying a good used unit.
==========
That's a 20dB amplification ...a bit much for a single stage amp.
You need a 10 dB intermediate stage ,resulting in 100 W output.
The final 10 dB to 1 kW can then be achieved with a (standard) Poweramp.

Frank KN6WH / GM0CSZ

5886. Re: To build or not to build

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-15 05:30:11 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <17adneWU_5zKYj3eRVn-pA@web-ster.com>
Source record: 15519

Highland Ham wrote:

>> If everything works out this weekend I should have about 10w or so to
>> drive into a linear. My friend here in town thinks I should buy used
>> Dentron Clipperton or Heathkit. I don't think 10watts would do either
>> justice. If 10w would give me a KW out with a commercial unit I would
>> consider buying a good used unit.
>
> =================
> That's a 20dB amplification ...a bit much for a single stage amp.
> You need a 10 dB intermediate stage ,resulting in 100 W output.
> The final 10 dB to 1 kW can then be achieved with a (standard) Poweramp.
>
> Frank KN6WH / GM0CSZ

The usual 6146 final stage doesn't take in more than a couple of watts
for 100 watts out.

I don't play with heavy iron, but AFAIK most linear amps are limited to
10dB of amplification because most hams have 100W output rigs and the
FCC kinda frowns on non-home-built amps that can do more than that
(something about CB'ers).

I've seen tetrode amplifier designs that look like they could easily do
this. You'd have to actually _pay attention_ to isolating the input
from the output, and you'd have to do all the care-and-feeding stuff
that screen grids require, but it should be possible to do it in one stage.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

5887. Re: To build or not to build

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-15 06:39:00 UTC
From: matt vk3zmw <nospam@nospam.ever>
Message-ID: <8c8of.2805$V7.414@news-server.bigpond.net.au>
Source record: 15520

yzordderrex@verizon.net wrote:
> If everything works out this weekend I should have about 10w or so to
> drive into a linear. My friend here in town thinks I should buy used
> Dentron Clipperton or Heathkit. I don't think 10watts would do either
> justice. If 10w would give me a KW out with a commercial unit I would
> consider buying a good used unit.
>
> Plan bravo is to build. I would have to do tubes in keeping with the
> theme of that side of the shack. CW, AM, & SSB are all modes that I
> would operate. I only need to operate 160m - 40m. I am experienced
> transistor engineer and my early schooling was in tubes , so not beyond
> my reach for this type of a project. I have plenty of other homebrew
> projects to keep me busy if this one gets scratched.
>
> I need help picking a topology and a tube set. Price and likelyhood of
> getting the thing working are two top runners. From the 1965 ARRL
> Handbook I see a few different tubes that might qualify. A Pair of 813
> in parallel, 3-400Z, 3-1000Z. I am soliciting some opinions on the
> topology. Again, all I got is about 10w am going into. I would like
> to do a kw or so pep. I am not looking to buy any parts at this time,
> so not looking for any 'sales calls'. I need comments like - look at
> this tube with this plate voltage kinda thing. Or try driving this toob
> with a such and such to get a kw out. I would like to keep the design
> required to a minimum and would consider some 'reverse engineering' a
> plus at this point. If I can get most of the design out of an old ARRL
> handbook then that would please me.
>
> 73
> Bob
> N9NEO
>

4CX1000.

Parts *relativly* easy to obtain.
Mechanically strong.
Complete plans in ARRL handbook.
KW+ all day on less than 10W drive.
Wants a bit under 1Amp at 2.5 - 3kV
If possible, get the 'K' model rather than the 'A'. Not so much for the
frequency response as for the more robust screen. If your budget doesn't
stretch to the genuine Eimac, try a copy such as Svetlana's 4CX1600.

5888. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-15 13:26:57 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <43A16F2A.61966951@shaw.ca>
Source record: 15521
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Rich Grise wrote:
>
> On Wed, 14 Dec 2005 13:29:50 +0000, Irv Finkleman wrote:
>
> > "Saandy , 4Z5KS" wrote:
> >>
> >> YOU CALL THIS A WORKBENCH!?!?!?
> >> my Goodness, if the mess on mine is les than 5 inches deep I feel I
> >> didn't do anything on that table! You know, I trained myself to
> >> identify location of things by the sound they make when they fall on
> >> something else when I throw it aside. If I were now to mop it up , I
> >> wouldn't be able to find anything!
> >> In any case I wish you good luck and I congratulate you for the
> >> initiative.
> >> Saandy 4Z5KS
> >>
> > Reminds me of one guy who complained that he could never find the chuck
> > key for his drill, so begin buying them by the dozen -- that way, he said,
> > they normally last for a week or two! :-)
> >
>
> You're supposed to ty-wrap it to the cord, out at the plug end, so that
> you can't use it while the drill is plugged in. (Keeps your hands in
> one piece.) :-)
>
> Cheers!
> Rich

Mine is tied to the cord at the plug end. My reply was only to reflect
a little humor on the subject!

Irv VE6BP
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/index.html
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/index.htm
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/index.htm
---

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

5889. Re: Help with Heath SB200

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-15 13:59:48 UTC
From: Paul P <p.pinyotREMOVE@REMOVEworldnet.attREMOVE.netREMOVE>
Message-ID: <oFeof.157632$qk4.32128@bgtnsc05-news.ops.worldnet.att.net>
Source record: 15522
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Lick your finder and draw an X of "saliva" on the face. Works great!

PP

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
news:1134574359.575250.129800@z14g2000cwz.googlegroups.com...
>> Also the meter seems to stick in a couple spots.
>
> Often, especially in the winter months, due to static electricity.
>
> See if wiping it with water or an anti-static cloth helps.
>
> Tim.
>

5890. Re: To build or not to build

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-15 15:38:56 UTC
From: cas@w-sherwood.ih.lucent.com
Message-ID: <dns2mg$acu@netnews.net.lucent.com>
Source record: 15523

Frankly I don't think 10W will drive any linear to 1kW.
You will get the most gain from a Tetrode but I still
don't think it will go 20db. I suggest you search for
richard measures web page and read some of his articles
about the merits of GG vs grid driven amplifiers.

I think you will need an intermediate stage to get
enough drive. Then you might as well pick up an old
Heath SB200 or SB220 for the final stage.
The SB200 will give you 500-600 watts out with a
pair of 572s and you can buy them for 300 bucks.
Plus the tubes are not too expensive if you need new ones.

chuck

5891. Re: Help with Heath SB200

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-15 16:53:35 UTC
From: nobody <rhughes4-removeme@swbell.net>
Message-ID: <jchof.37940$tV6.23536@newssvr27.news.prodigy.net>
Source record: 15524
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi Chuck.

I have a SB-200, but I don't have the time to take it apart and
measure the size of the fan right now. Maybe this weekend.

In the meantime, you might load and/or ask here:
http://www.harbachelectronics.com/

He sells replace parts for SB-200, SB-220 and others.

Ronnie, N5CSE

"Chuck Sherwood" <cas@w-sherwood.ih.lucent.com> wrote in message
news:dnpcaf$1r9s@netnews.net.lucent.com...
>I have a Heath SB200 that has been modified a bit too much.
> Someone replaced the stock fan with a muffin fan and they
> cut a big hole for the fan in the RF chamber.
>
> I want to replace the muffin fan with a fan resembling the
> stock fan. Grainger sells motor and fan blades for appliances
> that look close enough. I just need some data to choose the
> right one. Most import is the fan blade size. Second would
> be any specs for the motor. Stock motors range from 1/500Hp
> to 1/20 HP. I suspect one of the smallers one based on physical
> size.
>
> Also the meter seems to stick in a couple spots. I don't
> see anything obvious like a bent needle. Any hope of finding
> a similar meter that I can move the faceplate? Any place that
> can repair meters?
>
> All help appreciated.
> thanks
> chuck

5892. Re: To build or not to build

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-15 19:20:51 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <hof3q1df3mdokru7asogn38be2a82d9dqu@4ax.com>
Source record: 15526

On Thu, 15 Dec 2005 04:42:33 +0000, Highland Ham
<abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:

>That's a 20dB amplification ...a bit much for a single stage amp.

~~~~~~

That's true in grounded grid mode, but quite doable for grid driven.
According to the Amperex data sheet, a pair of 3-1000Zs in class B
grid driven mode will give 3560 watts out for 28 watts of drive. For a
single tube, that scales down to 127 watts out per watt in. 10 watts
in will give 1270 watts out, a power gain of 21 dB.

That's the only tube I've looked at so there may be others that will
give a full 1500 out for 10 in. On the other hand, 1270 is close
enough to 1500 that you'll probably never notice the difference.

You will have to neutralize it of course, lest you end up with a high
power VFO. :-)

73, Bill W6WRT
~~~~~~

5893. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-15 19:23:14 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.12.15.19.27.21.337730@example.net>
Source record: 15525
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Wed, 14 Dec 2005 21:33:45 -0500, John Popelish wrote:

> Rich Grise wrote:
>> On Wed, 14 Dec 2005 23:26:10 +0000, Michael A. Terrell wrote:
>>
>>
>>>Rich Grise wrote:
>>>
>>>>You're supposed to ty-wrap it to the cord, out at the plug end, so that
>>>>you can't use it while the drill is plugged in. (Keeps your hands in
>>>>one piece.) :-)
>>>
>>> That doesn't work on my drill press. Its chained to the wiring cover
>>>on the motor and only has a couple inches of slack to keep it out of the
>>>way.
>>
>>
>> Hmm, then maybe you need a little bungee for it. :-)
>>
>> Hey! I just had an invention! The chuck key plugs into a dead-man switch
>> socket! It's right there on the drill press, and you pull it out, it kills
>> the power, you use it, and you have to poke the chuck key back into its
>> socket or the drill press won't turn on! ;-)
>>
>> Nah, they'd defeat it with a nail or something.
>>
>
> If you combine that with a self sealed relay as the run contact
> (momentary N.O. pushbutton to start, momentary N.C. pushbutton or
> pulled key to stop) I think it would be just great. I just wouldn't
> want the motor to start at the moment I plugged the key in the hole.
> I might just add that to my press.

Not much industry experience, huh? ;-) I only mention it because almost
every major industrial-grade tool I've seen has "ON" and "OFF" buttons,
and a latching contactor. If power goes down, or the "OFF" button is
pressed, or the "EMERGENCY STOP" button is pressed, the machine turns
off, and doesn't restart when you reset the breaker - you have to
overtly press the green "ON" (or sometimes "START") button. This gives
you a chance to clear the scrap out of the machine before you reset
and restart whatever process got stopped in the middle.

Probably cost-prohibitive for a consumer-level garage or basement drill press.

Then again, people pay for explosives inside their car in the name of "safety"; why not add fifteen or twenty bucks to the cost of a power tool if you can tout it as a "safety" feature? ;-P

Thanks!
Rich

5894. Re: To build or not to build

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-15 19:46:33 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <3ivV1UEZgcoDFADL@ifwtech.co.uk>
Source record: 15528

Chuck Sherwood wrote:
>Frankly I don't think 10W will drive any linear to 1kW.
>You will get the most gain from a Tetrode but I still
>don't think it will go 20db.

Most modern tetrodes will easily provide 20dB of gain, and with good stability.

The favored technique is to use an untuned grid circuit which is resistively loaded (often called 'passive grid').

In class AB1, grid-driven, a tetrode requires very little RF input power (in simple theory, none at all). All the grid requires is a voltage swing. For good linearity, the tube should never be driven into grid current - in other words, even at peak RF input voltage the grid should never become positive. That means the peak RF voltage should only be equal to the grid's negative DC bias. These basic requirements are totally independent of the output power capability of the tube.

For tube data, see:
http://www.g8wrb.org/tetrodes.shtml

The driver stage will need to see a 50 ohm load impedance, so the most common input circuit in commercial tetrode amplifiers is simply a 50 ohm resistor. However, 10W into 50 ohms is only 31V peak, and a typical value of grid bias is probably about -50V (depending on the specific type of tube and its recommended DC bias conditions). It is quite true that 10W could not drive such an amp to full output.

But you're not forced to use a 50 ohm input resistor. Think about using a broadband step-up transformer to get a larger voltage swing.

For example, a unun transformer with a 4:1 impedance step-up, terminated in a 200 ohm resistor. This will provide a 50 ohm load to the driver stage, and 10W will deliver about 62V peak to the grid of the tube. So any tube that will operate in class AB1 with a grid bias of 62V or less can be driven to full output by 10W.

10W into an input circuit consisting of a 9:1 unun terminated in 450 ohms will deliver about 93V peak. This is more than enough to drive any modern ceramic tetrode to full output, so the driver stage can actually be operated at significantly less than its 10W maximum, for improved intermodulation distortion.

It should be quite easy to find or develop a suitable broadband transformer design, especially since the original poster only wanted to operate 160-40m.

--
73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

5895. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-15 19:48:11 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <11q3i3qrhb08g2d@corp.supernews.com>
Source record: 15527
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Rich Grise" <richgrise@example.net> wrote in message
news:pan.2005.12.15.19.27.21.337730@example.net...
> Then again, people pay for explosives inside their car in the name of
> "safety"; why not add fifteen or twenty bucks to the cost of a power
> tool if you can tout it as a "safety" feature? ;-P

Because people are convinced that air bags are there to protect them when
OTHERS crash into them, whereas few people are willing to pay for extra
protective measures to protect them from THEMSELVES! :-)

5896. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-15 20:07:07 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43A1CCE3.FCBFCB30@earthlink.net>
Source record: 15529
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Rich Grise wrote:
>
> On Wed, 14 Dec 2005 23:26:10 +0000, Michael A. Terrell wrote:
>
> > Rich Grise wrote:
> >>
> >> You're supposed to ty-wrap it to the cord, out at the plug end, so that
> >> you can't use it while the drill is plugged in. (Keeps your hands in
> >> one piece.) :-)
> >
> > That doesn't work on my drill press. Its chained to the wiring cover
> > on the motor and only has a couple inches of slack to keep it out of the
> > way.
>
> Hmm, then maybe you need a little bungee for it. :-)

I prefer the small chain. If someone turns the drill press on with it
in the chuck there is a weak link that will snap and not whip the chain
all over the place.

> Hey! I just had an invention! The chuck key plugs into a dead-man switch
> socket! It's right there on the drill press, and you pull it out, it kills
> the power, you use it, and you have to poke the chuck key back into its
> socket or the drill press won't turn on! ;-)
>
> Nah, they'd defeat it with a nail or something.
>
> Good Luck!
> Rich

I've got a scrap bench top drill press that was built with a switch
lick that. Its the second one my dad has killed in the last seven
years. You couldn't flip the power switch on the first one, till the
chuck key was wedged into the hole.
--
?

Michael A. Terrell
Central Florida

5897. Re: To build or not to build

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-15 20:41:56 UTC
From: cas@w-sherwood.ih.lucent.com
Message-ID: <dnskek$dvq@netnews.net.lucent.com>
Source record: 15530

In article <3ivV1UEZgcoDFADL@ifwtech.co.uk>,
Ian White GM3SEK <gm3sek@ifwtech.co.uk> wrote:
>73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
>http://www.ifwtech.co.uk/g3sek

Damn you guys are good. I need to hang out here more often!
chuck

5898. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-15 20:50:08 UTC
From: Zak <jute@zak.invalid>
Message-ID: <43a1d681$0$10823$6c4159fb@news.tweaknews.nl>
Source record: 15531
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Rich Grise wrote:

> Not much industry experience, huh? ;-) I only mention it because almost
> every major industrial-grade tool I've seen has "ON" and "OFF" buttons,
> and a latching contactor. If power goes down, or the "OFF" button is
> pressed, or the "EMERGENCY STOP" button is pressed, the machine turns
> off, and doesn't restart when you reset the breaker - you have to
> overtly press the green "ON" (or sometimes "START") button. This gives
> you a chance to clear the scrap out of the machine before you reset
> and restart whatever process got stopped in the middle.
>
> Probably cost-prohibitive for a consumer-level garage or basement
> drill press.

Well, the one I got at the supermarket for some 40 euros has one.

They're actually simple devices: a switch where the latch is a tiny
coil. Not expensive at all, if made in sufficient volume.

Thomas

5899. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-15 21:11:21 UTC
From: Al <no.spam@wanted.com>
Message-ID: <no.spam-80A09F.16111915122005@news.verizon.net>
Source record: 15532
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

In article <11q3i3qrhb08g2d@corp.supernews.com>,
"Joel Kolstad" <JKolstad71HatesSpam@Yahoo.Com> wrote:

> "Rich Grise" <richgrise@example.net> wrote in message
> news:pan.2005.12.15.19.27.21.337730@example.net...
> > Then again, people pay for explosives inside their car in the name of
> > "safety"; why not add fifteen or twenty bucks to the cost of a power
> > tool if you can tout it as a "safety" feature? ;-P
>
> Because people are convinced that air bags are there to protect them when
> OTHERS crash into them, whereas few people are willing to pay for extra
> protective measures to protect them from THEMSELVES! :-)
>
>

A little off topic, but air bags don't protect anything. People have air
bags and now think they can drive more aggressively as they are
"protected." Four-wheel drive also makes people drive in conditions they
normally would not; but four-wheel stop is the same for both.

Al

5900. FA:JENNINGS FIXED GLASS CAPS 20KV

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-15 22:29:47 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <v7mof.159122$qk4.53023@bgtnsc05-news.ops.worldnet.att.net>
Source record: 15533
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Jennings fixed vac caps (glass) rated at 20kv, 100PF and 140PF + a few more items too; see at

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

tnx Merry Christmas, Happy New Year, Happy Hanukkak, 73 heytubeguy

5901. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 02:04:25 UTC
From: hayseed <hayseed@bogus.net>
Message-ID: <43A220A9.1080406@bogus.net>
Source record: 15534
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Henry Kiefer wrote:
> (Snippage)

> Building a 32KHz oscillator with a clock crystal and having sinus output is
> really simple with CMOS buffers.
Like snot???

(more snippage)
Sorry. I couldn't resist it.

Merry Christmas to all!!!

-Bob

5902. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 03:32:05 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <nP6dndMixKr7qT_eRVn-rA@adelphia.com>
Source record: 15535
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Rich Grise wrote:
> On Wed, 14 Dec 2005 21:33:45 -0500, John Popelish wrote:
>
>
>>Rich Grise wrote:
>>
>>>On Wed, 14 Dec 2005 23:26:10 +0000, Michael A. Terrell wrote:
>>>
>>>
>>>
>>>>Rich Grise wrote:
>>>>
>>>>
>>>>>You're supposed to ty-wrap it to the cord, out at the plug end, so that
>>>>>you can't use it while the drill is plugged in. (Keeps your hands in
>>>>>one piece.) :-)
>>>>
>>>> That doesn't work on my drill press. Its chained to the wiring cover
>>>>on the motor and only has a couple inches of slack to keep it out of the
>>>>way.
>>>
>>>
>>>Hmm, then maybe you need a little bungee for it. :-)
>>>
>>>Hey! I just had an invention! The chuck key plugs into a dead-man switch
>>>socket! It's right there on the drill press, and you pull it out, it kills
>>>the power, you use it, and you have to poke the chuck key back into its
>>>socket or the drill press won't turn on! ;-)
>>>
>>>Nah, they'd defeat it with a nail or something.
>>>
>>
>>If you combine that with a self sealed relay as the run contact
>>(momentary N.O. pushbutton to start, momentary N.C. pushbutton or
>>pulled key to stop) I think it would be just great. I just wouldn't
>>want the motor to start at the moment I plugged the key in the hole.
>>I might just add that to my press.
>
>
> Not much industry experience, huh? ;-)

Lots. I just described it for those who do have not seen this common
control circuit. And, sadly, most home power tools have no such

control circuit.

> I only mention it because almost
> every major industrial-grade tool I've seen has "ON" and "OFF" buttons,
> and a latching contactor. If power goes down, or the "OFF" button is
> pressed, or the "EMERGENCY STOP" button is pressed, the machine turns
> off, and doesn't restart when you reset the breaker - you have to
> overtly press the green "ON" (or sometimes "START") button. This gives
> you a chance to clear the scrap out of the machine before you reset
> and restart whatever process got stopped in the middle.
>
> Probably cost-prohibitive for a consumer-level garage or basement
> drill press.
>
> Then again, people pay for explosives inside their car in the name of
> "safety"; why not add fifteen or twenty bucks to the cost of a power
> tool if you can tout it as a "safety" feature? ;-P

It wouldn't have added $5 to the production cost of my made in Taiwan
drill press.

5903. Re: MESA Quartz Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 03:39:44 UTC
From: novatech@eskimo.com
Message-ID: <dntcu0mos1@eskinews.eskimo.com>
Source record: 15536

"Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> writes:

>Do you know what load they are cut for? That osc is for overtone operation
>and those usually run the crystal in series mode.

If he doesn't care about absolute accuracy, series or parallel mode is not
a concern. The LC tank will reduce phase noise, but shouldn't have a Q of
more than about 10-20. If you tune the tank for max amplitude, you are sure
to be at the right operating point for the xtal.

Steve
(part of AN419)

--
Steven D. Swift, novatech@eskimo.com, http://www.novatech-instr.com
NOVATECH INSTRUMENTS, INC. P.O. Box 55997
206.301.8986, fax 206.363.4367 Seattle, Washington 98155 USA

5904. Re: To build or not to build

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 04:20:15 UTC
From: yzordderrex@verizon.net
Message-ID: <1134706815.339539.278960@g44g2000cwa.googlegroups.com>
Source record: 15537

Ok, lots to think about here. I figured 20db would be a lot to ask out of production unit. Tim's made a couple good points. A Tetrode may be a good way to go, but I wonder if a 4146 driving into something else might be a bit cheeper. Maybe a pair of 813s? As I said the 1965 ARRL handbook claims a kw out with a pair of 813s,but I have my doubts. They are cheep enough - $55 ea at tubesandmore.com The Taylor 572B can be had for about 200 bucks for 4 of em. Would this be a viable option?

I wonder if the 4CX1000 or 3-1000Z solutions can be done for a good cost relative to other implementations. Also, are they easy to get working? I'm afraid I might end up chasing parasitic ghosts. I am aware that layout can be critical and would look to clone somebody elses design that's up and running if that's the way I go.

Thanks for the comments. I thought it was narrowed down to a large tetrode with a lot of gain or two stages with 4146 maybe driving 813s or the 572Bs that get run in a lot of commercial rigs. Then I realized I would have to buy a plate transformer and a chassis and a box and a whole bunch of other stuff. Right about now some kinda intermediate predriver to get between the 10w out and the 100w in that I need might not be a bad deal. Then again I really need to buy from somebody I trust cause I hear a lot of people whining about used linears they bought. So nothing is decided.

5905. Re: To build or not to build

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 05:09:40 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <qah4q1916mjtiml934va9ld26iu6t0iqrk@4ax.com>
Source record: 15538

On 15 Dec 2005 20:20:15 -0800, yzordderrex@verizon.net wrote:

>A Tetrode
>may be a good way to go, but I wonder if a 4146 driving into something
>else might be a bit cheeper. Maybe a pair of 813s? As I said the 1965
>ARRL handbook claims a kw out with a pair of 813s,but I have my doubts.
> They are cheep enough - $55 ea at tubesandmore.com The Taylor 572B
>can be had for about 200 bucks for 4 of em. Would this be a viable
>option?

~~~~~~

(I assume you meant 6146 in the above)

Remember, adding a driver stage complicates the design because you
will have to add bandswitching to the driver too, unless you can
figure out a way to broadband a tube amp, something not easily done.
If you grid-drive the 6146 you will have to add neutralizing as well.

A pair of 813s have only 250 watts plate dissipation. Getting 1kw out
of them is pushing it and their life will be short. For just a bit
more you can get a single 3-500Z and have twice the plate dissipation.
This is still not the best way to go, IMO. If you are really stuck at
the ten watt drive level, the class AB1 tetrode passive grid solution
would be the best approach.

Big, strong amplifiers are not cheap. Don't scrimp or you'll be sorry.
Are you aware a 1500 watt rated bandswitch will cost about as much as
a PAIR of 3-500Zs? And that's only the beginning. Plate transformer,
power diodes, filter capacitors, tune and load capacitors, chassis and
cabinet, blower, on and on.

Homebrewing a high power amp is a prestigious accomplishment, but in
terms of overall cost, buying commercial is cheaper in the long run.
The money you spend on a homebrew amp will likely never be recovered.
A commercial amp can retain a large percentage of it's price when the
time comes to sell. In fact, if you buy a quality used one you might
well be able to use it for years and sell it for more than you paid.
Something to keep in mind.

My wallet hurts just thinking about it. :-)

73, Bill W6WRT
~~~~~~

5906. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 12:35:51 UTC
From: Theo <theodore.twyler@ntlworld.com>
Message-ID: <Hwyof.68$68.32@newsfe3-win.ntli.net>
Source record: 15539
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1126951418.730335.258350@g14g2000cwa.googlegroups.com...
ISBN 0-7506-9946-9
(snip)
I only wish that I had cum across it before ???

5907. Re: Help with Heath SB200

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 13:51:54 UTC
From: "Gary P. Fiber" <gfiber@comcast.net>
Message-ID: <lgh5q1dumli2sv7iqc4umthrfn1j344cpv@4ax.com>
Source record: 15540

On 14 Dec 2005 15:04:47 GMT, cas@w-sherwood.ih.lucent.com (Chuck Sherwood) wrote:

>I have a Heath SB200 that has been modified a bit too much.
>Someone replaced the stock fan with a muffin fan and they
>cut a big hole for the fan in the RF chamber.
>
>I want to replace the muffin fan with a fan resembling the
>stock fan. Grainger sells motor and fan blades for appliances
>that look close enough. I just need some data to choose the
>right one. Most import is the fan blade size. Second would
>be any specs for the motor. Stock motors range from 1/500Hp
>to 1/20 HP. I suspect one of the smallers one based on physical
>size.
>
>Also the meter seems to stick in a couple spots. I don't
>see anything obvious like a bent needle. Any hope of finding
>a similar meter that I can move the faceplate? Any place that
>can repair meters?
>
>All help appreciated.
>thanks
>chuck

For plastic meter faces get a soft cloth and some liquid dishwashing detergent. Use the detergent straight, no water and wipe the meter and then buff so none remains. This has worked for years on the heath VTVM when static builds up.

Gary

5908. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 16:43:12 UTC
From: Alan Holmes <alan.holmes@virgin.net>
Message-ID: <A8Cof.833$r4.518@newsfe1-gui.ntli.net>
Source record: 15541
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

"Walt Davidson" <g3nyy@despammed.com> wrote in message
news:bbh5q19jnm4gs6blebhahhnn6cgkfgh831@4ax.com...
> On Fri, 16 Dec 2005 12:35:51 GMT, "Theo"
> <theodore.twyler@ntlworld.com> wrote:
>
>>"Polymath" <aiyr.r.bean@lycos.co.uk> wrote in message
>>news:1126951418.730335.258350@g14g2000cwa.googlegroups.com...
>>ISBN 0-7506-9946-9
>>(snip)
>
>>I only wish that I had cum across it before ???
>
> I suspect you are thinking of a completely different type of book!
>
> 73 de Wlat

When did you change your name Walt?

Alan

>
> --
> Walt Davidson Email: g3nyy @despammed.com

5909. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 16:56:38 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1134752197.948498.92070@g47g2000cwa.googlegroups.com>
Source record: 15542
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

The foul-mouthed CBer reveals himself every time that he
opens his mouth.....

Theo wrote:
> (snip)
> I only wish that I had cum across it before ???

5910. Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 17:02:58 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1134752578.139108.150450@g49g2000cwa.googlegroups.com>
Source record: 15543
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

A number of potential recruits are in great danger of being misled into thinking that they are Radio Hams when, in fact, they are nothing of the kind! As it is the season of goodwill, let us show our goodwill by saving these poor deluded fools from the mischievous ne-er-do-wells who will attempt to mislead them. (Radio Hams are technically-motivated people and not merely turnip-brained button pushers like CBers and like M3/CBers)

What is Ham Radio?

Ham Radio is a technical pursuit for those who are interested in the science of radio wave propagation and who are also interested in the way that their radios function. It has a long-standing tradition of providing a source of engineers who are born naturals.

Ham Radio awakens in its aficionados a whole-life fascination with all things technical and gives an all-abiding curiosity to improve one's scientific knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience with ones fellow man, and shows itself in the gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that they can construct and operate their own equipment! No-one else has this privilege. Users, such as broadcasters, the po lice and armed farces, CBers and mobile phone users have to purchase ready-made gear. Manufacturers are not licensed to operate their gear. Radio Hams are qualified to design, build and then operate their own pieces of equipment. They do this with gusto, and also repair and modify their own equipment. This is a privilege well worth the effort to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with relatively simple technologies at first, perhaps making his own Wimshurst machine and primary cells. Small pieces of test equipment follow, possibly multimeters and signal generators. Then comes receivers and transmitters. It is with the latter that communication with like-minded technically

motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of

a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B
licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

Happy Solstice, and let's keep the religious crap out of Crapmas!

5911. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 17:18:38 UTC
From: Allan McDonald <amsc23803@blueyonder.co.uk>
Message-ID: <OFCof.56$Og1.43@fe2.news.blueyonder.co.uk>
Source record: 15544
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Pierian Spring you talk to much.

"Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1134752578.139108.150450@g49g2000cwa.googlegroups.com...
> A number of potential recruits are in great danger of being
> misled into thinking that they are Radio Hams when, in fact,
> they are nothing of the kind! As it is the season of goodwill,
> let us show our goodwill by saving these poor deluded fools
> from the mischievous ne-er-do-wells who will attempt to
> mislead them. (Radio Hams are technically-motivated people
> and not merely turnip-brained button pushers like CBers and
> like M3/CBers)
>
> What is Ham Radio?
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.
>
> Ham Radio awakens in its aficionados a whole-life
> fascination with all things technical and gives
> an all-abiding curiosity to improve one's scientific
> knowledge. It's a great swimming pool, please dive in!
>
> This excitement causes a wish to share the experience
> with ones fellow man, and shows itself in the
> gentlemanly traditions of Ham Radio.
>
> Radio Hams are in a unique privileged position in that
> they can construct and operate their own equipment! No-one
> else has this privilege. Users, such as broadcasters,
> the po lice and armed farces, CBers and mobile phone
> users have to purchase ready-made gear. Manufacturers
> are not licensed to operate their gear. Radio Hams
> are qualified to design, build and then
> operate their own pieces of equipment. They do this
> with gusto, and also repair and modify their own
> equipment. This is a privilege well worth the effort
> to gain, and one to be jealously guarded.

>
> The excitement that drives a Radio Ham starts with
> relatively simple technologies at first, perhaps making
> his own Wimshurst machine and primary cells. Small pieces
> of test equipment follow, possibly multimeters and signal
> generators. Then comes receivers and transmitters. It is with
> the latter that communication with like-minded technically
> motivated people takes off. The scope for technical
> development grows with the years
> and now encompasses DSP and DDS. There is also a great deal
> of excitement in the areas of computer programming to
> be learnt and applied.
>
> The technical excitement motivates Radio Hams to compete
> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.
>
> -----OOOOO----
>
> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large
> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
> repaired; they are not interested in technical discussion
> and sneer at those who are; they have no idea how
> their radios work inside and have no wish to find out;
> they are free with rather silly personal insults;
> they have not satisfied any technical qualification
> and their licences prevent the use of
> self-designed-and-built equipment.
>
> These CB types engage in the competitive activities
> with their Cheque-Book-purchased off-the-shelf radios
> in a forlorn effort to prove that they are Radio Hams.
>
> No _REAL_ Radio Hams are deceived by such people!
>
> -----ooooo-----
>
> One infallible way to disambiguate the CB Radio Hobbyist
> from the _REAL_ Radio Ham is to solicit their view of the
> difference between CB Radio and Ham Radio. A Radio Ham will
> perceive Ham Radio to be a technical pursuit and will
> perceive CB Radio to be a social communications facility
> no different in essence to a land-line telephone or a
> GSM mobile in the hands of a 6-year-old. Thus a Radio Ham

> could also hold a CB licence safe in the knowledge that
> such a licence says no more about him than having a land-line
> telephone, whilst continuing to regard Ham Radio as a separate
> technical pursuit.
>
> A CB Radio hobbyist, on the other hand, sees no difference between
> a Ham Radio licence and a CB Radio licence. To him, they are
> sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
> tries to classify himself as the equal of the Radio
> Ham when, in fact, he is nothing of the kind. A sure sign of
> a CB Radio hobbyist is if he holds, or has ever held, a licence
> issued under the gangrenous degeneration that is the
> M3/CB Fools' Licence scheme.
>
> -----ooooo-----
>
> One group of people who claim to be of the standard of
> Radio Hams but who are in reality nothing more than an
> apology for the failure of a CBer are those class B
> licensees who falsely proclaimed that they were against
> the use of a Morse Test to control access to the HF
> bands, until, that is, a test was introduced at their
> intellectual level, the intellectual level of 6-year-olds.
>
> 6 year-olds simply lack the mathematical tool kit to
> enable them to handle even the simplest algebraic manipulation
> for Ohm's Law and thus, the disgraceful Class Ber's in
> the aforementioned category are not Radio Hams by any stretch
> of the imagination!
>
> Remember - A sure sign of a CB Radio hobbyist is if he holds,
> or has ever held, a licence issued under the gangrenous
> degeneration that is the M3/CB Fools' Licence scheme!
>
>
> Happy Solstice, and let's keep the religious crap out of Crapmas!
>

5912. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 17:27:37 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1134754057.676456.48500@o13g2000cwo.googlegroups.com>
Source record: 15545
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

You seem to be intellectually challenged on the point that
you make below (CBer, are you?) - the essence of a
discussion group is,.....wait for it.....discussion!

Discussion implies talking.

ITYM, "too" and not, "to". (CBer, are you?)

Allan McDonald wrote:
> Pierian Spring you talk to much.
>
> "Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
> news:1134752578.139108.150450@g49g2000cwa.googlegroups.com...
> > A number of potential recruits are in great danger of being
> > misled into thinking that they are Radio Hams when, in fact,
> > they are nothing of the kind! As it is the season of goodwill,
> > let us show our goodwill by saving these poor deluded fools
> > from the mischievous ne-er-do-wells who will attempt to
> > mislead them. (Radio Hams are technically-motivated people
> > and not merely turnip-brained button pushers like CBers and
> > like M3/CBers)
> >
> > What is Ham Radio?
> >
> > Ham Radio is a technical pursuit for those who
> > are interested in the science of radio wave
> > propagation and who are also interested in the
> > way that their radios function. It has a long-standing
> > tradition of providing a source of engineers who
> > are born naturals.
> >
> > Ham Radio awakens in its aficionados a whole-life
> > fascination with all things technical and gives
> > an all-abiding curiosity to improve one's scientific
> > knowledge. It's a great swimming pool, please dive in!
> >
> > This excitement causes a wish to share the experience
> > with ones fellow man, and shows itself in the
> > gentlemanly traditions of Ham Radio.
> >
> > Radio Hams are in a unique privileged position in that
> > they can construct and operate their own equipment! No-one
> > else has this privilege. Users, such as broadcasters,

> > the po lice and armed farces, CBers and mobile phone
> > users have to purchase ready-made gear. Manufacturers
> > are not licensed to operate their gear. Radio Hams
> > are qualified to design, build and then
> > operate their own pieces of equipment. They do this
> > with gusto, and also repair and modify their own
> > equipment. This is a privilege well worth the effort
> > to gain, and one to be jealously guarded.
> >
> > The excitement that drives a Radio Ham starts with
> > relatively simple technologies at first, perhaps making
> > his own Wimshurst machine and primary cells. Small pieces
> > of test equipment follow, possibly multimeters and signal
> > generators. Then comes receivers and transmitters. It is with
> > the latter that communication with like-minded technically
> > motivated people takes off. The scope for technical
> > development grows with the years
> > and now encompasses DSP and DDS. There is also a great deal
> > of excitement in the areas of computer programming to
> > be learnt and applied.
> >
> > The technical excitement motivates Radio Hams to compete
> > with each other to determine who has designed and manufactured
> > the best-quality station. This competitiveness is found in DXing,
> > competitions and fox-hunts.
> >
> > -----OOOOO----
> >
> > However, beware! A Ham Radio licence is such a
> > desirable thing to have that there are large
> > numbers of people who wish to be thought of
> > as Radio Hams when, in fact, they are nothing
> > of the kind! Usually such people are a
> > variation of the CB Radio hobbyist; they buy their
> > radios off the shelf and send them back to be
> > repaired; they are not interested in technical discussion
> > and sneer at those who are; they have no idea how
> > their radios work inside and have no wish to find out;
> > they are free with rather silly personal insults;
> > they have not satisfied any technical qualification
> > and their licences prevent the use of
> > self-designed-and-built equipment.
> >
> > These CB types engage in the competitive activities
> > with their Cheque-Book-purchased off-the-shelf radios
> > in a forlorn effort to prove that they are Radio Hams.
> >
> > No _REAL_ Radio Hams are deceived by such people!
> >
> > -----ooooo-----

> >
> > One infallible way to disambiguate the CB Radio Hobbyist
> > from the _REAL_ Radio Ham is to solicit their view of the
> > difference between CB Radio and Ham Radio. A Radio Ham will
> > perceive Ham Radio to be a technical pursuit and will
> > perceive CB Radio to be a social communications facility
> > no different in essence to a land-line telephone or a
> > GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
> > could also hold a CB licence safe in the knowledge that
> > such a licence says no more about him than having a land-line
> > telephone, whilst continuing to regard Ham Radio as a separate
> > technical pursuit.
> >
> > A CB Radio hobbyist, on the other hand, sees no difference between
> > a Ham Radio licence and a CB Radio licence. To him, they are
> > sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
> > tries to classify himself as the equal of the Radio
> > Ham when, in fact, he is nothing of the kind. A sure sign of
> > a CB Radio hobbyist is if he holds, or has ever held, a licence
> > issued under the gangrenous degeneration that is the
> > M3/CB Fools' Licence scheme.
> >
> > -----ooooo-----
> >
> > One group of people who claim to be of the standard of
> > Radio Hams but who are in reality nothing more than an
> > apology for the failure of a CBer are those class B
> > licensees who falsely proclaimed that they were against
> > the use of a Morse Test to control access to the HF
> > bands, until, that is, a test was introduced at their
> > intellectual level, the intellectual level of 6-year-olds.
> >
> > 6 year-olds simply lack the mathematical tool kit to
> > enable them to handle even the simplest algebraic manipulation
> > for Ohm's Law and thus, the disgraceful Class Ber's in
> > the aforementioned category are not Radio Hams by any stretch
> > of the imagination!
> >
> > Remember - A sure sign of a CB Radio hobbyist is if he holds,
> > or has ever held, a licence issued under the gangrenous
> > degeneration that is the M3/CB Fools' Licence scheme!
> >
> >
> > Happy Solstice, and let's keep the religious crap out of Crapmas!
> >

5913. Re: "Standard parts" for rf amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 17:30:47 UTC
From: Don Lancaster <don@tinaja.com>
Message-ID: <40gbubF1a77q7U2@individual.net>
Source record: 15546
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

hayseed wrote:
> Henry Kiefer wrote:
>
>> (Snippage)
>
>
>> Building a 32KHz oscillator with a clock crystal and having sinus
>> output is
>> really simple with CMOS buffers.
>
> Like snot???
>
> (more snippage)
> Sorry. I couldn't resist it.
>
> Merry Christmas to all!!!
>
> -Bob
Turns out that if you really want micropower sinewave oscillation at
32kHz, you are far better off using bipolar transistors than CMOS gates.

--
Many thanks,

Don Lancaster voice phone: (928)428-4073
Synergetics 3860 West First Street Box 809 Thatcher, AZ 85552
rss: http://www.tinaja.com/whtnu.xml email: don@tinaja.com

Please visit my GURU's LAIR web site at http://www.tinaja.com

5914. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 17:46:42 UTC
From: mike@g4kfk.co.uk
Message-ID: <1134755202.370913.241940@z14g2000cwz.googlegroups.com>
Source record: 15547
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Pierian Spring wrote:
> A number of potential recruits are in great danger of being
> misled into thinking that they are Radio Hams when, in fact,
> they are nothing of the kind! As it is the season of goodwill,
> let us show our goodwill by saving these poor deluded fools
> from the mischievous ne-er-do-wells who will attempt to
> mislead them. (Radio Hams are technically-motivated people
> and not merely turnip-brained button pushers like CBers and
> like M3/CBers)
>

The Pierian Spring, from Greek mythology, was a source of inspiration.

I see nothing inspiring in the bigoted drivel you just posted.

73
Mike
G4KFK

5915. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 17:52:14 UTC
From: "jim.gm4dhj" <jim.gm4dhj@ntlworld.com>
Message-ID: <i9Dof.47028$uR.3174@newsfe7-gui.ntli.net>
Source record: 15448
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

<mike@g4kfk.co.uk> wrote in message
news:1134755202.370913.241940@z14g2000cwz.googlegroups.com...
>
> Pierian Spring wrote:
>> A number of potential recruits are in great danger of being
>> misled into thinking that they are Radio Hams when, in fact,
>> they are nothing of the kind! As it is the season of goodwill,
>> let us show our goodwill by saving these poor deluded fools
>> from the mischievous ne-er-do-wells who will attempt to
>> mislead them. (Radio Hams are technically-motivated people
>> and not merely turnip-brained button pushers like CBers and
>> like M3/CBers)
>>
>
> The Pierian Spring, from Greek mythology, was a source of inspiration.
>
> I see nothing inspiring in the bigoted drivel you just posted.
>
> 73
> Mike
> G4KFK
>
Have you ever been inspired by a M3 ? ......inspired to leave the hobby
perhaps.....

5916. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 18:12:52 UTC
From: Roooooooodney <bigdongfooyong@fartognet.net>
Message-ID: <66f6f$43a311ae$d1cc7a0b$8179@snip.allthenewsgroups.com>
Source record: 15449
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1134752578.139108.150450@g49g2000cwa.googlegroups.com...

> Happy Solstice, and let's keep the religious crap out of Crapmas!

You should check into the Liberty Net at 10:00 PM
saturday night (3.955 (+/- 10 kc) A real collection
of crakns, grumpy old men, kooks and weirdoes.
You would fit right in like lime jell-o into a piehole....

5917. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 18:17:28 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <NIadnbfdw5IhmT7eRVn-qQ@giganews.com>
Source record: 15450
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Roooooooodney wrote:
> "Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
> news:1134752578.139108.150450@g49g2000cwa.googlegroups.com...
>
>> Happy Solstice, and let's keep the religious crap out of Crapmas!
>
> You should check into the Liberty Net at 10:00 PM
> saturday night (3.955 (+/- 10 kc) A real collection
> of crakns, grumpy old men, kooks and weirdoes.
> You would fit right in like lime jell-o into a piehole....

Pierian Spring, aka Gareth Evans G4SDW, was once a member of a church
bellringing group. One wonders what happened in the belltower that turned
him so....
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

5918. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 18:50:39 UTC
From: LT <reply@server.com>
Message-ID: <11q633og55bit90@corp.supernews.com>
Source record: 15451
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

You need to drink deeper. Shallow draughts have intoxicated your mind
and you have not yet tasted the Pierian Spring. (apologies to A. Pope)

5919. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 19:34:03 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1134761643.625666.203100@g44g2000cwa.googlegroups.com>
Source record: 15452
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

If you publish Childish Broadcasts (CB) such as you
do below, then you will be perceived as a CBer.

Ham Radio is a technical pursuit for which it is
important to maintain standards. There is no
bigotry in seeking to maintain educational
standards.

We do ourselves no favours if we associate
with the non-technical turnip-brains.

Grow up, Mike Gathergood!

mike@g4kfk.co.uk wrote:
> Pierian Spring wrote:
> > A number of potential recruits are in great danger of being
> > misled into thinking that they are Radio Hams when, in fact,
> > they are nothing of the kind! As it is the season of goodwill,
> > let us show our goodwill by saving these poor deluded fools
> > from the mischievous ne-er-do-wells who will attempt to
> > mislead them. (Radio Hams are technically-motivated people
> > and not merely turnip-brained button pushers like CBers and
> > like M3/CBers)
> >
>
> The Pierian Spring, from Greek mythology, was a source of inspiration.
>
> I see nothing inspiring in the bigoted drivel you just posted.
>
> 73
> Mike
> G4KFK

5920. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 19:37:08 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1134761828.028673.59640@g49g2000cwa.googlegroups.com>
Source record: 15453
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

If you wish to be perceived as a Childish Broadcaster (CBer)
then continue to publish Childish Broadcasts (CB) as you
do below.

Ham Radio is a technical pursuit with gentlemanly
traditions, traditions which seem to be lost on you.

Roooooooodney wrote:
> You should check into the Liberty Net at 10:00 PM
> saturday night (3.955 (+/- 10 kc) A real collection
> of crakns, grumpy old men, kooks and weirdoes.
> You would fit right in like lime jell-o into a piehole....

5921. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 19:39:20 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1134761960.161518.316510@z14g2000cwz.googlegroups.com>
Source record: 15454
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Your knowledge of the Pierian Spring is shallow if your only
association is through Pope's reference.

If, however, it is merely the case that you wish to be
perceived as a Childish Broadcaster (CBer) then
continue as you do below.

LT wrote:
> You need to drink deeper. Shallow draughts have intoxicated your mind
> and you have not yet tasted the Pierian Spring. (apologies to A. Pope)

5922. Re: Recommended reading for _REAL_ Radio Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 20:18:24 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <Y9udnauQH9KMvD7enZ2dnUVZ_sCdnZ2d@giganews.com>
Source record: 15455
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Walter Raleigh wrote:
> On Fri, 16 Dec 2005 20:09:28 +0000, Walt Davidson
> <g3nyy@despammed.com> blurted forth into cyberspace:
>
>
>> Oh my ......
>
> Sorry Walt, seems that other post wasn't irony after all.

More likely to Mongery
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

5923. Tool Talk

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 20:58:53 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <43a3294a.15803484@news.blueyonder.co.uk>
Source record: 15456
Cross-posted to: rec.radio.amateur.homebrew;,uk.radio.amateur

Just got this from my pal in Texas...
It hits the nail on the head :-)

Peter, G3PHO

..... TOOL TALK .....

DRILL PRESS: A tall upright machine useful for suddenly snatching flat metal bar stock out of your hands so that it smacks you in the chest and flings your beer across the room, splattering it against that freshly painted airplane part you were drying.

WIRE WHEEL: Cleans paint off bolts and then throws them somewhere under the workbench with the speed of light. Also removes fingerprint whorls and hard-earned guitar calluses in about the time it takes you to say,
"Ouch...."

ELECTRIC HAND DRILL: Normally used for spinning pop rivets in their holes until you die of old age.

PLIERS: Used to round off bolt heads.

HACKSAW: One of a family of cutting tools built on the Ouija board principle. It transforms human energy into a crooked, unpredictable motion, and the more you attempt to influence its course, the more dismal your future becomes.

VISE-GRIPS: Used to round off bolt heads. If nothing else is available, they can also be used to transfer intense welding heat to the palm of your hand.

OXYACETYLENE TORCH: Used almost entirely for lighting various flammable objects in your shop on fire. Also handy for igniting the grease inside the wheel hub you want the bearing race out of.

WHITWORTH SOCKETS: Once used for working on older British cars and motorcycles, they are now used mainly for impersonating that 9/16 or 1/2 socket you've been searching for the last 15 minutes.

HYDRAULIC FLOOR JACK: Used for lowering an automobile to the ground after you have installed your new brake shoes, trapping the jack handle firmly under the bumper.

EIGHT-FOOT LONG DOUGLAS FIR 2X4: Used for levering an automobile upward off a hydraulic jack handle.

TWEEZERS: A tool for removing wood splinters.

PHONE: Tool for calling your neighbor to see if he has another hydraulic floor jack.

SNAP-ON GASKET SCRAPER: Theoretically useful as a sandwich tool for spreading mayonnaise; used mainly for getting dog**** off your boot.

E-Z OUT BOLT AND STUD EXTRACTOR: A tool ten times harder than any known drill bit that snaps off in bolt holes you couldn't use anyway.

TWO-TON ENGINE HOIST: A tool for testing the tensile strength on everything you forgot to disconnect.

CRAFTSMAN 1/2 x 16-INCH SCREWDRIVER: A large prybar that inexplicably has an accurately machined screwdriver tip on the end opposite the handle.

AVIATION METAL SNIPS: See hacksaw.

TROUBLE LIGHT: The home mechanic's own tanning booth. Sometimes called a drop light, it is a good source of vitamin D, "the sunshine vitamin," which is not otherwise found under cars at night. Health benefits aside, it's main purpose is to consume 40-watt light bulbs at about the same rate that 105-mm howitzer shells might be used during, say, the first few hours of the Battle of the Bulge. More often dark than light, its name is somewhat misleading.

PHILLIPS SCREWDRIVER: Normally used to stab the lids of old-style paper-and-tin oil cans and splash oil on your shirt; but can also be used, as the name implies, to strip out Phillips screw heads.

AIR COMPRESSOR: A machine that takes energy produced in a coal-burning power plant 200 miles away and transforms it into compressed air that travels by hose to a Chicago Pneumatic impact wrench that grips rusty bolts last over tightened 50 years ago by someone at Ford, and neatly rounds off their heads.

PRY BAR: A tool used to crumple the metal surrounding that clip or bracket you needed to remove in order to replace a 50 cent part.

HOSE CUTTER: A tool used to cut hoses too short.

HAMMER: Originally employed as a weapon of war, the hammer nowadays is used as a kind of divining rod to locate the most expensive parts not far from the object we are trying to hit.

MECHANIC'S KNIFE: Used to open and slice through the contents of cardboard cartons delivered to your front door; works particularly well on contents such as seats, vinyl records, liquids in plastic bottles, collector magazines, refund checks, and rubber or plastic parts.

DAMMIT TOOL: Any handy tool that you grab and throw across the garage While yelling "DAMMIT" at the top of your lungs. It is also the next tool that you will need.

EXPLETIVE: A balm, usually applied verbally in hindsight, which somehow eases those pains and indignities following our every deficiency in foresight

5924. Re: Tool Talk

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 21:29:01 UTC
From: tox <tox@toxtox.co.com>
Message-ID: <xkGof.437$Nl4.108@newsfe4-gui.ntli.net>
Source record: 15457
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"Walter Raleigh" <walterraleigh69nospam@hotmail.com> wrote in message
news:a3c6q1l34l4c20n0fqdj2drcvvqsfcijfm@4ax.com...
>
>
> Excellent!
>
> MattD, I think you'll like this :)

Who's going to explain this to ZZZZZZZZZZZZzzzzzzzzzzzzzzzzzzzzzzzzzzzzzpk,
Walter?

Regards
tox

5925. Re: w.band new car

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 21:43:37 UTC
From: fmmck@aol.com
Message-ID: <fmmck-1612051643370001@aca44713.ipt.aol.com>
Source record: 15458

In article <1134522734.633635.175030@g14g2000cwa.googlegroups.com>, "Gene" <moggy2cat@aol.com> wrote:

> New car yesterday, noticed today that it has weather
> band....umnmn...any chance to re tune to the local railroad? 160.515...
> or a local 2m repeater?

Gene-

Converting a modern frequency-synthesized radio to receive different frequencies may be possible, but quite a neat trick.

A simpler approach would be to buy or build an external tuner. It could be crystal-controlled, switching between crystals for different frequencies. It could use only one crystal and use the existing radio's tuner to select different frequencies.

73, Fred, K4DII

5926. Re: Tool Talk

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 21:47:18 UTC
From: DieSea <DieSea.NoSpamPlease@ntlworldd.ccom>
Message-ID: <43a335de$0$29561$da0feed9@news.zen.co.uk>
Source record: 15459
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

>>Peter, G3PHO
>
>
> Excellent!
>
> MattD, I think you'll like this :)
> --
>
> 73s de Walter R.

Sprang to my mind as well

More suitable for the Mech. in HIS kitchen I would have thought

Wonder what he does his chips in

Sump Oil Perhaps !! ?

DieSea

5927. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 21:51:05 UTC
From: Korbin Dallas <korbindallas@null.org>
Message-ID: <pan.2005.12.16.21.51.03.980400@null.org>
Source record: 15460
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Wed, 14 Dec 2005 17:19:13 +0000, Rich Grise wrote:

> On Wed, 14 Dec 2005 13:29:50 +0000, Irv Finkleman wrote:
>
>> "Saandy , 4Z5KS" wrote:
>>>
>>> YOU CALL THIS A WORKBENCH!?!?!?
>>> my Goodness, if the mess on mine is les than 5 inches deep I feel I
>>> didn't do anything on that table! You know, I trained myself to
>>> identify location of things by the sound they make when they fall on
>>> something else when I throw it aside. If I were now to mop it up , I
>>> wouldn't be able to find anything!
>>> In any case I wish you good luck and I congratulate you for the
>>> initiative.
>>> Saandy 4Z5KS
>>
>> Reminds me of one guy who complained that he could never find the chuck
>> key for his drill, so begin buying them by the dozen -- that way, he said,
>> they normally last for a week or two! :-)
>>
>
> You're supposed to ty-wrap it to the cord, out at the plug end, so that
> you can't use it while the drill is plugged in. (Keeps your hands in
> one piece.) :-)
>
> Cheers!
> Rich

A Clean Workbench is the sign of a person who is not doing anything...

--
Korbin Dallas
The name was changed to protect the guilty.

5928. Re: Tool Talk

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 22:01:16 UTC
From: Ken Ward <ken.g1itv@MTLworld.com>
Message-ID: <MOGof.15819$b4.7821@newsfe1-win.ntli.net>
Source record: 15461
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"Walter Raleigh" <walterraleigh69nospam@hotmail.com> wrote in message
news:a3c6q1l34l4c20n0fqdj2drcvvqsfcijfm@4ax.com...
> On Fri, 16 Dec 2005 20:58:53 GMT, microwaves@blueyonder.co.uk (Peter)
> blurted forth into cyberspace:
>
>>Just got this from my pal in Texas...
>>It hits the nail on the head :-)
>>
>>Peter, G3PHO
>
>
> Excellent!
>
> MattD, I think you'll like this :)

I certainly did!

KW

5929. Re: To build or not to build

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 22:46:55 UTC
From: yzordderrex@verizon.net
Message-ID: <1134773215.130884.160900@z14g2000cwz.googlegroups.com>
Source record: 15462

Hey Bill you got some really good points there. (Yes, 6146)

I figured a homebrew Amplifier project could be a costly undertaking. I got over $500 into the HX-50 with the cost of the unit and parts to get it running. I had about 80 hours into a Knight T-150 to get it working correctly. Was my first rig and I called it a learning experience to ease the pain. The reason we play with these radios is because we like to rather than to make any money at it.

I've got a few big mosfet projects in front of the amplifier, so not in any hurry. (I can do a full PEP setup with a half dozen fets for about 200 bucks.) I'll do some more poking around and see what I come up with. Project may in fact become a reduced output amplifier.

Thanks everybody for comments. I will mull over and figure this all out as other projects get finished.

73
Bob
N9NEO

5930. Re: Tool Talk

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 22:53:18 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <43a343c4.1039495@news.iol.ie>
Source record: 15463
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"tox" <tox@toxtox.co.com> wrote:

> Regards
> tox

for your info dear tox.

apart from _TWO_ , i have used all of those somewhere.

including the dammit tool when i was trying to line up the chassis-end
of the upper engine mount on an old mini-850 and the other tool broke
(known in certain dublin circles as a PODGER or POJJER) allowing my
knuckles to go at 'lightning speed' straight into the shelf&bodywork
behind it.

now if you want to take a shot at me,,, then please TRY do it with some
sort of STYLE rather than doing a very good impression of that well known
cb'er MEGHERTZ.

5931. Re: Pepper And Salt - Re Gareth Alun Evans G4ASW

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-16 23:32:30 UTC
From: Micky Taker <micky.taker@blueyonder.co.uk>
Message-ID: <i8Iof.10238$iz3.2375@text.news.blueyonder.co.uk>
Source record: 15464
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Pierian Spring wrote:
> A number of potential recruits are in great danger of being
> misled into thinking that they are Radio Hams when, in fact,
> they are nothing of the kind! As it is the season of goodwill,
> let us show our goodwill by saving these poor deluded fools
> from the mischievous ne-er-do-wells who will attempt to
> mislead them. (Radio Hams are technically-motivated people
> and not merely turnip-brained button pushers like CBers and
> like M3/CBers)
>
> What is Ham Radio?

On Aug 9 1996, at 7:00 am

Gareth Alun Evans - G4ASW
Published this message to the Public Domain

G.A.Evans, Director, Out And About Systems Ltd
Software Consultancy for Telecommunications, Real Time and ATE
13 Hardens Close, Chippenham, Wiltshire, SN15 3AA
(01249) 651897

Yes morse is obsolete, but also useful.
The former is no basis for banning it.
The latter is no basis for using it as a passport to the HF Bands.

Why do we need a further exam for incentive licensing? Do we not have enough already?....
(1) CB licence as an appetite whetter
(2) Novice licence
(3) RAE.

(Perversely, the Novice RAE is a higher technical challenge than the RAE!)

Restore the RAE to its technical status, and we have a sufficient and complete incentive licensing scheme, without anything to do with the Morse (Sorry, Vail) Code.

Arguments relating to international requirements are redundant - laws change.

Amateur Radio is dying, and this is due IMHO in no small part to the consumerism CBish activities of today, QSLing as an end in itself, WAB, contest operating other than as a means of evaluating one's technical equipment, squeakies on repeaters, walts on URA, and inane discussions

about the turnips growing in one's garden.

72's de Gareth G4SDW GQRP 3339

Regards

Micky

5932. Question regarding the AADE L/C meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 00:26:58 UTC
From: Bill <exray@coqui.net>
Message-ID: <27c36$43a35b55$4232bd07$32385@COQUI.NET>
Source record: 15465

Scratching my head again...

This is specific to the AADE unit.

I've got a coil of about 5mH. If I use the C function of the AADE I get a reading in the range of 25 pf.

Am I seeing the actual interwinding capacitance here or is the combination with inductance goofing on the measurement circuit that this device utilizes?

If it helps anyone get a "feel" for the amount of capacitance of this coil its about 175 turns, #37-ish loosely scatterwound in about 1.5" diameter, 1/8" wide and high.

TIA,
Bill WX4A/KP4

5933. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 01:29:52 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1134782992.159432.296340@g44g2000cwa.googlegroups.com>
Source record: 15466
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Thanks for the responses so far....

A few more questions....

How much and what type of storage do you have?

How are the workbenches laid out most efficiently? L shaped? U shaped?
T shaped?

How much stationary and how much mobile?

What do you like for lighting?

Has anyone built power busses into your bench? If so, what was it?

How about floor coverings? Ever drop a tiny screw or surface mount part
on the floor and spend hours looking for it?

TMT

5934. Re: w.band new car

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 01:39:37 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <x%Jof.12636$Eu3.2517@fe07.lga>
Source record: 15467

"Fred McKenzie" <fmmck@aol.com> wrote in message
news:fmmck-1612051643370001@aca44713.ipt.aol.com...

> Converting a modern frequency-synthesized radio to receive different
> frequencies may be possible, but quite a neat trick.

Actually, in theory it is pretty easy, in practice, darned near impossible. Given that the railroad and 2 meters are neither very far from the weather band, you probably could get reasonable performance without any front end changes.

But here is the problem ... in the old days that tuning knob was attached to a variable capacitor and a slight change in the L and C values could move the radio. Today, however, that knob is attached to an encoder that is read by a microprocessor. The micro then tells a synthesizer what frequency to make. So, it is a simple matter of reprogramming the micro.

There's the rub. Even if you had the capability to reprogram the micro (really not all that unreasonable) you would need to get the source code (not bloody likely). And if you had the code, simply understanding it would be a major challenge; I was visiting one auto manufacturer a few months ago and was surprised to learn they have over a million lines of code in the radio!

> A simpler approach would be to buy or build an external tuner. It could
> be crystal-controlled, switching between crystals for different
> frequencies. It could use only one crystal and use the existing radio's
> tuner to select different frequencies.

This, actually, could be pretty simple. You are only a couple MHz away from the railroad frequency, so some sort of front end filter, a 602 with an appropriate crystal, and a whopping attenuator on the output of the 602 and you should be good to go. You could do something similar for a repeater, the rock would be more like 20 MHz instead of 2, but you couldn't cover much of the 2 meter band with the tuning from the weather band. But for one repeater...

The ugliest part would be switching it in and out if you wanted to listen to the FM Broadcast band.

..

5935. Re: Question regarding the AADE L/C meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 02:06:46 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1134785206.166528.296300@g49g2000cwa.googlegroups.com>
Source record: 15468

I'd guess the effective parallel capacitance is quite a bit less than
that. Not sure just what's going on in the processor in the AADE to
figure out and display that number, but remember, the circuit works by
looking at the resonant frequency of a tank that includes your part,
and by asking it "capacitance" when you clearly put "inductance" across
the terminals is...um...asking for trouble or nonsense. You might pose
the question to AADE.

Cheers,
Tom

5936. Re: Question regarding the AADE L/C meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 03:10:53 UTC
From: Bill <exray@coqui.net>
Message-ID: <3b7d7$43a381bf$4232bd07$27029@COQUI.NET>
Source record: 15469

K7ITM wrote:

> You might pose
> the question to AADE.
>
> Cheers,
> Tom
>

I certainly will do so later. Their December vacation schedule
conflicts with mine :)

Tnx
-Bill

5937. Re: Pepper And Salt - Re Gareth Alun Evans G4ASW

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 03:21:14 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <0r-dnfqRh8ioGT7eRVny2Q@pipex.net>
Source record: 15470
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

>>Gareth Alun Evans - G4ASW

>>Published this message to the Public Domain
>
>
> G4ASW
> M YORKE
> 8 ST JOHN PLACE
> PORT WASHINGTON
> NEW YORK 11050
> USA
==========
I think , Gareth Evans' callsign is : G4DSW

Just ignore his outpouring

Frank KN6WH / GM0CSZ

5938. Re: w.band new car

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 03:25:09 UTC
From: Bill <exray@coqui.net>
Message-ID: <a6643$43a38519$4232bd07$28213@COQUI.NET>
Source record: 15471

xpyttl wrote:

> "Fred McKenzie" <fmmck@aol.com> wrote in message
> news:fmmck-1612051643370001@aca44713.ipt.aol.com...
>
>
>>Converting a modern frequency-synthesized radio to receive different
>>frequencies may be possible, but quite a neat trick.
>
>
> Actually, in theory it is pretty easy, in practice, darned near impossible.
> Given that the railroad and 2 meters are neither very far from the weather
> band, you probably could get reasonable performance without any front end
> changes.

I had a Nissan/Clarion radio that was stock for models exported to the
"English Caribbean". It was set for 9 kc AM-BC channels and had no
switch as an option. No importa that the Caribbean doesn't use 9kc
channel spacing. The switch placement markings were on the multi-use PCB
but it wasn't there. I'm sure there was a workaround but without
supporting documentation it wasn't to be done...at least not by me.

In the case of the Weather Band....since there is more than one freq in
use, do you have any channel option there (WX1 or WX2) or is it just so
broad that it will receive any Wx-band channels?

I also suspect that this LO freq is programmed into the chip. They
don't really make them "hobbyist-friendly" do they?

-Bill

in the old days that tuning knob was attached to
> a variable capacitor and a slight change in the L and C values could move
> the radio. Today, however, that knob is attached to an encoder that is read
> by a microprocessor. The micro then tells a synthesizer what frequency to
> make. So, it is a simple matter of reprogramming the micro.
>
> There's the rub. Even if you had the capability to reprogram the micro
> (really not all that unreasonable) you would need to get the source code
> (not bloody likely). And if you had the code, simply understanding it would
> be a major challenge; I was visiting one auto manufacturer a few months ago
> and was surprised to learn they have over a million lines of code in the
> radio!
>
>
>>A simpler approach would be to buy or build an external tuner. It could

>>be crystal-controlled, switching between crystals for different
>>frequencies. It could use only one crystal and use the existing radio's
>>tuner to select different frequencies.
>
>
> This, actually, could be pretty simple. You are only a couple MHz away from
> the railroad frequency, so some sort of front end filter, a 602 with an
> appropriate crystal, and a whopping attenuator on the output of the 602 and
> you should be good to go. You could do something similar for a repeater,
> the rock would be more like 20 MHz instead of 2, but you couldn't cover much
> of the 2 meter band with the tuning from the weather band. But for one
> repeater...
>
> The ugliest part would be switching it in and out if you wanted to listen to
> the FM Broadcast band.
>
> ..
>
>

5939. damaged collins filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 04:06:46 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <27Mof.1557$aS5.297@bignews4.bellsouth.net>
Source record: 15472

I have a new in the original box F455N20 collins filter
(from R390A) that I got at a hamfest many years ago
and stored it away for a 'future project'.

I dug it out recently and was examining it when I noticed
that as I rotated it in my hand I could feel something
inside shifting back and forth. I never noticed this
before (the filter was NEVER dropped in my care and
has remained packed in the original packing material
all this time). Is this normal for this type of filter
or might the unit be defective?

5940. Re: To build or not to build

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 04:15:24 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <bfMof.1561$aS5.144@bignews4.bellsouth.net>
Source record: 15473

yzordderrex@verizon.net wrote:
> If everything works out this weekend I should have about 10w or so to
> drive into a linear. My friend here in town thinks I should buy used
> Dentron Clipperton or Heathkit. I don't think 10watts would do either
> justice. If 10w would give me a KW out with a commercial unit I would
> consider buying a good used unit.
>
> Plan bravo is to build. I would have to do tubes in keeping with the
> theme of that side of the shack. CW, AM, & SSB are all modes that I
> would operate. I only need to operate 160m - 40m. I am experienced
> transistor engineer and my early schooling was in tubes , so not beyond
> my reach for this type of a project. I have plenty of other homebrew
> projects to keep me busy if this one gets scratched.
>
> I need help picking a topology and a tube set. Price and likelyhood of
> getting the thing working are two top runners. From the 1965 ARRL
> Handbook I see a few different tubes that might qualify. A Pair of 813
> in parallel, 3-400Z, 3-1000Z. I am soliciting some opinions on the
> topology. Again, all I got is about 10w am going into. I would like
> to do a kw or so pep. I am not looking to buy any parts at this time,
> so not looking for any 'sales calls'. I need comments like - look at
> this tube with this plate voltage kinda thing. Or try driving this toob
> with a such and such to get a kw out. I would like to keep the design
> required to a minimum and would consider some 'reverse engineering' a
> plus at this point. If I can get most of the design out of an old ARRL
> handbook then that would please me.
>
> 73
> Bob
> N9NEO
>
As others have pointed out you will need a tetrode amp to get
20db of gain in one stage. The old warhorse 4cx1000a will do it,
but this is an expensive tube with an expensive socket to match!

Look for a Svetlana 4cx800 tube. The sockets for this are not
too costly and the tube itself is in the $100-$150 range. A single
4cx800 will get you close to the legal limit. You can drive this tube
as a conventional grid driven with tuned input, or use an impedance
matching transformer with a 450 ohm swamping resistor.
Yet another way is to run the tube cathode driven, but with normal
grid bias and screen voltage, both grids bypassed to ground for rf.
I'm not sure how much drive will be required in the cathode driven
mode, but if operated in AB1 it will be much less than a conventional

grounded grid circuit.

5941. Re: Tool Talk

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 04:15:36 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1134792936.737603.320740@o13g2000cwo.googlegroups.com>
Source record: 15474
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

It would seem, therefore, that not only do you lack
the gentlemanly traditions of _REAL_ Ham Radio
when you habituate your 5-year-old's outbursts, but
that you lack the engineering nous of a _REAL_
Radio Ham.

Peter wrote:
> Just got this from my pal in Texas...
> It hits the nail on the head :-)

5942. Re: Pepper And Salt - Re Eric Williams M3EJO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 04:37:12 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1134794232.231717.65710@g47g2000cwa.googlegroups.com>
Source record: 15475
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Micky Taker" is, in reality,

Eric Williams, M3EJO,
19, Raglans,
Exeter,
EX2 8XN.

He is one of those disgraceful adults warned against by the OP; a grown man with seeming years of experience who was either too lazy or too stupid, or both, to be able to tackle and pass exams that were being taken in their stride by otherwise-unqualified 14-year-olds and went instead for the yellow-bellied coward's way out by going for exams set for 6-year-olds.

Eric did not seem to understand that the OP was a public stance for the maintenance of academic standards and that by responding with his Childish Broadcast (CB) in the way that he did he illustrated graphically the sort of turnip-brained dross that the OP warned against.

M3EJO is one of the licences issued under the gangrenous degeneration that is the M3/CB Fools' Licence and by taking out such a licence, Eric proves himself to be an incurable CBer who will _NEVER_ make it into the ranks of _REAL_ Radio Hams.

Eric seems to have missed the point that the OP was arguing in favour of the very acadaemic standards that Eric himself so dismally failed to reach - the issue is not one of the relevance, or otherwise, of the Morse Code, but the showing of sufficient dedication of putting in the necessary effort to get what you want. Going for an M3/CB Fools' Licence and then posting personal attacks in the way that Eric did is a sure sign of lack of such dedication.

Eric - you are a stupid boy and should grow up. It may well be that you wear long trousers but it is certain that your mind is still in nappies.

Micky Taker wrote:
> Pierian Spring wrote:
> > A number of potential recruits are in great danger of being
> > misled into thinking that they are Radio Hams when, in fact,
> > they are nothing of the kind! As it is the season of goodwill,
> > let us show our goodwill by saving these poor deluded fools
> > from the mischievous ne-er-do-wells who will attempt to
> > mislead them. (Radio Hams are technically-motivated people

> > and not merely turnip-brained button pushers like CBers and
> > like M3/CBers)
> >

5943. Re: Pepper And Salt - Re "MICKY TAKER" - Eric Williams M3EJO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 04:46:52 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1134794812.052930.78760@g43g2000cwa.googlegroups.com>
Source record: 15476
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Title's typo corrected.

Pierian Spring wrote:
> "Micky Taker" is, in reality,
>
> Eric Williams, M3EJO,
> 19, Raglans,
> Exeter,
> EX2 8XN.
>
> He is one of those disgraceful adults warned against by the OP; a
> grown man with seeming years of experience who was either too
> lazy or too stupid, or both, to be able to tackle and pass exams
> that were being taken in their stride by otherwise-unqualified
> 14-year-olds and went instead for the yellow-bellied coward's
> way out by going for exams set for 6-year-olds.
>
> Eric did not seem to understand that the OP was a public stance
> for the maintenance of academic standards and that by responding
> with his Childish Broadcast (CB) in the way that he did he illustrated
> graphically the sort of turnip-brained dross that the OP warned
> against.
>
> M3EJO is one of the licences issued under the gangrenous
> degeneration that is the M3/CB Fools' Licence and by taking out
> such a licence, Eric proves himself to be an incurable CBer who
> will _NEVER_ make it into the ranks of _REAL_ Radio Hams.
>
> Eric seems to have missed the point that the OP was arguing
> in favour of the very acadaemic standards that Eric himself so
> dismally failed to reach - the issue is not one of the relevance, or
> otherwise, of the Morse Code, but the showing of sufficient dedication
> of putting in the necessary effort to get what you want. Going
> for an M3/CB Fools' Licence and then posting personal attacks in
> the way that Eric did is a sure sign of lack of such dedication.
>
> Eric - you are a stupid boy and should grow up. It may well
> be that you wear long trousers but it is certain that your
> mind is still in nappies.
>
> Micky Taker wrote:
> > Pierian Spring wrote:
> > > A number of potential recruits are in great danger of being

> > > misled into thinking that they are Radio Hams when, in fact,
> > > they are nothing of the kind! As it is the season of goodwill,
> > > let us show our goodwill by saving these poor deluded fools
> > > from the mischievous ne-er-do-wells who will attempt to
> > > mislead them. (Radio Hams are technically-motivated people
> > > and not merely turnip-brained button pushers like CBers and
> > > like M3/CBers)
> > >

5944. Re: Pepper And Salt - Re Frank Dinger GM0CSZ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 04:53:21 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1134795200.987962.255630@g14g2000cwa.googlegroups.com>
Source record: 15477
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

The Childish Broadcast (CB) quoted below would suggest that
the 2 letters, number, 2 letters format used by Britland CB
licences is also in use by Yankland in the KN6 series.....

Frank Dinger's Childish Broadcast (CB) serves to illustrate
well the Trojan Horse of the CBer-Masquerading-As-A-Radio-Ham
warned against by the OP.

Just ignore his outpouring - he is as irrelevant to _REAL_ Ham Radio
as is the RSCB.

Highland Ham wrote:
>
> Just ignore his outpouring
>
> Frank KN6WH / GM0CSZ

5945. Re: Tool Talk

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 08:14:00 UTC
From: "�|��T?□Rt?@$t"
Message-ID: <do0hcf$v68$1@domitilla.aioe.org>
Source record: 15478
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

I see you cross posted this to 3 groups, none of which are relevant, I suggest you read the terms & conditions from Blueyonder about off-topic posting, it can result in termination of your service if enough people complain.

BTW the address, for anyone interested, is abuse@blueyonder.co.uk

5946. Aluminum Tower Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 08:23:18 UTC
From: Bob <none@thistime>
Message-ID: <FuWdnUXGVvxuVz7eRVn-qA@giganews.com>
Source record: 15479

Need about 50ft. Contact: eh54 at sbcglobal dot net

5947. Re: Tool Talk

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 08:59:49 UTC
From: Ken Ward <ken.g1itv@MTLworld.com>
Message-ID: <9sQof.15897$b4.4435@newsfe1-win.ntli.net>
Source record: 15480
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

"<|??T?□Rt?@$t" <<|??T?□Rt?@$t@norway_coastline.net> wrote in message
news:do0hcf$v68$1@domitilla.aioe.org...
>I see you cross posted this to 3 groups, none of which are relevant, I
> suggest you read the terms & conditions from Blueyonder about off-topic
> posting, it can result in termination of your service if enough people
> complain.
>
> BTW the address, for anyone interested, is abuse@blueyonder.co.uk

What a complete and utter miserable whinging bastard you alledgedly are!

KW

5948. Re: Tool Talk

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 09:10:16 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1134810616.633328.172820@g44g2000cwa.googlegroups.com>
Source record: 15481
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

You should be aware that
1. Common abuse is not libel.
2. Use of the word, "allegedly", however spelt, does not
give you a defence in a libel case.

Ken Ward wrote:
> "§|ª®T?ßªRt?@$t" <§|ª®T?ßªRt?@$t@norway_coastline.net> wrote in message
> news:do0hcf$v68$1@domitilla.aioe.org...
> >I see you cross posted this to 3 groups, none of which are relevant, I
> > suggest you read the terms & conditions from Blueyonder about off-topic
> > posting, it can result in termination of your service if enough people
> > complain.
> > BTW the address, for anyone interested, is abuse@blueyonder.co.uk
> What a complete and utter miserable whinging bastard you alledgedly are!

5949. Re: To build or not to build

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 09:27:03 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <TigcFbCnn9oDFA3+@ifwtech.co.uk>
Source record: 15482

Ken Scharf wrote:
> A single 4cx800 will get you close to the legal limit.

That's being over-ambitious. The manufacturer's data (Svetlana) says that a single 4CX800A "will conservatively produce 750 watts PEP SSB, and 750 watts Key Down CW in any of the three modes: grid-driven, grid-driven passive input, and cathode-driven."
http://www.g8wrb.org/data/Svetlana/pdf/4CX800A.pdf

You can certainly screw more power from the tube, but intermodulation levels will rise rapidly. When selecting a tube, a good rule of thumb is to expect an RF output equal to the tube's anode dissipation.

If the original aim was for something "in the region of" a kilowatt, it would be well worth considering a single 4CX800 at slightly reduced output.

--
73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

5950. Re: Pepper And Salt - Re Gareth Alun Evans G4ASW

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 09:49:26 UTC
From: Lloyd II <NotRoger@anon>
Message-ID: <do0mq5$7gb$0@pita.alt.net>
Source record: 15483
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Walt Davidson" <g3nyy@despammed.com> wrote in message
news:rbn7q1lt9a3lpoa6c1tif90uh1d1ud11pc@4ax.com...
On Fri, 16 Dec 2005 19:21:14 -0800, Highland Ham
<abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:

>>>Gareth Alun Evans - G4ASW
>
>>>Published this message to the Public Domain
>>
>>
>> G4ASW
>> M YORKE
>> 8 ST JOHN PLACE
>> PORT WASHINGTON
>> NEW YORK 11050
>> USA
>==================
>I think , Gareth Evans' callsign is : G4DSW

I don't think so!

:-)))

73 de G3NYY

--
Walt Davidson Email: g3nyy @despammed.com

....and just the heck is this worth?????

5951. Re: Pepper And Salt - Re Gareth Alun Evans G4ASW

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 09:53:46 UTC
From: Micky Taker <micky.taker@blueyonder.co.uk>
Message-ID: <KeRof.10348$iz3.3909@text.news.blueyonder.co.uk>
Source record: 15484
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Walt Davidson wrote:
> On Fri, 16 Dec 2005 23:32:30 GMT, Micky Taker
> <micky.taker@blueyonder.co.uk> wrote:

>
>>Published this message to the Public Domain

> G4ASW

My humble apologies to G4ASW. Don't know where that came from, but I'm going to play the dyslexia card here. Either that or I was pi**ed.

Regards,

Micky

5952. Re: Pepper And Salt - Re Eric Williams M3EJO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 10:46:02 UTC
From: Eric 2E0ECW <gin@tonic.uk>
Message-ID: <K%Rof.10381$iz3.5252@text.news.blueyonder.co.uk>
Source record: 15485
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Pierian Spring wrote:

> Going for an M3/CB Fools' Licence and then posting personal attacks in
> the way that Eric did is a sure sign of lack of such dedication.

Please quote said personal attack.

> Eric - you are a stupid boy and should grow up. It may well
> be that you wear long trousers but it is certain that your
> mind is still in nappies.
>
One up to you then, looks like!

Regards

Eric
2E0ECW

"Perversely, the Novice RAE is a higher technical challenge than the
RAE!" - (C) Gareth Alun Evans 1996

5953. Re: Pepper And Salt - Re Eric Williams M3EJO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 11:13:51 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1134818031.528586.249380@g14g2000cwa.googlegroups.com>
Source record: 15486
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

But the Novice RAE is no more, and the comment applied to the RAE
as it existed at the time of the Novice RAE.

The comments are not revalidated for the 3-level farce fiasco that
exists today.

Eric 2E0ECW wrote:
> "Perversely, the Novice RAE is a higher technical challenge than the
> RAE!" - (C) Gareth Alun Evans 1996

5954. Re: Pepper And Salt - Re Gareth Alun Evans G4ASW

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 12:12:13 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <43a4007e.569807@news.iol.ie>
Source record: 15487
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Micky Taker <micky.taker@blueyonder.co.uk> wrote:

> Gareth ____ _____ - G4ASW

i'm sure g4asw will have something to say !

5955. Re: Pepper And Salt - Re Gareth Alun Evans G4ASW

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 12:13:28 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <43a400bc.631862@news.iol.ie>
Source record: 15488
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Micky Taker <micky.taker@blueyonder.co.uk> wrote:

> My humble apologies to G4ASW. Don't know where that came from, but I'm
> going to play the dyslexia card here. Either that or I was pi**ed.

doh!

mickey taker takes a nose dive.
which is hard to do when flying so low in the first place !

5956. Re: Pepper And Salt - Re Gareth Alun Evans G4ASW

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 13:58:24 UTC
From: Micky Taker <micky.taker@the.rsgb>
Message-ID: <4QUof.10459$iz3.8136@text.news.blueyonder.co.uk>
Source record: 15489
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

zYYPK, AKA - PAUL KEARNEY EI7GM, wrote:
> Micky Taker <micky.taker@blueyonder.co.uk> wrote:
>
>
>>Gareth ____ _____ - G4ASW
>
>
> i'm sure g4asw will have something to say !
>

Yes, I posted that through beer-tinted spectacles and realised the
mistake in the cold light of day.

Cheers,

Micky

5957. Re: Pepper And Salt - Re Gareth Alun Evans G4ASW

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 14:51:19 UTC
From: tox <tox@toxtox.co.com>
Message-ID: <HBVof.33586$a15.11590@newsfe5-win.ntli.net>
Source record: 15490
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Micky Taker" <micky.taker@the.rsgb> wrote in message
news:4QUof.10459$iz3.8136@text.news.blueyonder.co.uk...
>>
>
> Yes, I posted that through beer-tinted spectacles and realised the mistake
> in the cold light of day.
>
No worse than DSP, heat bands, polarised resistors, fettling, slope
detection, big k and
of course, lol...unclear emissions!

tox

5958. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 15:25:51 UTC
From: Epsilon <amsc23803@blueyonder.co.uk>
Message-ID: <36Wof.3412$Og1.1741@fe2.news.blueyonder.co.uk>
Source record: 15491
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Here we go again.......... Blah blah blah blah blah.

"Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1134761643.625666.203100@g44g2000cwa.googlegroups.com...
> If you publish Childish Broadcasts (CB) such as you
> do below, then you will be perceived as a CBer.
>
> Ham Radio is a technical pursuit for which it is
> important to maintain standards. There is no
> bigotry in seeking to maintain educational
> standards.
>
> We do ourselves no favours if we associate
> with the non-technical turnip-brains.
>
> Grow up, Mike Gathergood!
>
> mike@g4kfk.co.uk wrote:
> > Pierian Spring wrote:
> > > A number of potential recruits are in great danger of being
> > > misled into thinking that they are Radio Hams when, in fact,
> > > they are nothing of the kind! As it is the season of goodwill,
> > > let us show our goodwill by saving these poor deluded fools
> > > from the mischievous ne-er-do-wells who will attempt to
> > > mislead them. (Radio Hams are technically-motivated people
> > > and not merely turnip-brained button pushers like CBers and
> > > like M3/CBers)
> > >
> >
> > The Pierian Spring, from Greek mythology, was a source of inspiration.
> >
> > I see nothing inspiring in the bigoted drivel you just posted.
> >
> > 73
> > Mike
> > G4KFK
>

5959. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 15:25:51 UTC
From: Epsilon <amsc23803@blueyonder.co.uk>
Message-ID: <36Wof.3413$Og1.854@fe2.news.blueyonder.co.uk>
Source record: 15492
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Do you cut and paste your messages. Is that how lazy you are.

"Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1134761828.028673.59640@g49g2000cwa.googlegroups.com...
> If you wish to be perceived as a Childish Broadcaster (CBer)
> then continue to publish Childish Broadcasts (CB) as you
> do below.
>
> Ham Radio is a technical pursuit with gentlemanly
> traditions, traditions which seem to be lost on you.
>
> Roooooooodney wrote:
> > You should check into the Liberty Net at 10:00 PM
> > saturday night (3.955 (+/- 10 kc) A real collection
> > of crakns, grumpy old men, kooks and weirdoes.
> > You would fit right in like lime jell-o into a piehole....
>

5960. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 15:37:11 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1134833831.090663.193180@g44g2000cwa.googlegroups.com>
Source record: 15493
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

No, no, no! You've got it wrong!

That should read "Dah dah dah dah dah", which means "Zero".

So, I suppose you're right in one respect - the useful
contribution that you make to this NG and to _REAL_
Ham Radio is......ZERO!

Epsilon wrote:
> Here we go again.......... Blah blah blah blah blah.
>

5961. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 15:38:22 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1134833902.747825.197290@g44g2000cwa.googlegroups.com>
Source record: 15494
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

If you wish to be perceived as a Childish Broadcaster (CBer)
then continue to publish Childish Broadcasts (CB) such as you
do below.

Stupid boy.

Epsilon wrote:
> Do you cut and paste your messages. Is that how lazy you are.

5962. Re: To build or not to build

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 17:52:05 UTC
From: yzordderrex@verizon.net
Message-ID: <1134841925.194120.7990@g14g2000cwa.googlegroups.com>
Source record: 15495

Ok, thanks Ken & Ian & others. My post has spawned just the type of comments that I had hoped for.

Ian, I've been over to Tom's tubes and I see you have boards over there. If I do the tetrode I will probably pick up a kit to help out. I don't like to re-invent unless there is a clear-cut advantage to doing another way. I'm up in the air over 2 stages or the Tetrode. I think the tetrode is probably going to win. I've posed the question to some AM types on AM Fone to see what they say.

5963. Re: To build or not to build

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 18:16:33 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <35olD1PBYFpDFAaL@ifwtech.co.uk>
Source record: 15496

>Ok, thanks Ken & Ian & others. My post has spawned just the type of
>comments that I had hoped for.
>
>Ian, I've been over to Tom's tubes and I see you have boards over
>there. If I do the tetrode I will probably pick up a kit to help out.
>I don't like to re-invent unless there is a clear-cut advantage to
>doing another way.

Ah, I didn't realise you were a neighbor of Tom's. (As I hope you understand, I was writing with the 'In Practice' hat on, and definitely wasn't trying to sell you anything.)

>I'm up in the air over 2 stages or the Tetrode. I
>think the tetrode is probably going to win. I've posed the question to
>some AM types on AM Fone to see what they say.
>

--
73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

5964. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 20:14:27 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1134850466.995920.154550@g49g2000cwa.googlegroups.com>
Source record: 15497
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Sorry - somehow lost the cross-posted groups!

Pierian Spring wrote:
> Apart from the gratuitous abuse in the last line quoted below,
> you have forgottne very quickly your remark, "About sums you
> up - old views, old world, just old..... "
>
> You are so habituated by insulting and childish outbursts
> that you assume it to be normal adult behaviour - it isn't.
>
> As to your farce of an apology - as I remember it - it
> was disingenuous - blaming me for your own social
> maladjustments and was followed almost
> immediately by further rudeness.
>
> You don't realise that you're doing it, for which reason
> you are a bad example to youngsters and therefore
> should not be employed in _ANY_ capacity in _ANY
> school.
>
>
>
> Leigh Preece wrote:
> >
> > What insulting remark? I haven't made any recent remarks and, for past
> > remarks, you surely remember my public apology?
> >
> > He just hates it when he can't return the volley when challenged!

5965. Re: To build or not to build

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 20:56:30 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <DV_of.12826$kP5.12470@bignews5.bellsouth.net>
Source record: 15348

Ian White GM3SEK wrote:
> Ken Scharf wrote:
>
>> A single 4cx800 will get you close to the legal limit.
>
>
> That's being over-ambitious. The manufacturer's data (Svetlana) says
> that a single 4CX800A "will conservatively produce 750 watts PEP SSB,
> and 750 watts Key Down CW in any of the three modes: grid-driven,
> grid-driven passive input, and cathode-driven."
> http://www.g8wrb.org/data/Svetlana/pdf/4CX800A.pdf
>
> You can certainly screw more power from the tube, but intermodulation
> levels will rise rapidly. When selecting a tube, a good rule of thumb is
> to expect an RF output equal to the tube's anode dissipation.
>
> If the original aim was for something "in the region of" a kilowatt, it
> would be well worth considering a single 4CX800 at slightly reduced output.
>
>
>
I didn't have the data sheet in front of me, but I just assumed that
with a plate rating of 800w it would max out near 1200w out.
The 3cx800 tube will put out this much and there are single tube
amps using this bottle that will do that. Guess the 4cx800 is a
bit short on the plate voltage or max cathode current rating to
make it to 1200w.

Well you could use a pair of 4cx800's to get to 1500w out if that
is your goal. A pair of these are STILL cheaper than a single
4cx1000a or 8877 (especially with the cost of the sockets
figured in).

5966. Re: damaged collins filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 23:14:05 UTC
From: Casual Fool <CasualFool@fakeemailadress.com>
Message-ID: <op59q1t6mlkomtme2j7iup87p80tih5144@4ax.com>
Source record: 15350

On Fri, 16 Dec 2005 23:06:46 -0500, Ken Scharf
<wa2mzeNOTTHIS@bellsouth.net> wrote:

>I have a new in the original box F455N20 collins filter
>(from R390A) that I got at a hamfest many years ago
>and stored it away for a 'future project'.
>
>I dug it out recently and was examining it when I noticed
>that as I rotated it in my hand I could feel something
>inside shifting back and forth. I never noticed this
>before (the filter was NEVER dropped in my care and
>has remained packed in the original packing material
>all this time). Is this normal for this type of filter
>or might the unit be defective?

Hi Ken, I had a similar problem with an F455 XXXX 05 mechanical filter for a 75S-3B/C receiver. When I would switch it in, the insertion loss was 20 dB plus. Since I figured I had nothing to lose, I carefully took the filter apart, and as I recall, there are three wires that are spot welded to a row of resonating discs, and my filter had some busted connections on one row of the resonating discs. I knew I could not fix the filter, per say, but since I bought the 75S3-B from the original owner, he could have very well dropped the filter, and then installed it... I propose this for your filter. Since I haven't taken apart a R390A filter, plug the thing in, and see if there is any insertion loss. It may be that in your filter, which I presume is in a round package, like a 75A-4, was affixed on either end, where the input and output transformer(s) connect to the resonating discs, may have been held in place with some foam or glue to keep the discs from moving. I have seen in some Japanese mechanical filters they use a foam substance that degrades over the years, however, I'm not sure on the R390A filter.. So, plug the darn thing in a good working receiver, and see if it works.. If its busted, then you've only wasted a few minutes.. If your in dire straits, and need a new filter, or a used NOS filter, there are plenty out there.. BTW, I haven't known or heard of anyone that has really fixed a Collins Mechanical Filter with busted resonating discs where the stadia wire has broken loose from the discs... Good Luck OM es Best 73.. Tony WB8MLA, near Cleveland, OH...

5967. BF964S noise - alternatives??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-17 23:15:24 UTC
From: Samuel Hunt <shunt010@hotmail.com>
Message-ID: <do266b$ch7$1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 15349

I'm looking at getting a preamp that's based around a BF964S.

These appear to have about 1dB noise figure at 200mhz. It's to be used on 2m.

Does anyone know of a suitable alternative that I could swap it with that has less noise?

Sam

5968. Re: damaged collins filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 01:07:44 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <9B2pf.4536$Qa1.176@bignews1.bellsouth.net>
Source record: 15351

Casual Fool wrote:
> On Fri, 16 Dec 2005 23:06:46 -0500, Ken Scharf
> <wa2mzeNOTTHIS@bellsouth.net> wrote:
>
>
>>I have a new in the original box F455N20 collins filter
>>(from R390A) that I got at a hamfest many years ago
>>and stored it away for a 'future project'.
>>
>>I dug it out recently and was examining it when I noticed
>>that as I rotated it in my hand I could feel something
>>inside shifting back and forth. I never noticed this
>>before (the filter was NEVER dropped in my care and
>>has remained packed in the original packing material
>>all this time). Is this normal for this type of filter
>>or might the unit be defective?
>
>
>
> Hi Ken, I had a similar problem with an F455 XXXX 05 mechanical filter
> for a 75S-3B/C receiver. When I would switch it in, the insertion loss
> was 20 dB plus. Since I figured I had nothing to lose, I carefully
> took the filter apart, and as I recall, there are three wires that are
> spot welded to a row of resonating discs, and my filter had some
> busted connections on one row of the resonating discs. I knew I could
> not fix the filter, per say, but since I bought the 75S3-B from the
> original owner, he could have very well dropped the filter, and then
> installed it... I propose this for your filter. Since I haven't taken
> apart a R390A filter, plug the thing in, and see if there is any
> insertion loss. It may be that in your filter, which I presume is in a
> round package, like a 75A-4, was affixed on either end, where the
> input and output transformer(s) connect to the resonating discs, may
> have been held in place with some foam or glue to keep the discs from
> moving. I have seen in some Japanese mechanical filters they use a
> foam substance that degrades over the years, however, I'm not sure on
> the R390A filter.. So, plug the darn thing in a good working receiver,
> and see if it works.. If its busted, then you've only wasted a few
> minutes.. If your in dire straits, and need a new filter, or a used
> NOS filter, there are plenty out there.. BTW, I haven't known or heard
> of anyone that has really fixed a Collins Mechanical Filter with
> busted resonating discs where the stadia wire has broken loose from
> the discs... Good Luck OM es Best 73.. Tony WB8MLA, near Cleveland,
> OH...
Thanks for the info.

This filter is from the R390a and is normally soldered into the circuit. It does not have terminals that can 'plug in', the filter is mounted under the chassis in a bulkhead that shields the input from the output. The unit I have came in the original Collins box and was sold as a spare. I have another Collins filter, I think the part number is FA455N27 that is the usual plug in package with three pins on each end, probably from an S line rig. This filter makes no internal sound when handled, so it is still in good shape. I was going to use one of them in a homebrew rig and the older R390 type has a 2.0khz bandwidth vs the 2.7khz bandwidth of the newer filter.

If these filters can go bad just sitting in the original box in a low humidity environment, I wonder how many R390A's now have rotting filters?

5969. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 01:14:55 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <4aGdnZrvFPqPJTneRVn-uw@comcast.com>
Source record: 15352
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Saandy , 4Z5KS" <hardware2@ift-int.com> wrote in message
news:1134562449.096696.326280@o13g2000cwo.googlegroups.com...
> YOU CALL THIS A WORKBENCH!?!?!?
> my Goodness, if the mess on mine is les than 5 inches deep I feel I
> didn't do anything on that table! You know, I trained myself to
> identify location of things by the sound they make when they fall on
> something else when I throw it aside. If I were now to mop it up , I
> wouldn't be able to find anything!
> In any case I wish you good luck and I congratulate you for the
> initiative.
> Saandy 4Z5KS
>

Just missing "ON VACATION" sign :-)

5970. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 06:57:29 UTC
From: meow2222@care2.com
Message-ID: <1134889049.450477.124800@g49g2000cwa.googlegroups.com>
Source record: 15353
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Too_Many_Tools wrote:

> Thanks for the responses so far....
>
> A few more questions....
>
> How much and what type of storage do you have?

seems there are pros and cons to all of them. Budget is a relevant question, you wont get tracked racks on a limited budget.

Cardboard boxes are budget-free, most flexible, spares store flat, and you can cut them up for sound proofing.

> How are the workbenches laid out most efficiently? L shaped? U shaped?
> T shaped?

I dont know. I've always gone for multilayered where possible. But whats best depends. Being able to put some kit on a half depth shelf under the worktop saves space. And another high shelf gives more opportunity for more gear thats semi within reach.

> How much stationary and how much mobile?

if theres room to move anything about, youre not using your space efficiently.

> What do you like for lighting?

Flourescent 3500K, 2 or 3 lights with switchbank so you can vary the level. High brightness is quite unpleasant all day, and gentler lighting no good for all work.
5w CFL inspection light. Ultrabright LED on the end of a foot of bellwire for a tiny spaces light inside equipment - very handy. Be sure to sleeve insulate it.
The one thing I've never found handy is an anglepoise. Too large, too uncooperative, too often in the way.
Magnifying light for sm work - though I dont have that here.

> Has anyone built power busses into your bench? If so, what was it?

On front of, side of, above, behind, under, yes, but not into. Into is too inflexible, and a pointless money spend imho. I used built-in at work but never thought it the best option.

> How about floor coverings? Ever drop a tiny screw or surface mount part
> on the floor and spend hours looking for it?

No, consider what the part costs and what your time's worth. There are normally more in the box. I always use a multicompartment tray to put removed bits in so this doesnt happen.

I suppose antistatic lino would be the ideal floor, but never had it. Ordinary vinyl floors are the worst for static, I'd avoid those. Concrete conducts more than I'd like, puts humans at risk. HT PSUs with reservoir caps are effectively not protected by RCDs (GFCIs). Wood is the best imho, its insulating, doesnt generate static, comfortable, smooth surfaced, looks good, feels good, is often already in place, is low cost, easy clean, low noise, what more could you want?

Dont overlook climate control. I dont know where you are but summer dryness isnt good for static. A wet towel and fan restores RH and catches pollen, if you dont want to spring for proper climate control. Also fumes can be an issue at times, esp burning plastic, though I've never considered going as far as a fume cupboard. Outdoors is fine for that occasional job. But if you really wanted everything, I guess a powerful extract fan at the back of the bench would see occasional use.

Dont forget to ask the cat too. You need somewhere comfortable and close for kitty, somewhere that keeps an obstacle in the way of climbing on the bench, so you get enough time to take action re soldering iron, voltages etc. In practice you need a few somewheres, and the cat will decide which is good. At least one within reach and one out of reach.

When you get on to test gear, definitely have 2 computers. One for the serious stuff, the other one you can put every bit of unknown but looks interesting software on you want, turn it into an all singing all dancing all crashing test centre. I never knew I needed a vector scope, but with a PC its free. Ditto a wide range of variable performance test gear.

NT

5971. Re: Question regarding the AADE L/C meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 08:13:14 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1134893594.569491.60600@g49g2000cwa.googlegroups.com>
Source record: 15354

this is what happens when you make a test instrument do what it isn't
supposed to.
Yes, what you actually measure is the interwinding capacitance pf the
coil. the bigger coils have quite a lot of it. besides, the capacitance
is not a linear function of size. there are so may factors influencing
it that you can't realy calculate it. like they say, your shoes size
and underwear color go into it.
but it's OK: thi is the way it's supposed to work.
I compared it with the Autek analyzer I laso have
Saandy 4Z5KS

5972. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 09:38:43 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1134898723.007259.103040@z14g2000cwz.googlegroups.com>
Source record: 15355
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Oops, I seem to have lost the other groups again.

Sorted!

Pierian Spring responded with justifiable indignation to LEIGH PREECE:
> Oh, I almost forgot your criminal breaches of
> the Telecommunications Act, the Forgery Act,
> and the Malicious Communications Act wherein
> you forged grossly offensive postings to the Internet
> that purported to have come from me.
>
> No, I don't think that you should work in schools.
>
> Pierian Spring wrote:
> > You yourself published the remarks quoted below by repeating
> > them in the post which I quoted below. If you do not believe
> > them to be true, why did you repeat them?
> >
> > My opinion of you which has been caused by your own
> > one-sided campaign of vituperative bile, was brought
> > about by your obsession with me, your habituation with
> > the publishing of infantile and grossly offensive
> > comments, your cowardly use of pseudonyms behind
> > from which to further vent your spleen, your admission of guilt
> > by an apology (after which you continued to be abusive and
> > trying to justify your abuse thereby calling into question your
> > sincerity), and your attempts to justify your infantile outbursts,
> > is that you are of an immature, anti-social and maladjusted
> > personality that is a disgustingly poor example to give to
> > children and which means that you are a danger to children
> > and should not be employed in _ANY_ capacity in _ANY_ school.
> >
> > Your childish outbursts and my indignant responses to them have
> > occurred
> > entirely within the public forum of this NG. If there are any issues
> > arising therefrom, then this NG is the place to raise them, entirely
> > open and above board. I see no reason to run away and hide in
> > a cowardly fashion in an email discourse. This very-public situation
> > has come about entirely by your own action, and it is a sign of your
> > continuing infantility that you wish to suppress public criticism of
> > yourself and your public childishness.
> >
> > Try growing up.

> >

5973. Need a UHF tube - link

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 09:40:16 UTC
From: Paul P <p.pinyotREMOVE@REMOVEworldnet.attREMOVE.netREMOVE>
Message-ID: <48apf.167149$qk4.131983@bgtnsc05-news.ops.worldnet.att.net>
Source record: 15356

http://www.burle.com/comtube.htm

Dream and Enjoy

5974. Annc: New release of KE5FX GPIB Toolkit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 09:56:07 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e0ed20f6adc75a3989713@news-central.giganews.com>
Source record: 15357
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

Free to any/all interested parties:

http://www.speakeasy.org/~jmiles1/ke5fx/gpib/readme.htm

Some of this code has been around for quite awhile, but it's never been
properly packaged and documented until now. The new spectrum-
surveillance and phase-noise measurement utilities are VERY cool.
Enjoy!

-- john, KE5FX

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

5975. AM xmtr

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 10:07:09 UTC
From: Paul P <p.pinyotREMOVE@REMOVEworldnet.attREMOVE.netREMOVE>
Message-ID: <hxapf.167207$qk4.132616@bgtnsc05-news.ops.worldnet.att.net>
Source record: 15358
Body handling: HTML body converted to readable text

http://www.amwindow.org/tech/htm/pw.htm You will need a license for these.

"Paul P" wrote in
message news:48apf.167149$qk4.131983@bgtnsc05-news.ops.worldnet.att.net...
> http://www.burle.com/comtube.htm
>
> Dream and Enjoy
>

5976. Re: Pepper And Salt - Re Gareth Alun Evans G4ASW

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 11:30:32 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <43a54827.84463036@news.iol.ie>
Source record: 15359
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"tox" <tox@toxtox.co.com> wrote:

> No worse than DSP, heat bands, polarised resistors, fettling, slope
> detection, big k and
> of course, lol...unclear emissions!

if i didnt know any better i'd swear you have bits of twine attached to
your wrists and the othr ends of the twine lead to somewhere in kent.

5977. Re: Tool Talk

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 11:31:02 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <43a5486d.84532956@news.iol.ie>
Source record: 15360
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Walter Raleigh <walterraleigh69nospam@hotmail.com> wrote:

> I gather that Z is something of an authority on tools ;-)

1.
please publish your name + callsign in a
similar manner to the way you have published
my name + callsign.
I want this reply as a simple FIRST NAME SECOND NAME and then CALLSIGN.

2.
please state quite clearly if your reference to
"automatics" and "jackeen ethnic cleansing" was
a threat or not.
I want this reply as a simple but definite YES or NO.

I will continue to request above until you fully
satisfy my requests.
You have yet to answer EITHER request to my
satisfaction as all previous replies have been
so vague and wooly to a point of being useless.

5978. Re: Damaged Collins Filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 12:20:17 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <UOSdnZn0Z_uZyTjeRVn-pg@comcast.com>
Source record: 15361

"Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
news:9B2pf.4536$Qa1.176@bignews1.bellsouth.net...
> Casual Fool wrote:
>> On Fri, 16 Dec 2005 23:06:46 -0500, Ken Scharf
>> <wa2mzeNOTTHIS@bellsouth.net> wrote:
>>
>>
>>>I have a new in the original box F455N20 collins filter
>>>(from R390A) that I got at a hamfest many years ago
>>>and stored it away for a 'future project'.
>>>
>>>I dug it out recently and was examining it when I noticed
>>>that as I rotated it in my hand I could feel something
>>>inside shifting back and forth. I never noticed this
>>>before (the filter was NEVER dropped in my care and
>>>has remained packed in the original packing material
>>>all this time). Is this normal for this type of filter
>>>or might the unit be defective?
>>
>>
>>
>> Hi Ken, I had a similar problem with an F455 XXXX 05 mechanical filter
>> for a 75S-3B/C receiver. When I would switch it in, the insertion loss
>> was 20 dB plus. Since I figured I had nothing to lose, I carefully
>> took the filter apart, and as I recall, there are three wires that are
>> spot welded to a row of resonating discs, and my filter had some
>> busted connections on one row of the resonating discs. I knew I could
>> not fix the filter, per say, but since I bought the 75S3-B from the
>> original owner, he could have very well dropped the filter, and then
>> installed it... I propose this for your filter. Since I haven't taken
>> apart a R390A filter, plug the thing in, and see if there is any
>> insertion loss. It may be that in your filter, which I presume is in a
>> round package, like a 75A-4, was affixed on either end, where the
>> input and output transformer(s) connect to the resonating discs, may
>> have been held in place with some foam or glue to keep the discs from
>> moving. I have seen in some Japanese mechanical filters they use a
>> foam substance that degrades over the years, however, I'm not sure on
>> the R390A filter.. So, plug the darn thing in a good working receiver,
>> and see if it works.. If its busted, then you've only wasted a few
>> minutes.. If your in dire straits, and need a new filter, or a used
>> NOS filter, there are plenty out there.. BTW, I haven't known or heard
>> of anyone that has really fixed a Collins Mechanical Filter with
>> busted resonating discs where the stadia wire has broken loose from
>> the discs... Good Luck OM es Best 73.. Tony WB8MLA, near Cleveland,

>> OH...
> Thanks for the info.
> This filter is from the R390a and is normally soldered into the circuit.
> It does not have terminals that can 'plug in', the filter is mounted under
> the chassis in a bulkhead that shields the input from the output. The
> unit I have came in the original Collins box and was sold as a spare.
> I have another Collins filter, I think the part number is FA455N27 that
> is the usual plug in package with three pins on each end, probably from
> an S line rig. This filter makes no internal sound when handled, so it
> is still in good shape. I was going to use one of them in a homebrew
> rig and the older R390 type has a 2.0khz bandwidth vs the 2.7khz bandwidth
> of the newer filter.
>
> If these filters can go bad just sitting in the original box in a low
> humidity environment, I wonder how many R390A's now have rotting filters?

Large file (about 300 pages) ... from R390A group (Chuck Ripple) -- just has filter and IF comments, repair suggestions, tips, "pearls", etc:
http://209.35.120.129/Pearls/IF-deck-tips.pdf

Longwave products R390A filters
http://www.r390a.com/html/Curry.html

gb

5979. Re: Pepper And Salt - Re Gareth Alun Evans G4ASW

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 13:03:21 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1134911000.965501.306290@g47g2000cwa.googlegroups.com>
Source record: 15362
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

By "kent", do you mean "trousers"?
(along the lines of Oxford Bags)

zYYPK wrote:
> "tox" <tox@toxtox.co.com> wrote:
>
> > No worse than DSP, heat bands, polarised resistors, fettling, slope
> > detection, big k and
> > of course, lol...unclear emissions!
>
>
> if i didnt know any better i'd swear you have bits of twine attached to
> your wrists and the othr ends of the twine lead to somewhere in kent.

5980. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 14:37:12 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1134916632.333413.24000@g14g2000cwa.googlegroups.com>
Source record: 15363
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

I suggest that you learn something about computers - the
qsl web site was working well in the 5 minutes immediately before
I wrote my original post (the one that got lost).

And, on checking now, it is still working; I wouldn't follow
if the roles were reversed, but you
may like to try the following....

http://www.qsl.net/m5gwh/about%20me.htm

So, what happened? Did the infantile and aggressive persona
that you present to this NG result in you getting sacked as
someone being unsuitable to have contact with chidren?

Leigh Preece wrote:
> Pierian Spring wrote:
> > (Previous post seems to have got lost, I though I'd replied,
> > perhaps I mistakenly emailed the CBer instead?)
> >
> > I do not claim that you work in a school. I only state that
> > the infantile and maladjusted persona that you present
> > renders you unsuitable to work in _ANY_ school in
> > _ANY_ capacity.
> >
> > The only claim to be working in a school, Maryhill High
> > School in Kidsgrove, comes in an entry in QSL.NET for
> > someone with the same name as you, and with the
> > CBer's callsign, M5GWH.
>
> You will notice that the website no longer works and what is there has
> not been updated since February 2004 - so you are basing your knowledge
> on old and incorrect information.

5981. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 14:46:56 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1134917216.802214.114720@g49g2000cwa.googlegroups.com>
Source record: 15364
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

I mean, in this report you seem to be the bee's knees,.....

http://www.holdthefrontpage.co.uk/news/2003/12dec/031222med.shtml

But now you're suggesting that you're persona non grata?

What happened?

Or is this merely your attempt at FUD/Disinformation, and you
were given an official warning the last time that you brought
Maryhill High School into disrepute?

Pierian Spring wrote:
> I suggest that you learn something about computers - the
> qsl web site was working well in the 5 minutes immediately before
> I wrote my original post (the one that got lost).
>
> And, on checking now, it is still working; I wouldn't follow
> if the roles were reversed, but you
> may like to try the following....
>
> http://www.qsl.net/m5gwh/about%20me.htm
>
> So, what happened? Did the infantile and aggressive persona
> that you present to this NG result in you getting sacked as
> someone being unsuitable to have contact with chidren?
>
> Leigh Preece wrote:
> > Pierian Spring wrote:
> > > (Previous post seems to have got lost, I though I'd replied,
> > > perhaps I mistakenly emailed the CBer instead?)
> > >
> > > I do not claim that you work in a school. I only state that
> > > the infantile and maladjusted persona that you present
> > > renders you unsuitable to work in _ANY_ school in
> > > _ANY_ capacity.
> > >
> > > The only claim to be working in a school, Maryhill High
> > > School in Kidsgrove, comes in an entry in QSL.NET for
> > > someone with the same name as you, and with the
> > > CBer's callsign, M5GWH.
> >
> > You will notice that the website no longer works and what is there has

> > not been updated since February 2004 - so you are basing your knowledge
> > on old and incorrect information.

5982. Re: BF964S noise - alternatives??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 16:17:36 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1134922656.246374.46970@o13g2000cwo.googlegroups.com>
Source record: 15365

I'm curious, what sorts of things do amateurs do that really need
better than a 1dB noise figure on 2 meters? I can understand it on
higher frequencies, but I'd have thought that galactic noise, at least,
would be a limiting factor on 2 meters.

Looking to be educated,

Tom

5983. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 16:18:37 UTC
From: Leigh Preece <news@leighs.org>
Message-ID: <xZfpf.733$NI4.304@newsfe4-gui.ntli.net>
Source record: 15366
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Pierian Spring wrote:
> I mean, in this report you seem to be the bee's knees,.....
>
> http://www.holdthefrontpage.co.uk/news/2003/12dec/031222med.shtml
>
> But now you're suggesting that you're persona non grata?
>
> What happened?
>
> Or is this merely your attempt at FUD/Disinformation, and you
> were given an official warning the last time that you brought
> Maryhill High School into disrepute?

Old news.

5984. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 16:20:22 UTC
From: Leigh Preece <news@leighs.org>
Message-ID: <a%fpf.734$Nl4.208@newsfe4-gui.ntli.net>
Source record: 15367
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Pierian Spring wrote:

> I suggest that you learn something about computers - the
> qsl web site was working well in the 5 minutes immediately before
> I wrote my original post (the one that got lost).

It's a not a site - but a page.

> And, on checking now, it is still working; I wouldn't follow
> if the roles were reversed, but you
> may like to try the following....
>
> http://www.qsl.net/m5gwh/about%20me.htm

Ermm - that's a webpage from a defunct site - an orphan page with no
parent - so literally just existing and not referenced.

5985. Re: Question regarding the AADE L/C meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 16:42:00 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <r54bq11mud7qkfvbu04q56mj4pgcl5ss40@4ax.com>
Source record: 15368

I don't believe that is correct.

What you are measuring is the net result of the interwinding capacitance PLUS the reactance of the coil, but it is only correct at the frequency of the test. Change the frequency and you will get a different answer. You are NOT measuring the interwinding capacitance alone.

73, Bill W6WRT

~~~~~~
ORIGINAL MESSAGE:

On 18 Dec 2005 00:13:14 -0800, "Saandy , 4Z5KS"
<hardware2@ift-int.com> wrote:

>Yes, what you actually measure is the interwinding capacitance pf the
>coil.
~~~~~~

5986. Re: BF964S noise - alternatives??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 17:15:17 UTC
From: toor@iquest.net
Message-ID: <do45f5$11v8$1@news.iquest.net>
Source record: 15369

In article <1134922656.246374.46970@o13g2000cwo.googlegroups.com>,
"K7ITM" <k7itm@msn.com> writes:
> I'm curious, what sorts of things do amateurs do that really need
> better than a 1dB noise figure on 2 meters? I can understand it on
> higher frequencies, but I'd have thought that galactic noise, at least,
> would be a limiting factor on 2 meters.
>
> Looking to be educated,
>
I also question (a little) the need for better than a true 1dB NF
when using a terrestrial antenna in the 2M band. On the other hand,
if the transistor is speced to be able to supply 1dB NF, but isn't
working as well as desired because of preamp design, high return
loss, etc.

It isn't really HARD to get 1dB NF at frequencies
below 1GHz (or even higher), but it is sometimes tricky to get a good real
world NF while also providing good return losses (good impedance match),
at high signal levels, especially while trying to minimize DC power usage.

My own high-end jelly bean for near-ultimate performance below 1GHz,
moderately high power for reception (10mw - 100mw), reasonable noise match in
the 50-75Ohm range, but perhaps a little tricky due to high frequency
behavior would be the HP f54143 (Hi IP3, reasonable noise match, it has
lots/too much of UHF or higher freq gain, but is moderately well behaved).
This part costs less than $2... (I bought my supply for between
$1.50 and $2.00 each.) I'd also consider using moderate current SiGe
transistors while biasing them at about 10ma to 20ma (which is generally a
reasonable range for a good 50-75ohm noise match.) Either the SiGe
transistors NESG2101 or the PHEMT (54143) will give better than 1dB NF
with a generally fairly wide noise match. (SiGe is generally better than
most alternatives for oscillators -- off subject -- also, due to their
generally very good 1/f characteristics and generally high Beta, which
translates to generally low current noise -- esp in the low freqs where
part of the AM/PM noise comes from.)

Given the very wide signal strength range, I'd definitely consider OIP3
of at least 25-30dBm, and try to design for no more than 10-15dB gain.
It is very possible that even a very highly performing preamp will work
worse than no preamp at all!!!

John

5987. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 17:24:30 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1134926670.660726.238160@g43g2000cwa.googlegroups.com>
Source record: 15370
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

No, you are quite wrong on two counts.....
1. The qsl web site is definitely a site and not a page.

2. "http://www.qsl.net/m5gwh/about%20me.htm" is not
an orphan at all, because if you try for "http://www.qsl.net/m5gwh",
you get access to a fairly extensive directory.

I suggest that you learn something about computers.

Leigh Preece wrote:
> Pierian Spring wrote:
> > I suggest that you learn something about computers - the
> > qsl web site was working well in the 5 minutes immediately before
> > I wrote my original post (the one that got lost).
>
> It's a not a site - but a page.
>
> > And, on checking now, it is still working; I wouldn't follow
> > if the roles were reversed, but you
> > may like to try the following....
> > http://www.qsl.net/m5gwh/about%20me.htm
>
> Ermm - that's a webpage from a defunct site - an orphan page with no
> parent - so literally just existing and not referenced.

5988. Re: Hi Just Saying Hello

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 18:24:58 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <th9bq1ts3sc3a5fomeg0924nq3hl0jgjlh@4ax.com>
Source record: 15371
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Harry wrote:

>
>"Pierian Spring of very dull water" wrote:
>
>> Ham Radio is not a hobby, it is a technical pursuit.

ITHM "it is technically a pursuit of the uneatable by the
unspeakable".

It has one proponent on ukra.

An even cursory study of the gospel by which it is promulgated will
reveal it is built on sand rather than rock; 'operating' was once
decried, but is now elevated to the highest level. Or has it changed
yet again? Who knows? Who cares?

>Why the personal attack?

You have entered the pastime by the easiest means possible.

Some, who did the same in their time, cover their embarrassment by
attacking those who came later and did the same thing. They are
evident by their bluster, self-importance, and technical pomposity.

Take no notice of them.

from
Aero Spike

5989. Re: Damaged Collins Filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 18:30:25 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e0f4a8978d6ab2989714@news-central.giganews.com>
Source record: 15373

In article <UOSdnZn0Z_uZyTjeRVn-pg@comcast.com>,
onw9mapsgb@no.arrl.spam.net says...
> "Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
> news:9B2pf.4536$Qa1.176@bignews1.bellsouth.net...
> > Casual Fool wrote:
> >> On Fri, 16 Dec 2005 23:06:46 -0500, Ken Scharf
> >> <wa2mzeNOTTHIS@bellsouth.net> wrote:
> >>
> >>
> >>>I have a new in the original box F455N20 collins filter
> >>>(from R390A) that I got at a hamfest many years ago
> >>>and stored it away for a 'future project'.
> >>>
> >>>I dug it out recently and was examining it when I noticed
> >>>that as I rotated it in my hand I could feel something
> >>>inside shifting back and forth. I never noticed this
> >>>before (the filter was NEVER dropped in my care and
> >>>has remained packed in the original packing material
> >>>all this time). Is this normal for this type of filter
> >>>or might the unit be defective?
> >>
> >>
> >>
> >> Hi Ken, I had a similar problem with an F455 XXXX 05 mechanical filter
> >> for a 75S-3B/C receiver. When I would switch it in, the insertion loss
> >> was 20 dB plus. Since I figured I had nothing to lose, I carefully
> >> took the filter apart, and as I recall, there are three wires that are
> >> spot welded to a row of resonating discs, and my filter had some
> >> busted connections on one row of the resonating discs. I knew I could
> >> not fix the filter, per say, but since I bought the 75S3-B from the
> >> original owner, he could have very well dropped the filter, and then
> >> installed it... I propose this for your filter. Since I haven't taken
> >> apart a R390A filter, plug the thing in, and see if there is any
> >> insertion loss. It may be that in your filter, which I presume is in a
> >> round package, like a 75A-4, was affixed on either end, where the
> >> input and output transformer(s) connect to the resonating discs, may
> >> have been held in place with some foam or glue to keep the discs from
> >> moving. I have seen in some Japanese mechanical filters they use a
> >> foam substance that degrades over the years, however, I'm not sure on
> >> the R390A filter.. So, plug the darn thing in a good working receiver,
> >> and see if it works.. If its busted, then you've only wasted a few
> >> minutes.. If your in dire straits, and need a new filter, or a used
> >> NOS filter, there are plenty out there.. BTW, I haven't known or heard
> >> of anyone that has really fixed a Collins Mechanical Filter with

> >> busted resonating discs where the stadia wire has broken loose from
> >> the discs... Good Luck OM es Best 73.. Tony WB8MLA, near Cleveland,
> >> OH...
> > Thanks for the info.
> > This filter is from the R390a and is normally soldered into the circuit.
> > It does not have terminals that can 'plug in', the filter is mounted under
> > the chassis in a bulkhead that shields the input from the output. The
> > unit I have came in the original Collins box and was sold as a spare.
> > I have another Collins filter, I think the part number is FA455N27 that
> > is the usual plug in package with three pins on each end, probably from
> > an S line rig. This filter makes no internal sound when handled, so it
> > is still in good shape. I was going to use one of them in a homebrew
> > rig and the older R390 type has a 2.0khz bandwidth vs the 2.7khz bandwidth
> > of the newer filter.
> >
> > If these filters can go bad just sitting in the original box in a low
> > humidity environment, I wonder how many R390A's now have rotting filters?
>
> Large file (about 300 pages) ... from R390A group (Chuck Ripple) -- just has
> filter and IF comments, repair suggestions, tips, "pearls", etc:
> http://209.35.120.129/Pearls/IF-deck-tips.pdf

Wow... that file is amazing. R390 people are actually harder-core about
service, documentation, and product history than the vintage-Ferrari
nuts I have known.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

5990. Re: Hi Just Saying Hello

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 18:36:26 UTC
From: Harry <newsgroup@invalid.com>
Message-ID: <do49vgtad1@domitilla.aioe.org>
Source record: 15372
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Spike" <Aero.Spike@S&T.invalid> wrote in message
news:th9bq1ts3sc3a5fomeg0924nq3hl0jgjlh@4ax.com...
>
> Harry wrote:
>
>>
>>"Pierian Spring of very dull water" wrote:
>>
>>> Ham Radio is not a hobby, it is a technical pursuit.
>
> ITHM "it is technically a pursuit of the uneatable by the
> unspeakable".
>
> It has one proponent on ukra.
>
> An even cursory study of the gospel by which it is promulgated will
> reveal it is built on sand rather than rock; 'operating' was once
> decried, but is now elevated to the highest level. Or has it changed
> yet again? Who knows? Who cares?
>
>>Why the personal attack?
>
> You have entered the pastime by the easiest means possible.
>
> Some, who did the same in their time, cover their embarrassment by
> attacking those who came later and did the same thing. They are
> evident by their bluster, self-importance, and technical pomposity.
>
> Take no notice of them.

Thank you Spike, it sounds like good advice.

Harry

5991. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 18:46:33 UTC
From: Leigh Preece <news@leighs.org>
Message-ID: <d8ipf.48018$uR.24854@newsfe7-gui.ntli.net>
Source record: 15374
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Pierian Spring wrote:

> No, you are quite wrong on two counts.....
> 1. The qsl web site is definitely a site and not a page.

I insist that it is simply a page - maybe you should learn the rudiments of website assembly as there is no identifiable index or homepage but a collection of orpan pages or what would have been 'parent/child' pages.

> 2. "http://www.qsl.net/m5gwh/about%20me.htm" is not
> an orphan at all, because if you try for "http://www.qsl.net/m5gwh",
> you get access to a fairly extensive directory.

Yes - correct - but again this is a directory listing and not a website as, I state above, a website requires a definate 'index' or 'home' page.

> I suggest that you learn something about computers.

I suggest you learn something about website construction and the heirarchy system of website structure.

5992. Re: Question regarding the AADE L/C meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 19:41:11 UTC
From: Bill <exray@coqui.net>
Message-ID: <d349b$43a5bb59$4232bd44$25777@COQUI.NET>
Source record: 15375

Bill Turner wrote:

> I don't believe that is correct.
>
> What you are measuring is the net result of the interwinding
> capacitance PLUS the reactance of the coil, but it is only correct at
> the frequency of the test. Change the frequency and you will get a
> different answer. You are NOT measuring the interwinding capacitance
> alone.
>
> 73, Bill W6WRT

I partially agree, Bill. After looking at the schematic and crunching
some numbers I see that the added inductance at the 750 kc test freq
would have the equivalent 'shift' of about 20pf in this particular example.
So taking that into account there's no reason to believe that the
remainder of the reading is not the actual capacitance inherent in the coil.

-Bill

5993. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 19:53:52 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1134935632.670418.204760@o13g2000cwo.googlegroups.com>
Source record: 15376
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

No other suggestions?

5994. Re: BF964S noise - alternatives??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 20:38:06 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <k0fbq15fcboupg45038k5g6uak5q3bg9so@4ax.com>
Source record: 15377

On Sun, 18 Dec 2005 17:15:17 +0000 (UTC), toor@iquest.net (John S. Dyson) wrote:

>I also question (a little) the need for better than a true 1dB NF
>when using a terrestrial antenna in the 2M band.

<clip>

>Given the very wide signal strength range, I'd definitely consider OIP3
>of at least 25-30dBm, and try to design for no more than 10-15dB gain.
>It is very possible that even a very highly performing preamp will work
>worse than no preamp at all!!!

One reason for attempting to get a low noise figure as possible, even for terrestrial working, is that you can then afford a larger loss due to input band-pass filtering.

The unloaded Q to loaded Q ratio of the input filter determines the filter loss and the unloaded Q is mainly defined by the filter construction (LC, Helical, 1/4 lines etc.). A 15:1 ratio would give about 0.5 dB loss, while 5:1 ratio attenuates the passband by 1.5 dB.

Assuming a unloaded Q of 100 for an LC filter and loaded Q of 20 would produce a 7 MHz bandwidth (at -3 dB points) with 1.5 dB loss in the middle of passband and assuming 0.5 dB preamplifier noise would give a total 2.0 dB noise figure, with a nice attenuation of broadcast FM and VHF TV signals that otherwise might overload the preamplifier.

Paul OH3LWR

5995. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 21:04:19 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <1bjbq19ncb6bmkrb4v9n85687s3ro2btcc@4ax.com>
Source record: 15378
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Sun, 18 Dec 2005 21:33:52 +0100, Rolf_B
<rolfnospambombach@bluewin.ch> wrote:

>John Larkin wrote:
>>
>> A 1N4007 can also be used as a drift step-recovery diode and as a
>> plasma avalanche diode. Together, two can generate a kilovolt edge
>> with a 100 ps risetime.
>
>Very interesting. The 1N4007 seem to be very versatile devices.
>They are available with a SOD-57 glass envelope, too (1N4007G?).
>These are fairly well photoconductive. When illuminated by
>a high efficiency IR LED (HSDL-4230 or so) current transfer
>ratios of 0.001 can be achieved. Not too much, but with
>two LEDs 100uA of photocurrent is obtainable. This is OK for
>a pass element in an "electrostatic" power supply for e.g.
>electron or ion lens systems.

A high-voltage optocoupler; cool.

I've posted a schematic for a hv opamp (400 v p-p) that uses two
optoisolators as the output push-pull stage... it's very cheap and
simple. A higher-voltage photodetector, like a glass power diode,
sounds useful, too.

I worked once with a company in Southern California that had a neat
gadget: it was a truncated cone of silicon with gold contacts on the
base and the flattened apex. It would stand off something like 5KV
until you whacked it from above with a laser, illuminating all the
sides of the cone, whence it would conduct hard. I think they went out
of business, though; it was pretty obscure.

John

5996. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 21:20:13 UTC
From: Fred Bloggs <nospam@nospam.com>
Message-ID: <43A5D288.8030009@nospam.com>
Source record: 15379
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

>
> How much and what type of storage do you have?

I take what they give me- but I prefer those big roll around
multi-drawer jobs with each drawer user partitioned.

>
> How are the workbenches laid out most efficiently? L shaped? U shaped?
> T shaped?

Makes no difference- all lined up against one wall works well, the
mobile stuff needs to go in a rack anyway- roll the rack to where it's
needed, some people prefer carts.

>
> How much stationary and how much mobile?

Every thing goes mobile at one point or any other. Stationary just means
it will be something to make mobile later.

>
> What do you like for lighting?

It can only be flourescent- and built in to the bench in addition to
normal room lighting works best.

>
> Has anyone built power busses into your bench? If so, what was it?

A real bench has bussed line voltage with *LOTS* of receptacles.

>
> How about floor coverings? Ever drop a tiny screw or surface mount part
> on the floor and spend hours looking for it?

It always has to be thick insulating mats rated for 20KV, any IC dropped
on the floor is considered lost and not used, a screw is a different
matter, you shouldn't have to hunt for a hard to find screw, you should
be able to cut to length any replacement.

Better make space for lots of data books and a computer, fire
extinguisher, metal working machines, first aid kit, smoke alarm,
set-aside projects, file cabinets, and nice-to-get-to-later junk you
will accumulate. And make it so that every damned thing can be locked
up- especially the door to the lab, and more locks on all the storage
cabintes once inside, you may consider touch pad enable of all the room

receptacles, and installing an alarm.

5997. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 21:26:33 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <qqkbq1p7gnpgq2s7k8q3rmf5dsaoj4omb7@4ax.com>
Source record: 15380
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Sun, 18 Dec 2005 21:20:13 GMT, Fred Bloggs <nospam@nospam.com>
wrote:

[snip]

>you may consider touch pad enable of all the room
>receptacles, and installing an alarm.

When I was involved in off-line switchers I had a "panic button"
installed... one side-of-the-hand punch dropped the whole lab.

Plus a rule of no work unless a minimum of two people were there.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

5998. AM to FM?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 23:30:17 UTC
From: packerfan6000@yahoo.com
Message-ID: <1134948617.340619.13790@g49g2000cwa.googlegroups.com>
Source record: 15381

Hello, I have a 1969 Porsche that has an original, Blaupunkt, radio.
The AM works, but the FM does not. I was trying to find information on
a "FM to AM converter". If anyone has a schematic, or any advice at
all, I would GREATLY appreciate it. Thanks in advance!

5999. Re: Pepper And Salt - Re Gareth Alun Evans G4ASW

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 23:39:35 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <43a5f316.15230401@news.iol.ie>
Source record: 15382
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Pierian Spring" <radio.ham@lycos.co.uk> wrote:

> By "kent", do you mean "trousers"?
> (along the lines of Oxford Bags)

probably...

i Obviously dont mean in the way of MORSE KEYS

6000. Re: AM to FM?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 23:42:12 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e0f93b268363306989715@news-central.giganews.com>
Source record: 15384

In article <1134948617.340619.13790@g49g2000cwa.googlegroups.com>,
packerfan6000@yahoo.com says...
> Hello, I have a 1969 Porsche that has an original, Blaupunkt, radio.
> The AM works, but the FM does not. I was trying to find information on
> a "FM to AM converter". If anyone has a schematic, or any advice at
> all, I would GREATLY appreciate it. Thanks in advance!
>
>

I'd call these guys up (http://www.radiomanrepair.com/) and see if
they'll provide a quote for repair of the OEM radio. You'll have a
neat, operating vintage car radio, and you might even get the cash back
when you sell the car.

It isn't trivial to convert FM broadcast signals for reception in the AM
band. You pretty much need a back-to-back FM receiver and an AM
transmitter to do that, and the RF work associated with homebrewing a
converter would (honestly) place the task out of reach for anyone who
needs to ask how to do it. :-)

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

6001. Re: Pepper And Salt - Re Eric Williams M3EJO

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-18 23:43:12 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <43a5f406.15471029@news.iol.ie>
Source record: 15383
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Eric 2E0ECW <gin@tonic.uk> wrote:

> Please quote said personal attack.

tut tut tut... dont you know he cant do that here...???

anyway... hows the morse code going or are you just wasting time ?

6002. Re: Damaged Collins Filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 01:19:50 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <YtGdnbg4o-0qlzveRVn-sw@comcast.com>
Source record: 15385

"John Miles" <jmiles@pop.removethistomailme.net> wrote in message
news:MPG.1e0f4a8978d6ab2989714@news-central.giganews.com...
> In article <UOSdnZn0Z_uZyTjeRVn-pg@comcast.com>,
> onw9mapsgb@no.arrl.spam.net says...
>> "Ken Scharf" <wa2mzeNOTTHIS@bellsouth.net> wrote in message
>> news:9B2pf.4536$Qa1.176@bignews1.bellsouth.net...
>> > Casual Fool wrote:
>> >> On Fri, 16 Dec 2005 23:06:46 -0500, Ken Scharf
>> >> <wa2mzeNOTTHIS@bellsouth.net> wrote:
>> >>
>> >>
>> >>>I have a new in the original box F455N20 collins filter
>> >>>(from R390A) that I got at a hamfest many years ago
>> >>>and stored it away for a 'future project'.
>> >>>
>> >>>I dug it out recently and was examining it when I noticed
>> >>>that as I rotated it in my hand I could feel something
>> >>>inside shifting back and forth. I never noticed this
>> >>>before (the filter was NEVER dropped in my care and
>> >>>has remained packed in the original packing material
>> >>>all this time). Is this normal for this type of filter
>> >>>or might the unit be defective?
>> >>
>> >>
>> >>
>> >> Hi Ken, I had a similar problem with an F455 XXXX 05 mechanical filter
>> >> for a 75S-3B/C receiver. When I would switch it in, the insertion loss
>> >> was 20 dB plus. Since I figured I had nothing to lose, I carefully
>> >> took the filter apart, and as I recall, there are three wires that are
>> >> spot welded to a row of resonating discs, and my filter had some
>> >> busted connections on one row of the resonating discs. I knew I could
>> >> not fix the filter, per say, but since I bought the 75S3-B from the
>> >> original owner, he could have very well dropped the filter, and then
>> >> installed it... I propose this for your filter. Since I haven't taken
>> >> apart a R390A filter, plug the thing in, and see if there is any
>> >> insertion loss. It may be that in your filter, which I presume is in a
>> >> round package, like a 75A-4, was affixed on either end, where the
>> >> input and output transformer(s) connect to the resonating discs, may
>> >> have been held in place with some foam or glue to keep the discs from
>> >> moving. I have seen in some Japanese mechanical filters they use a
>> >> foam substance that degrades over the years, however, I'm not sure on
>> >> the R390A filter.. So, plug the darn thing in a good working receiver,
>> >> and see if it works.. If its busted, then you've only wasted a few
>> >> minutes.. If your in dire straits, and need a new filter, or a used

>> >> NOS filter, there are plenty out there.. BTW, I haven't known or heard
>> >> of anyone that has really fixed a Collins Mechanical Filter with
>> >> busted resonating discs where the stadia wire has broken loose from
>> >> the discs... Good Luck OM es Best 73.. Tony WB8MLA, near Cleveland,
>> >> OH...
>> > Thanks for the info.
>> > This filter is from the R390a and is normally soldered into the
>> > circuit.
>> > It does not have terminals that can 'plug in', the filter is mounted
>> > under
>> > the chassis in a bulkhead that shields the input from the output. The
>> > unit I have came in the original Collins box and was sold as a spare.
>> > I have another Collins filter, I think the part number is FA455N27 that
>> > is the usual plug in package with three pins on each end, probably from
>> > an S line rig. This filter makes no internal sound when handled, so it
>> > is still in good shape. I was going to use one of them in a homebrew
>> > rig and the older R390 type has a 2.0khz bandwidth vs the 2.7khz
>> > bandwidth
>> > of the newer filter.
>> >
>> > If these filters can go bad just sitting in the original box in a low
>> > humidity environment, I wonder how many R390A's now have rotting
>> > filters?
>>
>> Large file (about 300 pages) ... from R390A group (Chuck Ripple) -- just
>> has
>> filter and IF comments, repair suggestions, tips, "pearls", etc:
>> http://209.35.120.129/Pearls/IF-deck-tips.pdf
>
> Wow... that file is amazing. R390 people are actually harder-core about
> service, documentation, and product history than the vintage-Ferrari
> nuts I have known.
>
> -- jm

John -

Yes --- Well especially Collins collectors!!

gb

6003. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 01:36:52 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <V9WdndI6JIcpkzvenZ2dnUVZ_tOdnZ2d@comcast.com>
Source record: 15386
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
news:439FA234.396EE28E@earthlink.net...
> meow2222@care2.com wrote:
>>
>> The one thing I avoided like the plague, and still do, is those plastic
>> drawer racks with often open top drawer boxes. You've only got to move
>> one once to see what I mean! One spill and you'll never ever buy one
>> again. Small parts containers must have burst proof latches, I wont use
>> any that dont.
>
>
> I moved over 1000 miles in 1987 and I had 24 50 drawer Akro-Mills
> cabinets full of parts. I cut pieces of cardboard to cover the front and
> placed two of them face to face, then taped them together. I didn't
> have even one part out of place when I arrived at my new place and set
> up my shop. The move was done with my shop's step van and I hauled over
> 17,000 pounds of tools, parts, manuals and test equipment in two trips.
> there is nothing wrong with parts cabinets, if you know how to pack
> them.

Same trick I used when I moved my parts cabinets from PA back to IL in
1980s.

Finally gave away my last old AkroMills metal cabinet (50 drawer) to new
amateur earlier this year.

gb

6004. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 01:40:15 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <YZmdnWuuudjikjveRVn-oA@comcast.com>
Source record: 15387
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Rich Grise" <richgrise@example.net> wrote in message
news:pan.2005.12.15.19.27.21.337730@example.net...
> On Wed, 14 Dec 2005 21:33:45 -0500, John Popelish wrote:
>
>> Rich Grise wrote:
>>> On Wed, 14 Dec 2005 23:26:10 +0000, Michael A. Terrell wrote:
>>>
>>>
>>>>Rich Grise wrote:
>>>>
>>>>>You're supposed to ty-wrap it to the cord, out at the plug end, so that
>>>>>you can't use it while the drill is plugged in. (Keeps your hands in
>>>>>one piece.) :-)
>>>>
>>>> That doesn't work on my drill press. Its chained to the wiring cover
>>>>on the motor and only has a couple inches of slack to keep it out of the
>>>>way.
>>>
>>>
>>> Hmm, then maybe you need a little bungee for it. :-)
>>>
>>> Hey! I just had an invention! The chuck key plugs into a dead-man switch
>>> socket! It's right there on the drill press, and you pull it out, it
>>> kills
>>> the power, you use it, and you have to poke the chuck key back into its
>>> socket or the drill press won't turn on! ;-)
>>>
>>> Nah, they'd defeat it with a nail or something.
>>>
>>
>> If you combine that with a self sealed relay as the run contact
>> (momentary N.O. pushbutton to start, momentary N.C. pushbutton or
>> pulled key to stop) I think it would be just great. I just wouldn't
>> want the motor to start at the moment I plugged the key in the hole.
>> I might just add that to my press.
>
> Not much industry experience, huh? ;-) I only mention it because almost
> every major industrial-grade tool I've seen has "ON" and "OFF" buttons,
> and a latching contactor. If power goes down, or the "OFF" button is
> pressed, or the "EMERGENCY STOP" button is pressed, the machine turns
> off, and doesn't restart when you reset the breaker - you have to
> overtly press the green "ON" (or sometimes "START") button. This gives

> you a chance to clear the scrap out of the machine before you reset
> and restart whatever process got stopped in the middle.
>
> Probably cost-prohibitive for a consumer-level garage or basement
> drill press.
>
Actually not a bad price at all ..... you can get one from Rockler
Woodworking for less than $20 .. these have been on sale for a few weeks...
great price for shop tool .. currently free with their router table. They
have a couple of local stores here in Chicago area
http://www.rockler.com/index.cfm?

gb

6005. Re: AM to FM?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 01:44:14 UTC
From: Bill <exray@coqui.net>
Message-ID: <8616d$43a61077$4232bdda$15903@COQUI.NET>
Source record: 15388

John Miles wrote:

> In article <1134948617.340619.13790@g49g2000cwa.googlegroups.com>,
> packerfan6000@yahoo.com says...
>
>>Hello, I have a 1969 Porsche that has an original, Blaupunkt, radio.
>>The AM works, but the FM does not. I was trying to find information on
>>a "FM to AM converter". If anyone has a schematic, or any advice at
>>all, I would GREATLY appreciate it. Thanks in advance!
>>
>>
>
>
> I'd call these guys up (http://www.radiomanrepair.com/) and see if
> they'll provide a quote for repair of the OEM radio. You'll have a
> neat, operating vintage car radio, and you might even get the cash back
> when you sell the car.
>
> It isn't trivial to convert FM broadcast signals for reception in the AM
> band. You pretty much need a back-to-back FM receiver and an AM
> transmitter to do that, and the RF work associated with homebrewing a
> converter would (honestly) place the task out of reach for anyone who
> needs to ask how to do it. :-)
>
> -- jm

They used to sell FM to AM converters for car radios. They 'worked' ok.
Watch ebay for Audiovox FM Converter. Here's one example.
http://cgi.ebay.com/ebaymotors/ws/eBayISAPI.dll?ViewItem&item=4597467612

Regular old used ones generally sell for $15-20.

If it were me I'd get the original fixed, though.

-Bill

6006. Re: To build or not to build

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 02:45:57 UTC
From: yzordderrex@verizon.net
Message-ID: <1134960357.711602.220910@f14g2000cwb.googlegroups.com>
Source record: 15389

Hi Ken,

1500w was the target, but I see it's not so easy a target to hit on a budget. I just did an inventory of shack and realized that I spent a whole bunch of cash over three years just getting back into radio. A couple of boatanchors, high performance receivers and some decent test gear have kept the accounts payable department busy here in MA. (The N9 call followed me east after college) Wife and I have other interests that also run on cash, so I can tone down the amplifier performance a bit no problem. I can be happy with a smaller amplifier and maybe some time down the road build a bigger beast. 100w-200w of carrier on 160-40 would suit me fine right now. I can build giant multi-kilowatt transmitters using mosfets if I want to, but the tube thing has a certain appeal to me now. I got my first class commercial ticket over thirty years ago but never did much with the hollow state. I'm having a blast now with the BAs.

Thanks for the help (to all). I'll be asking lots of questions as the design goes forward.

73
Bob
N9NEO

6007. Re: AM to FM?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 02:50:01 UTC
From: yzordderrex@verizon.net
Message-ID: <1134960601.518977.267550@g47g2000cwa.googlegroups.com>
Source record: 15390

There are guys out there that will take your radio and stick new guts
in it. You end up with a radio that looks completely stock 1969
Porsche, but performs like a brand new Mark Levinson.

regards,
Bob

6008. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 03:22:59 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <qq9cq1dvqepqntobtkrt68cvb02gdkrkpd@4ax.com>
Source record: 15391
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Thu, 15 Dec 2005 22:32:05 -0500, the renowned John Popelish
<jpopelish@rica.net> wrote:
>
>Lots. I just described it for those who do have not seen this common
>control circuit. And, sadly, most home power tools have no such
>control circuit.
>
> > I only mention it because almost
>> every major industrial-grade tool I've seen has "ON" and "OFF" buttons,
>> and a latching contactor. If power goes down, or the "OFF" button is
>> pressed, or the "EMERGENCY STOP" button is pressed, the machine turns
>> off, and doesn't restart when you reset the breaker - you have to
>> overtly press the green "ON" (or sometimes "START") button. This gives
>> you a chance to clear the scrap out of the machine before you reset
>> and restart whatever process got stopped in the middle.
>>
>> Probably cost-prohibitive for a consumer-level garage or basement
>> drill press.
>>
>> Then again, people pay for explosives inside their car in the name of
>> "safety"; why not add fifteen or twenty bucks to the cost of a power
>> tool if you can tout it as a "safety" feature? ;-P
>
>It wouldn't have added $5 to the production cost of my made in Taiwan
>drill press.

I'm pretty sure the power switch in my China made small bench drill
press cost no more than about 15 cents.

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

6009. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 03:38:19 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <do59vb02lee@drn.newsguy.com>
Source record: 15392
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Rolf_B wrote...
>
> Very interesting. The 1N4007 seem to be very versatile devices.
> They are available with a SOD-57 glass envelope, too (1N4007G?).
> These are fairly well photoconductive. When illuminated ...

While many companies* are making 1n4007G glass-passivated diodes,
it appears they all cover the glass with plastic. I wonder...
where one can get a 1n4007 with an all-glass package these days?

* Including unusual semiconductor manufacturers, like: Won-Top,
Bytesonic, Leshan Radio, Formosa Microsemi, Gulf Semiconductor,
Dachang Electronic, Goodwork Semiconductor, etc.

--
Thanks,
- Win

6010. HP 11593A specification?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 06:18:03 UTC
From: CA <no@mail.com>
Message-ID: <vgspf.41032$d5.196635@newsb.telia.net>
Source record: 15393

Looking for a specification of the HP 11953A termination resistor (BNC).
Measurements of two different units indicate R=51,3 Ohms.
I would have expected something closer to 50 Ohm.

Yes, the ohmmeter is calibrated...

Christer SM6PXJ

6011. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 07:25:41 UTC
From: mroberds@worldnet.att.net
Message-ID: <Vftpf.9003$9G.4722@dukeread10>
Source record: 15394
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

In sci.electronics.components Winfield Hill <Winfield_member@newsguy.com> wrote:
>Rolf_B wrote...
>> [1N4007] are available with a SOD-57 glass envelope, too (1N4007G?).
>> These are fairly well photoconductive.
>
> While many companies* are making 1n4007G glass-passivated diodes,
> it appears they all cover the glass with plastic. I wonder...
> where one can get a 1n4007 with an all-glass package these days?

I've got a few 1N4003 and 1N4004 diodes with all-glass packages but I'm not sure how recent they are. They have the (older?) Fairchild logo of an italicized "F" with the middle stroke extending on both sides of the vertical. I'm about 90% sure these came in one of those "20 rectifiers for $2" packages from Rat Shock, so who knows how old they really are. The bodies are about 2.5 mm diameter by 4 mm long. Inside the glass, the ends near the leads are orange, with a clear strip less than 0.5 mm wide near the middle.

Testing them with the "diode check" on a $40 multimeter and either a 40 watt clear globe lamp or a TV remote control doesn't show much photoconductivity, but I suspect I would need to look a little harder than this to see it.

Matt Roberds

6012. FS: Filter capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 10:54:55 UTC
From: David J Windisch <davidjw@cinci.rr.com>
Message-ID: <3kwpf.203231$tD4.28660@tornado.ohiordc.rr.com>
Source record: 15395

FS: Filter capacitors

GE pn 43F6331MA3, 500 uF, 250VDC' 4-1/2" high X 1-3/4" dia

Qty: 12, sold as unit of >40uF/3000VDC, already mounted by lead-screws and series-connected, between plexiglas sheets, no equalizing resistors, re-formed and checked at rated voltage

$100 ono + ship <10lb from 45251

Tks for reading & 73, Dave, N3HE

6013. FS: Filter capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 11:02:59 UTC
From: David J Windisch <davidjw@cinci.rr.com>
Message-ID: <Drwpf.203232$tD4.51073@tornado.ohiordc.rr.com>
Source record: 15396

FS: Filter capacitors

Mallory pn CGS192T450X5L3PH, 1900 uF, 450VDC' 6" high X 3" dia., with brackets

Qty: 15, sold as unit of >130uF/4000VDC, already mounted on fiberglas plate, no equalizing resistors, re-formed and checked at rated voltage

$200 ono + ship about 40lb from 45251

Tks for reading & 73, Dave, N3HE

6014. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 12:45:12 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <akadq1hin476igtg0askqqc1g1sg3862o9@4ax.com>
Source record: 15397

On 18 Dec 2005 19:38:19 -0800, Winfield Hill
<Winfield_member@newsguy.com> wrote:

>Rolf_B wrote...
>>
>> Very interesting. The 1N4007 seem to be very versatile devices.
>> They are available with a SOD-57 glass envelope, too (1N4007G?).
>> These are fairly well photoconductive. When illuminated ...
>
> While many companies* are making 1n4007G glass-passivated diodes,
> it appears they all cover the glass with plastic. I wonder...
> where one can get a 1n4007 with an all-glass package these days?
>
> * Including unusual semiconductor manufacturers, like: Won-Top,
> Bytesonic, Leshan Radio, Formosa Microsemi, Gulf Semiconductor,
> Dachang Electronic, Goodwork Semiconductor, etc.

Or use a differnt diode in a glass case. The PN junction makes a
decent small area photovoltaic cell (transistors too).

FYI: if your using 1n4007 for a varactor, light impinging on glass
versions will drive you nuts (Florescents will give AC hum
modulation) and lower the Q.

Allison

6015. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 15:39:56 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43A6D440.903B97C0@earthlink.net>
Source record: 15398
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

gb wrote:
>
> "Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
> news:439FA234.396EE28E@earthlink.net...
> > meow2222@care2.com wrote:
> >>
> >> The one thing I avoided like the plague, and still do, is those plastic
> >> drawer racks with often open top drawer boxes. You've only got to move
> >> one once to see what I mean! One spill and you'll never ever buy one
> >> again. Small parts containers must have burst proof latches, I wont use
> >> any that dont.
> >>
> >>
> > I moved over 1000 miles in 1987 and I had 24 50 drawer Akro-Mills
> > cabinets full of parts. I cut pieces of cardboard to cover the front and
> > placed two of them face to face, then taped them together. I didn't
> > have even one part out of place when I arrived at my new place and set
> > up my shop. The move was done with my shop's step van and I hauled over
> > 17,000 pounds of tools, parts, manuals and test equipment in two trips.
> > there is nothing wrong with parts cabinets, if you know how to pack
> > them.
>
> Same trick I used when I moved my parts cabinets from PA back to IL in
> 1980s.
>
> Finally gave away my last old AkroMills metal cabinet (50 drawer) to new
> amateur earlier this year.
>
> gb

I need about 20 more, but they don't make them anymore. I've been
using the crappy all plastic ones that shrink and jam. I'm about to the
point of putting the parts in plastic bags and driving over the damn
cheap plastic things.

--
Been there, Done that, I've got my DD214 to prove it.

Michael A. Terrell
Central Florida

6016. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 15:42:27 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43A6D4D7.1C1ACCDC@earthlink.net>
Source record: 15399
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Spehro Pefhany wrote:
>
> I'm pretty sure the power switch in my China made small bench drill
> press cost no more than about 15 cents.
>
> Best regards,
> Spehro Pefhany

I added a commercial, heavy duty foot switch to my floor model drill
press to make it easier to use while leaning on my cane.

--
Been there, Done that, I've got my DD214 to prove it.

Michael A. Terrell
Central Florida

6017. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 15:47:41 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43A6D611.D7952AD4@earthlink.net>
Source record: 15400
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Winfield Hill wrote:
>
> Rolf_B wrote...
> >
> > Very interesting. The 1N4007 seem to be very versatile devices.
> > They are available with a SOD-57 glass envelope, too (1N4007G?).
> > These are fairly well photoconductive. When illuminated ...
>
> While many companies* are making 1n4007G glass-passivated diodes,
> it appears they all cover the glass with plastic. I wonder...
> where one can get a 1n4007 with an all-glass package these days?
>
> * Including unusual semiconductor manufacturers, like: Won-Top,
> Bytesonic, Leshan Radio, Formosa Microsemi, Gulf Semiconductor,
> Dachang Electronic, Goodwork Semiconductor, etc.
>
>
>
> --
> Thanks,
> - Win

How many do you need, and can you use ones pulled from PC boards? I
may have some left that I pulled from damaged boards.

--
Been there, Done that, I've got my DD214 to prove it.

Michael A. Terrell
Central Florida

6018. Re: AM to FM?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 16:12:32 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <hkmdq1la3jg685jvvplog21u7dn2n0923i@4ax.com>
Source record: 15401

ORIGINAL MESSAGE:

On 18 Dec 2005 18:50:01 -0800, yzordderrex@verizon.net wrote:

>There are guys out there that will take your radio and stick new guts
>in it. You end up with a radio that looks completely stock 1969
>Porsche, but performs like a brand new Mark Levinson.

~~~~~~

Travesty.

Please preserve the radio in its original condition. FM radios are
common as dirt but a 1969 Blaupunkt is a collector's item.

Bill T.
~~~~~~

6019. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 17:11:06 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_43a6d462@fidonet.org>
Source record: 15402

"mroberds@worldnet.att.net" bravely wrote to "All" (19 Dec 05 07:25:41)
--- on the heady topic of "Re: Unusual functions of cheap parts"

mr> From: mroberds@worldnet.att.net
mr> Xref: core-easynews de.sci.electronics:311430
mr> rec.radio.amateur.homebrew:89926 sci.electronics.components:104476
mr> sci.electronics.design:532313

mr> In sci.electronics.components Winfield Hill
mr> <Winfield_member@newsguy.com> wrote: >Rolf_B wrote...
>> [1N4007] are available with a SOD-57 glass envelope, too (1N4007G?).
>> These are fairly well photoconductive.
>
> While many companies* are making 1n4007G glass-passivated diodes,
> it appears they all cover the glass with plastic. I wonder...
> where one can get a 1n4007 with an all-glass package these days?

mr> I've got a few 1N4003 and 1N4004 diodes with all-glass packages but
mr> I'm not sure how recent they are. They have the (older?) Fairchild
mr> logo of an italicized "F" with the middle stroke extending on both
mr> sides of the vertical. I'm about 90% sure these came in one of those
mr> "20 rectifiers for $2" packages from Rat Shock, so who knows how old
mr> they really are. The bodies are about 2.5 mm diameter by 4 mm long.
mr> Inside the glass, the ends near the leads are orange, with a clear
mr> strip less than 0.5 mm wide near the middle.

mr> Testing them with the "diode check" on a $40 multimeter and either a
mr> 40 watt clear globe lamp or a TV remote control doesn't show much
mr> photoconductivity, but I suspect I would need to look a little harder
mr> than this to see it.

mr> Matt Roberds

Germanium diodes like a 1N34 in glass case are quite light sensitive.
Some LED's are too and IR emitter LED's are quite sensitive to IR.

A*s*i*m*o*v

6020. Re: AM to FM?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 18:03:21 UTC
From: packerfan6000@yahoo.com
Message-ID: <1135015401.585089.292550@z14g2000cwz.googlegroups.com>
Source record: 15403

I TOTALLY AGREE!!! I will do NOTHING to deprive the originality of the car. I was just curious as to my situation. Don't worry!

6021. Re: Question regarding the AADE L/C meter

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 18:23:05 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1135016585.810349.298990@g43g2000cwa.googlegroups.com>
Source record: 15404

Bill,

A reliable way to find the effective shunt capacitance is to observe the self-resonant frequency of the coil. If it's really about 25pF, and the coil really is about 5mH, I'd expect self-resonance at about 450kHz. Can you make some simple measurement of the self resonance? (e.g., square wave coupled loosely to the coil; scope monitoring the ringing. Or signal generator swept across the suspected frequency range, looking for a peak in the response. Key is to couple the generator and the detector to the coil loosely.)

Cheers,
Tom

6022. Re: HP 11593A specification?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 18:39:38 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <hMSdnVApkLLnYzveRVnyrg@pipex.net>
Source record: 15405

> Looking for a specification of the HP 11953A termination resistor (BNC).
> Measurements of two different units indicate R=51,3 Ohms.
> I would have expected something closer to 50 Ohm.
>
> Yes, the ohmmeter is calibrated...

==========

What is the uncertainty of your ohm meter ? If it is a DVM then apart from the uncertainty the actual value is plus/minus 1 of the least significant digit.
You really have to define 'Ohm meter is calibrated'

Frank KN6WH / GM0CSZ (currently in California)

6023. Re: damaged collins filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 18:43:05 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1135017785.342995.108490@z14g2000cwz.googlegroups.com>
Source record: 15406

Ken Scharf wrote:
> as I rotated it in my hand I could feel something
> inside shifting back and forth.

The inside has the resonating elements "suspended" in foam. The foam does decay, but usually in place.

Check the resistance on each side of the filter, it should be something like 50K ohms. If either one is open circuit, the tiny wires that connect to the coils inside have probably broken. Check the R-390A sites, some have taken off the end of the filter can and shown pictures of the inside, and some have even reconnected broken wires and at least thought about replacing the decaying foam.

The 4kc filter is the hardest to find but not impossible (either demand or most used/most quickly worn out), the 2kc filter ought to be easier.

Tim.

6024. Re: AM to FM?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 19:51:18 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <ZaEpf.4148$Vr.3345@fe06.lga>
Source record: 15407

There is quite a large market for Porsche parts, even for older cars. There is also quite a wide range of prices so it pays to look around.

I had the radio die in my '98 Boxster. It looked to be about $500 to repair it, and a replacement was over $1200, over 700 for a rebuilt radio. Now, it was a nice radio, but $1200!!

After much hand wringing and looking around I finally found a speed shop halfway across the country that had a rebuilt radio for around $200. There are literally hundreds of Porsche blogs and mod sites on the net; many of these can provide leads. Don't forget the obvious Porsche suppliers and, of course, eBay. Even if they don't directly have what you want, often they can provide clues.

Back then those radios weren't that great, and a LOT of people yanked them in favor of radios with cassette players or, later, CD's. Porsches tend to be driven for a LONG time. So the odds of finding a replacement for a decent price might be pretty good. Heck, I may have one of about that vintage lying around here. Not much chance of ever finding it in this shack, though!

As far as making a converter, I don't hold it to be quite as tough as some of the other posters have indicated, but it could be a real barrier if you aren't already a homebrewer. The fact that you are posting to a ham radio newsgroup leads me to suspect you might not be a total innocent around a soldering iron. There are a number of chips, NE612, 614, 615, that contain a large fraction of an FM reciever. If you only want one station, it is actually pretty simple. Building a high frequency VFO, though, is a bit of a challenge. Modern synthesizer chips can greatly ease that, but they are all little bitty surface mount parts, and you gotta program a computer chip to drive them. Really not all that insurmountable, but it's not an afternoon project, either!

Might not be such a bad plan to run down to Best Buy or whatever and get a cheap replacement; pretty good radios are cheap enough that it could be temporary. Then you have tunes while you are getting the real radio fixed.

..

<packerfan6000@yahoo.com> wrote in message
news:1135015401.585089.292550@z14g2000cwz.googlegroups.com...
>I TOTALLY AGREE!!! I will do NOTHING to deprive the originality of the
> car. I was just curious as to my situation. Don't worry!
>

6025. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 20:20:51 UTC
From: "John L. Sielke" <w2agnNOSPAM@w2agn.net>
Message-ID: <43A71623.4030200@w2agn.net>
Source record: 15408
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Pierian Spring wrote:

<snip>

and the baying hounds replied:

<snip> <snip> <etc>

You know, I agree in principle that Ham Radio is being so dumbed down that it no longer can be considered a technical hobby. (But then all of education has been dumbed down. It is more important to assure a student's "self-esteem" remains intact, than that he learn the subject).

What amazes me is that every time this "faq" is sent to the newsgroups, the same idiots respond to it, and get into a flame war. When it dies down, it only requires the repeat of the same message to get the same idiots stirred up again.

Sort of a Pavlovian response. I guess for some, it might be fun to watch dumb animals drool. Maybe it's a UK thing......

6026. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 20:42:04 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <776eq1dlo9p41kl70v9j7pq6np5qq4jllc@4ax.com>
Source record: 15409
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

John L. Sielke wrote:

>Pierian Spring of Very Dull Water wrote:
>
><snip>
>
>and the baying hounds replied:
>
><snip> <snip> <etc>
><another snip>
>
>What amazes me is that every time this "faq" is sent to the newsgroups, the same
>idiots respond to it, and get into a flame war. When it dies down, it only
>requires the repeat of the same message to get the same idiots stirred up again.
>
>Sort of a Pavlovian response. I guess for some, it might be fun to watch dumb
>animals drool. Maybe it's a UK thing......

The thing you need to bear in mind is that of the current 55 messages
in that thread, no less than 23 - not far short of half of the total -
were in fact posted by the OP. Some of these involve him posting - or
barking - replies to himself. I wasn't aware that Pavlov had trained
his dogs to drool at their own barking. But the chap concerned claims
a qualification in psychology, so perhaps he could name this
phenomenon for us.

from
Aero Spike

6027. One of the Chosen speaks (the same old repetitive drivel)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 20:53:06 UTC
From: K&#65533;HB <groupk0hb@earthlink.net>
Message-ID: <S4Fpf.311$R84.306@newsread2.news.pas.earthlink.net>
Source record: 15410
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote

>A number of potential recruits are in great danger of being
> misled into thinking that they are Radio Hams when, in fact,
> they are nothing of the kind! As it is the season of goodwill,
> let us show our goodwill by saving these poor deluded fools
> from the mischievous ne-er-do-wells who will attempt to
> mislead them. (Radio Hams are technically-motivated people
> and not merely turnip-brained button pushers like CBers and
> like M3/CBers)

The Wise Ones live in the depths of the D, E, and F-Layers, and in the servers at Yahoogroups.com. They are the descendants of the Gods. I personally subscribe to the theory they are the children of Thor Heyerdahl, the Viking god of Thunder and Balsawood Raft Dxpeditions. But that's another story.

The Wise Ones criticize everything that happens on the air and on this list, but they can't police every pileup or every Yahoogroup by themselves, so every morning, just before daylight over Katmandu, the Wise Ones select the "Mostest Intellegentest Ham Ever" in their layer and convey upon him the title INFLICTOR OF HIGHER MORAL HARANGUES. This title and its duties last until the following dawn on Bouvet, if someone is there to observe the sunrise. Otherwise your duties end when Riley Hollingsworth gets tired of your crap and sends his lawyers with a gag order.

If you are ever chosen you will know because a representative of the Wise Ones will anoint your temples with oil from a forty year old bottle of Dr. Guano, collected on Ocean Island by VR1L in 1963. For that day you will be known as The Chosen. Your duties will be to seek out those that don't do things the way you do them (in other words, the right way.) When you find them, it will be your duty to correct them.

Think about all the ills of ham radio that you can police .....too wide, too weak, too slow, too fast, what's your call dammit, wrong VFO, rotten fist, QRQ, QRS, poor pileup control, wrong band, wrong QSL route, you timed out the repeater, wrong lingo, not enough green stamps, you're in the DX window, no-coders not allowed, coders suck, ... these and many other sins are all your to root out and expose!!!

When you find these wayward ones, you will lumber onto their frequency, stand up in your operating chair and shout, I AM A BETTER HAM THAN YOU, SHUT UP AND LISTEN. You will now have the wayward one's undivided attention. He will think about this very briefly, then yield to your superior intellect and ham skill. He will be very receptive to your thoughts and point of view.

Lecture him and proceed to the next wrong doer.

Now for the sad part of this tale. There are pretenders and charlatans out there who try to usurp the rightful powers of The Chosen. To you villainous few, I say beware. The Wise Ones also created BAWA (Baddest Ass Whats Around). No matter how bad you are, BAWA has the ability to be badder. You will know when you start your lecture and Bawa yells back, "You're a jerk, but I'm a bigger one. LET'S ESCALATE".

And you will have no choice.

But soon BAWA will tire of you and sink your little balsa boat. As you slip under the surface you will yell, "BUT I WAS RIGHT, DAMMIT" and you will once again prove the ancient mariners axiom -- AN OPEN MOUTH TAKES ON WATER.

dit dit

de Hans, K0HB
--
><{{{{*> http://www.home.earthlink.net/~k0hb

By the way, what disease DID cured hams actually have before they were cured?

6028. Re: One of the Chosen speaks (the same old repetitive drivel)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 20:59:33 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135025973.570506.283140@o13g2000cwo.googlegroups.com>
Source record: 15411
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Hans,
You've missed the point which is that we are in a privileged
position as the result of our educational achievements. Allowing the
standard represented by those achievements to fall such
that turnip-brained CBers are perceived as our fellows is
the route to Company-Built (CB) rigs only, and our hard-earned
right to build our own gear will be lost.

It's not a question of snobbery, but one of preserving the
world of _REAL_ Ham Radio.

KØHB wrote:
> "Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote
>
> >A number of potential recruits are in great danger of being
> > misled into thinking that they are Radio Hams when, in fact,
> > they are nothing of the kind! As it is the season of goodwill,
> > let us show our goodwill by saving these poor deluded fools
> > from the mischievous ne-er-do-wells who will attempt to
> > mislead them. (Radio Hams are technically-motivated people
> > and not merely turnip-brained button pushers like CBers and
> > like M3/CBers)
>
> The Wise Ones live in the depths of the D, E, and F-Layers, and in the servers
> at Yahoogroups.com. They are the descendants of the Gods. I personally subscribe
> to the theory they are the children of Thor Heyerdahl, the Viking god of Thunder
> and Balsawood Raft Dxpeditions. But that's another story.

6029. Re: One of the Chosen speaks (the same old repetitive drivel)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 21:05:33 UTC
From: K&#65533;HB <groupk0hb@earthlink.net>
Message-ID: <xgFpf.3977$mj1.3470@newsread3.news.pas.earthlink.net>
Source record: 15412
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Pierian Spring" <radio.ham@lycos.co.uk> wrote

> Hans,
> You've missed the point which is ......

Sorry, Anonymous Old Sod, but since you made no point, there was no point to
miss.

73, de Hans, K0HB
--
Hamming for almost a half-century, and it just keeps getting better.

6030. Re: One of the Chosen speaks (the same old repetitive drivel)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 21:18:08 UTC
From: K&#65533;HB <groupk0hb@earthlink.net>
Message-ID: <ksFpf.314$R84.38@newsread2.news.pas.earthlink.net>
Source record: 15413
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Walt Davidson" <g3nyy@despammed.com> wrote

>
> [incomprehensible rantings snipped]
>

Well done, Walt. You once again prove the ancient mariners axiom -- AN OPEN
MOUTH TAKES ON WATER.

6031. Re: AM to FM?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 21:20:36 UTC
From: packerfan6000@yahoo.com
Message-ID: <1135027236.780937.43330@o13g2000cwo.googlegroups.com>
Source record: 15414

soldering is my middle name.... but I want to keep the original
radio.............the most modifying I want to do would be to build
this converter

6032. Re: AM to FM?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 21:23:27 UTC
From: packerfan6000@yahoo.com
Message-ID: <1135027407.213367.307090@g43g2000cwa.googlegroups.com>
Source record: 15415

When you say "keeping it to one station"... do you mean the AM or the FM?... I want to be able to change the AM, but if I have to keep the Blaupunkt at one frequency to receive the signal from the converter, I wouldn't mind at all.

6033. Still looking for a Tripp Lite PR-25 (or similar) DC power supply schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 21:39:55 UTC
From: Paul P <p.pinyotREMOVE@REMOVEworldnet.attREMOVE.netREMOVE>
Message-ID: <LMFpf.315730$zb5.47297@bgtnsc04-news.ops.worldnet.att.net>
Source record: 15416
Cross-posted to:
alt.binaries.schematics.electronic,rec.antiques.radio+phono,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Still looking for a Tripp Lite PR-25 (or similar model) DC power supply
schematic to repair the club's repeater power supply. If any one has one
I'd appreciate a copy, email or otherwise.

I called Tripp Lite just now. According to Technical Support their
PRESIDENT has
recently mandated that they would NOT send any more schematics out.
However, I could trade the supply in for a new one at about 85 bucks.

Thanks and merry Christmas,
Paul.

paul at ppinyot dot com

>>> Looking for a Tripp Lite PR-25 dc supply schematic
>>
>> Have you called 'em at:
>> (773) 869-1111
>> I blew up one of my many Tripp Lite sine wave inverters and they sent me
>> the schematic, free!...
>>
>
>

6034. Re: AM to FM?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-19 23:57:06 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <o5ieq1loe6nr4m61u07c2lt0kmhelf9d9v@4ax.com>
Source record: 15417

On 19 Dec 2005 13:23:27 -0800, packerfan6000@yahoo.com wrote:

>When you say "keeping it to one station"... do you mean the AM or the
>FM?... I want to be able to change the AM, but if I have to keep the
>Blaupunkt at one frequency to receive the signal from the converter, I
>wouldn't mind at all.

Seeing as how you are a "packer fan" I may have just what you are looking for. I have one of those FM to AM converters. Got it sometime in the 70's. It is a very small box about 3/4 inch high by about 4 x 6 inches. Used it in a car that came with only an AM radio. Just plugs into the antenna jack and the car antenna plugs into it. Needs to also hook to 12 volt power. Push the button and it switches the converter in line. Set a push button on the am radio the the output frequency of the converter and tune in your FM station with the knob on the converter. It is mono FM though. No stereo. Works great. Email me at garyschafer@comcast.net if interested.

73
Gary K4FMX

6035. Re: AM to FM?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-20 01:01:35 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_43a74aa5@fidonet.org>
Source record: 15418

"packerfan6000@yahoo.com" bravely wrote to "All" (19 Dec 05 13:23:27)
--- on the heady topic of "Re: AM to FM?"

pa> From: packerfan6000@yahoo.com
pa> Xref: core-easynews rec.radio.amateur.homebrew:89949

pa> When you say "keeping it to one station"... do you mean the AM or the
pa> FM?... I want to be able to change the AM, but if I have to keep the
pa> Blaupunkt at one frequency to receive the signal from the converter, I
pa> wouldn't mind at all.

There used to be all transistor converters like that back when. Now
that I think of it there might even be one in the garage here. I'm not
sure though, but the last time I was clearing room for the car I
vaguely recall coming across such an FM converter on a shelf. Would it
be something you might want if it works?

A*s*i*m*o*v

... I can't remember the last time I forgot something.

6036. Re: Still looking for a Tripp Lite PR-25 (or similar) DC power supply schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-20 02:46:32 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <EoadneNH9pUW7TrenZ2dnUVZ_tKdnZ2d@comcast.com>
Source record: 15419
Cross-posted to:
alt.binaries.schematics.electronic,rec.antiques.radio+phono,rec.radio.amateur.antenna,rec.radio.amateur.homebrew
Body handling: HTML body converted to readable text

"Paul P" wrote in
message news:LMFpf.315730$zb5.47297@bgtnsc04-news.ops.worldnet.att.net...
>
> Still looking for a Tripp Lite PR-25 (or similar model) DC power supply
> schematic to repair the club's repeater power supply. If any one has one
> I'd appreciate a copy, email or otherwise.
>
> I called Tripp Lite just now. According to Technical Support their
> PRESIDENT has recently mandated that they would NOT send any more
> schematics out.
> However, I could trade the supply in for a new one at about 85 bucks.
>
> Thanks and merry Christmas,
> Paul.
>
> paul at ppinyot dot com
>

Paul -

IF it uses the standard LM723 IC regulator and pass transistors (2N3055,
2N3771, or 2N3772) you do not need a schematic per say - to repair. Check
the pass transistors with you trusty VOM/DVM .. can replace 723 !!

Here is the DIY web site for linear supplies
http://www.kbt-dc-supplies.com/index.php

Astron schematics (everyone else copies them)
http://www.repeater-builder.com/astron/astron-index.html

Regulated Power Supply construction (how a linear supply works)
http://www.seits.org/features/pwrsup.htm

w9gb

6037. FA: Nice Homebrew SSB / CW Transmitter - 80, 40, 20 meters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-20 04:08:16 UTC
From: Jeffrey Bauman <jbauman2@earthlink.net>
Message-ID: <QsLpf.7246$3Z.2408@newsread1.news.atl.earthlink.net>
Source record: 15420

Quite a rig.

Please see my auction:

http://cgi.ebay.com/Beautiful-Homebrew-SSB-CW-Transmitter-80-40-20-M_W0QQitemZ5844101224QQ
categoryZ4675QQssPageNameZWDVWQQrdZ1QQcmdZViewItem

...or try auction # 5844101224

Thanks!
Jeff
W8KZW
Near Detroit

6038. Re: One of the Chosen speaks (the same old repetitive drivel)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-20 05:14:29 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1135055669.302255.252690@g14g2000cwa.googlegroups.com>
Source record: 15421
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Walt Davidson wrote:
> On Mon, 19 Dec 2005 21:18:08 GMT, "KØHB" <groupk0hb@earthlink.net>
> wrote:
>
> >"Walt Davidson" <g3nyy@despammed.com> wrote
> >
> >>
> >> [incomprehensible rantings snipped]
> >>
> >
> >Well done, Walt. You once again prove the ancient mariners axiom -- AN OPEN
> >MOUTH TAKES ON WATER.
>
> I'm sorry, Hans. I'm afraid nothing you say makes any sense to us
> Limeys.
> :-)

well han doesn't read uch better on this side of the pond either many
days
>
> 73 de G3NYY
>
> --
> Walt Davidson Email: g3nyy @despammed.com

6039. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-20 05:29:31 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1135056571.904887.304180@g14g2000cwa.googlegroups.com>
Source record: 15422
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"Finally gave away my last old AkroMills metal cabinet (50 drawer) to
new
amateur earlier this year."

Does anyone make a METAL cabinet anymore like the older Akromills ones?

TMT

6040. Re: FA: Nice Homebrew SSB / CW Transmitter - 80, 40, 20 meters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-20 05:46:04 UTC
From: Bill <exray@coqui.net>
Message-ID: <1d368$43a79a9d$4232bd5c$3905@COQUI.NET>
Source record: 15423

Jeffrey Bauman wrote:

> Quite a rig.

Indeed!

-Bill

6041. Re: One of the Chosen speaks (the same old repetitive drivel)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-20 06:44:00 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135061039.978642.191780@o13g2000cwo.googlegroups.com>
Source record: 15424
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

If you wish to be perceived as a Childish Broadcaster (CBer),
then carry right on with your Childish Broadcasting (CB)
such as you do below.....

KØHB wrote:
>
> Sorry, Anonymous Old Sod, but since you made no point, there was no point to
> miss.

6042. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-20 07:24:37 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135063477.649411.146110@g47g2000cwa.googlegroups.com>
Source record: 15425
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

You insist that www.qsl.net is "simply a page"?

Stupid boy.

Leigh Preece wrote:
> Pierian Spring wrote:
>
> > No, you are quite wrong on two counts.....
> > 1. The qsl web site is definitely a site and not a page.
>
> I insist that it is simply a page - maybe you should learn the rudiments
> of website assembly as there is no identifiable index or homepage but a
> collection of orpan pages or what would have been 'parent/child' pages.
>

6043. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-20 08:20:56 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135066856.353788.240120@g14g2000cwa.googlegroups.com>
Source record: 15426
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Oops! -For some reason I keep losing the cross-posts,
sorted now!

Pierian Spring wrote:
> The following point is deserving of a further reply, again
> defeating your dastardly attempt to run away from a
> right of reply by redirecting to alt.dev.null.
>
> Anybody who pretends to be a lexicographer really ought
> to be able to disambiguate a personal attack from a
> well-justified political comment that criticises undesirable
> social trends.
>
> It is "meet and right so to" criticise.
>
> One such undesirable social trend germane to this NG is the
> gangrenous degeneration that is the M3/CB Fools' Licence
> scheme; a scheme that is filling the Ham Bands with the
> metaphorically-mixed Trojan Horse of the Mongolian Hordes
> of turnip-brained CBers.
>
> Another, since you raised the topic and I am merely being
> courteous to you in responding to it, is the vested
> interests of those who ride the gravy train,
> those idle parasites who live off the rent money from the
> sweated labours of humanity - the farmer in Kernow has
> little enough money without having to support the masturbation
> that is the Britland monarchy.
>
> There is nothing in the scientific or medical world that supports
> the notion of royalty - those who would parasitise in this way
> are no different physiologically and intellectually from the
> rest of us. (Well, perhaps not intellectually after centuries
> of in-breeding)
>
> That little-known poet (what a polymath!) Gareth Alun Evans
> expressed this succintly in his poem, "In Short, Politics!".....
>
> "Monarchy is heinous
> 'Cos the queen has an anus.
>
> She sits and squits

> Brown bits of shits.
>
> She eases and squeezes
> Brown pieces of faeces."
>
> (Look out for the publication of his forthcoming
> anthology - a polymath, indeed!)
>
>
> Richard Kaulfuss wrote:
> > On 18 Dec 2005 09:31:10 -0800, "Pierian Spring"
> > <aiyr.r.bean@lycos.co.uk> wrote:
> >
> > >I have _NEVER_ originated personal attacks on anyone.
> > >
> > Perhaps not against individuals, but you have certainly originated
> > attacks against groups of individuals such as the armed forces, the
> > police, the royal family, M3s/CBers, etc.

6044. Re: One of the Chosen speaks (the same old repetitive drivel)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-20 11:06:39 UTC
From: Chaney <chaney@i12.com>
Message-ID: <3BRpf.1321$vl2.807@fe2.news.blueyonder.co.uk>
Source record: 15427
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Are there no Yank NG's you could be haunting!!!...we're British...we take
our ghosts with a pinch of salt...

--

Chaney

Chaney's World
www.chaney.i12.com

"K&#65533;HB" <groupk0hb@earthlink.net> wrote in message
news:xgFpf.3977$mj1.3470@newsread3.news.pas.earthlink.net...
>
> "Pierian Spring" <radio.ham@lycos.co.uk> wrote
>
>> Hans,
>> You've missed the point which is .....
>
> Sorry, Anonymous Old Sod, but since you made no point, there was no point
> to miss.
>
> 73, de Hans, K0HB
> --
> Hamming for almost a half-century, and it just keeps getting better.
>
>
>
>

6045. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-20 14:07:03 UTC
From: Keith Williams <krw@att.bizzzz>
Message-ID: <MPG.1e11d9ff6d9a2fd98975e@News.Individual.NET>
Source record: 15428
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

In article <1135056571.904887.304180@g14g2000cwa.googlegroups.com>,
too_many_tools@yahoo.com says...
> "Finally gave away my last old AkroMills metal cabinet (50 drawer) to
> new
> amateur earlier this year."
>
> Does anyone make a METAL cabinet anymore like the older Akromills ones?

Stanley Vidmar makes metal storage cabinets. They're rather pricey
though.

http://www.stanleyvidmar.com/default.asp?TYPE=STATIC&PAGE=HOME.HTM

--
Keith

6046. Re: One of the Chosen speaks (the same old repetitive drivel)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-20 14:43:11 UTC
From: K&#65533;HB <groupk0hb@earthlink.net>
Message-ID: <3MUpf.4192$mj1.2131@newsread3.news.pas.earthlink.net>
Source record: 15429
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

"Walt Davidson" <g3nyy@despammed.com> wrote

>
> BTW, I don't much care for the jingoistic tone of his Web site.
>
> 73 de G3NYY
>

Perhaps this Web site is better suited to your political view:

http://www.amishrakefight.org/gfy

With kindest regards of the season,

Jingo Bells, Jingo Bells, Jingo all the waaaaaaaaaaaaaaaay,

de Hans, K0HB
--
1943 Poster Boy for the 'Precocious Little Bastard' Campaign
><{{{{*> http://www.home.earthlink.net/~k0hb

6047. Re: AM to FM?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-20 15:11:07 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_43a81865@fidonet.org>
Source record: 15430

"Gary Schafer" bravely wrote to "All" (19 Dec 05 18:57:06)
--- on the heady topic of "Re: AM to FM?"

GS> From: Gary Schafer <gaschafer@comcast.net>
GS> Xref: core-easynews rec.radio.amateur.homebrew:89952

GS> On 19 Dec 2005 13:23:27 -0800, packerfan6000@yahoo.com wrote:

>When you say "keeping it to one station"... do you mean the AM or the
>FM?... I want to be able to change the AM, but if I have to keep the
>Blaupunkt at one frequency to receive the signal from the converter, I
>wouldn't mind at all.

GS> Seeing as how you are a "packer fan" I may have just what you are
GS> looking for. I have one of those FM to AM converters. Got it sometime
GS> in the 70's. It is a very small box about 3/4 inch high by about 4 x 6
GS> inches. Used it in a car that came with only an AM radio. Just plugs
GS> into the antenna jack and the car antenna plugs into it. Needs to also
GS> hook to 12 volt power. Push the button and it switches the converter
GS> in line. Set a push button on the am radio the the output frequency of
GS> the converter and tune in your FM station with the knob on the
GS> converter. It is mono FM though. No stereo. Works great. Email me at
GS> garyschafer@comcast.net if interested.

I found the converter box in the garage shelf I had mentioned. However
it turned out to be an 8-track converter. Remember 8-track?! WOW!

A*s*i*m*o*v

... I cut it three times already and it's still too short!

6048. Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-20 15:12:02 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135091521.890234.15800@g49g2000cwa.googlegroups.com>
Source record: 15431
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

If you are you admitting to being a toilet mouth, then
there is hope for you, even yet.

Richard Kaulfuss wrote:
> On 19 Dec 2005 23:22:32 -0800, "Pierian Spring"
> <radio.ham@lycos.co.uk> wrote:
>
> >You se
>
> <FLUUUUSH!>

6049. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-20 16:24:13 UTC
From: kludge@panix.com
Message-ID: <do9b7d$5kl$1@panix2.panix.com>
Source record: 15432
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Too_Many_Tools <too_many_tools@yahoo.com> wrote:
>"Finally gave away my last old AkroMills metal cabinet (50 drawer) to
>new
>amateur earlier this year."
>
>Does anyone make a METAL cabinet anymore like the older Akromills ones?

I think Akro-Mills still does, but they don't sell them through consumer
outlets. Try Applied Industrial Technology (ie. Maintenance America).
--scott
--
"C'est un Nagra. C'est suisse, et tres, tres precis."

6050. Re: Still looking for a Tripp Lite PR-25 (or similar) DC power supply schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-20 17:28:10 UTC
From: PS_DUDE <psdude@psdude.com>
Message-ID: <43A83F2A.72DD0E2C@psdude.com>
Source record: 15433
Cross-posted to:
alt.binaries.schematics.electronic,rec.antiques.radio+phono,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

hi paul,

Tripp lite makes good supplies but lacks in the
support side !

Good thing is the supplies use off the shelf parts
or easy substituted parts from anywhre,
http://www.mouser.com etc.

What problem(s) are you having ?

73 ps dude

6051. Re: FA: Nice Homebrew SSB / CW Transmitter - 80, 40, 20 meters

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-20 18:32:49 UTC
From: rleesBSD Wb8LZR <rscheckelhoff@yahoo.com>
Message-ID: <1135103569.491755.300020@o13g2000cwo.googlegroups.com>
Source record: 15434

What a beautiful piece of equipment ...

6052. Re: BF964S noise - alternatives??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-20 23:27:31 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <43a895eb$1$16503$9b4e6d93@newsread4.arcor-online.net>
Source record: 15435

Is that galactic noise measured on a wide bandwidth antenna?
What if it is very narrow band?

regards -
Henry

"K7ITM" <k7itm@msn.com> schrieb im Newsbeitrag
news:1134922656.246374.46970@o13g2000cwo.googlegroups.com...
> I'm curious, what sorts of things do amateurs do that really need
> better than a 1dB noise figure on 2 meters? I can understand it on
> higher frequencies, but I'd have thought that galactic noise, at least,
> would be a limiting factor on 2 meters.
>
> Looking to be educated,
>
> Tom
>

6053. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-20 23:31:35 UTC
From: Henry Kiefer <otc_friend@gmx.net>
Message-ID: <43a895ec$0$16503$9b4e6d93@newsread4.arcor-online.net>
Source record: 15436
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

I thought optical triggered GTOs were still in business??

regards -
Henry

"John Larkin" <jjlarkin@highNOTlandTHIStechnologyPART.com> schrieb im
Newsbeitrag news:1bjbq19ncb6bmkrb4v9n85687s3ro2btcc@4ax.com...
> On Sun, 18 Dec 2005 21:33:52 +0100, Rolf_B
> <rolfnospambombach@bluewin.ch> wrote:
>
> >John Larkin wrote:
> >>
> >> A 1N4007 can also be used as a drift step-recovery diode and as a
> >> plasma avalanche diode. Together, two can generate a kilovolt edge
> >> with a 100 ps risetime.
> >>
> >Very interesting. The 1N4007 seem to be very versatile devices.
> >They are available with a SOD-57 glass envelope, too (1N4007G?).
> >These are fairly well photoconductive. When illuminated by
> >a high efficiency IR LED (HSDL-4230 or so) current transfer
> >ratios of 0.001 can be achieved. Not too much, but with
> >two LEDs 100uA of photocurrent is obtainable. This is OK for
> >a pass element in an "electrostatic" power supply for e.g.
> >electron or ion lens systems.
>
> A high-voltage optocoupler; cool.
>
> I've posted a schematic for a hv opamp (400 v p-p) that uses two
> optoisolators as the output push-pull stage... it's very cheap and
> simple. A higher-voltage photodetector, like a glass power diode,
> sounds useful, too.
>
> I worked once with a company in Southern California that had a neat
> gadget: it was a truncated cone of silicon with gold contacts on the
> base and the flattened apex. It would stand off something like 5KV
> until you whacked it from above with a laser, illuminating all the
> sides of the cone, whence it would conduct hard. I think they went out
> of business, though; it was pretty obscure.
>
> John
>

6054. Re: Still looking for a Tripp Lite PR-25 (or similar) DC power supply schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 00:00:08 UTC
From: Paul P <p.pinyotREMOVE@REMOVEworldnet.attREMOVE.netREMOVE>
Message-ID: <cW0qf.175681$qk4.13936@bgtnsc05-news.ops.worldnet.att.net>
Source record: 15437
Cross-posted to:
alt.binaries.schematics.electronic,rec.antiques.radio+phono,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

There are a couple of smoked resistors on the regulator board. I can not trust the ohm meter reading so I wanted to verify its value. I am trying to avoid De-engineering the board. Now once the resistors are replace there may be something else that smoked the resistors too.

Paul.

"PS_DUDE" <psdude@psdude.com> wrote in message
news:43A83F2A.72DD0E2C@psdude.com...
> hi paul,
>
> Tripp lite makes good supplies but lacks in the
> support side !
>
> Good thing is the supplies use off the shelf parts
> or easy substituted parts from anywhre,
> http://www.mouser.com etc.
>
> What problem(s) are you having ?
>
> 73 ps dude
>

6055. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 00:50:23 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <ij9hq1ps2jtjis7mgkmcr7k7nbciokok99@4ax.com>
Source record: 15438
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Wed, 21 Dec 2005 00:31:35 +0100, "Henry Kiefer"
<otc_friend@gmx.net> wrote:

>I thought optical triggered GTOs were still in business??
>
>regards -
>Henry
>

Maybe so, but this wasn't a GTO, it was a bulk-effect device,
blindingly fast.

Can an opto-triggered GTO be turned *off* with light?

John

6056. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 01:14:23 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <doaa9f013v1@drn.newsguy.com>
Source record: 15439
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Michael A. Terrell wrote...
>
> How many do you need, and can you use ones pulled from PC boards?
> I may have some left that I pulled from damaged boards.

One or two may be enough for proof-of-principle measurements.

--
Thanks,
- Win

6057. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 01:42:16 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <Yp2qf.43498$6e1.33756@newssvr14.news.prodigy.com>
Source record: 15441
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Hello Henry,
>
> Do you know of other interesting devices or circuits good for misuse?
>

Six sawed off pieces of the pole of a busted market umbrella allowed me
to move a 1/2ton piece of furniture all by myself.

Oh wait, wrong category....

Regards, Joerg

http://www.analogconsultants.com

6058. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 01:42:39 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43A8B2E0.7F7DAFC2@earthlink.net>
Source record: 15440
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Winfield Hill wrote:
>
> Michael A. Terrell wrote...
> >
> > How many do you need, and can you use ones pulled from PC boards?
> > I may have some left that I pulled from damaged boards.
>
> One or two may be enough for proof-of-principle measurements.
>
> --
> Thanks,
> - Win

I'll see if I can find a couple for you.

--
Been there, Done that, I've got my DD214 to prove it.

Michael A. Terrell
Central Florida

6059. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 01:48:20 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <22dhq1h62jj51unhlqqt1ftklkoll52ldd@4ax.com>
Source record: 15442
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Wed, 21 Dec 2005 01:42:16 GMT, Joerg
<notthisjoergsch@removethispacbell.net> wrote:

>Hello Henry,
>>
>> Do you know of other interesting devices or circuits good for misuse?
>>
>
>Six sawed off pieces of the pole of a busted market umbrella allowed me
>to move a 1/2ton piece of furniture all by myself.
>
>Oh wait, wrong category....
>
>Regards, Joerg
>
>http://www.analogconsultants.com

I've done that with 1" oak dowel.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

"Winners never quit, quitters never win", Jack Bradley Budnik ~1956

6060. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 01:57:43 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <rE2qf.43501$6e1.2142@newssvr14.news.prodigy.com>
Source record: 15443
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Hello Jim,

> I've done that with 1" oak dowel.
>

But if you bought those I bet my solution was cheaper. About one cent
worth of elctricity to saw it ;-)

Regards, Joerg

http://www.analogconsultants.com

6061. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 02:04:32 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <o0ehq11huumtpf9nej5m3jjbgg1b3vkg16@4ax.com>
Source record: 15444
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Wed, 21 Dec 2005 01:57:43 GMT, Joerg
<notthisjoergsch@removethispacbell.net> wrote:

>Hello Jim,
>
>> I've done that with 1" oak dowel.
>>
>
>But if you bought those I bet my solution was cheaper. About one cent
>worth of elctricity to saw it ;-)
>
>Regards, Joerg
>
>http://www.analogconsultants.com

I don't know, I save all my scrap ;-)

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

"Winners never quit, quitters never win", Jack Bradley Budnik ~1956

6062. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 04:06:30 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1135137990.614743.204620@o13g2000cwo.googlegroups.com>
Source record: 15445
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Thanks NT....I appreciate your detailed response....very helpful.

Anyone else?

How about arrangement of test equiptment? I have seen many benchs
overtaken by stacks of equipment with it running over on the floor.

TMT

6063. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 05:35:28 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43A8E96B.88085DBB@earthlink.net>
Source record: 15446
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Too_Many_Tools wrote:
>
> Thanks NT....I appreciate your detailed response....very helpful.
>
> Anyone else?
>
> How about arrangement of test equiptment? I have seen many benchs
> overtaken by stacks of equipment with it running over on the floor.
>
> TMT

I have several benches, with each set up a different type of work.

--
Been there, Done that, I've got my DD214 to prove it.

Michael A. Terrell
Central Florida

6064. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 07:20:35 UTC
From: meow2222@care2.com
Message-ID: <1135149635.452648.254900@g49g2000cwa.googlegroups.com>
Source record: 15447
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Fred Bloggs wrote:

> > How about floor coverings? Ever drop a tiny screw or surface mount part
> > on the floor and spend hours looking for it?
>
> It always has to be thick insulating mats rated for 20KV,

Though it creates static hell IME. I much prefer wood, it will insulate personnel from anything too nasty, but without the static. (avoid nailing wood to concrete, which conducts.) With floor insulation you have to keep fondling the benches as you walk along, else you build up enough static to get bit just from crossing the room. A real hallmark of poor design imho, yet seems to be industry standard here, including in labs working on ESD sensitive kit.

I guess antistatic mat or coating on the bench goes without saying. Not needed for metal benches, but they have their own risks. Coating beats mat imho. Mats warp, catch on an elbow, dont fit perfectly, deteriorate, etc.

> any IC dropped
> on the floor is considered lost and not used, a screw is a different
> matter, you shouldn't have to hunt for a hard to find screw, you should
> be able to cut to length any replacement.
>
> Better make space for lots of data books and a computer, fire
> extinguisher,

I might make that extinguishers (along the escape route), getting out of a stuff packed room in a fire can be no joke. If you're going for the have everything approach there's always heat activated sprinklers. Just dont make the mistake of using those extinguishers to save your stuff when you could be getting out. Your exit must _always_ be clear, the moment its threatened get out immediately. I'm told fire extinguishers are liable to kill more than save otherwise.

BTW put emergency lighting near the floor, not up high as is usually done. When high up, by the time the light gets to the floor where youre crawling out, its all been absorbed by the smoke. Put it at exit(s) so when you dont know whats going on or where you are - disorientation is a very common problem in fires - you can just crawl toward the light. If youre working in a detached wood shack, an axe by the bench that wil bust through the wall.

> metal working machines,

Yeah. If there are no limits, you might want one of those 3d laser
gloop prototype making things. I forget the name but the computer scans
the beams through a tank of gel, and a hard plastic prototype is born.
Very pricey iirc, but sometimes worth it.

A runner is handy. If you need something you dont have, just call them
and they show
up with it in 30 minutes etc. This is something thats not so hard to
set up, as long as youre not in the middle of nowhere.

> first aid kit,

If its your own shack, tools of self defence too. Not just weapons, but
lighting, recording kit, etc. I've found recording kit pays for itself
with ease.

> smoke alarm,

make that 2.

> set-aside projects,

sheet wood that fits on the desktop. Put a sheet on before starting
work, ad you can lift your whole project onto another shelf any time,
and use the bench for another task. Multitasking.

Almost forgot, replace notepad with win32pad. Its the bees knees for
information libraries. You can have 50 files open at once no problem,
they open instantly, .txt format is (and more importantly will remain)
100% compatible, and so on.

> file cabinets, and nice-to-get-to-later junk you
> will accumulate. And make it so that every damned thing can be locked
> up- especially the door to the lab, and more locks on all the storage
> cabintes once inside, you may consider touch pad enable of all the room
> receptacles, and installing an alarm.

This is a good point, security. I like to modify locks, it makes almost
all lock pickers unable to pick them. Lock pickers are mostly not that
skiled today.

Its yet another advantage of cardboard boxes on wood shelving, makes it
looks like a downmarket shack filled with junk. May not look flash, but
it means you get to keep it. Probably more useful for self contained
unguarded units than corporate workshops.

A PIR alarm linked to a _very_ loud noise is all it takes to scare a
lot of burglars away. By loud I mean LLOOUUDD. Its funny watching the
video afterwards too :)

Almost forgot, any workshop needs a sink, and many dont have them. And
a microwave/fan combi oven. And everything else that enables you to
keep working comfortably.

NT

6065. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 07:22:36 UTC
From: meow2222@care2.com
Message-ID: <1135149756.105040.22900@z14g2000cwz.googlegroups.com>
Source record: 15298
Cross-posted to: sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Too_Many_Tools wrote:
> Thanks NT....I appreciate your detailed response....very helpful.
>
> Anyone else?
>
> How about arrangement of test equiptment? I have seen many benchs
> overtaken by stacks of equipment with it running over on the floor.
>
>
> TMT

What are you planning to do with all this TMT, set up a new workshop,
write a book?

NT

6066. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 07:29:18 UTC
From: meow2222@care2.com
Message-ID: <1135150158.126849.208160@f14g2000cwb.googlegroups.com>
Source record: 15299
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Too_Many_Tools wrote:
> Thanks NT....I appreciate your detailed response....very helpful.
>
> Anyone else?
>
> How about arrangement of test equiptment? I have seen many benchs
> overtaken by stacks of equipment with it running over on the floor.
>
>
> TMT

I've never solved that one, just have to move the stuff each time. But it reminds me of one thing: some kind of easily portable testkit would be very handy. One day I had no multimeter for some reason, and ended up using 3 light bulbs to measure V and i. It worked, got it sorted out, but is a situation one should not be landed in.

Ah, also a set of cheapo backup tools in the car. The finest tools dont work when theyre left behind, lost, stolen etc. You can only keep cheapskate tools in the car, anything better and they get nicked. Proved useful several times.

NT

6067. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 07:37:31 UTC
From: Roger <Delete-Invallid.stuff.groups@tm.net>
Message-ID: <1b1iq1pqtgj036jj9h1gjccomi6rcu22er@4ax.com>
Source record: 15300
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On 13 Dec 2005 16:30:39 -0800, "Too_Many_Tools"
<too_many_tools@yahoo.com> wrote:

>With the holiday season here it is time to redo the workshop and the
>workbench in particular.
>
>So, what suggestions do you have for setting up a good efficient
>workspace for electronics?
>
>Here's an example that I found....
>
>http://www.stevenjohnson.com/workbench.htm

When I worked in industry my office was never that neat. I had one
computer in front of me and one to my left with nothing but papers and
printouts in between. I operated both computers at the same time like
a keyboard player.

>
>So what does your workspace, test bench and layout look like?
>
>Pictures and links would be great.

Do you have to be able to see the surface of the bench?
Mines about 20' long X 3' deep and there is very little surface
showing.

>
>What has worked for you?...what hasn't?

What worked? Let the chips fall where they may, don't more anything.
What didn't? Trying to keep a neat and clean bench.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com
>
>Benches, racks, cabinets, tables, carts....
>
>Any particular test equipment that you would recommend for or against?
>
>Thanks
>
>TMT

6068. Re: BF964S noise - alternatives??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 08:06:10 UTC
From: Samuel Hunt <shunt010@hotmail.com>
Message-ID: <dob2di$2i2$1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 15301

It's because I've got about 3dB of aerial loss and filtering loss, that I can't get rid of.

But thanks for the advice on the devices, I'll take a look at them and see if they would substitute, and how I would need to modify the circuit if not.

Sam

6069. If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 08:34:22 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135154062.667473.109580@f14g2000cwb.googlegroups.com>
Source record: 15302
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

A joke for the Winter Solstice season, largely known
as "Christmas" because the Christians have shown their
true mettle over the years by burning at the stake those
who opposed them, and yet who have parasitised so
much of their opponents' beliefs such as Yule Logs,
Holly, Ivy, sacred sites and the choice of this time to
year, all as a means of insidious propaganda.

What a truly nasty sect are the Christians! (They even
went so far as to torture those who claimed to be
Christian but who objected to rule from
Rome, seeming to lose sight of the fact that the origins are
not in Rome but in Palestinianstan!)

If the Christian god really exists, then he must have a pretty
sick sense of humour - sending that Tsunami last Boxing
Day. He must also be pretty thick - in an age that has
encompassed the postal service, carrier pigeons, heliographs,
semaphore, telegraphy, telephones, radio, television, GSM,
GPS, Satellite TV, and the Internet - when he wants to
communicate with humanity he sends a tsunami? That God
seems as thick as those who believe in him!

Anyway, to keep this on topic, taking the lead from
the title of the thread.....

Q. If the answer is, "Cockrobin", what is the question?
|
|
|
|
|
|
|
|
|
|
|
|
|
|
|
|
|
|
|

|
|
|

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B
licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

6070. more hate from "polymath"

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 08:37:48 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1135154268.494023.154810@g14g2000cwa.googlegroups.com>
Source record: 15303
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> A joke for the Winter Solstice season, largely known
> as "Christmas" because the Christians have shown their
> true mettle over the years by burning at the stake those
> who opposed them, and yet who have parasitised so
> much of their opponents' beliefs such as Yule Logs,
> Holly, Ivy, sacred sites and the choice of this time to
> year, all as a means of insidious propaganda.
>
cuting the bullshit

why do you bother asshole

6071. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 08:50:44 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135155043.983039.198810@g14g2000cwa.googlegroups.com>
Source record: 15304
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

I don't celebrate and have withdrawn from the prezzie cycle
for some years because it's a most difficult time for alcoholics
and the time of year when one is most likely to have a "slip"
(as it is termed in AA) if one is not on one's guard all the time.

However, as I have to find humour from within myself and not
rely on some external drug, on the occasions when I do
go to social gatherings, I am accused of being the drunkest
person present!

So, alcoholism has one big advantage - I don't pay out loads
of shekels to give to other people loads of things they don't
really want and get in return loads of things that I don't
really want! The spare cash that I have goes to the
purchase of components that I do want!

PS.There's a new condom on the market this Christmas, the
"Sant Claus" model.

It's 6 foot long!

Why? Because he only "comes" once a year, and when he
does, he fills up your stockings!

Walt Davidson wrote:
> On 21 Dec 2005 00:34:22 -0800, "Pierian Spring"
> <aiyr.r.bean@lycos.co.uk> wrote:
>
> What's Santa bringing you this year, Gareth?

6072. why must ham radio have clases of liecen what tdo we get except the devisive bullshit arists

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 08:51:02 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1135155062.239261.199920@g14g2000cwa.googlegroups.com>
Source record: 15305
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Walt Davidson wrote:
> On 21 Dec 2005 00:34:22 -0800, "Pierian Spring"
> <aiyr.r.bean@lycos.co.uk> wrote:
>
> [snip]
>
> What's Santa bringing you this year, Gareth?

I hope he skips him after all his hate does not deserve even coal coal
is valueble
>
> 73 de Wlat
>
> --
> Walt Davidson Email: g3nyy @despammed.com

6073. Re: more hate from "polymath"

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 08:52:11 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135155130.998761.203730@g14g2000cwa.googlegroups.com>
Source record: 15306
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

If you wish to be ever perceived as a Childish Broadcaster (CBer),
then carry right on with the Childish Broadcasting (CB) such
as you utter below.

Grow up!

Stupid boy.

an old friend wrote:
> >
> cuting the bullshit
>
> why do you bother asshole

6074. Re: why must ham radio have clases of liecen what tdo we get except the devisive bullshit arists

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 08:56:52 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135155412.339697.84900@g43g2000cwa.googlegroups.com>
Source record: 15307
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"coal coal"?

ITYM "Coca Cola"!

PS. Did you hear about the dyslexic alcoholic?

He drowned in a pool of VIMTO!

(For the benefit of the unchristian Yankland warmongers, "VIMTO" is
a Britland children's drink. (As are,
"Alcopops" these days, by alla accounts!))

an old friend wrote:
> Walt Davidson wrote:
> > On 21 Dec 2005 00:34:22 -0800, "Pierian Spring"
> > <aiyr.r.bean@lycos.co.uk> wrote:
> >
> > [snip]
> >
> > What's Santa bringing you this year, Gareth?
>
> I hope he skips him after all his hate does not deserve even coal coal
> is valueble
> >
> > 73 de Wlat
> >
> > --
> > Walt Davidson Email: g3nyy @despammed.com

6075. Re: more hate from "polymath"

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 08:58:05 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1135155485.827568.88620@g47g2000cwa.googlegroups.com>
Source record: 15308
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> If you wish to be ever perceived as a Childish Broadcaster (CBer),
> then carry right on with the Childish Broadcasting (CB) such
> as you utter below.

you i don't care if you think I am CBer in point of fact I use CB when
it suits. FRS when it suits my needs and Ham Radio

all are usefull tools each has there place

something an asshole like yourself is clearly too dumb to know
>
> Grow up!

look in the mirror

you publish the lame hate week after week
>
> Stupid boy.

must be looking in the mirror
>
> an old friend wrote:
> > >
> > cuting the bullshit
> >
> > why do you bother asshole

6076. Re: why must ham radio have clases of liecen what tdo we get except the devisive bullshit arists

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 08:59:38 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135155578.192302.300960@o13g2000cwo.googlegroups.com>
Source record: 15309
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"alla"? What a (divinely inspired?) typo!!!!!!

"By all accounts"!!!!!

Pierian Spring wrote:
> "coal coal"?
>
> ITYM "Coca Cola"!
>
> PS. Did you hear about the dyslexic alcoholic?
>
> He drowned in a pool of VIMTO!
>
> (For the benefit of the unchristian Yankland warmongers, "VIMTO" is
> a Britland children's drink. (As are,
> "Alcopops" these days, by alla accounts!))
>
> an old friend wrote:
> > Walt Davidson wrote:
> > > On 21 Dec 2005 00:34:22 -0800, "Pierian Spring"
> > > <aiyr.r.bean@lycos.co.uk> wrote:
> > >
> > > [snip]
> > >
> > > What's Santa bringing you this year, Gareth?
> >
> > I hope he skips him after all his hate does not deserve even coal coal
> > is valueble
> > >
> > > 73 de Wlat
> > >
> > > --
> > > Walt Davidson Email: g3nyy @despammed.com

6077. A Good Question

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 09:00:05 UTC
From: K4YZ <k4yz@aol.com>
Message-ID: <1135155605.463463.226430@g44g2000cwa.googlegroups.com>
Source record: 15310
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

an old friend wrote:
> Pierian Spring wrote:
> > A joke for the Winter Solstice season, largely known
> > as "Christmas" because the Christians have shown their
> > true mettle over the years by burning at the stake those
> > who opposed them, and yet who have parasitised so
> > much of their opponents' beliefs such as Yule Logs,
> > Holly, Ivy, sacred sites and the choice of this time to
> > year, all as a means of insidious propaganda.
> >
> cuting the bull####
>
> why do you bother ###hole

Good question, Markie.

Perian, why DO you bother Markie?

Steve, K4YZ

6078. Re:FAQ What is Xmas??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 09:04:26 UTC
From: Krusty <nospam@please.com>
Message-ID: <uU8qf.4621$f7.3560@newsfe3-win.ntli.net>
Source record: 15311
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1135155043.983039.198810@g14g2000cwa.googlegroups.com...
>I don't celebrate and have withdrawn from the prezzie cycle
> for some years because it's a most difficult time for alcoholics
> and the time of year when one is most likely to have a "slip"
> (as it is termed in AA) if one is not on one's guard all the time.
>

My personal reasonal reasons for celebrating Christmas is to look back and on my previous 12 months achievements, also to take time out from a busy work schedule (the aerospace industry doesn't run itself you know!!) and spend time amongst friends and family. Even exchanging gifts as a token of appreciation for being there thru the ups and downs of the past year and to look forward to whatever the future holds. A beer here, a spirit there and the odd mince pie does no harm.Indeed, a wondorous time for even the strongest disbelievers!

....and a good excused to get pissed for a week and a bit!!!

6079. the true asshole of RRap priate another thread for his hate athon and act stupid in the baragn

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 09:05:04 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1135155904.044634.324820@o13g2000cwo.googlegroups.com>
Source record: 15312
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

K4YZ wrote:
> an old friend wrote:
> > Pierian Spring wrote:
> > > A joke for the Winter Solstice season, largely known
> > > as "Christmas" because the Christians have shown their
> > > true mettle over the years by burning at the stake those
> > > who opposed them, and yet who have parasitised so
> > > much of their opponents' beliefs such as Yule Logs,
> > > Holly, Ivy, sacred sites and the choice of this time to
> > > year, all as a means of insidious propaganda.
> > >
> > cuting the bull####
> >
> > why do you bother ###hole

more the forgery that you are famous for stevie and the one of the
reasons for the flamewar
>
> Good question, Markie.
>
> Perian, why DO you bother Markie?

why isn't stevie smart enough to ask the right person

asshole
>
> Steve, K4YZ

6080. Re: BF964S noise - alternatives??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 09:06:06 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1135155966.488527.3900@o13g2000cwo.googlegroups.com>
Source record: 15313

don't even try!
the ambient noise levels on 2m are such that even a 5 to 6 dB noise
figure won't limit your MDS.
it's just going to complicate your life, because the amplifioers able
to provide a lower than 1 dB NF tend to become unstable. the trouble
isn't worth it.
Saandy 4Z5KS

6081. Re: why must ham radio have clases of liecen what tdo we get except the devisive bullshit arists

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 09:12:06 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135156326.594787.238510@f14g2000cwb.googlegroups.com>
Source record: 15314
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

And an interesting revelation recently was that the
red-coated Daddy Xmas isn't traditional (He was
originally GREEN, and an extension of the Celt's
interest in the evergreen trees, those that did not die
and that therefore were immortal).

The red colouring ("coloring" for the benefit of
the unchristian warmongers of Yankland) came
about as a Coca Cola advert!

Pierian Spring wrote:
> "coal coal"?
>
> ITYM "Coca Cola"!

6082. More Markie Mularkie

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 09:18:23 UTC
From: K4YZ <k4yz@aol.com>
Message-ID: <1135156702.947795.288880@g44g2000cwa.googlegroups.com>
Source record: 15315
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

an old friend wrote:
> K4YZ wrote:
> > an old friend wrote:
> > > Pierian Spring wrote:
> > > > A joke for the Winter Solstice season, largely known
> > > > as "Christmas" because the Christians have shown their
> > > > true mettle over the years by burning at the stake those
> > > > who opposed them, and yet who have parasitised so
> > > > much of their opponents' beliefs such as Yule Logs,
> > > > Holly, Ivy, sacred sites and the choice of this time to
> > > > year, all as a means of insidious propaganda.
> > > >
> > > cuting the bull####
> > >
> > > why do you bother ###hole
> >
> more the forgery that you are famous for stevie and the one of the
> reasons for the flamewar

There's no forgery here, Markie.

I simply choose to not promulgate your profanities.

> > Good question, Markie.
> >
> > Perian, why DO you bother Markie?
> >
> why isn't stevie smart enough to ask the right person

I DID ask the right person, Markie.

You said (to Pierian) "why do you bother ###hole"

And I agreed...I asked Pierian why he was bothering you...That WAS
your question...

> ###hole

Sober up, PaganBoy. You're talking about yourself again.

Steve, K4YZ

6083. APRS users

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 09:36:55 UTC
From: hxc98@yahoo.com
Message-ID: <1135157815.348084.27290@g44g2000cwa.googlegroups.com>
Source record: 15316

If you use MapPoint with either APRSPoint or UI-View, you can update MapPoint 2004 with the latest map data very inexpensively. All you need is a copy of Streets 2006 or AutoRoute 2006. Go to http://www.aprspoint.com/ for step by step instructions.

6084. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 10:31:18 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135161078.520645.90890@g43g2000cwa.googlegroups.com>
Source record: 15317
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Walt Davidson wrote:
> What's Santa bringing you this year, Gareth?

A fresh supply of lithium carbonate, hopefully.

6085. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 11:08:37 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135163317.378183.222730@g47g2000cwa.googlegroups.com>
Source record: 15318
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

If you wish ever to be perceived as a Childish Broadcaster (CBer)
then carry right on with your Childish Broadcasting (CB) such
as you utter below.

Grow up, Mike Gathergood!

Stupid boy.

mike@g4kfk.co.uk wrote:
> Walt Davidson wrote:
> > What's Santa bringing you this year, Gareth?
>
> A fresh supply of lithium carbonate, hopefully.

6086. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 11:17:31 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135163851.402488.24450@f14g2000cwb.googlegroups.com>
Source record: 15319
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

To the person known variously as, "Ever
Diminishing Signal to Noise Ratio", "G4GCJ",
"Catweazel", "MJN", and "Frances Fuller"...

If you wish for ever to be perceived as a Childish Broadcaster (CBer)
then continue with your gratuitous Childish Broadcasting (CB) that
you use below.

I never troll. The poisoning of the world of Radio Hammery by
the M3/CBer and his spawn is not something to be ignored
and must be tackled at every opportunity.

Grow up FRANCES!

Stupid child.

Ever Diminishing Signal to Noise Ratio wrote:
> sigh.
> Please don't feed the Troll.

6087. Re: more hate from "polymath"

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 11:32:06 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135164725.994604.236110@z14g2000cwz.googlegroups.com>
Source record: 15320
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

I must take you up on that slur, for you seem to
have misunderstood, (perhaps deliberately?) what
is being said.

There is no hate whatsoever in welcoming with
open arms all those who wish to be part of the
technical pursuit that is Ham Radio.

There is no hate in setting ourselves apart from
those who are not Radio Hams in an effort to
preserve our hard-earned rights.

There is no hate in correcting those who have been
misled by some desperate Billies-No-Mates to think
that they are Radio Hams, when, in fact, they are nothing
of the kind!

No. There is no hate whatsoever in what I publish; merely
a statement of who we are, and encouragement to exert
themselves to those who would join us!

an old friend wrote:
>
> you publish the lame hate week after week

6088. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 12:02:00 UTC
From: Chaney <chaney@i12.com>
Message-ID: <Yubqf.5788$PD2.2097@fe1.news.blueyonder.co.uk>
Source record: 15321
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Drunkest!!!...no such word...I'm sure it's "most drunk"...as in "most drunk person there"...

--

Chaney

Chaney's World
www.chaney.i12.com

"Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message news:1135155043.983039.198810@g14g2000cwa.googlegroups.com...
>I don't celebrate and have withdrawn from the prezzie cycle
> for some years because it's a most difficult time for alcoholics
> and the time of year when one is most likely to have a "slip"
> (as it is termed in AA) if one is not on one's guard all the time.
>
> However, as I have to find humour from within myself and not
> rely on some external drug, on the occasions when I do
> go to social gatherings, I am accused of being the drunkest
> person present!
>
> So, alcoholism has one big advantage - I don't pay out loads
> of shekels to give to other people loads of things they don't
> really want and get in return loads of things that I don't
> really want! The spare cash that I have goes to the
> purchase of components that I do want!
>
> PS.There's a new condom on the market this Christmas, the
> "Sant Claus" model.
>
> It's 6 foot long!
>
> Why? Because he only "comes" once a year, and when he
> does, he fills up your stockings!
>
>
>
> Walt Davidson wrote:
>> On 21 Dec 2005 00:34:22 -0800, "Pierian Spring"
>> <aiyr.r.bean@lycos.co.uk> wrote:
>>
>> What's Santa bringing you this year, Gareth?
>

6089. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 12:56:44 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <YOmdnVyxA_2XzDTenZ2dnUVZ_t6dnZ2d@giganews.com>
Source record: 15322
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> A joke for the Winter Solstice season, largely known
> as "Christmas" because the Christians have shown their
> true mettle over the years by burning at the stake those
> who opposed them, and yet who have parasitised so
> much of their opponents' beliefs such as Yule Logs,
> Holly, Ivy, sacred sites and the choice of this time to
> year, all as a means of insidious propaganda.
>
> What a truly nasty sect are the Christians! (They even
> went so far as to torture those who claimed to be
> Christian but who objected to rule from
> Rome, seeming to lose sight of the fact that the origins are
> not in Rome but in Palestinianstan!)
>

Readers may like to be reminded that Gareth was once a very devout Christian
(look up the archives).

What happened, Gareth baby? Did they make you an outcast? Where you not
wanted?

Awwww
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

6090. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 13:00:47 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <0dGdnTWvBONjzDTenZ2dnUVZ_tOdnZ2d@giganews.com>
Source record: 15323
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

huLLy wrote:
>
> Readers may like to be reminded that Gareth was once a very devout
> Christian (look up the archives).
>
> What happened, Gareth baby? Did they make you an outcast? Where you
> not wanted?
>
> Awwww

Having thought about this, I suspect that he wandered into church one Sunday so drunk that he threw up all over the vicar. Ah yes, everything else just falls into place now...
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

6091. Re: why must ham radio have clases of liecen what tdo we get except the devisive bullshit arists

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 13:46:42 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135172801.959020.135660@g47g2000cwa.googlegroups.com>
Source record: 15324
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> The red colouring ("coloring" for the benefit of
> the unchristian warmongers of Yankland) came
> about as a Coca Cola advert!

Yet more (G4) Sad Drivel from Wiltshire? See
http://www.snopes.com/cokelore/santa.asp

It's not the class of licence the amateur holds, it's the class of
amateur who holds the licence.

6092. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 14:54:30 UTC
From: Mark Fergerson <nunya@biz.ness>
Message-ID: <P9eqf.5524$xF6.4371@fed1read01>
Source record: 15325
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Jim Thompson wrote:
> On Wed, 21 Dec 2005 01:42:16 GMT, Joerg
> <notthisjoergsch@removethispacbell.net> wrote:

>>Hello Henry,
>>
>>>Do you know of other interesting devices or circuits good for misuse?

>>Six sawed off pieces of the pole of a busted market umbrella allowed me
>>to move a 1/2ton piece of furniture all by myself.
>>
>>Oh wait, wrong category....

> I've done that with 1" oak dowel.

I've done it with sheer adrenaline (I'm 6'0", 150#) after watching three big bruisers horse around and get nowhere with an air conditioner that was IN MY FUCKING WAY!!! I stomped up, said "MOVE IT!", grabbed a corner, shoved hard and walked past. And no, I didn't so much as bend a fingernail.

Mark L. Fergerson

PS I once used a $150 multimeter as a non-resettable fuse, but I don't think that's what the OP had in mind...

6093. Re: why must ham radio have clases of liecen what tdo we get except the devisive bullshit arists

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 15:17:24 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135178244.602193.112510@o13g2000cwo.googlegroups.com>
Source record: 15326
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

If you wish to perceived for ever as a Childish Broadcaster (CBer),
then carry right on with the rather sad and infantile Childish
Broadcasting (CB) such as you use below.

Grow up, Mike Gathergood!

Stupid boy.

mike@g4kfk.co.uk wrote:
> Pierian Spring wrote:
> > The red colouring ("coloring" for the benefit of
> > the unchristian warmongers of Yankland) came
> > about as a Coca Cola advert!
>
> Yet more (G4) Sad Drivel from Wiltshire? See
> http://www.snopes.com/cokelore/santa.asp
>
> It's not the class of licence the amateur holds, it's the class of
> amateur who holds the licence.

6094. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 15:24:54 UTC
From: DrBoris <noyuckymeat@ntlworld.com>
Message-ID: <ateqf.37642$Cj5.21159@newsfe6-win.ntli.net>
Source record: 15327
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

<mike@g4kfk.co.uk> wrote in message
news:1135161078.520645.90890@g43g2000cwa.googlegroups.com...
>
> Walt Davidson wrote:
>> What's Santa bringing you this year, Gareth?
>
> A fresh supply of lithium carbonate, hopefully.
>
More like thioridazine, chlorpromazine etc.

6095. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 15:38:20 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135179500.701146.324710@g44g2000cwa.googlegroups.com>
Source record: 15328
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

If you wish the previous public perception of you as a
Childish Broadcaster (CBer) to be re-awakened, then just
carry on, as you do below, with your rather silly
and infantile Childish Broadcasts (CB).

Grow up, Andy Gilfillan!

Stupid boy.

DrBoris wrote:
> >
> More like thioridazine, chlorpromazine etc.

6096. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 15:38:47 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43A976C3.3B3A6762@earthlink.net>
Source record: 15329
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Mark Fergerson wrote:
>
> Jim Thompson wrote:
> > On Wed, 21 Dec 2005 01:42:16 GMT, Joerg
> > <notthisjoergsch@removethispacbell.net> wrote:
>
> >>Hello Henry,
> >>
> >>>Do you know of other interesting devices or circuits good for misuse?
>
> >>Six sawed off pieces of the pole of a busted market umbrella allowed me
> >>to move a 1/2ton piece of furniture all by myself.
> >>
> >>Oh wait, wrong category....
>
> > I've done that with 1" oak dowel.
>
> I've done it with sheer adrenaline (I'm 6'0", 150#) after watching
> three big bruisers horse around and get nowhere with an air conditioner
> that was IN MY FUCKING WAY!!! I stomped up, said "MOVE IT!", grabbed a
> corner, shoved hard and walked past. And no, I didn't so much as bend a
> fingernail.
>
> Mark L. Fergerson
>
> PS I once used a $150 multimeter as a non-resettable fuse, but I
> don't think that's what the OP had in mind...

I got mad one day when i was 20 and picked up a Pontiac 389 short
block.

--
Been there, Done that, I've got my DD214 to prove it.

Michael A. Terrell
Central Florida

6097. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 15:42:18 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135179738.032256.236000@g43g2000cwa.googlegroups.com>
Source record: 15330
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

DrBoris wrote:
> <mike@g4kfk.co.uk> wrote in message
> news:1135161078.520645.90890@g43g2000cwa.googlegroups.com...
> >
> > Walt Davidson wrote:
> >> What's Santa bringing you this year, Gareth?
> >
> > A fresh supply of lithium carbonate, hopefully.
> >
> More like thioridazine, chlorpromazine etc.

NWTAP, but his postings are more symptomatic of bipolar disorder than
of senile dementure.

Focused rage at the new licensing scheme, misdirected rantings at the
new licensees who are merely progressing through the licensing régime
as it now stands --- mixed with a manic fixation that everybody else in
the UK shares his rage, and that he alone can fix it by repetitive
posting of the same tedious drivel umpteen times a week. The other
fixation with (as he puts it) "kiddie fiddlers" is indicative of the
heightened libido often associated with manic depression.

In any case, if Wiltshire Primary Healthcare Trust can't afford the
frontal lobotamy and 4 rolls of double-thickness rubber wallpaper that
he so desparately needs, they certainly can't afford thioridazine.

73
Mike G4KFK
www.g4kfk.co.uk

6098. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 15:54:34 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135180474.530862.58650@g44g2000cwa.googlegroups.com>
Source record: 15331
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

If you wish to be continued to be seen as a Childish Broadcaster (CBer)
then just continue with the rather silly and infantile tirade of
Childish Broadcasts that you utter below.

Grow up, Mike Gathergood!

Stupid boy.

mike@g4kfk.co.uk wrote:
> NWTAP, but his postings are more symptomatic of bipolar disorder than
> of senile dementure.
> Focused rage at the new licensing scheme, misdirected rantings at the
> new licensees who are merely progressing through the licensing régime
> as it now stands --- mixed with a manic fixation that everybody else in
> the UK shares his rage, and that he alone can fix it by repetitive
> posting of the same tedious drivel umpteen times a week. The other
> fixation with (as he puts it) "kiddie fiddlers" is indicative of the
> heightened libido often associated with manic depression.
> In any case, if Wiltshire Primary Healthcare Trust can't afford the
> frontal lobotamy and 4 rolls of double-thickness rubber wallpaper that
> he so desparately needs, they certainly can't afford thioridazine.

6099. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 15:55:55 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.12.21.16.00.03.542140@example.net>
Source record: 15332
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Tue, 20 Dec 2005 23:20:35 -0800, meow2222 wrote:

> Fred Bloggs wrote:
>
>> > How about floor coverings? Ever drop a tiny screw or surface mount part
>> > on the floor and spend hours looking for it?
>>
>> It always has to be thick insulating mats rated for 20KV,
>
> Though it creates static hell IME. I much prefer wood, it will insulate
> personnel from anything too nasty, but without the static. (avoid
> nailing wood to concrete, which conducts.) With floor insulation you
> have to keep fondling the benches as you walk along, else you build up
> enough static to get bit just from crossing the room. A real hallmark
> of poor design imho, yet seems to be industry standard here, including
> in labs working on ESD sensitive kit.

http://www.google.com/search?q=%22antistatic+carpet%22

Cheers!
Rich

6100. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 15:56:41 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135180601.856235.266600@o13g2000cwo.googlegroups.com>
Source record: 15333
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Oops, seem to have lost the cross-posted groups again!

Pierian Spring wrote:
> I am a decent, civilised law-abiding citizen. I _NEVER_
> originate personal attacks; I _NEVER_ initiate the
> behaviour of the playground; I _NEVER_ post grossly
> offensive articles purporting to be from someone else, articles
> that are severe breaches of the Malicious Communications
> Act, the Forgery Act and the Telecommunications Act. I
> _NEVER_ seek to justify infantile behaviour simply because I
> have none. I _NEVER_ proffer hypocritical apologies.
>
> It is entirely right for you to suggest that you are different
> from me. There is hope for you, yet.
>
> Leigh Preece wrote:
> > For once, despite our differences

6101. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 16:04:55 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.12.21.16.09.03.68309@example.net>
Source record: 15334
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Tue, 20 Dec 2005 23:20:35 -0800, meow2222 wrote:

> Its yet another advantage of cardboard boxes on wood shelving, makes it
> looks like a downmarket shack filled with junk. May not look flash, but
> it means you get to keep it. Probably more useful for self contained
> unguarded units than corporate workshops.

And another cool thing you can do is label them all "Misc.". Drives the
visitors nuts! ;-)

Cheers!
Rich

6102. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 16:10:50 UTC
From: Richard the Dreaded Libertarian <eatmyshorts@doubleclick.net>
Message-ID: <pan.2005.12.21.16.14.58.73824@doubleclick.net>
Source record: 15335
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

On Wed, 21 Dec 2005 07:54:30 -0700, Mark Fergerson wrote:
> Jim Thompson wrote:
>> On Wed, 21 Dec 2005 01:42:16 GMT, Joerg
>> <notthisjoergsch@removethispacbell.net> wrote:
>
>>>Hello Henry,
>>>
>>>>Do you know of other interesting devices or circuits good for misuse?
>
>>>Six sawed off pieces of the pole of a busted market umbrella allowed me
>>>to move a 1/2ton piece of furniture all by myself.
>>>
>>>Oh wait, wrong category....
>
>> I've done that with 1" oak dowel.
>
> I've done it with sheer adrenaline (I'm 6'0", 150#) after watching
> three big bruisers horse around and get nowhere with an air conditioner
> that was IN MY FUCKING WAY!!! I stomped up, said "MOVE IT!", grabbed a
> corner, shoved hard and walked past. And no, I didn't so much as bend a
> fingernail.

For some reason, this brings to mind one of todays Top Nooz stories -
some woman who was jogging in the park was jumped by some guy who
wanted to assault her and she kicked the shit out of him. But they
noted that she was 6' and about 140#, and he was 5'6", 120#. It
was actually kinda refreshing to hear about someone defending herself,
but how stoopid do you have to be to attack somebody that's twice
your size? ?:-/

Cheers!
Rich

6103. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 16:57:40 UTC
From: Mr Fed UP <mrfedup@bellsouth.net>
Message-ID: <KNfqf.15532$Qa1.13065@bignews1.bellsouth.net>
Source record: 15336
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Holly Crap!!! You have anyplace I can get a pick-up truck load of money
for all these
suggestions? LOL

I like to build me a "play with my radio toys" bench not a do everything
Electronics Lab.
Some nice suggestions, but waaaay out of the average Hams pocket book I
thinks.

May need to plan what it is you really want the bench for. You could spend
the rest
of your life putting it all together and not enjoying the things you want to
play with.
After all, if you look at the ARRL Handbook; it would be nearly impossible
to have
one workbench to fit all aspects of Ham Radio. From QRP to Satellite..
Wheeew!
what a spread. Better think about it for a while first. Remember it's not
the one with
the most toys that wins.... It's the one who gets to play the most with
their toys.

Keep the ideas coming though, might be a few good ones I can afford on my SS
check. :-)

No suggestions for the apartment size cooler for the beer and a chair for
the visiting novice?
Er better make that a recliner.... some of my stories take a while. ie.
Rag Chew Award
Then there was the time......

73 K4TWO Gary

"Too_Many_Tools" <too_many_tools@yahoo.com> wrote in message
news:1135137990.614743.204620@o13g2000cwo.googlegroups.com...
> Thanks NT....I appreciate your detailed response....very helpful.
>
> Anyone else?
>
> How about arrangement of test equiptment? I have seen many benchs
> overtaken by stacks of equipment with it running over on the floor.
>
>
> TMT

>

6104. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 17:07:07 UTC
From: szekeres@pitt.edu
Message-ID: <doc23uplm1@usenet01.srv.cis.pitt.edu>
Source record: 15337
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

In article <pan.2005.12.21.16.00.03.542140@example.net>, Rich Grise
<richgrise@example.net> wrote:
>On Tue, 20 Dec 2005 23:20:35 -0800, meow2222 wrote:
>
>> Fred Bloggs wrote:
>>
>>> > How about floor coverings? Ever drop a tiny screw or surface mount part
>>> > on the floor and spend hours looking for it?
>>>
>>> It always has to be thick insulating mats rated for 20KV,
>>
>> Though it creates static hell IME. I much prefer wood, it will insulate
>> personnel from anything too nasty, but without the static. (avoid
>> nailing wood to concrete, which conducts.) With floor insulation you
>> have to keep fondling the benches as you walk along, else you build up
>> enough static to get bit just from crossing the room. A real hallmark
>> of poor design imho, yet seems to be industry standard here, including
>> in labs working on ESD sensitive kit.
>
>http://www.google.com/search?q=%22antistatic+carpet%22
>
>Cheers!
>Rich
>

I like wood benches for some of the same reasons.
I have been using a rubber static relief mat, that holds up
under high heat, and also has a natural curl, so parts
always settle back inside the mat, and not roll away.
This thing is great. I doubt if MCM still has a similar item.
The stock number on the mat is not currently valid.

I've been using color printers
more lately, for laying out various things, either building things
or fixing things. Having a circuit board, you can take pictures of both
sides, then flip one side, and you can more easily trouble shoot or
build things. Having a color laserprinter makes the process faster.

Having multiple benches is almost mandatory for certain projects.
I frequently use a Rubbermaid cart to put equipment on, and
work right there on the cart. You can always push the cart away, and
work on something else. Its also necessary sometimes for big
or heavy objects, even dripping things like water baths. Screws, etc.,

stay inside the carts tray.

A very bright flashlight held along the floor, will usually find parts much more easily than just looking around.

At home I have had "workbenches". but my number one work bench, was the top of a washing machine. Its a bitch when the screws fall inside.

greg

6105. Re: why must ham radio have clases of liecen what tdo we get except the devisive bullshit arists

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 17:17:36 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <X42dnUuJ_6ayEzTenZ2dnUVZ_v-dnZ2d@giganews.com>
Source record: 15338
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> If you wish to perceived for ever as a Childish Broadcaster (CBer),
> then carry right on with the rather sad and infantile Childish
> Broadcasting (CB) such as you use below.
>
> Grow up, Mike Gathergood!
>
> Stupid boy.
>

This is, of course, not a personal attack!
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

6106. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 18:46:44 UTC
From: guv <me@privacy.net>
Message-ID: <40tm8iF1bp5e0U1@individual.net>
Source record: 15339
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1135154062.667473.109580@f14g2000cwb.googlegroups.com...

<Snip shit>

Fuck off, Evans.

6107. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 21:27:10 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <43a9c89e.1287800@news.iol.ie>
Source record: 15340
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"DrBoris" <noyuckymeat@ntlworld.com> wrote:

oh look! the good doctor has surfaced.

6108. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 21:28:02 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <43a9c8bf.1320954@news.iol.ie>
Source record: 15341
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

mike@g4kfk.co.uk wrote:

> NWTAP, but his postings are more symptomatic of bipolar disorder than
> of senile dementure.

and i'm sure you are qualified to make such a suggestion ???

if you are fine... if you are not then why did you ?

6109. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 22:00:40 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135202440.809264.313710@g43g2000cwa.googlegroups.com>
Source record: 15342
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

In whatever guise he appears, the incurable CBer Not-Ham, a
self confessed criminal pirate, is as childish and as foul as ever.....

Insofar as he is a criminal, then we pay him no further heed.

guv wrote:
> "Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
> news:1135154062.667473.109580@f14g2000cwb.googlegroups.com...
>
> <Snip shit>
>
> Fuck off, Evans.

6110. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-21 22:04:17 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <KLKdnb6eIsHCTDTenZ2dnUVZ_tqdnZ2d@giganews.com>
Source record: 15343
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> In whatever guise he appears, the incurable CBer Not-Ham, a
> self confessed criminal pirate, is as childish and as foul as
> ever.....
>
> Insofar as he is a criminal, then we pay him no further heed.
>
> guv wrote:
>> "Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
>> news:1135154062.667473.109580@f14g2000cwb.googlegroups.com...
>>
>> <Snip shit>
>>
>> Fuck off, Evans.

Is that your 'software' that you wrote, Evans, to determine that the post you quoted was mine?
As ever, you're completely wrong. Kinda sums up your dismal life, doesn't it?
Are you drunk yet? Getting in the mood for some baaadroom antics with Elisabeth?
I've never been arrested. How many times is it for you? Do you have a favourite cell at the Chippenham nick?

Total loser, Evans.
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

6111. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 01:08:37 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43A9FC3B.A89470C2@earthlink.net>
Source record: 15344
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Rich Grise wrote:
>
> On Tue, 20 Dec 2005 23:20:35 -0800, meow2222 wrote:
>
> > Its yet another advantage of cardboard boxes on wood shelving, makes it
> > looks like a downmarket shack filled with junk. May not look flash, but
> > it means you get to keep it. Probably more useful for self contained
> > unguarded units than corporate workshops.
>
> And another cool thing you can do is label them all "Misc.". Drives the
> visitors nuts! ;-)
>
> Cheers!
> Rich

Amateur! Number the boxes, then tell them you lost the index.

--
Been there, Done that, I've got my DD214 to prove it.

Michael A. Terrell
Central Florida

6112. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 01:32:30 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1135215150.279073.81340@g47g2000cwa.googlegroups.com>
Source record: 15345
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"What are you planning to do with all this TMT, set up a new workshop,
write a book?

NT "

I am setting up a new test bench and am trying to learn from the
experiences of others.

Write a book? No, but if there were a good one I would buy it. Has
anyone ever seen the "The Workshop Book" and the The Workbench Book"
for wood workers? I sure wish ones existed for electronic hobbywork.

Does anyone have any books they would suggest that would discuss
setting up this type of workshop?

TMT

6113. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 01:35:40 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135215340.314230.301520@z14g2000cwz.googlegroups.com>
Source record: 15346
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

zYYPK wrote:
> mike@g4kfk.co.uk wrote:
>
> > NWTAP, but his postings are more symptomatic of bipolar disorder than
> > of senile dementure.
>
> and i'm sure you are qualified to make such a suggestion ???
>
> if you are fine... if you are not then why did you ?

You're right, of course. It was unprofessional to attempt a remote
diagnosis. Besides, a face-to-face consultation would be fascinating -
there must be enough material there for an entire conference.

73
Mike G4KFK

6114. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 01:41:05 UTC
From: an Old friend <kb9rqz@amsat.org>
Message-ID: <1135215665.128739.319640@z14g2000cwz.googlegroups.com>
Source record: 15347
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

m...@g4kfk.co.uk wrote:
> zYYPK wrote:
> > mike@g4kfk.co.uk wrote:
> >
> > > NWTAP, but his postings are more symptomatic of bipolar disorder than
> > > of senile dementure.
> >
> > and i'm sure you are qualified to make such a suggestion ???
> >
> > if you are fine... if you are not then why did you ?
>
> You're right, of course. It was unprofessional to attempt a remote
> diagnosis. Besides, a face-to-face consultation would be fascinating -
> there must be enough material there for an entire conference.

fascinating? are you sure the answer isn't sickiening? or something
along those lines

>
> 73
> Mike G4KFK

6115. Re: Still looking for a Tripp Lite PR-25 (or similar) DC power supply schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 02:59:34 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <wIadnQUzPPcGizfenZ2dnUVZ_tidnZ2d@comcast.com>
Source record: 15248
Cross-posted to:
alt.binaries.schematics.electronic,rec.antiques.radio+phono,rec.radio.amateur.antenna,rec.radio.amateur.homebrew
Body handling: HTML body converted to readable text

"Paul P" wrote in
message news:cW0qf.175681$qk4.13936@bgtnsc05-news.ops.worldnet.att.net...
> There are a couple of smoked resistors on the regulator board. I can not
> trust the ohm meter reading so I wanted to verify its value. I am trying
> to avoid De-engineering the board. Now once the resistors are replace
> there may be something else that smoked the resistors too.
>
> Paul.
>

Paul -

Where are these resistors .. the typical linear supply has low ohm
equalizing resistors across the NPN pass transistors .. and only a few in
the regulation circuit off the LM723 pins .. for example a 1 K is usually
used from pin 4 to the voltage adjustment potentiometer.

gb

6116. Re: Still looking for a Tripp Lite PR-25 (or similar) DC power supply schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 03:40:24 UTC
From: ehsjr <ehsjr@bellatlantic.net>
Message-ID: <lepqf.1496$JP1.249@trndny03>
Source record: 15249
Cross-posted to:
alt.binaries.schematics.electronic,rec.antiques.radio+phono,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Paul P wrote:
> There are a couple of smoked resistors on the regulator board. I can not
> trust the ohm meter reading so I wanted to verify its value. I am trying to
> avoid De-engineering the board. Now once the resistors are replace there
> may be something else that smoked the resistors too.
>
> Paul.
>

Here's a link to an Astron supply:
http://www.seits.org/features/pwrsup.htm

Assuming a typical 723 ==> pass transistors linear supply,
it shouldn't be hard to figure out the values of the cooked
resistors. The schematic at the link above serves well as a
model for many (most?) of that type of supply. Combined
with the LM723 datasheet, you can fix it.

Ed

> "PS_DUDE" <psdude@psdude.com> wrote in message
> news:43A83F2A.72DD0E2C@psdude.com...
>
>>hi paul,
>>
>>Tripp lite makes good supplies but lacks in the
>>support side !
>>
>>Good thing is the supplies use off the shelf parts
>>or easy substituted parts from anywhre,
>>http://www.mouser.com etc.
>>
>>What problem(s) are you having ?
>>
>>73 ps dude
>>
>
>
>

6117. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 03:50:45 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43AA2228.99960F58@earthlink.net>
Source record: 15250
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Too_Many_Tools wrote:
>
> "What are you planning to do with all this TMT, set up a new workshop,
> write a book?
>
> NT "
>
> I am setting up a new test bench and am trying to learn from the
> experiences of others.
>
> Write a book? No, but if there were a good one I would buy it. Has
> anyone ever seen the "The Workshop Book" and the The Workbench Book"
> for wood workers? I sure wish ones existed for electronic hobbywork.
>
> Does anyone have any books they would suggest that would discuss
> setting up this type of workshop?
>
> TMT

It would be difficult, because no two home electronics workbenches
have the equipment or tools. That is why i have several benches,
including a couple extra that are stacked up in the corner for the next
time I get a batch of test equipment.

--
Been there, Done that, I've got my DD214 to prove it.

Michael A. Terrell
Central Florida

6118. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 04:59:21 UTC
From: Bill <exray@coqui.net>
Message-ID: <ef6a1$43aa32aa$4232bd35$27448@COQUI.NET>
Source record: 15251
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Michael A. Terrell wrote:
> Too_Many_Tools wrote:

>
> It would be difficult, because no two home electronics workbenches
> have the equipment or tools. That is why i have several benches,
> including a couple extra that are stacked up in the corner for the next
> time I get a batch of test equipment.

I have "thousands" of ideas should you need one.

-Bill

6119. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 05:40:10 UTC
From: LenAnderson@ieee.org
Message-ID: <1135230010.796033.161450@z14g2000cwz.googlegroups.com>
Source record: 15252
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

From: Too_Many_Tools on Dec 21, 5:32 pm

>>"What are you planning to do with all this TMT, set up a new workshop,
>>write a book?
>>
>>NT "
>
>I am setting up a new test bench and am trying to learn from the
>experiences of others.

Having done some home hobby work in radio-electronics for, oh,
about 58 years give-or-take, I'll suggest some basics:

1. The Bench itself:

1.1 A possibility is the "butcher block" slab top, usually
made for an island in a kitchen. Finished or unfinished,
it can have your choice of legs added, attach shelves
above it, all fastened into the wood. Various sizes
are available, depends on supplier.*

1.2 Use a solid-core wood door blank with choice of legs.
Lumberyards carry those. Solid-core doors allow
fasteners any place along the surface. Avoid the
standard or hollow-core types. I gave a friend the
door I had (covered in celotex glued on) for model
aircraft building; he still does giant-scale R/C
still using balsa construction. No warping in it yet.

1.3 1-inch thick 7-ply (minimum) plywood can be had at
lumberyards and, for a slight extra fee, cut to size
you specify. Depending on size of lumber yard, can be
had with your choice of surface veneer, "finish one
side" (cheaper) or "finish both sides."

2. Bench superstructures:

2.1 Test equipment shelving or support for stacked parts
bins can be done from do-it-yourself wall-mounting
shelf units, bracket-mounted to rear of bench top.

2.2 Wall-standard shelving can have its standards mounted
on a slab of plywood (3/4" minimum suggested) attached
to back of bench top, shelves bought ready-made in
modular sizes.** Limited shelf depth to about 12"

maximum for modular shelving. Can also use plywood
cut to order but will seldom find standard brackets
to hold shelving deeper than 14".

3. A place to sit:

"Task chairs" such as are found at sales times at
Office Depot or Office Max, those usually adjustable for
height desired of bench top above floor. Various choices
of upholstery; plastic suggested to avoid solder splashes
sticking to woven fabric. Sales time prices around $40.

4. Convenient Parts/Tools Storage

4.1 Home storage containers with clear sides for visibility,
available from 10" widths to 18" widths (from Sterilite)
and are found in some food supermarkets for an average
of about $13 (Ralphs Markets in southern California).

4.2 Akro-Mills small parts cabinets. Three sizes available
now, all-plastic but sturdy. [they have a website too]
I have four of those in my workshop now, easily screwed
to a back wall of particle board and they have been
holding about 150 pounds of stuff for a couple years.
Price and availability is, unfortunately variable. I
saw mine first at an OSH sale, grabbed them while there.

* IKEA has lots of individual pieces for sale so their full
catalog is needed for detailed sizes. Six years ago I made
twin computer benches out of IKEA butcher-block kitchen tops,
using their legs for tables, added keyboard slide-out trays
using slides from Home Depot. The butcher-block tops finished
very nicely using just thinned sanding sealer but they come
very flat and can take cementing-on of melamine laminate if
that is preferred. IKEA has a website with most size details.

** OSH = Orchard Supply Hardware, a do-it-yourself store that is
in the southern California region. Their website isn't a
catalog but they do offer some do-it-yourself project ideas.
Lowe's or Home Depot have the same but the product lines they
carry are seldom complete...they tend towards certain sizes
of their products and product models (same for OSH). I do
know the local OSH has a good line of wall shelving; that
enabled me to build 39 lineal feet of book shelving on one
wall of our office at home.

Luckier than most home owners, I had a 13' x 13' center room to
play with, subdivided that in half, using "my" half for the
center workshop, making false walls and cabinets as well as the
bench itself (3/4" ply on 2" x 2" framing supports). Do NOT use
any vinyl top material as I did...it tends to hold solder
splashings and still reacts with masking tape (all-around-use
temporary fastener) adhesive. Avoid paint for the bench top

(useless in the long run). Bare wood okay and, if it gets too dirty, just use an orbital sander on it to take off the worst. Use good lighting. I have two double 4-foot flourescent units as the main lights, a "fill" light without hot spots. I had two long AC outlet strips but those managed to corrode inside and go phut. Surge-protected 6 to 8 outlet strips are all over the stores now at less than $10 each (I got a half dozen at $5 each on a local sale). Be alert. Bargains happen! :-)

Using up a pad of paper in planning is a good idea. I like 1/8" "quadrille" pads and do simple drawings in scale (for big things) to get the arrangements and sizes right. For benches, plan the heights that suit you, not the "traditional" heights which might have suited an old production shop. That and sizes available from vendors lets me plan fairly well the overall costs.

LenAnderson@ieee.org

6120. A message for John L Sielke (Was : Re: Pepper And Salt (Seasoned Greetings) to all our readers - the Xmas FAQ)

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 07:59:34 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135238373.980197.174590@g14g2000cwa.googlegroups.com>
Source record: 15253
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

There was an email message from you in my inbox this morning.

It was deleted unread.

I do not accept email messages arising from NG discourse. If you
have an issue arising from matters in this NG, then this NG
is the place to discuss it, all open and above board.

The only reason for having the email account is because it is
a requirement of google groups. The mailbox does not get
accessed for days at a time.

Pierian Spring wrote:
> A number of potential recruits are in great danger of being
> misled into thinking that they are Radio Hams when, in fact,
> they are nothing of the kind!

6121. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 08:08:05 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135238885.856798.17740@z14g2000cwz.googlegroups.com>
Source record: 15254
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

If you wish to be for ever perceived to be a Childish Broadcaster
(CBer)
then carry on, as you do below, with your Childish Broadcasting (CB).

Not only is it unprofessional but it is also a criminal act for
a ship's radio "officer" to attempt to pass himself off as a
medical professional.

Grow up, Mike Gathergood!

Stupid boy.

mike@g4kfk.co.uk wrote:
>
> You're right, of course. It was unprofessional to attempt a remote
> diagnosis. Besides, a face-to-face consultation would be fascinating -
> there must be enough material there for an entire conference.

6122. FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 08:47:32 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135241252.682964.182400@g49g2000cwa.googlegroups.com>
Source record: 15255
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

In case their are those who get a CB-type rig such as the 817
in their stockings and are misled by those-who-ought-to-know-better
into thinking that they are Radio Hams, the weekly (and
revised) FAQ is posted a couple of days early to enable
the parents to take the CB gear back to the shop.....

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal

of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One such CB type is the so-called "Not-Ham". Otherwise
known as the CBer-Masquerading-As-A-Radio-Ham, this type
had their background in the hobby that is CB Radio and not
in the technical pursuits that lead up to a coveted Ham licence.
Easily recognised by their boasts of the criminal activity of
11 metre SSB operation, one wonders why they don't go back to
the CB Bands if such bands are dearer in their hearts than are the Ham
Bands? No _REAL Radio Hams associate with those who made an
illegal installation of transmitting equipment before being
in possession of an appropriate licence.

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham

could also hold a CB licence safe in the knowledge that such a licence says no more about him than having a land-line telephone, whilst continuing to regard Ham Radio as a separate technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between a Ham Radio licence and a CB Radio licence. To him, they are sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then tries to classify himself as the equal of the Radio Ham when, in fact, he is nothing of the kind. A sure sign of a CB Radio hobbyist is if he holds, or has ever held, a licence issued under the gangrenous degeneration that is the M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of Radio Hams but who are in reality nothing more than an apology for the failure of a CBer are those class B licensees who falsely proclaimed that they were against the use of a Morse Test to control access to the HF bands, until, that is, a test was introduced at their intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to enable them to handle even the simplest algebraic manipulation for Ohm's Law and thus, the disgraceful Class Ber's in the aforementioned category are not Radio Hams by any stretch of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds, or has ever held, a licence issued under the gangrenous degeneration that is the M3/CB Fools' Licence scheme!

6123. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 09:10:01 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135242601.245634.261180@g49g2000cwa.googlegroups.com>
Source record: 15256
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Over-wound Spring wrote:
> In case their are those who get a CB-type rig such as the 817
> in their stockings and are misled by those-who-ought-to-know-better
> into thinking that they are Radio Hams, the weekly (and
> revised) FAQ is posted a couple of days early to enable
> the parents to take the CB gear back to the shop.....

Could this possibly have been posted by the man who, just 8 years ago,
was selling his FT101E on the grounds that it was too difficult to tune
up without the manual?

> 2. FT101E, pristine condition, CW filter. (Purchased Longleat '95, never
> used on TX by me 'cos critical tuning-up pages missing from manual!) "
> 73 de Gareth G4SDW
> 13 Hardens Close, Chippenham, Wiltshire, SN15 3AA
> (01249) 651897

You should get an 817 yourself - no tuning required!

6124. SolderSmoke#11: A show for electronics enthusiasts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 09:19:19 UTC
From: meara.london@virgin.net
Message-ID: <1135243159.822042.76780@g47g2000cwa.googlegroups.com>
Source record: 15257
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,sci.electronics.basics

SOLDERSMOKE!
A SHOW FOR ELECTRONICS HOMEBREWERS!
http://www.ourmedia.org/node/123300

Topics discussed in SolderSmoke 11:
Video of Trivial Electric Motor. Solar powered station on 80 meters. Mike's new PIC-pong game. Coax traps for a 160 meter antenna. Understanding solid state amplifier design. Homebrew shows on the Discovery RealTime Channel. The G-QRP Superdrug radio project. Altoids and I-pods. Listen at: http://www.ourmedia.org/node/123300

Background:
Tired of listening to Led Zepplin or NPR on your I-Pod? Wouldn't you like to be able to carry with you the kinds of ham radio conversations that you listen to while in your radio shack?
Mike, KL7R, in Juneau, Alaska, and Bill, M0HBR, in London, England meet regularly on the ECHOLINK system to discuss their homebrew radio projects. We are making them available as PODCASTS.

You can subscribe to the program, have them downloaded to your MP-3 player, and listen to them at your convenience. To subscribe, just cut and paste this URL into your I-poder (or similar) software.

http://www.ourmedia.org/mediarss/user/36170

If you don't have an MP3 player you can just go to the site below and listen to the latest program (and earlier editions) using the audio software on your computer.

http://www.ourmedia.org/node/123300

We hope you enjoy the program. Please send us feedback.

73 from London
Bill M0HBR N2CQR CU2JL
http://www.qsl.net/n2cqr

6125. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 09:42:18 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135244538.349938.188520@g44g2000cwa.googlegroups.com>
Source record: 15258
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

If you wish to be henceforth perceived as a Childish Broadcaster (CBer)
then carry right on with the Childish Broadcasting (CB) such as
you utter below.

You seem to be obsessed with me, you are chanting your
infantile playground tirades at every turn. Brian Reay says that
such obsession is a sign of envy. Have you no life of your own?

All _REAL_ Radio Hams have a number of ongoing projects
simultaneously. Some are held up for lack of components, some
for a lack of time, others for lack of info.
I wouldn't recommend anyone whose background
is in transistorised QRP to tackle the neutralising of a compact
PA stage with 600 VDC on the anodes after replacing the
antenna coupling capacitor unadvisedly, lightly, or wantonly. The
project
was held up awaiting info, and when I needed the space, was
one of a number that I disposed of. ISTR that an R1475 awaiting
restoration
also was disposed of at the same time. The project was underway,
I was fully prepared to have a go, in sharp contrast to the
CBers-Masquerading-As-Radio-Hams of today who buy their
goods from a shop and return them to a shop if needing repair.

You really do seem anxious to score some pathetic and childish
points. You may feel at home starting and then desperately
trying to continue a pissing-in-the-playground
competition, but that is not my style.

You do yourself, this NG, and Ham Radio in general no service
by discouraging the discussion of what we do and the problems
we encounter along the way if you pick up on minor points out
of context and sneer and chant from the sidelines. How are
we to encourage the novitiate other than by discussing what
we do?

Shame on you.

Grow up, Mike Gathergood!

Stupid boy.

m...@g4kfk.co.uk wrote:
> Over-wound Spring wrote:
> > In case their are those who get a CB-type rig such as the 817
> > in their stockings and are misled by those-who-ought-to-know-better

> > into thinking that they are Radio Hams, the weekly (and
> > revised) FAQ is posted a couple of days early to enable
> > the parents to take the CB gear back to the shop.....
>
> Could this possibly have been posted by the man who, just 8 years ago,
> was selling his FT101E on the grounds that it was too difficult to tune
> up without the manual?
>
> > 2. FT101E, pristine condition, CW filter. (Purchased Longleat '95, never
> > used on TX by me 'cos critical tuning-up pages missing from manual!) "
>
> You should get an 817 yourself - no tuning required!

6126. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 09:56:02 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135245362.058528.81080@o13g2000cwo.googlegroups.com>
Source record: 15259
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

OK - are you a man, or a yellow-bellied coward?

I notice that your own personal details are withheld
in the callbook.

How brave of you to publish someone else's, including
their phone number while you yourself hide shaking
and quivering behind the safety of the playground fence
while you chant your infantile sneers.

Grow up, Mike Gathergood!

Stupid boy.

mike@g4kfk.co.uk wrote:
> > 73 de Gareth G4SDW
> > 13 Hardens Close, Chippenham, Wiltshire, SN15 3AA
> > (01249) 651897

6127. Re: tedious bollocks - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 09:59:10 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135245550.762168.226490@f14g2000cwb.googlegroups.com>
Source record: 15260
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
>You may feel at home starting and then desperately
> trying to continue a pissing-in-the-playground
> competition, but that is not my style.

Oh - it seems I owe you an apology?

It must be some other Pierian Spring who "pisses" the same tedious
self-righteous drivel into these newsgroups umpteen times a week.

6128. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 10:02:59 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135245779.351638.228770@g47g2000cwa.googlegroups.com>
Source record: 15261
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> OK - are you a man, or a yellow-bellied coward?
>
> I notice that your own personal details are withheld
> in the callbook.
>
> How brave of you to publish someone else's, including
> their phone number while you yourself hide shaking
> and quivering behind the safety of the playground fence
> while you chant your infantile sneers.

QTHR on the website (www.g4kfk.co.uk) and at QRZ.com

You'll also find Nick G3VCP, whom you accused of being a pirate, is
QTHR at qrz.com

And at least I use my own name, rather than claiming to be the Pierian
Spring of Greek mythology.

"A little learning is a dang'rous thing;
Drink deep or taste not the Pierian Spring"
Alexander Pope

73
Mike G4KFK

6129. Re: tedious bollocks - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 10:21:32 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135246892.186109.298860@g43g2000cwa.googlegroups.com>
Source record: 15262
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

If it is your wish to be for ever perceived as a Childish
Broadcaster (CBer), then carry right on with uttering
your obsessive Childish Broadcasting (CB) such as you
do below.

You're not doing yourself any favours with your
infantile tirades, and you really ought to know better.

Shame on you.

Grow up, Mike Gathergood!

Stupid boy.

mike@g4kfk.co.uk wrote:
> Pierian Spring wrote:
> >You may feel at home starting and then desperately
> > trying to continue a pissing-in-the-playground
> > competition, but that is not my style.
> Oh - it seems I owe you an apology?
> It must be some other Pierian Spring who "pisses" the same tedious
> self-righteous drivel into these newsgroups umpteen times a week.

6130. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 10:36:47 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135247807.624407.200900@z14g2000cwz.googlegroups.com>
Source record: 15263
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

I don't follow web links - if you have something valid
to contribute to a discussion in this NG - possibly
your address and telephone number, then contribute it,
or else be for ever dismissed as a cowardly child.

You really must get out of this habit of yours of
chanting infantile untruths; it does you no favours.
I did not accuse anybody of being a pirate as you
imply below.

As to using one's own name, I used to until my
family was subject to malicious and threatening
correspondence coming from Stephen G Bryan G0SGB.
I advise anybody to remain anonymous as there are
malicious and obsessive loonies to be found in this NG
and in this thread to this day.

You also seem to not understand the tradition
of using a pseudonym, in my case for the reason
discussed above - I do not claim to be a font of any sort;
I am merely using a pseudonym.

Once again, you should give serious consideration to
presenting to this NG a persona other than the
insult-sneering infant that you continue to do below.

Grow up, Mike Gathergood!

Stupid boy.

mike@g4kfk.co.uk wrote:
> Pierian Spring wrote:
> > OK - are you a man, or a yellow-bellied coward?
> > I notice that your own personal details are withheld
> > in the callbook.
> > How brave of you to publish someone else's, including
> > their phone number while you yourself hide shaking
> > and quivering behind the safety of the playground fence
> > while you chant your infantile sneers.
> QTHR on the website (www.g4kfk.co.uk) and at QRZ.com
> You'll also find Nick G3VCP, whom you accused of being a pirate, is
> QTHR at qrz.com
> And at least I use my own name, rather than claiming to be the Pierian
> Spring of Greek mythology.
> "A little learning is a dang'rous thing;

> Drink deep or taste not the Pierian Spring"
> Alexander Pope

6131. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 10:48:31 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135248511.118828.240980@z14g2000cwz.googlegroups.com>
Source record: 15264
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> ... there are malicious and obsessive loonies to be found in this NG

You're right about one thing!

6132. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 10:48:35 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135248515.732665.68440@g43g2000cwa.googlegroups.com>
Source record: 15265
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> ... there are malicious and obsessive loonies to be found in this NG

You're right about one thing!

6133. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 11:30:15 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <1uukq1dteklhp6s4e5dgvah0j98uomn419@4ax.com>
Source record: 15266
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

mike@g4kfk.co.uk wrote:

>
>Over-wound Spring wrote:
>
>> In case their are those who get a CB-type rig such as the 817
>> in their stockings and are misled by those-who-ought-to-know-better
>> into thinking that they are Radio Hams, the weekly (and
>> revised) FAQ is posted a couple of days early to enable
>> the parents to take the CB gear back to the shop.....

>You should get an 817 yourself - no tuning required!

It's interesting to note that the author makes much of the repair issue in his so-called 'FAQ', where he says:

"Usually such people are a variation of the CB Radio hobbyist; they buy their radios off the shelf and send them back to be repaired"

and also goes on to say, referring to his vision of 'radio hams' (whatever they are):

"They do this with gusto, and also repair and modify their own equipment"

but elsewhere said

"I wouldn't recommend anyone whose background is in transistorised QRP to tackle the neutralising of a compact PA stage with 600 VDC on the anodes after replacing the antenna coupling capacitor "

Is there is a conflict here between the so-called 'FAQ' as laid down, and its practice as suggested by its own adherent? Under what circumstances should others 'repair with gusto' but not consider adjustments to a valve PA? All PAs? Ones with 12V on the anode? What are the limitations here? Is there a safety issue here? Where does one go to get 'a suitable background'? The so-called 'FAQ' should make things clear, not have the issues clouded by postings elsewhere.

But it doesn't stop here. Note that no licence is necessary for the repair of radios, as anyone who wishes can repair them. Neither does the possession of an Amateur Licence bestow a qualification for this activity; it is not specifically mentioned.

But further to the repair issue; the so-called 'FAQ', as noted above, states

"Usually such people are a variation of the CB Radio hobbyist; they buy their radios off the shelf and send them back to be repaired"

but it is apparently a sanctioned activity to have a non-functioning radio, and sell it off in that state, the 'redeeming' factors being that the owner was prepared to repair it, and was intending to repair it; the fact that he did not do so apparently being irrelevant.

So, under this so-called 'FAQ', anyone whose radio ceased to function, but who thought they might have a go at repairing it, and indeed intended to repair it, but in the end didn't for whatever reason ("I can't find a screwdriver to get the lid off") would not have negated their 'qualification' for inclusion in the strange but very limited sect proposed by the so-called 'FAQ'! A mere 'statement of intent', perhaps made years later, will be all that is required to save their bacon!

It would seem that this issue of 'repair' needs to be clarified within the so-called 'FAQ' itself, rather than by passing defensive remarks in other utterances; and to do this as a matter of urgency as there might be safety issues for anyone so encouraged to follow it. Also, it makes the so-called 'FAQ' difficult to follow for its adherents - should there be any - in much the same way that over the years 'operating' has been at various times both held high and then damned.

It would seem that this so-called 'FAQ' is itself in need of serious repair; let us see if the author can tackle that, or whether he merely intends to tackle it but then abandon it in favour of some activity that actually lies within his ambit. It is suggested that for a number of reasons, some possibly legal in scope, he does not republish it until the problems inherent in it are satisfactorily dealt with, otherwise serious issues might arise by any who follow it.

from
Aero Spike

6134. website

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 12:25:09 UTC
From: Super DX <superdx@free.fr>
Message-ID: <qWwqf.505$Lp.333@nntpserver.swip.net>
Source record: 15267

Hi all,

here is a new ham website :

http://superdx.free.fr

73's and Merry Xmas !

Vince

6135. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 12:32:14 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <i1xqf.22292$zt1.1038@newsfe5-gui.ntli.net>
Source record: 15268
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Spike" <Aero.Spike@S&T.invalid> wrote in message
news:1uukq1dteklhp6s4e5dgvah0j98uomn419@4ax.com...
>
> "I wouldn't recommend anyone whose background is in transistorised QRP
> to tackle the neutralising of a compact PA stage with 600 VDC on the
> anodes after replacing the antenna coupling capacitor "
>
> Is there is a conflict here between the so-called 'FAQ' as laid down,
> and its practice as suggested by its own adherent? Under what
> circumstances should others 'repair with gusto' but not consider
> adjustments to a valve PA? All PAs? Ones with 12V on the anode? What
> are the limitations here? Is there a safety issue here? Where does one
> go to get 'a suitable background'? The so-called 'FAQ' should make
> things clear, not have the issues clouded by postings elsewhere.

Plus, of course, such a neutralisation isn't that difficult a task- being a
normal process after replacing a valve. I've done a couple of FT101's over
the years and I don't recall the PA being that compact.

Either way, assuming the technician involved had even a modicum of
experience in electronics, it is the sort of job I'd expect them to be able
to tackle.

73
Brian

6136. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 12:50:15 UTC
From: Dino Papas <kl0s@cox.net>
Message-ID: <kl0s-DCB194.07501522122005@news.east.cox.net>
Source record: 15269
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

There's a pretty good book available that covers a lot of the basics:

"Build Your Own Electronics Workshop" by Tom Petruzzellis

ISBN 0-07-144724-5 (McGraw Hill Publisher)

Not the answer to all but gives you some pretty good ideas to use as
departure points as you put your shop together.

Dino KL0S/4

6137. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 13:10:41 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <doe8kh$9ip$1@domitilla.aioe.org>
Source record: 15270
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

However as it's Christmas, please feel free to join me at my run down QTH
for a spot of meths!

Pierian Spring wrote:
> I don't follow web links - if you have something valid
> to contribute to a discussion in this NG - possibly
> your address and telephone number, then contribute it,
> or else be for ever dismissed as a cowardly child.
>

6138. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 13:14:11 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135257250.969579.255320@f14g2000cwb.googlegroups.com>
Source record: 15271
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Spike wrote:
> It would seem that this so-called 'FAQ' is itself in need of serious
> repair; let us see if the author can tackle that, or whether he merely
> intends to tackle it but then abandon it in favour of some activity
> that actually lies within his ambit. It is suggested that for a number
> of reasons, some possibly legal in scope, he does not republish it
> until the problems inherent in it are satisfactorily dealt with,
> otherwise serious issues might arise by any who follow it.

But why would he allow "nugatories" (his word) such as truth and
common-sense to spoil his vision of amateur radio? A vision which,
according to this posting from 1999, included an HND-level exam!

Gareth Alun Evans wrote in message
<922534269.8136.0.nnrp-06.9e982...@news.demon.co.uk>...
> Perhaps the answer would be to widen the terms
> of the CB license, to include what are now the 2m,
> 6m, 10m and 20m amateur bands, using only
> type-approved eqpt (which should suit the quasi-
> CB activities of DX, WAB and contests, and the
> current behavioural habits of the denizens of those
> bands); and then to bring in a much higher
> educational requirement (say, 'A' level maths
> and electronics) as a pre-requisite for an RAE
> at about the HND level. It cannot be ignored
> that a good mathematical grounding is essential for
> engineering design. This would also provide a
> break-time to ease the Morse requirement.
> Needless to say, all current Radio Hams (myself
> included) would get only the expanded CB, and
> would have to sit the new exams. I cannot see
> that there would be any objection to this because
> if you consider yourself to competent to design and
> construct radios, then you'd pass the exam with
> flying colours, wouldn't you?
> A Radio Ham licence would then, indeed, be
> a prized privilege

One wonders what would be the point? If 136kHz, 1.8, 3.5, 5, 7, 10, 18,
21 and 24MHz were only available to qualified engineers, what would
they use them for? What could they learn about propagation on these
bands that we don't already know? And, in a world where
mission-critical long-distance comms has already moved to fibre and
satellite, to what use would any new knowledge be put?

Surely it's better to promote the social side of the hobby (and yes Gareth, it IS a hobby) to at least the same extent as the technical side, and the only way to do this is for entry into the hobby to remain "competitive" with other pastimes. The RSGB have shown that they can do this efficiently.

73 and Happy CHRISTmas
Mike G4KFK
www.g4kfk.co.uk

6139. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 13:20:04 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <w9Gdnbwg2defNTfeRVn-tA@giganews.com>
Source record: 15272
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
>
> One such CB type is the so-called "Not-Ham". Otherwise
> known as the CBer-Masquerading-As-A-Radio-Ham, this type
> had their background in the hobby that is CB Radio and not
> in the technical pursuits that lead up to a coveted Ham licence.
> Easily recognised by their boasts of the criminal activity of
> 11 metre SSB operation, one wonders why they don't go back to
> the CB Bands if such bands are dearer in their hearts than are the Ham
> Bands? No _REAL Radio Hams associate with those who made an
> illegal installation of transmitting equipment before being
> in possession of an appropriate licence.
>

Cool! I'm in the G4SDW hall of flame!
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

6140. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 13:38:08 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <lbalq19t17ujhd6gobqi9pts126420534o@4ax.com>
Source record: 15273
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

mike@g4kfk.co.uk wrote:

>
>Spike wrote:
>
>> It would seem that this so-called 'FAQ' is itself in need of serious
>> repair; let us see if the author can tackle that, or whether he merely
>> intends to tackle it but then abandon it in favour of some activity
>> that actually lies within his ambit. It is suggested that for a number
>> of reasons, some possibly legal in scope, he does not republish it
>> until the problems inherent in it are satisfactorily dealt with,
>> otherwise serious issues might arise by any who follow it.
>
>But why would he allow "nugatories" (his word) such as truth and
>common-sense to spoil his vision of amateur radio? A vision which,
>according to this posting from 1999, included an HND-level exam!

Presumably this is the level of attainment that he himself reached;
had he set it higher, he would have excluded himself!

But it is the so-called 'FAQ' that raises the greatest concern, for he
has now started to bound it with other advice - not written within the
so-called FAQ, but elsewhere. If this was done as part of a
professional's duties, it would be regarded as, well, unprofessional;
but in the context of encouraging newcomers, it is a dangerous and
disgraceful practice.

Should this so-called FAQ should be ignored by all, and a disclaimer
issued by the author? Perhaps an abuse report might be in order if
this not be done in the very near future.

from
Aero Spike

6141. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 13:50:11 UTC
From: W8LNA <W8LNA@arrl.net>
Message-ID: <nayqf.124$qg.94@news02.roc.ny>
Source record: 15274
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> In case their are those who get a CB-type rig such as the 817
> in their stockings and are misled by those-who-ought-to-know-better
> into thinking that they are Radio Hams,

I got news for ya chappie, the war's over, you can get those parts for your head now.

Yeah, yeah, I know, 'stupid boy.'

You need some new material, and maybe some vitamin C tabs, ya been suckin' limes* so long you're sour completely through.

*- Apologies to all the British possibly offended by this remark with the exception of G4SDW, who it was intended to offend.

6142. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 14:47:46 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <m0zqf.15911$q4.6514@newsfe2-gui.ntli.net>
Source record: 15275
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Spike" <Aero.Spike@S&T.invalid> wrote in message
news:lbalq19t17ujhd6gobqi9pts126420534o@4ax.com...
>but elsewhere. If this was done as part of a
> professional's duties, it would be regarded as, well, unprofessional;
> but in the context of encouraging newcomers, it is a dangerous and
> disgraceful practice.

Certainly most professions expect the "established" to encourage and support
newcomers.
Experienced engineers tend to have newcomers as assistants, qualified
teachers have PGCE students to mentor and advise, new police officers are
put with experienced officers, junior Doctors are assign to a registrar,
etc., etc., etc.

Such a system only fails if the "established" person isn't so "established"
as maybe they should be.

73

Brian

6143. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 15:09:39 UTC
From: DrBoris <noyuckymeat@ntlworld.com>
Message-ID: <Tkzqf.11721$5v1.10650@newsfe2-win.ntli.net>
Source record: 15276
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Pierian Spring" <radio.ham@lycos.co.uk> wrote in message
news:1135244538.349938.188520@g44g2000cwa.googlegroups.com...
<crap snipped>

>> I wouldn't recommend anyone whose background
> is in transistorised QRP to tackle the neutralising of a compact
> PA stage with 600 VDC on the anodes after replacing the
> antenna coupling capacitor unadvisedly, lightly, or wantonly.

So how are people supposed to learn/progress if they are not
going to tackle something they have no previous experience of?
Is that not the whole point of Ham Radio, as you seem to continually
remind us of in your FAQ?

6144. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 15:24:03 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135265043.790913.86810@g44g2000cwa.googlegroups.com>
Source record: 15277
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> However as it's Christmas, please feel free to join me at my run down QTH
> for a spot of meths!

That's a very kind offer and, as it happens, we will be visiting
friends in Canal Road over the hols, so I might well take you up on the
offer.

It it BYOB? Should I bring my own anti-freeze?

Merry CHRISTmas
Mike G4KFK
www.g4kfk.co.uk

6145. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 15:52:30 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.12.22.15.56.36.804999@example.net>
Source record: 15278
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Wed, 21 Dec 2005 17:32:30 -0800, Too_Many_Tools wrote:

> "What are you planning to do with all this TMT, set up a new workshop,
> write a book?
>
> NT "
>
> I am setting up a new test bench and am trying to learn from the
> experiences of others.

This is the kind of deal where you make up your own experience. You sit at a blank bench, and put your project in front of you, and go, "Now, where would I like my power supply, DVM, and scope be sitting while I do this?"

Personally, I like to have everything possible at my fingertips, so I go with a U-shaped bench, a chair on wheels, and two tiers of shelves for stuff.

So use your imagination! Make up the workbench of your dreams, custom-tailored to your very own personal specification. :-)

Have Fun!
Rich

6146. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 16:17:13 UTC
From: Me <Me@hotmail.com>
Message-ID: <doejic$j53$1@domitilla.aioe.org>
Source record: 15279
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
[snip]
> I advise anybody to remain anonymous

As in getting yourself arrested, and your name and picture published in your local newspaper..thus bringing amateur radio into disrepute, is that what you version of anonymous is ?

http://archive.thisiswiltshire.co.uk/2005/3/10/91923.html

6147. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 16:28:04 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135268884.413518.215010@g49g2000cwa.googlegroups.com>
Source record: 15280
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Me wrote:
> As in getting yourself arrested, and your name and picture published in
> your local newspaper..thus bringing amateur radio into disrepute, is
> that what you version of anonymous is ?

Maybe a clean CRB check should be a pre-requisite for an amateur radio
licence?

73
Mike G4KFK

6148. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 16:32:55 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135269174.934284.28770@g14g2000cwa.googlegroups.com>
Source record: 15281
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

I see that some cowardly child has hidden behind an
anonymising server to forge an abusive posting that did not come from
me.

What more proof do we need that the dumbing down that
has come in from, amongst other things, the gangrenous
degeneration that is the M3/CB Fools' Licence, has
done irreparable harm to the society of Radio Hams?

In the light of the forged posting below, it is more and more
important that _ALL_ self-respecting _REAL_ Radio Hams
resign forthwith from the RSCB, if only to show support
for decency and for civilised behaviour in Radio Hammery.

Pierian Spring wrote:
> However as it's Christmas, please feel free to join me at my run down QTH
> for a spot of meths!
>
> Pierian Spring wrote:
> > I don't follow web links - if you have something valid
> > to contribute to a discussion in this NG - possibly
> > your address and telephone number, then contribute it,
> > or else be for ever dismissed as a cowardly child.
> > >

6149. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 16:40:30 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135269630.269502.23890@f14g2000cwb.googlegroups.com>
Source record: 15282
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

If it was your intention to be perceived as a Childish Broadcaster
(CBer),
and deliberately setting out to cause offence is most certainly
childish, then continue with your Childish Broadcasting (CB) such
as you use below.

Grow up, Galen Watts!

Stupid child.

W8LNA wrote:
> I got news for ya chappie, the war's over, you can get those parts for
> your head now.
> Yeah, yeah, I know, 'stupid boy.'
> You need some new material, and maybe some vitamin C tabs, ya been
> suckin' limes* so long you're sour completely through.
> *- Apologies to all the British possibly offended by this remark with
> the exception of G4SDW, who it was intended to offend.

6150. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 16:45:22 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135269922.792863.41410@f14g2000cwb.googlegroups.com>
Source record: 15283
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

At no time have I indicated that I wasn't prepared to
tackle something of which I had no experience. I was
prepared to tackle it, and was awaiting the appropriate
instructions. How many of those who boast of having
neutralised the PA stage of an FT101 did so without
the manufacturer's instructions thereto, and if they
lacked the instructions, how did they know that their
attempts to so neutralise were successful?

You really do seem desperate to score some
infantile point, Andy GilFillan!

DrBoris wrote:
> "Pierian Spring" <radio.ham@lycos.co.uk> wrote in message
> news:1135244538.349938.188520@g44g2000cwa.googlegroups.com...
> <crap snipped>
> >> I wouldn't recommend anyone whose background
> > is in transistorised QRP to tackle the neutralising of a compact
> > PA stage with 600 VDC on the anodes after replacing the
> > antenna coupling capacitor unadvisedly, lightly, or wantonly.
> So how are people supposed to learn/progress if they are not
> going to tackle something they have no previous experience of?
> Is that not the whole point of Ham Radio, as you seem to continually
> remind us of in your FAQ?

6151. Disciplining Airwave Nuisance

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 16:47:10 UTC
From: "nhorsley@charter.net" <nhorsley@charter.net>
Message-ID: <1135270030.634625.80190@g14g2000cwa.googlegroups.com>
Source record: 15284

There is this preachertype who comes to campus and he is impossible to ignore because he uses a wireless PA system. Is there a way to get a wireless mic or some other transmitter and piggyback onto his wireless PA system so others can enjoy freedom of speech using his PA? If so, what would we need to do this? Please explain it so a doofus (me) can understand.

I posted the above on related newsgroups and I have learned the following:
1. It's all probably illegal and the Patriot Act will put me in prison forever for even considering it.
2. It's definitely doable but I will need to identify the frequency the wireless mic is transmitting on and find another microphoned transmitter device that will allow me to override his wireless mic with a message of my own.

So the question remains: what is the name of this "microphoned transmitter device" and where can I find one or find the plans for building one?

Thank you.

6152. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 16:47:40 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135270060.440240.287510@g49g2000cwa.googlegroups.com>
Source record: 15285
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

If it is your wish to be perceived as a Childish Broadcaster (CBer)
then just carry right on with your Childish Broadcasting (CB)
such as you utter below.

You do yourslef no favours by your continual use of
gratuitous and abusive outbursts.

Grow up, Mike Gathergood!

Stupid boy.

mike@g4kfk.co.uk wrote:
> Pierian Spring wrote:
> > However as it's Christmas, please feel free to join me at my run down QTH
> > for a spot of meths!
> That's a very kind offer and, as it happens, we will be visiting
> friends in Canal Road over the hols, so I might well take you up on the
> offer.
> It it BYOB? Should I bring my own anti-freeze?
> Merry CHRISTmas
> Mike G4KFK
> www.g4kfk.co.uk

6153. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 16:57:36 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135270656.287807.255580@z14g2000cwz.googlegroups.com>
Source record: 15286
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Firstly, why not identify yourself, rather than hiding like the
infantile coward that you undoubtedly are behind an
anonymising server? (Talking of infantile anonymous
cowards, have you ever thought about joining the
plods yourself?)

Secondly, if anyone is arrested as the result of a malicious
and perjurous complaint, then that arrest, and any corresponding
bringing of Ham Radio into disrepute, is a reflection on the
criminal making the complaint, in this case, Brian Reay, G8OSN/M3OSN,
and not on his unfortunate victim.

Brian Reay subjected me to a vicious, malicious and distressing
campaign of harassment over a number of years when he
repeatedly accused me of sheep-shagging, said that my
wife was a sheep in the bed next to me, and accused
me of drinking methylated spirit. I did not respond to him
other than to chastise him for his grossly offensive behaviour.

When it became apparent that Brian Reay was a schoolteacher,
and had been conducting his sexually deviant campaign when
he was under training at a girls's school in Dartford, Kent,
I responded by suggesting that such a campaign meant that
he was a danger to children. Brian Reay's infantile psyche
could not deal with having the tables turned on him, and
he made a perjurous and malicious complaint to the plods
suggesting that it was I who was harassing him, rather than
the other way about. Brian Reay is a w*nkmason and it seems that
his fellow w*nkmasons in the plods will not take action against him
for wasting plod time in the way that he did.

Me wrote:
> Pierian Spring wrote:
> [snip]
> > I advise anybody to remain anonymous
>
> As in getting yourself arrested, and your name and picture published in
> your local newspaper..thus bringing amateur radio into disrepute, is
> that what you version of anonymous is ?
>
> http://archive.thisiswiltshire.co.uk/2005/3/10/91923.html

6154. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 16:59:33 UTC
From: W8LNA <W8LNA@arrl.net>
Message-ID: <VXAqf.135$qg.79@news02.roc.ny>
Source record: 15287
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> If it was your intention to be perceived as a Childish Broadcaster
> (CBer),
> and deliberately setting out to cause offence is most certainly
> childish, then continue with your Childish Broadcasting (CB) such
> as you use below.
>
> Grow up, Galen Watts!

Bullseye!

Gee, he can use a call sign lookup page, I'm really, really scared!

Maybe I should file a report with the Melksham police.

I'd bet they know who you are, Springy Ol' boy.

What's more childish, a casual insult across the internet or actually
going far enough to get arrested for intimidation across the internet?

I suspect the latter.

W8LNA
Galen Watts
HC 63 Box 309
Arbovale, WV 24915-9741

6155. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 17:07:09 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135271229.566574.35570@g49g2000cwa.googlegroups.com>
Source record: 15288
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

If anyone is arrested as the result of a malicious
and perjurous complaint, then that arrest, and any corresponding
bringing of Ham Radio into disrepute, is a reflection on the
criminal making the complaint, in this case, Brian Reay, G8OSN/M3OSN,
and not on his unfortunate victim.

Brian Reay subjected me to a vicious, malicious and distressing
campaign of harassment over a number of years when he
repeatedly accused me of sheep-shagging, said that my
wife was a sheep in the bed next to me, and accused
me of drinking methylated spirit. I did not respond to him
other than to chastise him for his grossly offensive behaviour.

When it became apparent that Brian Reay was a schoolteacher,
and had been conducting his sexually deviant campaign when
he was under training at a girls's school in Dartford, Kent,
I responded by suggesting that such a campaign meant that
he was a danger to children. Brian Reay's infantile psyche
could not deal with having the tables turned on him, and
he made a perjurous and malicious complaint to the plods
suggesting that it was I who was harassing him, rather than
the other way about. Brian Reay is a w*nkmason and it seems that
his fellow w*nkmasons in the plods will not take action against him
for wasting plod time in the way that he did.

If it was your intention to be perceived as a Childish Broadcaster
(CBer), and deliberately setting out to cause offence is most
certainly childish, then continue with your Childish Broadcasting
(CB) such as you use below.

Grow up, Galen Watts!

Stupid child.

W8LNA wrote:
> Bullseye!
> Gee, he can use a call sign lookup page, I'm really, really scared!
> Maybe I should file a report with the Melksham police.
> I'd bet they know who you are, Springy Ol' boy.
> What's more childish, a casual insult across the internet or actually
> going far enough to get arrested for intimidation across the internet?
> I suspect the latter.

6156. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 17:20:24 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135272024.453418.180780@g47g2000cwa.googlegroups.com>
Source record: 15289
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> If it is your wish to be perceived as a Childish Broadcaster (CBer)
> then just carry right on with your Childish Broadcasting (CB)
> such as you utter below.
>
> You do yourslef no favours by your continual use of
> gratuitous and abusive outbursts.
>
> Grow up, Mike Gathergood!
>
> Stupid boy.

Go on then - you drink that meths all by yourself. See if I care.

That's the last time I accept an invitation for a boys night out with
you!

73
Mike G4KFK

6157. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 17:20:28 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <TIs8PAkcBuqDFAVi@ifwtech.co.uk>
Source record: 15290
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Fred Bloggs wrote:
>
>> How about floor coverings? Ever drop a tiny screw or surface mount
>>part
>> on the floor and spend hours looking for it?
>
>It always has to be thick insulating mats rated for 20KV, any IC
>dropped on the floor is considered lost and not used, a screw is a
>different matter, you shouldn't have to hunt for a hard to find screw,
>you should be able to cut to length any replacement.
>
Someone had a very good idea about finding dropped parts: vacuum the
floor occasionally* with a sheer filter (women's tights) stretched over
the cleaner nozzle.

Not the most anti-static solution imaginable, but it does work.

* Once every ten years, whether it needs it or not.

--
73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

6158. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 17:25:09 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135272309.625773.197140@g44g2000cwa.googlegroups.com>
Source record: 15291
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

If you wish to be perceived as a Childish Broadcaster (CBer)
then just carry on with your Childish Broadcasting (CB)
such as you use below.

You do yourself no favours by your continual use of
gratuitous and abusive outbursts.

You bemuse those of us who observe your behaviour.

Grow up, Mike Gathergood!

Stupid boy.

m...@g4kfk.co.uk wrote:
> Go on then - you drink that meths all by yourself. See if I care.
> That's the last time I accept an invitation for a boys night out with
> you!

6159. Re: Disciplining Airwave Nuisance

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 17:30:34 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <6jolq15d2f5mo87477mj66cjqbsc57sgs6@4ax.com>
Source record: 15293

ORIGINAL MESSAGE:

On 22 Dec 2005 08:47:10 -0800, "nhorsley@charter.net"
<nhorsley@charter.net> wrote:

>So the question remains: what is the name of this "microphoned
>transmitter device" and where can I find one or find the plans for
>building one?

~~~~~~

1. This is a ham radio group.
2. Hams do not operate illegal transmitters nor condone those who do.
3. Go away.

73, Bill W6WRT
~~~~~~

6160. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 17:31:38 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135272698.718441.207390@o13g2000cwo.googlegroups.com>
Source record: 15292
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Typo (in the third word as well!)

For "their", read "there".

Pierian Spring wrote:
> In case their are those who get a CB-type rig such as the 817
> in their stockings and are misled by those-who-ought-to-know-better
> into thinking that they are Radio Hams, the weekly (and
> revised) FAQ is posted a couple of days early to enable
> the parents to take the CB gear back to the shop.....
>
> What is Ham Radio?
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.
>
> Ham Radio awakens in its aficionados a whole-life
> fascination with all things technical and gives
> an all-abiding curiosity to improve one's scientific
> knowledge. It's a great swimming pool, please dive in!
>
> This excitement causes a wish to share the experience
> with ones fellow man, and shows itself in the
> gentlemanly traditions of Ham Radio.
>
> Radio Hams are in a unique privileged position in that
> they can construct and operate their own equipment! No-one
> else has this privilege. Users, such as broadcasters,
> the po lice and armed farces, CBers and mobile phone
> users have to purchase ready-made gear. Manufacturers
> are not licensed to operate their gear. Radio Hams
> are qualified to design, build and then
> operate their own pieces of equipment. They do this
> with gusto, and also repair and modify their own
> equipment. This is a privilege well worth the effort
> to gain, and one to be jealously guarded.
>
> The excitement that drives a Radio Ham starts with
> relatively simple technologies at first, perhaps making
> his own Wimshurst machine and primary cells. Small pieces

> of test equipment follow, possibly multimeters and signal
> generators. Then comes receivers and transmitters. It is with
> the latter that communication with like-minded technically
> motivated people takes off. The scope for technical
> development grows with the years
> and now encompasses DSP and DDS. There is also a great deal
> of excitement in the areas of computer programming to
> be learnt and applied.
>
> The technical excitement motivates Radio Hams to compete
> with each other to determine who has designed and manufactured
> the best-quality station. This competitiveness is found in DXing,
> competitions and fox-hunts.
>
> -----OOOOO----
>
> However, beware! A Ham Radio licence is such a
> desirable thing to have that there are large
> numbers of people who wish to be thought of
> as Radio Hams when, in fact, they are nothing
> of the kind! Usually such people are a
> variation of the CB Radio hobbyist; they buy their
> radios off the shelf and send them back to be
> repaired; they are not interested in technical discussion
> and sneer at those who are; they have no idea how
> their radios work inside and have no wish to find out;
> they are free with rather silly personal insults;
> they have not satisfied any technical qualification
> and their licences prevent the use of
> self-designed-and-built equipment.
>
> These CB types engage in the competitive activities
> with their Cheque-Book-purchased off-the-shelf radios
> in a forlorn effort to prove that they are Radio Hams.
>
> No _REAL_ Radio Hams are deceived by such people!
>
> -----ooooo-----
>
> One such CB type is the so-called "Not-Ham". Otherwise
> known as the CBer-Masquerading-As-A-Radio-Ham, this type
> had their background in the hobby that is CB Radio and not
> in the technical pursuits that lead up to a coveted Ham licence.
> Easily recognised by their boasts of the criminal activity of
> 11 metre SSB operation, one wonders why they don't go back to
> the CB Bands if such bands are dearer in their hearts than are the Ham
> Bands? No _REAL Radio Hams associate with those who made an
> illegal installation of transmitting equipment before being
> in possession of an appropriate licence.
>

> -----ooooo-----
>
> One infallible way to disambiguate the CB Radio Hobbyist
> from the _REAL_ Radio Ham is to solicit their view of the
> difference between CB Radio and Ham Radio. A Radio Ham will
> perceive Ham Radio to be a technical pursuit and will
> perceive CB Radio to be a social communications facility
> no different in essence to a land-line telephone or a
> GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
> could also hold a CB licence safe in the knowledge that
> such a licence says no more about him than having a land-line
> telephone, whilst continuing to regard Ham Radio as a separate
> technical pursuit.
>
> A CB Radio hobbyist, on the other hand, sees no difference between
> a Ham Radio licence and a CB Radio licence. To him, they are
> sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
> tries to classify himself as the equal of the Radio
> Ham when, in fact, he is nothing of the kind. A sure sign of
> a CB Radio hobbyist is if he holds, or has ever held, a licence
> issued under the gangrenous degeneration that is the
> M3/CB Fools' Licence scheme.
>
> -----ooooo-----
>
> One group of people who claim to be of the standard of
> Radio Hams but who are in reality nothing more than an
> apology for the failure of a CBer are those class B
> licensees who falsely proclaimed that they were against
> the use of a Morse Test to control access to the HF
> bands, until, that is, a test was introduced at their
> intellectual level, the intellectual level of 6-year-olds.
>
> 6 year-olds simply lack the mathematical tool kit to
> enable them to handle even the simplest algebraic manipulation
> for Ohm's Law and thus, the disgraceful Class Ber's in
> the aforementioned category are not Radio Hams by any stretch
> of the imagination!
>
> Remember - A sure sign of a CB Radio hobbyist is if he holds,
> or has ever held, a licence issued under the gangrenous
> degeneration that is the M3/CB Fools' Licence scheme!

6161. Re: Disciplining Airwave Nuisance

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 17:45:57 UTC
From: johan aeq <pe1aeq@amsat.og>
Message-ID: <e44dc$43aae873$52ad139c$26615@news.versatel.nl>
Source record: 15297

try to find out the frequency:
lend a portable frequencycounter and get close to the speaker.
The frequencyreadout of this counter is the one you have to transmit to
overrule the speaker...
If you are in luck the frequency will be about 433.500MHz..
There are a couple of cheap portophones on this frequency..

<nhorsley@charter.net> schreef in bericht
news:1135270030.634625.80190@g14g2000cwa.googlegroups.com...
> There is this preachertype who comes to campus and he is impossible to
> ignore because he uses a wireless PA system. Is there a way to get a
> wireless mic or some other transmitter and piggyback onto his wireless
> PA system so others can enjoy freedom of speech using his PA? If so,
> what would we need to do this? Please explain it so a doofus (me) can
> understand.
>
> I posted the above on related newsgroups and I have learned the
> following:
> 1. It's all probably illegal and the Patriot Act will put me in prison
> forever for even considering it.
> 2. It's definitely doable but I will need to identify the frequency
> the wireless mic is transmitting on and find another microphoned
> transmitter device that will allow me to override his wireless mic with
> a message of my own.
>
> So the question remains: what is the name of this "microphoned
> transmitter device" and where can I find one or find the plans for
> building one?
>
> Thank you.
>

6162. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 17:51:09 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <43aae775.1154377@news.iol.ie>
Source record: 15294
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"guv" <me@privacy.net> wrote:

> xxxx xxx, xxxxx.

the foul mouthed cb'er ....

6163. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 17:52:13 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <43aae79e.1194761@news.iol.ie>
Source record: 15295
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"huLLy" <thisainthamradio@aol.com> wrote:

> Are you drunk yet? Getting in the mood for some baaadroom antics with
> xxxxxxxxx?

there you go again...
giving a green light to all and sundry to mention your own wife BY NAME !!

6164. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 17:54:05 UTC
From: Ed Unsworth <edunsworth@ULTIMATEEMAIL.COM>
Message-ID: <43aae83d_3@x-privat.org>
Source record: 15296
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Pierian Spring" <radio.ham@lycos.co.uk> wrote in message
news:1135271229.566574.35570@g49g2000cwa.googlegroups.com...
> If anyone is arrested as the result of a malicious
> and perjurous complaint,
Pray tell, has there been a prosecution, or conviction against Mr Reay for the above "alleged" malicious and perjurous complaints, if not your allegations must be groundless.

> Brian Reay is a we*nkmason
Right all is now clear...I take it you have never been invited to join, yet another goal you have failed to achieve.

6165. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 18:12:38 UTC
From: W8LNA <W8LNA@arrl.net>
Message-ID: <q0Cqf.1813$OU3.1728@news01.roc.ny>
Source record: 15098
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:

> Brian Reay subjected me to a vicious, malicious and distressing
> campaign of harassment...

Considering your behavior here I sincerely doubt your account of Mr. Reay's actions, especially when you refer to the constabulary as 'the plods,' a strong indication of your own denial of reality. I suspect (there's a word you're used to, eh?) the police reviewed transcripts of your exchanges with Mr. Reay and apparently determined you were the threat, as you were the party taken in to custody.

Ta ta,
W8LNA, 'Stupid Child'

6166. To build or not to build Part II

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 18:27:35 UTC
From: yzordderrex@verizon.net
Message-ID: <1135276055.319399.327470@g49g2000cwa.googlegroups.com>
Source record: 15099

I've pretty much decided on a single 4CX800A. The price seems to be right. I think 200w of carrier might be an appropriate target. I run AM mostly. My next step is to decide on a transformer for the thing. Plan of attack for me is to find a manual on BAMA that uses one tube and see what the transformer specs are. I'll try and do a paper design and come up with the transformer specs that I would need. I hope the two agree. I looked up an alpha design that uses two tubes and found a Peter Dahl transformer for the thing was $425. Ouch!

If you have a particular amplifier in mind that uses just one of these toobs then please say so. I need to get a flavor for the transformers available. I will probably buy another Peter Dahl unit.

I Got my HX-50 up and running last night for the first time. Had to replace the transformer and a recap and so forth. I am poking around to see what I can get out of it powerwise. I got 30w on 75m cw no prob into a dummy load. I guess when all is said and done I will put it on my boss's spectrum analyzer and see what I got to drive a linear with.

I realize that this project could be more expensive than a commercial unit, but I can get many of the parts for free from my boss. He is a real good guy and gives me stuff all the time.

thanks for the help.

regards,
Bob
N9NEO

6167. Re: To build or not to build Part II

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 18:56:23 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1135277783.009660.207100@o13g2000cwo.googlegroups.com>
Source record: 15100

> I looked up an alpha design that uses two tubes
> and found a Peter Dahl transformer for the thing
> was $425. Ouch!

The Peter Dahl prices are fair but not exactly cheap.

Your best bet is finding a junker linear and "inheriting" the transformer/bandswitching/inductor/capacitor and maybe even the plate choke (although most junkers probably have a burnt up choke and maybe some burnt up bandswitching).

> I've pretty much decided on a single 4CX800A.

I assume you mean an ex-soviet "GU74B"? You can find a lot of designs around the net using that part number.

Tim.

6168. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 18:57:26 UTC
From: Boaz <Boaz@kingsolomon.com>
Message-ID: <410b8mF1cs003U1@individual.net>
Source record: 15101
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

mike@g4kfk.co.uk wrote:
> Pierian Spring wrote:
>
>>However as it's Christmas, please feel free to join me at my run down QTH
>>for a spot of meths!
>
>
> That's a very kind offer and, as it happens, we will be visiting
> friends in Canal Road over the hols, so I might well take you up on the
> offer.
>
> It it BYOB? Should I bring my own anti-freeze?
>
> Merry CHRISTmas
> Mike G4KFK
> www.g4kfk.co.uk
>

In case anyone has trouble finding his qth (you might want to deliver

christmas cards) here is a map

www.mapquest.com/maps/map.adp?formtype=address&country=GB&addtohistory=&address=&city=&zip code=SN15+3AA

The fact that Wood Lane Police Station is only just down the road is
just coincidental (I think)

6169. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 19:02:44 UTC
From: "Rich Grise, but drunk" <yahright@example.net>
Message-ID: <pan.2005.12.22.19.06.53.177099@example.net>
Source record: 15102
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Thu, 22 Dec 2005 17:20:28 +0000, Ian White GM3SEK wrote:

> Fred Bloggs wrote:
>>
>>> How about floor coverings? Ever drop a tiny screw or surface mount
>>>part
>>> on the floor and spend hours looking for it?
>>
>>It always has to be thick insulating mats rated for 20KV, any IC
>>dropped on the floor is considered lost and not used, a screw is a
>>different matter, you shouldn't have to hunt for a hard to find screw,
>>you should be able to cut to length any replacement.
>>
> Someone had a very good idea about finding dropped parts: vacuum the
> floor occasionally* with a sheer filter (women's tights) stretched over
> the cleaner nozzle.

I'd lose track of whatever I was doing, and go play with the woman
who isn't wearing the tights. ;-P

Cheers!
Rich

6170. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 19:34:52 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135280092.889738.28190@g14g2000cwa.googlegroups.com>
Source record: 15103
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

The plods did not check out any transcripts of mine, and took
Brian Reay at his word. I rapidly produced in defence a pile
6 inches thick of Brian Reay's infantile and grossly offensive
remarks to me and the plods had to back down. I had no
"exchanges" with Reay - I merely responded in defence
against him to chasitise him for his gratuitous offensive
onslaughts - not dissimilar from your own.

The trial of the plod Richard Fuller for assault is scheduled
to take place on the 8th February at Chippenham Magistrates'
Court.

My behaviour here has always been in support of the
technical pursuit that is _REAL Ham Radio and trying
to maintain standards of decency in response to the
outbursts of rather silly and infantile people such as
yourself.

Indeed, in respect of your rather silly and infantile behaviour,
if you wish to be perceived as a Childish Broadcaster (CBer)
then just carry on with the Childish Broadcasting (CB) that
you utter below.

W8LNA wrote:
> Pierian Spring wrote:
> > Brian Reay subjected me to a vicious, malicious and distressing
> > campaign of harassment...
> Considering your behavior here I sincerely doubt your account of Mr.
> Reay's actions, especially when you refer to the constabulary as 'the
> plods,' a strong indication of your own denial of reality. I suspect
> (there's a word you're used to, eh?) the police reviewed transcripts of
> your exchanges with Mr. Reay and apparently determined you were the
> threat, as you were the party taken in to custody.
>
> Ta ta,
> W8LNA, 'Stupid Child'

6171. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 19:40:58 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <FbednV-GMe3RnDbeRVn-og@giganews.com>
Source record: 15104
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

zYYPK wrote:
> "huLLy" <thisainthamradio@aol.com> wrote:
>
>> Are you drunk yet? Getting in the mood for some baaadroom antics with
>> xxxxxxxxx?
>
> there you go again...
> giving a green light to all and sundry to mention your own wife BY
> NAME !!

No, it was already in the public domain, mention by Gareth himself many a time. So there's not really a problem, is there. If he hadn't mentioned his wife's name, neither would I.
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

6172. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 19:45:02 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <AJadnUJk5O3dnzbenZ2dnUVZ_vidnZ2d@giganews.com>
Source record: 15105
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
>
> Brian Reay subjected me to a vicious, malicious and distressing
> campaign of harassment over a number of years when he
> repeatedly accused me of sheep-shagging, said that my
> wife was a sheep in the bed next to me, and accused
> me of drinking methylated spirit. I did not respond to him
> other than to chastise him for his grossly offensive behaviour.
>

No, Gareth.

You are the instigator against Brian. YOU are the guilty man. YOU are the harrassing stalker. Unfortunately, you are too mentally unstable to ever see that.
How your wife puts up with you I shall never know. Maybe she's locked in a trunk in the attic or mummified in a rocking chair?

--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

6173. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 19:59:02 UTC
From: W8LNA <W8LNA@arrl.net>
Message-ID: <aADqf.1822$OU3.1432@news01.roc.ny>
Source record: 15106
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
...
> if you wish to be perceived as a Childish Broadcaster...

Frankly I don't care how you perceive me.

You, on the other hand, seem to be perceived by the others on this group as just that you decry, childish.

> My behaviour here has always been in support of the
> technical pursuit that is _REAL Ham Radio and trying
> to maintain standards of decency...

Whose standards? Yours? Do those 'standards' involve assisting newcomers, or do you just call them 'childish' and gloat from your soiled, ivory tower?

Oh for pity's sake.

It seems everyone here knows who you are, where you live etc. So why can't you post under your own name and call sign, instead of some fantastically pompous delusion that you're representative of some font of wisdom?

A font of pomposity, yes. Wisdom and knowledge? I'd laugh if you weren't so incredibly pitiful.

Go build something, follow your own FAQ,
W8LNA

6174. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 20:06:08 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135281968.135904.265150@z14g2000cwz.googlegroups.com>
Source record: 15107
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

There's no denial of reality in following the example
set by the Oddity Of Ploddity that is the We'll Shite
(All Over You) Constabulary....

At 16:45 on the 3rd July 2000, Bobby Young, an Acting
Inspector screamed at me, "ANY OLD PLOD WILL NOT DO!".
(Perhaps it is no wonder the childish disposition of the
common plod when their leaders behave so badly)

In the evening of 7th March this year, David Hunt W1361
referred to the "common plod".

So.....it seems to me that if it is acceptable for the plods
to use the word, "plod" when discussing the plods with
members of the public, then it is acceptable for members
of the public to use the word, "plod" when discussing the plods,
either with the plods, or with people who are not plods.

W8LNA wrote:
>... especially when you refer to the constabulary as 'the
> plods,' a strong indication of your own denial of reality.

6175. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 20:13:31 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <LNDqf.45230$a15.6759@newsfe5-win.ntli.net>
Source record: 15109
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring of verbal diarrhoea wrote:
> At 16:45 on the 3rd July 2000, Bobby Young, an Acting
> Inspector screamed at me, "ANY OLD PLOD WILL NOT DO!".
> (Perhaps it is no wonder the childish disposition of the
> common plod when their leaders behave so badly)
>
OK Beanie, don't keep us in suspense, what caused him to scream that at
you, and why did you note the exact date and time?
...(_!_)...

6176. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 20:16:24 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135282584.606742.287660@z14g2000cwz.googlegroups.com>
Source record: 15108
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

If you wish forever henceforth to be perceived as a Childish
Broadcaster (CBer) then just continue with your aggressive
assaults in the manner of Childish Broadcasting (CB) that
you emit below.

Grow up, Galen!

Stupid child.

W8LNA wrote:
> Frankly I don't care how you perceive me.
> You, on the other hand, seem to be perceived by the others on this group
> as just that you decry, childish.
> Whose standards? Yours? Do those 'standards' involve assisting
> newcomers, or do you just call them 'childish' and gloat from your
> soiled, ivory tower?
> Oh for pity's sake.
> It seems everyone here knows who you are, where you live etc. So why
> can't you post under your own name and call sign, instead of some
> fantastically pompous delusion that you're representative of some font
> of wisdom?
> A font of pomposity, yes. Wisdom and knowledge? I'd laugh if you
> weren't so incredibly pitiful.
> Go build something, follow your own FAQ,
> W8LNA

6177. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 20:22:56 UTC
From: bigamps <bigamps@louder.still.net>
Message-ID: <AWDqf.154$qg.2@news02.roc.ny>
Source record: 15110
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> If you wish forever henceforth to be perceived as a Childish
> Broadcaster (CBer)...

I don't care how *you* perceive me, your authority and superiority on
the matter stops at the edge of your minuscule cranial contents.

Get stuffed, Olde Springy,
W8LNA

6178. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 20:27:19 UTC
From: W8LNA <W8LNA@arrl.net>
Message-ID: <H_Dqf.157$qg.72@news02.roc.ny>
Source record: 15111
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> If you wish forever henceforth to be perceived as a Childish
> Broadcaster (CBer)...

Make an attempt to grasp the following:

I don't care what you forever henceforth perceive of me, your authority
and superiority in the matter extends only to the ends of the contents
of your cranium, whatever that may be.

> Grow up, Galen!
>
> Stupid child.

Get stuffed, Springy Old Boy.

Pompous ass (arse).

-W8LNA

6179. help with a transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 21:05:54 UTC
From: Paul M0EME <m0eme432@tiscali.co.uk>
Message-ID: <43ab1533$1_1@mk-nntp-2.news.uk.tiscali.com>
Source record: 15112

Hi all, Im using the transformer from a Bremi BRL500 linear to make a ham HF linear using four EL519 valves. I need to identify the leads coming from the transformer, I bought the transformer surplus so have no data with it....
Also has anyone got any EL519 valves they will sell....

Thankyou

--

Thanks and 73's de Paul M0EME
432MHz EME 4 times FO19,
FT847,
MGF1302,
100 Watts at feed,
Spectran.
Initials 432MHz #2 CW #4 JT65

http://myweb.tiscali.co.uk/m0eme

6180. Re: Disciplining Airwave Nuisance

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-22 23:21:41 UTC
From: w4sef@bellsouth.net
Message-ID: <43ab34d9.19379031@newsgroups.bellsouth.net>
Source record: 15113

This has nothing to do with Ham radio. Find the correct newsgroup.

Steve W4SEF

On 22 Dec 2005 08:47:10 -0800, "nhorsley@charter.net"
<nhorsley@charter.net> wrote:

>There is this preachertype who comes to campus and he is impossible to
>ignore because he uses a wireless PA system. Is there a way to get a
>wireless mic or some other transmitter and piggyback onto his wireless
>PA system so others can enjoy freedom of speech using his PA? If so,
>what would we need to do this? Please explain it so a doofus (me) can
>understand.
>
>I posted the above on related newsgroups and I have learned the
>following:
>1. It's all probably illegal and the Patriot Act will put me in prison
>forever for even considering it.
>2. It's definitely doable but I will need to identify the frequency
>the wireless mic is transmitting on and find another microphoned
>transmitter device that will allow me to override his wireless mic with
>a message of my own.
>
>So the question remains: what is the name of this "microphoned
>transmitter device" and where can I find one or find the plans for
>building one?
>
>Thank you.
>

6181. Re: FAQ - the voices in my head told me to post it again

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 00:10:20 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135296620.836221.162500@g14g2000cwa.googlegroups.com>
Source record: 15114
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Gareth "The Jailbird" Evans (G4SDW) wrote:
> Typo (in the third word as well!)

FWIW, I thought the first three words were pretty good.

Unfortunately it went downhill rapidly after the fourth.

73
Mike G4KFK

6182. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 00:22:20 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1135297340.611042.120540@g49g2000cwa.googlegroups.com>
Source record: 15115
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

"There's a pretty good book available that covers a lot of the basics:

"Build Your Own Electronics Workshop" by Tom Petruzzellis

ISBN 0-07-144724-5 (McGraw Hill Publisher) "

Thanks for the lead.

TMT

6183. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 00:24:36 UTC
From: Too_Many_Tools <too_many_tools@yahoo.com>
Message-ID: <1135297476.146585.215380@g47g2000cwa.googlegroups.com>
Source record: 15116
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

LenAnder...@ieee.org

Thanks for the writeup...I appreciate the time spent doing it.

TMT

6184. Re: Disciplining Airwave Nuisance

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 03:31:27 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <knrmq117bggue5741l0pqijud7q5mb02oc@4ax.com>
Source record: 15117

On Thu, 22 Dec 2005 09:30:34 -0800, Bill Turner <noway@nohow.com>
wrote:

>
>ORIGINAL MESSAGE:
>
>On 22 Dec 2005 08:47:10 -0800, "nhorsley@charter.net"
><nhorsley@charter.net> wrote:
>
>>So the question remains: what is the name of this "microphoned
>>transmitter device" and where can I find one or find the plans for
>>building one?
>
>
>~~~~~~
>
>1. This is a ham radio group.
>2. Hams do not operate illegal transmitters nor condone those who do.
>3. Go away.
>
>73, Bill W6WRT

1. Correct.
2. He is not asking about an illegal transmitter and I also do not
condone those who use them. He is asking for information about
commonly available, legal wireless microphones.
3. That's not very nice.

73, Russ KF4WXD

6185. Re: Disciplining Airwave Nuisance

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 04:34:15 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <lfvmq152qoni6ggd5a94up5ef7jo5213c0@4ax.com>
Source record: 15118

On Fri, 23 Dec 2005 03:31:27 GMT, Russ <carlzomer@hotmail.com> wrote:

>2. He is not asking about an illegal transmitter and I also do not
>condone those who use them. He is asking for information about
>commonly available, legal wireless microphones.

Which he wants to use in order to jam. That's illegal.

>3. That's not very nice.

Neither is jamming.

73, Bill W6WRT

6186. Re: FAQ - Repeated again because I can't accept that I need professional help

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 08:43:32 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135327412.685193.247310@g49g2000cwa.googlegroups.com>
Source record: 15119
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

For as long as you are prepared to illustrate so graphically
the difference between a CBer, an M3/CB Fools' Licensee, a
CBer-Masquerading-As-A-Radio-Ham and a _REAL_ Radio
Ham with his gentlemanly traditions, I am prepared to
watch you bemusedly from the sidelines and to chastise
you for your ridiculous outbursts.

It is important that we as Radio Hams make a stand for
civilised behaviour and decency against the vile CBer,
no matter how he might have slipped into our midst.

Don't you realise how silly and ridiculous you make yourself
look, by indulging in what are essentialy very infantile
abusive tirades in an international forum that is broadcast to
the whole world?

However, if you wish to be perceived as a Childish Broadcaster (CBer)
then just carry on as you are with your Childish Broadcasting (CB).

You, coming as you do from a background as a ship's radio
"officer", really ought to know better. Shame on you.

Grow up, Mike Gathergood!

Stupid boy.

mike@g4kfk.co.uk wrote:
> Gareth "Jailbird" Evans (G4SDW) wrote:
> > Grow up, Mike Gathergood!
> > Stupid boy.
>
> That's the 7th time he's said that to me this week! Can anybody else
> beat that?
>
> Is there an award scheme? Maybe a Bronze Truncheon for 25 verified
> "stupid boys"? Or a pair of Silver Handcuffs for 50.
>
> 73
> Mike G4KFK

6187. Re: FAQ - Repeated again because I can't accept that I need professional help

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 08:45:05 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135327505.305793.296210@g14g2000cwa.googlegroups.com>
Source record: 15120
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

For as long as you are prepared to illustrate so graphically
the difference between a CBer, an M3/CB Fools' Licensee, a
CBer-Masquerading-As-A-Radio-Ham and a _REAL_ Radio
Ham with his gentlemanly traditions, I am prepared to
watch you bemusedly from the sidelines and to chastise
you for your ridiculous outbursts.

It is important that we as Radio Hams make a stand for
civilised behaviour and decency against the vile CBer,
no matter how he might have slipped into our midst.

Don't you realise how silly and ridiculous you make yourself
look, by indulging in what are essentially very infantile
abusive tirades in an international forum that is broadcast to
the whole world?

However, if you wish to be perceived as a Childish Broadcaster (CBer)
then just carry on as you are with your Childish Broadcasting (CB).

You, coming as you do from a background as a ship's radio
"officer", really ought to know better. Shame on you.

Grow up, Mike Gathergood!

Stupid boy.

mike@g4kfk.co.uk wrote:
> Gareth "Jailbird" Evans (G4SDW) wrote:
> > Grow up, Mike Gathergood!
> > Stupid boy.
>
> That's the 7th time he's said that to me this week! Can anybody else
> beat that?
>
> Is there an award scheme? Maybe a Bronze Truncheon for 25 verified
> "stupid boys"? Or a pair of Silver Handcuffs for 50.
>
> 73
> Mike G4KFK

6188. Re: FAQ - Repeated again because I can't accept that I need professional help

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 09:02:04 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135328524.880631.75010@g43g2000cwa.googlegroups.com>
Source record: 15121
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> Grow up, Mike Gathergood!
> Stupid boy.

I've got 9 now! Maybe I'll go for the Golden Straight Jacket award
instead. At this rate I'll have it under my belt by the new year!

6189. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 09:28:51 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135330131.280109.118770@g14g2000cwa.googlegroups.com>
Source record: 15122
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

For as long as you are prepared to illustrate so graphically
the difference between a CBer, an M3/CB Fools' Licensee, a
CBer-Masquerading-As-A-Radio-Ham and a _REAL_ Radio
Ham with his gentlemanly traditions, I am prepared to
watch you bemusedly from the sidelines and to chastise
you for your ridiculous outbursts.

It is important that we as Radio Hams make a stand for
civilised behaviour and decency against the vile CBer,
no matter how he might have slipped into our midst.

Don't you realise how silly and ridiculous you make yourself
look, by indulging in what are essentially very infantile
abusive tirades in an international forum that is broadcast to
the whole world?

However, if you wish to be perceived as a Childish Broadcaster (CBer)
then just carry on as you are with your Childish Broadcasting (CB).

Shame on you.

Grow up, Galen Watts!

Stupid child.

bigamps wrote:
> Pierian Spring wrote:
> > If you wish forever henceforth to be perceived as a Childish
> > Broadcaster (CBer)...
>
> I don't care how *you* perceive me, your authority and superiority on
> the matter stops at the edge of your minuscule cranial contents.
>
> Get stuffed, Olde Springy,
> W8LNA

6190. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 09:29:54 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135330194.139270.169560@g43g2000cwa.googlegroups.com>
Source record: 15123
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

For as long as you are prepared to illustrate so graphically
the difference between a CBer, an M3/CB Fools' Licensee, a
CBer-Masquerading-As-A-Radio-Ham and a _REAL_ Radio
Ham with his gentlemanly traditions, I am prepared to
watch you bemusedly from the sidelines and to chastise
you for your ridiculous outbursts.

It is important that we as Radio Hams make a stand for
civilised behaviour and decency against the vile CBer,
no matter how he might have slipped into our midst.

Don't you realise how silly and ridiculous you make yourself
look, by indulging in what are essentially very infantile
abusive tirades in an international forum that is broadcast to
the whole world?

However, if you wish to be perceived as a Childish Broadcaster (CBer)
then just carry on as you are with your Childish Broadcasting (CB).

Shame on you.

Grow up, Galen Watts!

Stupid child.

W8LNA wrote:
> Pierian Spring wrote:
> > If you wish forever henceforth to be perceived as a Childish
> > Broadcaster (CBer)...
>
> Make an attempt to grasp the following:
>
> I don't care what you forever henceforth perceive of me, your authority
> and superiority in the matter extends only to the ends of the contents
> of your cranium, whatever that may be.
>
> > Grow up, Galen!
> >
> > Stupid child.
>
> Get stuffed, Springy Old Boy.
>
> Pompous ass (arse).
>
> -W8LNA

6191. Re: FAQ - the voices in my head told me to post it again

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 09:30:56 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135330256.248735.93250@f14g2000cwb.googlegroups.com>
Source record: 15124
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

For as long as you are prepared to illustrate so graphically
the difference between a CBer, an M3/CB Fools' Licensee, a
CBer-Masquerading-As-A-Radio-Ham and a _REAL_ Radio
Ham with his gentlemanly traditions, I am prepared to
watch you bemusedly from the sidelines and to chastise
you for your ridiculous outbursts.

It is important that we as Radio Hams make a stand for
civilised behaviour and decency against the vile CBer,
no matter how he might have slipped into our midst.

Don't you realise how silly and ridiculous you make yourself
look, by indulging in what are essentially very infantile
abusive tirades in an international forum that is broadcast to
the whole world?

However, if you wish to be perceived as a Childish Broadcaster (CBer)
then just carry on as you are with your Childish Broadcasting (CB).

You, coming as you do from a background as a ship's radio
"officer", really ought to know better. Shame on you.

Grow up, Mike Gathergood!

Stupid boy.

mike@g4kfk.co.uk wrote:
> Gareth "The Jailbird" Evans (G4SDW) wrote:
> > Typo (in the third word as well!)
>
> FWIW, I thought the first three words were pretty good.
>
> Unfortunately it went downhill rapidly after the fourth.
>
> 73
> Mike G4KFK

6192. Re: FAQ - the voices in my head told me to post it again

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 09:33:00 UTC
From: realradioham <realradioham@tiscali.co.uk>
Message-ID: <43abc48f$3_2@mk-nntp-2.news.uk.tiscali.com>
Source record: 15125
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Pierian Spring" <radio.ham@lycos.co.uk> wrote in message
news:1135330256.248735.93250@f14g2000cwb.googlegroups.com...
> Don't you realise how silly and ridiculous you make yourself
> look, by indulging in what are essentially very infantile
> abusive tirades in an international forum that is broadcast to
> the whole world?

Do you ever read your own posts??? Same repetitive twaddle.

rrh

6193. Re: FAQ - the voices in my head told me to post it again

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 09:37:43 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135330662.932422.39500@o13g2000cwo.googlegroups.com>
Source record: 15126
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> You, coming as you do from a background as a ship's radio
> "officer", really ought to know better. Shame on you.

You keep posting this, like you've dug up some interesting piece of trivia from an obscure source.

Rather puzzling, since I mentioned it myself last week in response to the thread about the "numbers station" conspiracy theory - and it's on my website www.g4kfk.co.uk

The good news is that I phoned SIPgate's head office in Germany to see what I could learn about your malicious caller. The bad news is that until you stop calling me a stupid boy, I'm not going to tell you what they told me.

73
Mike G4KFK

6194. Re: FAQ - Repeated again because I can't accept that I need professional help

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 09:43:59 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135331039.201036.135550@g44g2000cwa.googlegroups.com>
Source record: 15127
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

For as long as you are prepared to illustrate so graphically
the difference between a CBer, an M3/CB Fools' Licensee, a
CBer-Masquerading-As-A-Radio-Ham and a _REAL_ Radio
Ham with his gentlemanly traditions, I am prepared to
watch you bemusedly from the sidelines and to chastise
you for your ridiculous outbursts.

It is important that we as Radio Hams make a stand for
civilised behaviour and decency against the vile CBer,
no matter how he might have slipped into our midst.

Don't you realise how silly and ridiculous you make yourself
look, by indulging in what are essentially very infantile
abusive tirades in an international forum that is broadcast to
the whole world?

However, if you wish to be perceived as a Childish Broadcaster (CBer)
then just carry on as you are with your Childish Broadcasting (CB).

You, coming as you do from a background as a ship's radio
"officer", really ought to know better. Shame on you.

Grow up, Mike Gathergood!

Stupid boy.

mike@g4kfk.co.uk wrote:
> Pierian Spring wrote:
> > Grow up, Mike Gathergood!
> > Stupid boy.
>
> I've got 9 now! Maybe I'll go for the Golden Straight Jacket award
> instead. At this rate I'll have it under my belt by the new year!

6195. Re: FAQ - the voices in my head told me to post it again

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 09:49:50 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135331390.572403.155670@g44g2000cwa.googlegroups.com>
Source record: 15128
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

For as long as you are prepared to illustrate so graphically
the difference between a CBer, an M3/CB Fools' Licensee, a
CBer-Masquerading-As-A-Radio-Ham and a _REAL_ Radio
Ham with his gentlemanly traditions, I am prepared to
watch you bemusedly from the sidelines and to chastise
you for your ridiculous outbursts.

It is important that we as Radio Hams make a stand for
civilised behaviour and decency against the vile CBer,
no matter how he might have slipped into our midst.

Don't you realise how silly and ridiculous you make yourself
look, by indulging in what are essentially very infantile
abusive tirades in an international forum that is broadcast to
the whole world?

However, if you wish to be perceived as a Childish Broadcaster (CBer)
then just carry on as you are with your Childish Broadcasting (CB).

You, coming as you do from a background as a ship's radio
"officer", really ought to know better. Shame on you.

Grow up, Mike Gathergood!

Stupid boy.

mike@g4kfk.co.uk wrote:
> Pierian Spring wrote:
> > You, coming as you do from a background as a ship's radio
> > "officer", really ought to know better. Shame on you.
>
> You keep posting this, like you've dug up some interesting piece of
> trivia from an obscure source.
>
> Rather puzzling, since I mentioned it myself last week in response to
> the thread about the "numbers station" conspiracy theory - and it's on
> my website www.g4kfk.co.uk
>
> The good news is that I phoned SIPgate's head office in Germany to see
> what I could learn about your malicious caller. The bad news is that
> until you stop calling me a stupid boy, I'm not going to tell you what
> they told me.
>
> 73
> Mike G4KFK

6196. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 09:54:05 UTC
From: Howard Long <howard@howardlongxxx.com>
Message-ID: <doghftghc1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 15129
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"huLLy" <thisainthamradio@aol.com> wrote in message
news:AJadnUJk5O3dnzbenZ2dnUVZ_vidnZ2d@giganews.com...
> How your wife puts up with you I shall never know. Maybe she's locked in a
> trunk in the attic or mummified in a rocking chair?

Or a pen perhaps?

73, Howard G6LVB

6197. Re: FAQ - the voices in my head told me to post it again

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 10:08:27 UTC
From: Howard Long <howard@howardlongxxx.com>
Message-ID: <dogiar$ig8$1@nwrdmz01.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 15130
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

<mike@g4kfk.co.uk> wrote in message
news:1135330662.932422.39500@o13g2000cwo.googlegroups.com...
>
> Pierian Spring wrote:
> > You, coming as you do from a background as a ship's radio
> > "officer", really ought to know better. Shame on you.
>
> You keep posting this, like you've dug up some interesting piece of
> trivia from an obscure source.

Not that obscure to most as it's a web link on your website's home page that you often quote. But then it would be obscure to Pierian Spring who said in this thread:

> I don't follow web links

Or is there was some other really credible explanation, like a lucky guess, divine inspiration, someone else followed the link and told him... or some other dog-ate-my-homework reason?

Cheers & season's greetings.

73, Howard G6LVB

6198. Re: help with a transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 10:34:43 UTC
From: Leon <leon_heller@hotmail.com>
Message-ID: <1135334083.212000.246810@o13g2000cwo.googlegroups.com>
Source record: 15131

You will have to experiment, carefully! The mains winding will be the one with the thick leads, of course, so should be easy to identify. You should be able to work out the others by checking the resistances and then measuring the voltages with the supply connected.

73, Leon

6199. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 11:51:43 UTC
From: "Galen, W8LNA" <w8lna@arrl.net>
Message-ID: <jxRqf.1866$OU3.1473@news01.roc.ny>
Source record: 15132
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> For as long...

(another warm breeze snipped)

Let me guess: You're the inspiration for the Monty Python character 'Upper Class Twit of the Year'? That's amazing, considering you were about 15 years old when they filmed that skit, you were quite accomplished at such a tender age, my accolades!

If you are the example of a _REAL_ Radio Ham the hobby has definately sunk to a low much lower than I had ever suspected possible.

W8LNA

6200. Re: FAQ - Repeated again because I can't accept that I need professional help

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 11:57:11 UTC
From: "Galen, W8LNA" <w8lna@arrl.net>
Message-ID: <rCRqf.189$qg.93@news02.roc.ny>
Source record: 15133
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

mike@g4kfk.co.uk wrote:
> Pierian Spring wrote:
>
>>Grow up, Mike Gathergood!
>>Stupid boy.
>
>
> I've got 9 now! Maybe I'll go for the Golden Straight Jacket award
> instead. At this rate I'll have it under my belt by the new year!

I've got five 'Stupid Childs', is that a separate category or are we in competition? If the latter, I may be behind but I've got the will and desire to win! Fair warning, I'm still in the game! (if I don't laugh myself into a serious injury.)

73, G4KFK!
-W8LNA

6201. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 11:58:45 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135339125.703759.269650@g44g2000cwa.googlegroups.com>
Source record: 15134
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

For as long as you are prepared to illustrate so graphically
the difference between a CBer, an M3/CB Fools' Licensee, a
CBer-Masquerading-As-A-Radio-Ham and a _REAL_ Radio
Ham with his gentlemanly traditions, I am prepared to
watch you bemusedly from the sidelines and to chastise
you for your ridiculous outbursts.

It is important that we as Radio Hams make a stand for
civilised behaviour and decency against the vile CBer,
no matter how he might have slipped into our midst.

Don't you realise how silly and ridiculous you make yourself
look, by indulging in what are essentially very infantile
abusive tirades in an international forum that is broadcast to
the whole world?

However, if you wish to be perceived as a Childish Broadcaster (CBer)
then just carry on as you are with your Childish Broadcasting (CB).

Shame on you, you really ought to know better.

Grow up, Galen Watts!

Stupid child.

Galen, W8LNA wrote:
> (another warm breeze snipped)
> Let me guess: You're the inspiration for the Monty Python character
> 'Upper Class Twit of the Year'? That's amazing, considering you were
> about 15 years old when they filmed that skit, you were quite
> accomplished at such a tender age, my accolades!
> If you are the example of a _REAL_ Radio Ham the hobby has definately
> sunk to a low much lower than I had ever suspected possible.
> W8LNA

6202. Re: FAQ - Repeated again because I can't accept that I need professional help

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 12:00:55 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135339255.215243.239050@o13g2000cwo.googlegroups.com>
Source record: 15136
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

For as long as you are prepared to illustrate so graphically
the difference between a CBer, an M3/CB Fools' Licensee, a
CBer-Masquerading-As-A-Radio-Ham and a _REAL_ Radio
Ham with his gentlemanly traditions, I am prepared to
watch you bemusedly from the sidelines and to chastise
you for your ridiculous outbursts.

It is important that we as Radio Hams make a stand for
civilised behaviour and decency against the vile CBer,
no matter how he might have slipped into our midst.

Don't you realise how silly and ridiculous you make yourself
look, by indulging in what are essentially very infantile
abusive tirades in an international forum that is broadcast to
the whole world?

However, if you wish to be perceived as a Childish Broadcaster (CBer)
then just carry on as you are with your Childish Broadcasting (CB).

Shame on you.

Grow up, Galen Watts!

Stupid child.

Galen, W8LNA wrote:
> mike@g4kfk.co.uk wrote:
> > Pierian Spring wrote:
> >
> >>Grow up, Mike Gathergood!
> >>Stupid boy.
> >
> >
> > I've got 9 now! Maybe I'll go for the Golden Straight Jacket award
> > instead. At this rate I'll have it under my belt by the new year!
>
> I've got five 'Stupid Childs', is that a separate category or are we in
> competition? If the latter, I may be behind but I've got the will and
> desire to win! Fair warning, I'm still in the game! (if I don't laugh
> myself into a serious injury.)
>
> 73, G4KFK!
> -W8LNA

6203. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 12:03:58 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135339438.849497.250990@o13g2000cwo.googlegroups.com>
Source record: 15137
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Galen, W8LNA wrote:
> Let me guess: You're the inspiration for the Monty Python character
> 'Upper Class Twit of the Year'? That's amazing, considering you were
> about 15 years old when they filmed that skit, you were quite
> accomplished at such a tender age, my accolades!

There's nothing upper class about Gareth.

He's more like another Monty Python character, "The Black Knight" from
The Holy Grail. He just keeps coming back for more and more, never
knowing when to admit defeat.

73
Mike G4KFK

6204. Re: help with a transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 12:04:08 UTC
From: GBrown <gkbrown@gwi.net>
Message-ID: <aN6dnYHGIdcjezbeRVn-vg@gwi.net>
Source record: 15135

The filament winding has the thick lead, not the mains winding. HV winding will have a higher resistance. 6 volt and 5 volt windings are very very hard to tell apart with your average ohm meter. The mains winding could be dual voltage 120/240 or.....105/110/115/120 voltages. The use of an amp meter along with real low ac voltage should be used to find which winding is which.
Regards,
Gary...WZ1M
..
"Leon" <leon_heller@hotmail.com> wrote in message
news:1135334083.212000.246810@o13g2000cwo.googlegroups.com...
> You will have to experiment, carefully! The mains winding will be the
> one with the thick leads, of course, so should be easy to identify. You
> should be able to work out the others by checking the resistances and
> then measuring the voltages with the supply connected.
>
> 73, Leon
>

6205. Re: FAQ - Repeated again because I can't accept that I need professional help

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 12:13:53 UTC
From: bigamps <bigamps@louder.still.net>
Message-ID: <5SRqf.1868$OU3.1445@news01.roc.ny>
Source record: 15138
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

```
Pierian Spring wrote:
> For as long as you...

I wasn't addressing you, butt out!

> Galen, W8LNA wrote:
>
>>mike@g4kfk.co.uk wrote:
>>
>>>Pierian Spring wrote:
>>>
>>>
>>>>Grow up, Mike Gathergood!
>>>>Stupid boy.
>>>
>>>
>>>I've got 9 now! Maybe I'll go for the Golden Straight Jacket award
>>>instead. At this rate I'll have it under my belt by the new year!
>>
>>I've got five 'Stupid Childs', is that a separate category or are we in
>>competition? If the latter, I may be behind but I've got the will and
>>desire to win! Fair warning, I'm still in the game! (if I don't laugh
>>myself into a serious injury.)
>>
>>73, G4KFK!
>>-W8LNA
>
>
```

6206. Re: FAQ - Repeated again because I can't accept that I need professional help

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 12:14:34 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <L-SdnfEMZMO2dzbeRVnytQ@giganews.com>
Source record: 15139
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> Shame on you.
>
> Grow up, Galen Watts!
>
> Stupid child.
>
Now that Christmas, aka the alchoholic period, is upon us, expect postings
to increase with toxicity.
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

6207. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 12:15:47 UTC
From: bigamps <bigamps@louder.still.net>
Message-ID: <TTRqf.1869$OU3.1522@news01.roc.ny>
Source record: 15140
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> For as long as you are prepared...

...zzzzzzzzzzzzzzzzzzzzzzHuh? Oh, still at it?

hmmh....zzzzzzzzzzzzzzzzzzzz...

6208. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 12:19:37 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135340377.605097.192260@z14g2000cwz.googlegroups.com>
Source record: 15141
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

The pursuit of decency and of civilised behaviour should
never admit defeat in the face of an onslaught by a horde
of vulgar and abusive infants.

If we in Radio Hammery retreat in the face of such vulgarity, then
the gates will be left open for the Mongolian Hordes.

For as long as you are prepared to illustrate so graphically
the difference between a CBer, an M3/CB Fools' Licensee, a
CBer-Masquerading-As-A-Radio-Ham and a _REAL_ Radio
Ham with his gentlemanly traditions, I am prepared to
watch you bemusedly from the sidelines and to chastise
you for your ridiculous outbursts.

It is important that we as Radio Hams make a stand for
civilised behaviour and decency against the vile CBer,
no matter how he might have slipped into our midst.

Don't you realise how silly and ridiculous you make yourself
look, by indulging in what are essentially very infantile
abusive tirades in an international forum that is broadcast to
the whole world?

However, if you wish to be perceived as a Childish Broadcaster (CBer)
then just carry on as you are with your Childish Broadcasting (CB).

You, coming as you do from a background as a ship's radio
"officer", really ought to know better. Shame on you.

Grow up, Mike Gathergood!

Stupid boy.

mike@g4kfk.co.uk wrote:
> Galen, W8LNA wrote:
> > Let me guess: You're the inspiration for the Monty Python character
> > 'Upper Class Twit of the Year'? That's amazing, considering you were
> > about 15 years old when they filmed that skit, you were quite
> > accomplished at such a tender age, my accolades!
>
> There's nothing upper class about Gareth.
>
> He's more like another Monty Python character, "The Black Knight" from
> The Holy Grail. He just keeps coming back for more and more, never
> knowing when to admit defeat.
>

> 73
> Mike G4KFK

6209. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 12:23:12 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135340592.348833.31080@f14g2000cwb.googlegroups.com>
Source record: 15142
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

I am pleased that you tire of your infantile behaviour. There
is hope for you, yet. But please remember that it is not
just you who is made to look a fool by your behaviour; your
behaviour affects the public face of Radio Hammery, and
thereby affects us all.

Sleep on, awaken refreshed and hopefully of a more mature
perspective than you have presented in your recent posts.

bigamps wrote:
> Pierian Spring wrote:
> > For as long as you are prepared...
>
>
> ...zzzzzzzzzzzzzzzzzzzzzzHuh? Oh, still at it?
>
> hmmh....zzzzzzzzzzzzzzzzzzzz...

6210. Re: FAQ - Repeated again because I can't accept that I need professional help

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 12:23:25 UTC
From: "Galen, W8LNA" <w8lna@arrl.net>
Message-ID: <1%Rqf.1872$OU3.842@news01.roc.ny>
Source record: 15143
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

```
Pierian Spring wrote:
> For...

You weren't being addressed, please butt out!

...
>>mike@g4kfk.co.uk wrote:
>>
>>>Pierian Spring wrote:
>>>
>>>
>>>>Grow up, Mike Gathergood!
>>>>Stupid boy.
>>>
>>>
>>>I've got 9 now! Maybe I'll go for the Golden Straight Jacket award
>>>instead. At this rate I'll have it under my belt by the new year!
>>
>>I've got five 'Stupid Childs', is that a separate category or are we in
>>competition? If the latter, I may be behind but I've got the will and
>>desire to win! Fair warning, I'm still in the game! (if I don't laugh
>>myself into a serious injury.)
>>
>>73, G4KFK!
>>-W8LNA
>
>
```

6211. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 12:24:09 UTC
From: "Galen, W8LNA" <w8lna@arrl.net>
Message-ID: <J%Rqf.1873$OU3.1085@news01.roc.ny>
Source record: 15144
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> For as long...

...zzzzzzzzzzzzzzzzzzzzzzHuh? Oh, still at it?

hmmh....zzzzzzzzzzzzzzzzzzzz...

(shhh!)
(-W8LNA)

6212. Re: FAQ - Repeated again because I can't accept that I need professional help

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 12:28:25 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135340905.307309.222390@z14g2000cwz.googlegroups.com>
Source record: 15145
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

It is rather infantile to seek to impose a rule on others,
a rule that you did not follow yourself, for I addressed no
remarks to you that would have warranted the nascence
of your infantile tirades that you have directed at me.

For as long as you are prepared to illustrate so graphically
the difference between a CBer, an M3/CB Fools' Licensee, a
CBer-Masquerading-As-A-Radio-Ham and a _REAL_ Radio
Ham with his gentlemanly traditions, I am prepared to
watch you bemusedly from the sidelines and to chastise
you for your ridiculous outbursts.

It is important that we as Radio Hams make a stand for
civilised behaviour and decency against the vile CBer,
no matter how he might have slipped into our midst.

Don't you realise how silly and ridiculous you make yourself
look, by indulging in what are essentially very infantile
abusive tirades in an international forum that is broadcast to
the whole world?

However, if you wish to be perceived as a Childish Broadcaster (CBer)
then just carry on as you are with your Childish Broadcasting (CB).

Grow up, Galen!

Stupid child.

Galen, W8LNA wrote:
> Pierian Spring wrote:
> > For...
>
> You weren't being addressed, please butt out!
>

6213. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 12:30:20 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135341020.458222.135970@g47g2000cwa.googlegroups.com>
Source record: 15146
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

I am pleased that you tire of your infantile behaviour. There is hope for you, yet. But please remember that it is not just you who is made to look a fool by your behaviour; your behaviour affects the public face of Radio Hammery, and thereby affects us all.

Sleep on, awaken refreshed and hopefully of a more mature perspective than you have presented in your recent posts.

Galen, W8LNA wrote:
>
> ...zzzzzzzzzzzzzzzzzzzzzzHuh? Oh, still at it?
>
> hmmh....zzzzzzzzzzzzzzzzzzzz...
>
> (shhh!)
> (-W8LNA)

6214. A Merry Solstice To All Our Readers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 12:48:01 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135342081.128309.88930@o13g2000cwo.googlegroups.com>
Source record: 15147
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Now that the onslaught of rather silly and infantile
tirades from the closet CBers has ceased, may
I wish all the readers of this NG everything that they
would wish for themselves in this (belated) season
of Solstice celebrations!

6215. Re: FAQ - Repeated again because I can't accept that I need professional help

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 12:48:26 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <umSqf.16045$q4.13337@newsfe2-gui.ntli.net>
Source record: 15198
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"huLLy" <thisainthamradio@aol.com> wrote in message
news:L-SdnfEMZMO2dzbeRVnytQ@giganews.com...
>>
> Now that Christmas, aka the alchoholic period, is upon us, expect postings
> to increase with toxicity.

More like someone is having a bad time and sees everyone else having a good time, so they lash out. Same mentality that gives rise to vandals damaging nice cars etc.

Sad really.

Merry Xmas & 73

Brian
G8OSN
www.g8osn.org.uk

6216. Re: A Merry Solstice To All Our Readers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 12:56:37 UTC
From: bigamps <bigamps@louder.still.net>
Message-ID: <9uSqf.191$qg.40@news02.roc.ny>
Source record: 15199
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> Now that the onslaught of rather silly and infantile
> tirades from the closet CBers

Sorry, I was over on the LinRadio console actually doing ham radio (it's sunrise here) instead of provoking what could be described as the 21st century version of Inspiration for the Sex Pistols.

Where were we? Oh yes,

If you were a real ham radio op you'd be on the radio instead of playing Lord of the Gnats.

Twit.
-W8LNA

6217. Re: A Merry Solstice To All Our Readers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 12:58:20 UTC
From: "Galen, W8LNA" <w8lna@arrl.net>
Message-ID: <MvSqf.193$qg.182@news02.roc.ny>
Source record: 15200
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> Now that the onslaught of rather silly and infantile
> tirades from the closet CBers...

Sorry for the delay, I was over on the LinRadio console actually doing ham radio (it's sunrise here) instead of provoking what could be described as the 21st century version of Inspiration for the Sex Pistols.

Where were we? Oh yes,

If you were a real ham radio op you'd be on the radio instead of playing Lord of the Gnats.

Twit.
-W8LNA

6218. Re: A Merry Solstice To All Our Readers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 13:00:23 UTC
From: MuppetMaster <geraldsnipe1@yahoo.co.uk>
Message-ID: <1135342823.301353.241710@g47g2000cwa.googlegroups.com>
Source record: 15201
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Thank you kindly for your good wishes. It is a pleasure to read your offerings, for all your rantings at times I do believe you are a good egg.

6219. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 13:00:44 UTC
From: "Galen, W8LNA" <w8lna@arrl.net>
Message-ID: <0ySqf.194$qg.62@news02.roc.ny>
Source record: 15202
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> I am pleased that you tire of your infantile behaviour...

Nahhh, you're just boring me near to death!

Got to go, Springy Ol' Chap(ped arse), it's sunrise and I'm hearing good DX.

-W8LNA

6220. Re: A Merry Solstice To All Our Readers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 13:09:40 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135343380.276312.170750@o13g2000cwo.googlegroups.com>
Source record: 15203
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> Now that the onslaught of rather silly and infantile
> tirades from the closet CBers has ceased, may
> I wish all the readers of this NG everything that they
> would wish for themselves in this (belated) season
> of Solstice celebrations!

Indeed. And here are some seasonal songs specially for you Gareth:

"Santa Claus is Coming to Get Me"

"You Better Watch Out, I'm Gonna Cry, I'm Gonna Pout, Maybe I'll tell You Why"

"Walking in a Winter Wonderland Miles From My House in My Slippers and Robe"

"I Saw Mommy Kissing Santa Claus So I Burned Down the House"

"Have Yourself a Merry Little Christmas While I Sit Here and Hyperventilate"

73
Mike G4KFK

6221. Re: A Merry Solstice To All Our Readers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 13:23:20 UTC
From: Mr W Z Boson <WZ_Boson@yahoo.co.uk>
Message-ID: <1135344200.910638.273850@g14g2000cwa.googlegroups.com>
Source record: 15204
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:

> Now that the onslaught of rather silly and infantile
> tirades from the closet CBers has ceased, may
> I wish all the readers of this NG everything that they
> would wish for themselves in this (belated) season
> of Solstice celebrations!

I'm reminded of the words of that great Irish poet, songwriter and drunkard, Shane MacGowan ...

"Happy Christmas your arse, I pray God it's our last"

.. try singing it, it really does rhyme. So all together now ...

"It was Christmas Eve babe ..."

6222. Re: FAQ - Repeated again because I can't accept that I need professional help

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 13:42:20 UTC
From: tox <tox@toxtox.co.com>
Message-ID: <09Tqf.30747$8v6.2194@newsfe6-gui.ntli.net>
Source record: 15205
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"huLLy" <thisainthamradio@aol.com> wrote in message
news:L-SdnfEMZMO2dzbeRVnytQ@giganews.com...
> Pierian Spring wrote:
>> Shame on you.
>>
>> Grow up, Galen Watts!
>>
>> Stupid child.
>>
> Now that Christmas, aka the alchoholic period, is upon us, expect postings
> to increase with toxicity.

Oi, don't drag me into his cesspit ;-)

tox

6223. Re: A Merry Solstice To All Our Readers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 13:44:10 UTC
From: "Galen, W8LNA" <w8lna@arrl.net>
Message-ID: <KaTqf.197$qg.133@news02.roc.ny>
Source record: 15206
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

MuppetMaster wrote:
> ... I do believe you (Gareth) are a good
> egg.

I don't think he is, I think he's someone who finds himself unhappy with his lot in life and instead of trying to improve what he can (starting with himself) he instead denigrates what's around him in a futile attempt to elevate himself. He draws ridicule like a magnet because he continues to denigrate after receiving helpful and occasionally nasty suggestions to recognize his deluded behavior. A legend in his own mind but a joke that has become all too pitiful and no longer funny after too much repetition in the view of others.

But,
A Happy Holiday Season to all, especially Gareth, I hope you find yourself someday, you've got too much intelligence to waste on that FAQ drivel.

Change what you can, recognize what you can't, and move on.

W8LNA

6224. FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 13:55:13 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135346113.085610.124590@g43g2000cwa.googlegroups.com>
Source record: 15208
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this
with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured

the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One such CB type is the so-called "Not-Ham". Otherwise
known as the CBer-Masquerading-As-A-Radio-Ham, this type
had their background in the hobby that is CB Radio and not
in the technical pursuits that lead up to a coveted Ham licence.
Easily recognised by their boasts of the criminal activity of
11 metre SSB operation, one wonders why they don't go back to
the CB Bands if such bands are dearer in their hearts than are the Ham
Bands? No _REAL Radio Hams associate with those who made an
illegal installation of transmitting equipment before being
in possession of an appropriate licence.

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between a Ham Radio licence and a CB Radio licence. To him, they are sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then tries to classify himself as the equal of the Radio Ham when, in fact, he is nothing of the kind. A sure sign of a CB Radio hobbyist is if he holds, or has ever held, a licence issued under the gangrenous degeneration that is the M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of Radio Hams but who are in reality nothing more than an apology for the failure of a CBer are those class B licensees who falsely proclaimed that they were against the use of a Morse Test to control access to the HF bands, until, that is, a test was introduced at their intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to enable them to handle even the simplest algebraic manipulation for Ohm's Law and thus, the disgraceful Class Ber's in the aforementioned category are not Radio Hams by any stretch of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds, or has ever held, a licence issued under the gangrenous degeneration that is the M3/CB Fools' Licence scheme!

6225. Re: New release of KE5FX GPIB Toolkit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 13:58:27 UTC
From: Johnson <jdwalton@comt.net>
Message-ID: <e9GdnQn6U-bynTHeRVn-jA@comcast.com>
Source record: 15207
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

Did you see the EDN article on a USB-based GPIB controller? The link was
incorrect, should be:
http://lsd.fe.uni-lj.si/gpib/

Jack

"John Miles" <jmiles@pop.removethistomailme.net> wrote in message
news:MPG.1e0ed20f6adc75a3989713@news-central.giganews.com...
> Free to any/all interested parties:
>
> http://www.speakeasy.org/~jmiles1/ke5fx/gpib/readme.htm
>
> Some of this code has been around for quite awhile, but it's never been
> properly packaged and documented until now. The new spectrum-
> surveillance and phase-noise measurement utilities are VERY cool.
> Enjoy!
>
> -- john, KE5FX
>
> --
> http://www.qsl.net/ke5fx
> Note: My E-mail address has been altered to avoid spam
> --

6226. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 14:12:18 UTC
From: huLLy <s2f@f2s.com>
Message-ID: <u62dnUe9vv9emDHenZ2dnUVZ8qednZ2d@giganews.com>
Source record: 15209
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> What is Ham Radio?
>
abuse@network-i.net informed for repeated spamming.

Gareth uses a fixed IP of 212.21.118.235 incase anyone else feels the need
for a Christmas break from this loony.

--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

6227. Re: FAQ - Repeated again because I can't accept that I need professional help

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 14:13:14 UTC
From: huLLy <s2f@f2s.com>
Message-ID: <K62dnRLfG7hhmDHenZ2dnUVZ8qednZ2d@giganews.com>
Source record: 15210
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

tox wrote:
> "huLLy" <thisainthamradio@aol.com> wrote in message
> news:L-SdnfEMZMO2dzbeRVnytQ@giganews.com...
>> Pierian Spring wrote:
>>> Shame on you.
>>>
>>> Grow up, Galen Watts!
>>>
>>> Stupid child.
>>>
>> Now that Christmas, aka the alchoholic period, is upon us, expect
>> postings to increase with toxicity.
>
> Oi, don't drag me into his cesspit ;-)
>
> tox

At least you won't have to buy batteries for the kids toys!
Merry Christmas de
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

6228. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 14:18:30 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135347510.700600.108500@o13g2000cwo.googlegroups.com>
Source record: 15211
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Gareth Alun Evans (G4SDW) loosened his restraints for long enough to
scrawl:
> It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.

And, more recently, of harbouring sociopaths like the clown featured in
the following press article:
http://archive.thisiswiltshire.co.uk/2005/3/10/91923.html

The callsign of the subject of this article, which is a source of
embarrassment to all real radio amateurs, is G4SDW. Mr Evans is not a
newcomer to this hobby, but an old-timer licensee of more than 30
years!

73
Mike G4KFK

6229. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 14:18:53 UTC
From: bigamps <bigamps@louder.still.net>
Message-ID: <hHTqf.198$qg.83@news02.roc.ny>
Source record: 15212
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> What is Ham Radio...

You can hear Mongolian CB'ers? What kind of antenna are you using?

-W8LNA

6230. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 14:21:04 UTC
From: "Galen, W8LNA" <w8lna@arrl.net>
Message-ID: <kJTqf.200$qg.65@news02.roc.ny>
Source record: 15213
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> What...

You can hear Mongolian CB'ers? What kind of antenna are you using?

-W8LNA

6231. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 14:21:10 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135347670.899352.219060@g43g2000cwa.googlegroups.com>
Source record: 15214
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

bigamps wrote:
> You can hear Mongolian CB'ers? What kind of antenna are you using?

None at all. He forgot to put on his aluminium foil helmet this morning
:-)

6232. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 14:21:41 UTC
From: huLLy <s2f@f2s.com>
Message-ID: <Gc2dnZ59pYdrmjHeRVnyiQ@giganews.com>
Source record: 15215
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

mike@g4kfk.co.uk wrote:
> Gareth Alun Evans (G4SDW) loosened his restraints for long enough to
> scrawl:
>> It has a long-standing
>> tradition of providing a source of engineers who
>> are born naturals.
>
> And, more recently, of harbouring sociopaths like the clown featured
> in the following press article:
> http://archive.thisiswiltshire.co.uk/2005/3/10/91923.html
>
> The callsign of the subject of this article, which is a source of
> embarrassment to all real radio amateurs, is G4SDW. Mr Evans is not a
> newcomer to this hobby, but an old-timer licensee of more than 30
> years!
>

G4SDW's behaviour here and away is, indeed, shameful, and has done much
damage to the hobby that was amateur radio. Shameful!
--
huLLy
Mobile phone 07976 123278
ICQ 136-987-925

6233. Re: FAQ - the voices in my head told me to post it again

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 14:31:33 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <pe2oq1t1d3fqcbgejutdo7e8okfbo76bv6@4ax.com>
Source record: 15216
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

realradioham wrote:

>
>"Pierian Spring" <radio.ham@lycos.co.uk> wrote

<snip>

>Do you ever read your own posts?
>

He must do, as he sometimes replies to them.....

from
Aero Spike

6234. HV transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 14:54:26 UTC
From: christine <habla@hotmail.com>
Message-ID: <%dUqf.563$GD6.550@reader1.news.jippii.net>
Source record: 15217

hi!
I just brought home my new HV transformer, which was
made to my specifications.:

primary 230V 22A
secondary
two windings, each:
800-1000-1100-1200-1300-1400V at 2A

in this way I can connect the windings in parallell or
serie for a multipurpose HV power unit from
about 110V - 4000V at 2A depending on what
tubes I'll use in the amplifier.
the transformers weight is about 36kg...(80 pounds)

I am right now building a middlepower using
one GU84 with tunable vacuumcapacitors and rollercoil..
it's easy to add another one for more power and I don't
have to build a new HV power unit :-)

at the moment I use this new transformer in my old, small and heavily
modified GLA-1000 with 4xPL519 (transformer outside the case on the floor,
of course!)
as the original transformer is not giving enough power for those tubes.
not much left of the original GLA-1000, added 160m etc etc

I power the tubes heating with stabilized 40V from a separate transformer
as the tubes, which are made for serial heating, are that much different,
they get voltages from 39-41V in serial and I wanted tto have 40V for
each tube :-)

cheers,

cb

6235. Re: A Merry Solstice To All Our Readers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 14:58:23 UTC
From: Chaney <chaney@i12.com>
Message-ID: <jgUqf.13487$D47.800@fe3.news.blueyonder.co.uk>
Source record: 15218
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

I too like Gareth...he never switches allegiance on a whim...and I think he says what's on his mind...even if most of us don't agree with him...

Merry Christmas whoever you are this week...

--

Chaney

Chaney's World
www.chaney.i12.com

"Galen, W8LNA" <w8lna@arrl.net> wrote in message
news:KaTqf.197$qg.133@news02.roc.ny...
> MuppetMaster wrote:
>> ... I do believe you (Gareth) are a good
>> egg.
>
> I don't think he is, I think he's someone who finds himself unhappy with
> his lot in life and instead of trying to improve what he can (starting
> with himself) he instead denigrates what's around him in a futile attempt
> to elevate himself. He draws ridicule like a magnet because he continues
> to denigrate after receiving helpful and occasionally nasty suggestions to
> recognize his deluded behavior. A legend in his own mind but a joke that
> has become all too pitiful and no longer funny after too much repetition
> in the view of others.
>
> But,
> A Happy Holiday Season to all, especially Gareth, I hope you find yourself
> someday, you've got too much intelligence to waste on that FAQ drivel.
>
> Change what you can, recognize what you can't, and move on.
>
> W8LNA

6236. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 15:16:44 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135351004.906258.13910@g49g2000cwa.googlegroups.com>
Source record: 15219
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

For as long as you are prepared to illustrate so graphically
the difference between a CBer, an M3/CB Fools' Licensee, a
CBer-Masquerading-As-A-Radio-Ham and a _REAL_ Radio
Ham with his gentlemanly traditions, I am prepared to
watch you bemusedly from the sidelines and to chastise
you for your ridiculous outbursts.

It is important that we as Radio Hams make a stand for
civilised behaviour and decency against the vile CBer,
no matter how he might have slipped into our midst.

Don't you realise how silly and ridiculous you make yourself
look, by indulging in what are essentially very infantile
abusive tirades in an international forum that is broadcast to
the whole world?

However, if you wish to be perceived as a Childish Broadcaster (CBer)
then just carry on as you are with your Childish Broadcasting (CB).

You, coming as you do from a background as a ship's radio
"officer", really ought to know better. Shame on you.

Grow up, Mike Gathergood!

Stupid boy.

mike@g4kfk.co.uk wrote:
> Gareth Alun Evans (G4SDW) loosened his restraints for long enough to
> scrawl:
> > It has a long-standing
> > tradition of providing a source of engineers who
> > are born naturals.
> And, more recently, of harbouring sociopaths like the clown featured in
> the following press article:
> http://archive.thisiswiltshire.co.uk/2005/3/10/91923.html
> The callsign of the subject of this article, which is a source of
> embarrassment to all real radio amateurs, is G4SDW. Mr Evans is not a
> newcomer to this hobby, but an old-timer licensee of more than 30
> years!

6237. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 15:18:23 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135351103.473867.19640@g49g2000cwa.googlegroups.com>
Source record: 15220
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

For as long as you are prepared to illustrate so graphically
the difference between a CBer, an M3/CB Fools' Licensee, a
CBer-Masquerading-As-A-Radio-Ham and a _REAL_ Radio
Ham with his gentlemanly traditions, I am prepared to
watch you bemusedly from the sidelines and to chastise
you for your ridiculous outbursts.

It is important that we as Radio Hams make a stand for
civilised behaviour and decency against the vile CBer,
no matter how he might have slipped into our midst.

Don't you realise how silly and ridiculous you make yourself
look, by indulging in what are essentially very infantile
abusive tirades in an international forum that is broadcast to
the whole world?

However, if you wish to be perceived as a Childish Broadcaster (CBer)
then just carry on as you are with your Childish Broadcasting (CB).

You, coming as you do from a background as a ship's radio
"officer", really ought to know better. Shame on you.

Grow up, Mike Gathergood!

Stupid boy.

mike@g4kfk.co.uk wrote:
> bigamps wrote:
> > You can hear Mongolian CB'ers? What kind of antenna are you using?
>
> None at all. He forgot to put on his aluminium foil helmet this morning
> :-)

6238. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 15:18:42 UTC
From: meow2222@care2.com
Message-ID: <1135351122.485209.33140@g14g2000cwa.googlegroups.com>
Source record: 15221
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

> >So, what suggestions do you have for setting up a good efficient
> >workspace for electronics?

3 more things cross my small mind.

Adjustable mirror, a must have for working on fitted pcbs, so you can see both sides. Also a light shone through the board is handy - but not an anglepoise.

Someone mentioned painted benches: my best one was joined painted steel benches, and I had no problem with the paint finish. It all depends on the type of paint. But I prefer wood to metal, its safer and doesnt short things.

Someone also mentioned the question of social security budget workshops. For these, sheet wood on the bed makes a put-away-able workbench, shelving units can be made from scrap wood, but the one thing I would most recommend for low budgets is a melting pot. With one of these, you can get lots of components off scrap equipment boards, and avoid a lot of part purchasing.

Oh, for visitors: instead of using box numbers, use box names. And make 'em gory :) Brains, best.
Brains, reject
Necks
and other things I wont mention

NT

6239. Re: FAQ - the voices in my head told me to post it again

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 15:27:47 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135351666.980623.27510@g44g2000cwa.googlegroups.com>
Source record: 15222
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

That looks to all intents and purposes like you are abusing
your privileged position that your employer has given you.

Who do you work for?

mike@g4kfk.co.uk wrote:
>
> The good news is that I phoned SIPgate's head office in Germany to see
> what I could learn about your malicious caller. The bad news is that
> until you stop calling me a stupid boy, I'm not going to tell you what
> they told me.

6240. Re: FAQ - the voices in my head told me to post it again

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 15:39:43 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135352383.011475.106370@g14g2000cwa.googlegroups.com>
Source record: 15223
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> That looks to all intents and purposes like you are abusing
> your privileged position that your employer has given you.
>
> Who do you work for?

I work for the Mental Health Department of Wiltshire Primary Healthcare
Trust. That's how I know so much about you :-)

6241. Re: FAQ - the voices in my head told me to post it again

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 15:42:23 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135352543.023951.185190@g43g2000cwa.googlegroups.com>
Source record: 15224
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

For as long as you are prepared to illustrate so graphically
the difference between a CBer, an M3/CB Fools' Licensee, a
CBer-Masquerading-As-A-Radio-Ham and a _REAL_ Radio
Ham with his gentlemanly traditions, I am prepared to
watch you bemusedly from the sidelines and to chastise
you for your ridiculous outbursts.

It is important that we as Radio Hams make a stand for
civilised behaviour and decency against the vile CBer,
no matter how he might have slipped into our midst.

Don't you realise how silly and ridiculous you make yourself
look, by indulging in what are essentially very infantile
abusive tirades in an international forum that is broadcast to
the whole world?

However, if you wish to be perceived as a Childish Broadcaster (CBer)
then just carry on as you are with your Childish Broadcasting (CB).

You, coming as you do from a background as a ship's radio
"officer", really ought to know better. Shame on you.

Grow up, Mike Gathergood!

Stupid boy.

m...@g4kfk.co.uk wrote:
> Pierian Spring wrote:
> > That looks to all intents and purposes like you are abusing
> > your privileged position that your employer has given you.
> >
> > Who do you work for?
>
> I work for the Mental Health Department of Wiltshire Primary Healthcare
> Trust. That's how I know so much about you :-)

6242. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 15:42:52 UTC
From: tox <tox@toxtox.co.com>
Message-ID: <0WUqf.50750$uR.1645@newsfe7-gui.ntli.net>
Source record: 15225
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

<mike@g4kfk.co.uk> wrote in message
news:1135347510.700600.108500@o13g2000cwo.googlegroups.com...
>
>
> The callsign of the subject of this article, which is a source of
> embarrassment to all real radio amateurs, is G4SDW. Mr Evans is not a
> newcomer to this hobby, but an old-timer licensee of more than 30
> years!

AIUI, he certainly has not held a class A licence for thirty years. Did it
not take him 10 years to pass the "simple" Morse test?

Regards
tox

6243. Re: FAQ - the voices in my head told me to post it again

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 15:46:39 UTC
From: huLLy <thisainthamradio@aol.com>
Message-ID: <pOudnQnS8aVChjHeRVnyig@giganews.com>
Source record: 15226
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> For as long as you are prepared to ....

Your repeated spamming is not very gentlemanly to the newsgroup users with dialup access.

Think about ceasing your vitriol until next year.

Abuse@network-i.net informed again.

6244. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 15:48:15 UTC
From: huLLy <s2f@f2s.com>
Message-ID: <m9qdnRH2O7GigTHenZ2dnUVZ8qWdnZ2d@giganews.com>
Source record: 15227
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

tox wrote:
> <mike@g4kfk.co.uk> wrote in message
> news:1135347510.700600.108500@o13g2000cwo.googlegroups.com...
>>
>>
>> The callsign of the subject of this article, which is a source of
>> embarrassment to all real radio amateurs, is G4SDW. Mr Evans is not a
>> newcomer to this hobby, but an old-timer licensee of more than 30
>> years!
>
> AIUI, he certainly has not held a class A licence for thirty years.
> Did it not take him 10 years to pass the "simple" Morse test?
>

Yes, but he conveniently forgets this fact, as well as many other things!

6245. Re: FAQ - the voices in my head told me to post it again

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 15:51:51 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135353111.171163.219220@g43g2000cwa.googlegroups.com>
Source record: 15228
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> Grow up, Mike Gathergood!
>
> Stupid boy.

Well I'm definitely not going to tell you what SIPgate said now!

6246. Re: Disgraceful behaviour today - what do you think?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 15:56:07 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135353367.112665.154870@g49g2000cwa.googlegroups.com>
Source record: 15229
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Sorry, forgot the cross-post

Pierian Spring wrote:
> We, in the technical pursuit that is Radio Hammery have
> long held gentlemanly traditions.
>
> However, today in this NG there has been an avalanche
> of disgraceful personal attacks coming from a number
> of what appear to be Childish Broadcasters (CBers).
>
> What do _YOU_ think?
>
> Is this the way forward for Radio Hammery? Is this
> the public face that you want to see presented for
> your life's purpose?
>
> Have we gained nothing by withdrawing away from the RSCB
> and everything that its members and directors stand for?
>
> Please join me in decrying the disgraceful behaviour
> of one or two rather sillyand infantile miscreants. I am
> sure that I do not need to tell you who they are; indeed, it
> is quite likely that these Not-Ham characters will identify
> themselves with some silly and childish response to
> this appeal.

6247. Re: New release of KE5FX GPIB Toolkit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 16:19:46 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e15c37f76a5e2cb98971c@news-central.giganews.com>
Source record: 15230
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

In article <e9GdnQn6U-bynTHeRVn-jA@comcast.com>, jdwalton@comt.net
says...
> Did you see the EDN article on a USB-based GPIB controller? The link was
> incorrect, should be:
> http://lsd.fe.uni-lj.si/gpib/
>
> Jack
>

Interesting; looks very similar to the new Prologix board, which I
support fully. Both use a FTDI virtual RS-232 port chip and Atmel
controller, but the Prologix board has a lower chip count.

It will be good to have a few lower-cost options for USB-GPIB
connectivity out there... the National Instruments adapters are still
commanding silly prices.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

6248. Re: I'm barking mad - what do you think?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 16:24:32 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135355072.585088.258390@g49g2000cwa.googlegroups.com>
Source record: 15231
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> > What do _YOU_ think?

We think you need a check-up from the neck up!

6249. Re: I'm barking mad - what do you think?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 16:39:36 UTC
From: G4ZWI <fred.c@ntlworld.com>
Message-ID: <1135355976.080905.323240@o13g2000cwo.googlegroups.com>
Source record: 15232
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Grow up, Mike Gathergood..........

Stupid boy...........

(Sorry Mike, don't know you from Adam, {& don't REALLY mean the above
comments,,, }
Just thought I would get them in, before somebody else!!!!!)
Merry Christmas, Mike, & a happy new year, Fred G4ZWI GQRP 10981

6250. Re: FAQ - the voices in my head told me to post it again

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 16:49:46 UTC
From: white van driver <scotland_glasgow@yahoo.co.uk>
Message-ID: <1135356586.624733.170230@z14g2000cwz.googlegroups.com>
Source record: 15233
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Gareth,

You remind me of the advert years ago about Ariston....and on.....and
on......and on.....and on.....and on.....and on.....and on.....and
on.....and on.....and on.....and on.....and on.....and on.....and on

P.S. Before you post a response, here's the text you keep pasting with
Control + V on the keyboard,

Gareth's boring text

For as long as you are prepared to illustrate so graphically
the difference between a CBer, an M3/CB Fools' Licensee, a
CBer-Masquerading-As-A-Radio-Ham and a _REAL_ Radio
Ham with his gentlemanly traditions, I am prepared to
watch you bemusedly from the sidelines and to chastise
you for your ridiculous outbursts.

It is important that we as Radio Hams make a stand for
civilised behaviour and decency against the vile CBer,
no matter how he might have slipped into our midst.

Don't you realise how silly and ridiculous you make yourself
look, by indulging in what are essentially very infantile
abusive tirades in an international forum that is broadcast to
the whole world?

However, if you wish to be perceived as a Childish Broadcaster (CBer)
then just carry on as you are with your Childish Broadcasting (CB).

If at all possible, any chance you could give a constructive response
without the usual M3/CB twaddle ?

?
?
?
Bet you can't !

6251. Re: I'm barking mad - what do you think?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 16:52:00 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135356720.625867.99870@g47g2000cwa.googlegroups.com>
Source record: 15234
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

G4ZWI wrote:
> Merry Christmas, Mike, & a happy new year, Fred G4ZWI GQRP 10981

Hi Fred

Season's greetings to you too!

72
Mike G4KFK G-QRP 6627

6252. Re: HV transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 17:01:44 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <79boq197q2758gook07jq6q2mdcarr98p5@4ax.com>
Source record: 15235

ORIGINAL MESSAGE:

On Fri, 23 Dec 2005 16:54:26 +0200, "christine" <habla@hotmail.com>
wrote:

>
>in this way I can connect the windings in parallell or
>series

~~~~~~

Be careful when connecting the windings in series. The increased
voltage may be more than the insulation can handle unless you
specified it that way.

73, Bill W6WRT
~~~~~~

6253. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 17:21:05 UTC
From: Nedlar <Sam@techno.invalid>
Message-ID: <4ecoq19n2v3acrhu9tk1hf965qvomh8u7s@4ax.com>
Source record: 15236
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Fri, 23 Dec 2005 15:42:52 GMT, "tox" <tox@toxtox.co.com> wrote:

>AIUI, he certainly has not held a class A licence for thirty years. Did it
>not take him 10 years to pass the "simple" Morse test?
>
>Regards
>tox
>

Would that be the same Morse test that you could NEVER pass?

Merry Christmas, Baldy.

6254. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 17:22:01 UTC
From: Nedlar <Sam@techno.invalid>
Message-ID: <fgcoq1l7oa7hlearr0vatfvae5d4ablgq9@4ax.com>
Source record: 15237
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Fri, 23 Dec 2005 15:48:15 -0000, "huLLy" <s2f@f2s.com> wrote:

>tox wrote:
>> <mike@g4kfk.co.uk> wrote in message
>> news:1135347510.700600.108500@o13g2000cwo.googlegroups.com...
>>>
>>>
>>> The callsign of the subject of this article, which is a source of
>>> embarrassment to all real radio amateurs, is G4SDW. Mr Evans is not a
>>> newcomer to this hobby, but an old-timer licensee of more than 30
>>> years!
>>
>> AIUI, he certainly has not held a class A licence for thirty years.
>> Did it not take him 10 years to pass the "simple" Morse test?
>>
>
>Yes, but he conveniently forgets this fact, as well as many other things!
>

Would that be the same Morse test that you could NEVER pass?

6255. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 17:29:59 UTC
From: huLLy <s2f@f2s.com>
Message-ID: <Oaudnf2Yu6yKqTHeRVnyuA@giganews.com>
Source record: 15238
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Nedlar wrote:
>
> Would that be the same Morse test that you could NEVER pass?

I expect you will insist on paying for your license annually when they will
be free for life!
Some people...
--
huLLy
Tel: 07976 123278

6256. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 18:14:52 UTC
From: tox <tox@toxtox.co.com>
Message-ID: <w8Xqf.16030$mn1.7474@newsfe7-win.ntli.net>
Source record: 15239
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Nedlar" <Sam@techno.invalid> wrote in message
news:4ecoq19n2v3acrhu9tk1hf965qvomh8u7s@4ax.com...
>>
>
> Would that be the same Morse test that you could NEVER pass?

If you continue to practice, I figure in another 20 years, you may reach 5
WPM.

HTH
tox

6257. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 19:52:32 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <3e6dnf0aBIsSyDHeRVny1g@pipex.net>
Source record: 15240
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

> The callsign of the subject of this article, which is a source of
> embarrassment to all real radio amateurs, is G4SDW. Mr Evans is not a
> newcomer to this hobby, but an old-timer licensee of more than 30
> years!
==========
Whatever ,considering his weekly outpours ,it seems that Gareth ,G4SDW
is subject to some mental derailment. If we all just ignore him there
might be a chance that he is starting to get the message that he is
making a fool of himself..... so it is up to all of us on these NGs .

Frank KN6WH / GM0CSZ

6258. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 19:58:06 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135367886.299139.41810@g14g2000cwa.googlegroups.com>
Source record: 15241
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

For as long as you are prepared to illustrate so graphically
the difference between a CBer, an M3/CB Fools' Licensee, a
CBer-Masquerading-As-A-Radio-Ham and a _REAL_ Radio
Ham with his gentlemanly traditions, I am prepared to
watch you bemusedly from the sidelines and to chastise
you for your ridiculous outbursts.

It is important that we as Radio Hams make a stand for
civilised behaviour and decency against the vile CBer,
no matter how he might have slipped into our midst.

Don't you realise how silly and ridiculous you make yourself
look, by indulging in what are essentially very infantile
abusive tirades in an international forum that is broadcast to
the whole world?

However, if you wish to be perceived as a Childish Broadcaster (CBer)
then just carry on as you are with your Childish Broadcasting (CB).

Grow up, Frank Dinger!

Stupid boy.

Highland Ham wrote:
> > The callsign of the subject of this article, which is a source of
> > embarrassment to all real radio amateurs, is G4SDW. Mr Evans is not a
> > newcomer to this hobby, but an old-timer licensee of more than 30
> > years!
> ==========
> Whatever ,considering his weekly outpours ,it seems that Gareth ,G4SDW
> is subject to some mental derailment. If we all just ignore him there
> might be a chance that he is starting to get the message that he is
> making a fool of himself..... so it is up to all of us on these NGs .
>
> Frank KN6WH / GM0CSZ

6259. My amateur radio stations - make requests for songs and many more!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 20:03:52 UTC
From: radioimpress@yahoo.com
Message-ID: <1135368232.511709.202040@z14g2000cwz.googlegroups.com>
Source record: 15242

Spend some time listening online to my radio station - www.RadioImpress.hit.bg . You can request some songs and post a dedication with your own voice! Well, if that doesn't sound much interesting, you can record your own transmissions and then send them, we will transmit them. Isn't this an easy and quick way for the people to hear you? Everything you want to say - this is your place - Radio Impress! Internet awaits to here your voice online!

Tune in now - www.RadioImpress.hit.bg

6260. Re: HV transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 20:08:33 UTC
From: christine <habla@hotmail.com>
Message-ID: <uQYqf.684$lx7.135@reader1.news.jippii.net>
Source record: 15243

hi!

thanks for the remark!
the two windings are actually wound separately on an
"O" core and specified to be used both in serial and paralell connection.'

cheers,

cb

"Bill Turner"
> On Fri, 23 Dec 2005 16:54:26 +0200, "christine" >
>>in this way I can connect the windings in parallell or
>>series

> Be careful when connecting the windings in series. The increased
> voltage may be more than the insulation can handle unless you
> specified it that way.

6261. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 20:19:42 UTC
From: Messenger <scotland_glasgow@yahoo.co.uk>
Message-ID: <1135369182.546138.180050@o13g2000cwo.googlegroups.com>
Source record: 15245
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Gareth,

Please go and see the doctor before you pass out with stress !

6262. Re: New release of KE5FX GPIB Toolkit

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 20:27:33 UTC
From: Johnson <jdwalton@comt.net>
Message-ID: <SaOdnYKuOL8CxjHenZ2dnUVZ_s-dnZ2d@comcast.com>
Source record: 15244
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.equipment

In the Softwire forum there's some VB.NET code for GPIB --
(http://forums.softwire.com) -- written by one of the NATI folks. The
various MCC instruments which support USB can thus talk GPIB. (National
Instruments owns Measurement Computing which owns Softwire.)

"John Miles" <jmiles@pop.removethistomailme.net> wrote in message
news:MPG.1e15c37f76a5e2cb98971c@news-central.giganews.com...
> In article <e9GdnQn6U-bynTHeRVn-jA@comcast.com>, jdwalton@comt.net
> says...
> > Did you see the EDN article on a USB-based GPIB controller? The link
was
> > incorrect, should be:
> > http://lsd.fe.uni-lj.si/gpib/
> >
> > Jack
> >
>
> Interesting; looks very similar to the new Prologix board, which I
> support fully. Both use a FTDI virtual RS-232 port chip and Atmel
> controller, but the Prologix board has a lower chip count.
>
> It will be good to have a few lower-cost options for USB-GPIB
> connectivity out there... the National Instruments adapters are still
> commanding silly prices.
>
> -- jm
>
> --
> http://www.qsl.net/ke5fx
> Note: My E-mail address has been altered to avoid spam
> --

6263. Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 20:36:40 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135370200.466793.250570@g47g2000cwa.googlegroups.com>
Source record: 15246
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

At one time, Wood & Douglas was a respectable supplier to the
Ham Radio market, although it has long since devoted itself
to commercial markets only.

However, the behaviour of its EXPORT SALES MANAGER, one
Mike Gathergood, who has contributed a great number of grossly
offensive
and abusive publications to this NG in recent days would suggest
that the company has gone downhill very rapidly, and is no
longer a respectable organisation.

It is sad that a once respected company should be reflected
so badly in the appaling behaviour of its senior managers, especially
when his infantile and aggressive comments have been published
into various international news groups.

Indeed, it is surprising that the services someone who exhibits such
silly and infantile outbursts into the public fora that are NG
should be retained after giving the company such a bad press.

mike@g4kfk.co.uk wrote:
> Pierian Spring wrote:
> > That looks to all intents and purposes like you are abusing
> > your privileged position that your employer has given you.
> >
> > Who do you work for?
>
> I work for the Mental Health Department of Wiltshire Primary Healthcare
> Trust. That's how I know so much about you :-)

6264. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 20:38:57 UTC
From: huLLy <s2f@f2s.com>
Message-ID: <Sa6dnSjGyb78_THeRVny1Q@giganews.com>
Source record: 15247
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> At one time, Wood & Douglas was a respectable supplier to the
> Ham Radio market, although it has long since devoted itself
> to commercial markets only.
>
Crossing the line again, Gareth.

Abuse@network-i.net informed again.
--
huLLy
Tel: 07976 123278

6265. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 20:41:49 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135370509.748923.7290@z14g2000cwz.googlegroups.com>
Source record: 15148
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Would we be talking about....

Mike Gathergood,
Formerly P-Com Wireless Access Group,
6 Sylverns Court,
Warfield,
Bracknell,
RG42 3SL

Mob: (07717) - 728290
Tel: (01344) 310610
Fax: (01344) 310611?

Pierian Spring wrote:
> OK - are you a man, or a yellow-bellied coward?
>
> I notice that your own personal details are withheld
> in the callbook.
>
> How brave of you to publish someone else's, including
> their phone number while you yourself hide shaking
> and quivering behind the safety of the playground fence
> while you chant your infantile sneers.
>
> Grow up, Mike Gathergood!

6266. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 20:47:22 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135370842.036842.170860@g44g2000cwa.googlegroups.com>
Source record: 15149
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> At one time, Wood & Douglas was a respectable supplier to the
> Ham Radio market, although it has long since devoted itself
> to commercial markets only.
>
> However, the behaviour of its EXPORT SALES MANAGER, one
> Mike Gathergood, who has contributed a great number of grossly
> offensive
> and abusive publications to this NG in recent days would suggest
> that the company has gone downhill very rapidly, and is no
> longer a respectable organisation.

Well, you'd better call Alan (G4EEE) straight after the hols and let
him know how I've been misusing the company's phone and email
facilities. I'm sure he'll be very interested to hear from you!

73
Mike G4KFK

6267. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 20:49:42 UTC
From: Wiggy <mines.a.gin@tonic>
Message-ID: <GpZqf.13947$iz3.3417@text.news.blueyonder.co.uk>
Source record: 15150
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Nedlar wrote:
> On Fri, 23 Dec 2005 15:42:52 GMT, "tox" <tox@toxtox.co.com> wrote:
>
>
>>AIUI, he certainly has not held a class A licence for thirty years. Did it
>>not take him 10 years to pass the "simple" Morse test?
>>
>>Regards
>>tox
>>
>
>
> Would that be the same Morse test that you could NEVER pass?
>
> Merry Christmas, Baldy.

So, Mr Nedlar (obsolete). At some time in your obsolete life you took
some time out to pass an obsolete test so that you could PLAY with some
obsolete code and with no doubt some obsolete radio equipment?

You must be so proud!

Merry whatever floats your boat.

Wiggy

6268. Re: A Merry Solstice To All Our Readers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 20:54:15 UTC
From: Mr W Z Boson <WZ_Boson@yahoo.co.uk>
Message-ID: <1135371255.232545.249070@g49g2000cwa.googlegroups.com>
Source record: 15151
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Walt Davidson wrote:

> On 23 Dec 2005 05:23:20 -0800, "Mr W Z Boson" <WZ_Boson@yahoo.co.uk>
> wrote:
>
> >I'm reminded of the words of that great Irish poet, songwriter and
> >drunkard, Shane MacGowan ...
>
> Quite. Except that Shane is not Irish. Despite false claims that he
> is a native of Co. Tipperary, in fact he was born on Christmas Day
> 1957 in Tunbridge Wells! (Which, by coincidence, is not a million
> miles from Gillingham ...)
>
> He won a scholarship to the posh Westminster School, which he attended
> for a year until he was expelled (in the interests of street cred, you
> understand).
> ;-)
>
> http://en.wikipedia.org/wiki/Shane_McGowan
>
> When I used to meet him "out on the town" in 1976-77, he spoke with a
> strong North London accent.
>
> 73 de G3NYY
>
> --
> Walt Davidson Email: g3nyy @despammed.com

Well, you live and learn.

Great song nonetheless.

I don't understand the Gillingham reference though.

6269. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 21:00:07 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135371607.854994.256430@g14g2000cwa.googlegroups.com>
Source record: 15152
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Eric Williams, M3EJO, both in his current incarnation, and in his
previous incarnation of "Micky Taker", illustrates so well why
anybody who holds, or who has ever held, a licence issued under
the gangrenous degeneration that is the M3/CB Fools' Licence
scheme will _NEVER_ make it into the ranks of _REAL_ Radio
Hams with their gentlemanly traditions. Having failed to make
any grade other than that intended for 6-year-olds, he sneers
like a playground loser at his betters who have achieved
qualifications that he so dismally failed to acheive in the 20, or so,
years that he pretended to have an interest.

Eric - once you've made the grade (Yes, we can even arrange a 12WPM
Morse test for you) then you're in a position to comment.

Until then, you're just a poor loser.

Grow up.

Wiggy wrote:
> Nedlar wrote:
> > On Fri, 23 Dec 2005 15:42:52 GMT, "tox" <tox@toxtox.co.com> wrote:
> >
> >
> >>AIUI, he certainly has not held a class A licence for thirty years. Did it
> >>not take him 10 years to pass the "simple" Morse test?
> >>
> >>Regards
> >>tox
> >>
> >
> >
> > Would that be the same Morse test that you could NEVER pass?
> >
> > Merry Christmas, Baldy.
>
> So, Mr Nedlar (obsolete). At some time in your obsolete life you took
> some time out to pass an obsolete test so that you could PLAY with some
> obsolete code and with no doubt some obsolete radio equipment?
>
> You must be so proud!
>
> Merry whatever floats your boat.
>

> Wiggy

6270. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 21:05:46 UTC
From: tox <tox@toxtox.co.com>
Message-ID: <KEZqf.11933$f7.6232@newsfe3-win.ntli.net>
Source record: 15153
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Pierian Spring" <radio.ham@lycos.co.uk> wrote in message
news:1135371607.854994.256430@g14g2000cwa.googlegroups.com...
>
> Eric - once you've made the grade (Yes, we can even arrange a 12WPM
> Morse test for you) then you're in a position to comment.

Will it take him 10 years to pass the test though?

tox

6271. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 21:38:27 UTC
From: Nedlar <Sam@techno.invalid>
Message-ID: <ugroq1dai6e2jbahs53k4vvl6f72hjj07r@4ax.com>
Source record: 15154
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Fri, 23 Dec 2005 17:29:59 -0000, "huLLy" <s2f@f2s.com> wrote:

>Nedlar wrote:
>>
>> Would that be the same Morse test that you could NEVER pass?
>
>
>I expect you will insist on paying for your license annually when they will
>be free for life!

Just the kind of stupid answer a lazy-arsed CBr G7 would utter.

6272. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 21:41:10 UTC
From: Nedlar <Sam@techno.invalid>
Message-ID: <ljroq15i2bu13mhli2sn2vm462jhhq0fr5@4ax.com>
Source record: 15155
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Fri, 23 Dec 2005 18:14:52 GMT, "tox" <tox@toxtox.co.com> wrote:

>
>"Nedlar" <Sam@techno.invalid> wrote in message
>news:4ecoq19n2v3acrhu9tk1hf965qvomh8u7s@4ax.com...
>>>
>>
>> Would that be the same Morse test that you could NEVER pass?
>
>If you continue to practice, I figure in another 20 years, you may reach 5
>WPM.
>
>HTH
>tox

In 20 years I'll have snuffed it, Baldy.
Why don't you tell us why you were so lazy that you never attempted a
Morse test? Not interested in HF eh? Bwahahahahahaha
Bald tosser.

6273. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 21:42:35 UTC
From: huLLy <s2f@f2s.com>
Message-ID: <vdOdnZsDfpfW8jHeRVnyiA@giganews.com>
Source record: 15156
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Nedlar wrote:
> On Fri, 23 Dec 2005 17:29:59 -0000, "huLLy" <s2f@f2s.com> wrote:
>
>> Nedlar wrote:
>>>
>>> Would that be the same Morse test that you could NEVER pass?
>>
>>
>> I expect you will insist on paying for your license annually when
>> they will be free for life!
>
> Just the kind of stupid answer a lazy-arsed CBr G7 would utter.

The only degree you have is in stupidity.

Merry Christmas.
--
huLLy
Tel: 07976 123278

6274. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 21:45:25 UTC
From: Nedlar <Sam@techno.invalid>
Message-ID: <goroq15c8g0ld3l3749vbh6jq5nr777bfu@4ax.com>
Source record: 15157
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Fri, 23 Dec 2005 20:49:42 GMT, Wiggy <mines.a.gin@tonic> wrote:

>
>So, Mr Nedlar (obsolete). At some time in your obsolete life you took
>some time out to pass an obsolete test so that you could PLAY with some
>obsolete code and with no doubt some obsolete radio equipment?
>
>You must be so proud!
>
>Merry whatever floats your boat.
>
>Wiggy

WRONG!
I took the test that was required for me to get a licence (only one
class then). What I didn't do was wait until standards had been dumbed
down to a level that allowed idiots like you onto the amateur bands.
As for obselescence...well what are all these Morse signals I hear?
Perhaps we should abolish voice comms eh? After all, that's almost as
old as Morse.

6275. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 21:45:35 UTC
From: Wiggy <mines.a.gin@tonic>
Message-ID: <3e_qf.13979$iz3.12806@text.news.blueyonder.co.uk>
Source record: 15158
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> Eric Williams, M3EJO, both in his current incarnation, and in his
> previous incarnation of "Micky Taker", illustrates so well why
> anybody who holds, or who has ever held, a licence issued under
> the gangrenous degeneration that is the M3/CB Fools' Licence
> scheme will _NEVER_ make it into the ranks of _REAL_ Radio
> Hams with their gentlemanly traditions. Having failed to make
> any grade other than that intended for 6-year-olds, he sneers
> like a playground loser at his betters who have achieved
> qualifications that he so dismally failed to acheive in the 20, or so,
> years that he pretended to have an interest.
>
> Eric - once you've made the grade (Yes, we can even arrange a 12WPM
> Morse test for you) then you're in a position to comment.
>
> Until then, you're just a poor loser.
>
> Grow up.
>

Ah! But I can walk 25 metres on stilts. So who's the loser now?

Wiggy
2E0ECW

"Perversely, the Novice RAE is a higher technical challenge than the
RAE!" - (C) Gareth Alun Evans 1996

6276. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 21:47:12 UTC
From: Nedlar <Sam@techno.invalid>
Message-ID: <v0soq1li466tsb2rsmo7e4764fjjtubqf6@4ax.com>
Source record: 15159
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Fri, 23 Dec 2005 21:05:46 GMT, "tox" <tox@toxtox.co.com> wrote:

>
>"Pierian Spring" <radio.ham@lycos.co.uk> wrote in message
>news:1135371607.854994.256430@g14g2000cwa.googlegroups.com...
>>
>> Eric - once you've made the grade (Yes, we can even arrange a 12WPM
>> Morse test for you) then you're in a position to comment.
>
>Will it take him 10 years to pass the test though?
>
>tox
>
Or will he take you example and avoid it altogether?
Lazy-arsed CBr you are, Baldy.

6277. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 21:51:32 UTC
From: Nedlar <Sam@techno.invalid>
Message-ID: <d6soq15dibv3le3efokbq1aj43st96mnfl@4ax.com>
Source record: 15160
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Fri, 23 Dec 2005 21:42:35 -0000, "huLLy" <s2f@f2s.com> wrote:

>The only degree you have is in stupidity.
>
>Merry Christmas.

But I managed a 12wpm Morse test. You couldn't manage it.
I have a G3 call while you have a G7.
I managed a proper written test and proper Morse test...you didn't.

6278. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 21:52:20 UTC
From: Me <Me@hotmail.com>
Message-ID: <dohril$n0q$1@domitilla.aioe.org>
Source record: 15161
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> At one time, Wood & Douglas was a respectable supplier

At one time I wonder if this company was respectable

OUT & ABOUT SYSTEMS LTD
13 HARDENS CLOSE
CHIPPENHAM WILTSHIRE
SN153AA

Std. Industrial Classification (SIC):7372 Prepackaged software
72.20 COMPUTER SERVICES
Turnover:0
Profit:0
Networth:0
Employees:0
Company Registration Number:3144797

6279. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 21:52:45 UTC
From: Nedlar <Sam@techno.invalid>
Message-ID: <ubsoq197f04d2l4a0pdteopbg9ko9kn55s@4ax.com>
Source record: 15162
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Fri, 23 Dec 2005 21:45:35 GMT, Wiggy <mines.a.gin@tonic> wrote:

>
>Ah! But I can walk 25 metres on stilts. So who's the loser now?
>
>Wiggy
>2E0ECW

I can do at least 50mtrs while having a 30wpm Morse contact.

6280. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 21:54:06 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135374846.000671.83930@f14g2000cwb.googlegroups.com>
Source record: 15163
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> Would we be talking about....
>
> Mike Gathergood,
> Formerly P-Com Wireless Access Group,
> 6 Sylverns Court,
> Warfield,
> Bracknell,
> RG42 3SL
>
> Mob: (07717) - 728290
> Tel: (01344) 310610
> Fax: (01344) 310611?

That's very good - I bet nobody else reading this would have thought of putting my name into Google! We can all see now why you're the MD of a Software Consultancy.

So now, having correctly linked me to senior technical sales positions within two well-respected UHF and microwave communications companies, do I still qualify as a "vile CBer" just because I have spoken out against the repeated posting of your warped self-righteous and hypocritical "Frequently Asked Questions"? Or because I objected to your belittlement of the hard work and enthusiasm shown by various members of our scout group?

If so, there can't be much hope for many of us here, can there?

73
Mike G4KFK

6281. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 21:58:02 UTC
From: huLLy <s2f@f2s.com>
Message-ID: <08SdnQ3wG-V27zHeRVnysQ@giganews.com>
Source record: 15164
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Nedlar wrote:
> On Fri, 23 Dec 2005 21:42:35 -0000, "huLLy" <s2f@f2s.com> wrote:
>
>
>> The only degree you have is in stupidity.
>>
>> Merry Christmas.
>
> But I managed a 12wpm Morse test. You couldn't manage it.
> I have a G3 call while you have a G7.
> I managed a proper written test and proper Morse test...you didn't.

I do apologise for not being born 50 years earlier! Silly Me!
I still don't use HF (except in a professional capacity), I still have no interest in morse, and it really doesn't bother me. Why does it bother you so?
--
huLLy
Tel: 07976 123278

6282. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 22:01:12 UTC
From: Wiggy <mines.a.gin@tonic>
Message-ID: <ls_qf.13987$iz3.13857@text.news.blueyonder.co.uk>
Source record: 15165
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Nedlar wrote:
> On Fri, 23 Dec 2005 20:49:42 GMT, Wiggy <mines.a.gin@tonic> wrote:
>
>
>
>>So, Mr Nedlar (obsolete). At some time in your obsolete life you took
>>some time out to pass an obsolete test so that you could PLAY with some
>>obsolete code and with no doubt some obsolete radio equipment?
>>
>>You must be so proud!
>>
>>Merry whatever floats your boat.
>>
>>Wiggy
>
>
> WRONG!
> I took the test that was required for me to get a licence (only one
> class then). What I didn't do was wait until standards had been dumbed
> down to a level that allowed idiots like you onto the amateur bands.

Good job! Because you would probably fail now!

> As for obselescence...well what are all these Morse signals I hear?

What you hear is _amateurs_ "playing" with Morse code and radios!

> Perhaps we should abolish voice comms eh? After all, that's almost as
> old as Morse.

You or "we" are not in a position to abolish anything. Even so, that's
the way it's going. In the future it may be impossible to copy any
signal without the appropriate decoding system.

Wiggy
2E0ECW
Vorsprung Durk Teknik!

6283. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 22:03:52 UTC
From: Nedlar <Sam@techno.invalid>
Message-ID: <4rsoq1l6cln83edtovjs8l9cc4riqu78dg@4ax.com>
Source record: 15166
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Fri, 23 Dec 2005 21:58:02 -0000, "huLLy" <s2f@f2s.com> wrote:

>
>I do apologise for not being born 50 years earlier! Silly Me!
>I still don't use HF (except in a professional capacity), I still have no
>interest in morse, and it really doesn't bother me. Why does it bother you
>so?

It bothers me because you are a lazy-arsed CBr who thinks he is a
radio amateur. It is your type that has turned amateur radio into
multi-band CB.
Anyway it's time for me to pound the key for a while, so no more
replies tonight.

6284. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 22:05:05 UTC
From: tox <tox@toxtox.co.com>
Message-ID: <lw_qf.50000$7p5.47100@newsfe4-win.ntli.net>
Source record: 15167
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"huLLy" <s2f@f2s.com> wrote in message
news:08SdnQ3wG-V27zHeRVnysQ@giganews.com...

>
> I do apologise for not being born 50 years earlier! Silly Me!
> I still don't use HF (except in a professional capacity), I still have no
> interest in morse, and it really doesn't bother me. Why does it bother you
> so?

Ignore the doddering old fart, he's just wind and piss...

Regards
tox

6285. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 22:07:22 UTC
From: huLLy <s2f@f2s.com>
Message-ID: <soCdnUI-wJqH6DHeRVnyjA@giganews.com>
Source record: 15168
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

tox wrote:
> "huLLy" <s2f@f2s.com> wrote in message
> news:08SdnQ3wG-V27zHeRVnysQ@giganews.com...
>
>>
>> I do apologise for not being born 50 years earlier! Silly Me!
>> I still don't use HF (except in a professional capacity), I still
>> have no interest in morse, and it really doesn't bother me. Why does
>> it bother you so?
>
>
> Ignore the doddering old fart, he's just wind and piss...
>

That's why I won't buy SK gear!
--
huLLy
Tel: 07976 123278

6286. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 22:10:50 UTC
From: Wiggy <mines.a.gin@tonic>
Message-ID: <KB_qf.13992$iz3.11200@text.news.blueyonder.co.uk>
Source record: 15169
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

huLLy wrote:
> tox wrote:
>
>>"huLLy" <s2f@f2s.com> wrote in message
>>news:08SdnQ3wG-V27zHeRVnysQ@giganews.com...
>>
>>
>>>I do apologise for not being born 50 years earlier! Silly Me!
>>>I still don't use HF (except in a professional capacity), I still
>>>have no interest in morse, and it really doesn't bother me. Why does
>>>it bother you so?
>>
>>
>>Ignore the doddering old fart, he's just wind and piss...
>>
>
>
> That's why I won't buy SK gear!

Why not? Most of it is unused! :-)

Wiggy

6287. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 22:14:26 UTC
From: Wiggy <mines.a.gin@tonic>
Message-ID: <6F_qf.13998$iz3.10017@text.news.blueyonder.co.uk>
Source record: 15170
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Nedlar wrote:
> On Fri, 23 Dec 2005 21:58:02 -0000, "huLLy" <s2f@f2s.com> wrote:
>
>
>
>>I do apologise for not being born 50 years earlier! Silly Me!
>>I still don't use HF (except in a professional capacity), I still have no
>>interest in morse, and it really doesn't bother me. Why does it bother you
>>so?
>
>
> It bothers me because you are a lazy-arsed CBr who thinks he is a
> radio amateur. It is your type that has turned amateur radio into
> multi-band CB.
> Anyway it's time for me to pound the key for a while, so no more
> replies tonight.

Don't you mean "bash the bishop"?

Wiggy
3 mistresses and 14 love children!

6288. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 23:02:14 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <43ac81d9.949176@news.iol.ie>
Source record: 15171
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"huLLy" <thisainthamradio@aol.com> wrote:

> > there you go again...
> > giving a green light to all and sundry to mention your own wife BY
> > NAME !!
>
> No, it was already in the public domain, mention by Gareth himself many a

wrong !

i'm sure another on here will confirm.

6289. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 23:07:20 UTC
From: class-a-pkearn-zuuzpk@multi-band-cb-is-here---its-as-easy-as-they-say.br.eircom.ie.net
Message-ID: <43ac82e7.1219040@news.iol.ie>
Source record: 15172
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"huLLy" <thisainthamradio@aol.com> wrote:

> . YOU are the guilty man. YOU are the

oh ?

has hully become judge&jury in the last few days ?

(rest of post cut due to strong legal content)

6290. Re: A Merry Solstice To All Our Readers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 23:27:14 UTC
From: Mr W Z Boson <WZ_Boson@yahoo.co.uk>
Message-ID: <1135380434.173067.138560@g49g2000cwa.googlegroups.com>
Source record: 15173
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Walt Davidson wrote:

> On 23 Dec 2005 12:54:15 -0800, "Mr W Z Boson" <WZ_Boson@yahoo.co.uk>
> wrote:
>
> >I don't understand the Gillingham reference though.
>
> You're new here, aren't you?
> ;-)
>
> 73 de G3NYY
>
> --
> Walt Davidson Email: g3nyy @despammed.com

Oh right, I've got it now - it's about this BR malarkey isn't it?

tum tee tum.

I really am a bit worried about ARB though - it's all getting a bit OTT.

6291. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-23 23:39:14 UTC
From: DieSea <DieSea.NoSpamPlease@ntlworldd.ccom>
Message-ID: <43ac8a9c$0$29573$da0feed9@news.zen.co.uk>
Source record: 15174
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

> But I managed a 12wpm Morse test. You couldn't manage it.
> I have a G3 call while you have a G7.
> I managed a proper written test and proper Morse test...you didn't.

No doubt a REGURGITATED G3 call

You talk like a CRETIN not like a Respected G3

DieSea

6292. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 00:39:15 UTC
From: G4ZWI <fred.c@ntlworld.com>
Message-ID: <1135384755.574240.63330@g49g2000cwa.googlegroups.com>
Source record: 15175
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Grow up, Mike Gathergood!!!

stupid boy.......

Sorry Mike! didn't know you were connected with W&D..

I did buy a 70cms PA kit from W&D 15 years ago, but then got a FT2700,
so never put it together.
I now have a handheld for 70cms, and so dug it out, and put it
together.Worked first time of powering up, but think I may need to beef
up the heatsinking. It is so nice to spend my time increasing my
knowledge of ham radio, instead of kicking others for any shortfalls
they may have!!! (perhaps, to help and educate is the way
forward?????) Ah, well, night, night, and back to 4 meters for me....

6293. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 00:57:21 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135385840.962577.196350@g43g2000cwa.googlegroups.com>
Source record: 15176
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

G4ZWI wrote:
> Grow up, Mike Gathergood!!!
>
>
>
> stupid boy.......
>
> Sorry Mike! didn't know you were connected with W&D..

I joined W&D well after their activities with amateur radio, though there remain many licensed amateurs, both within the company itself and the network of distributors.

The remnants of the amateur products were divested lock, stock and barrel to G3TUX. Unfortunately Chris closed his business and retired to Guernsey last year, so the only place you'll find W&D amateur products sold now is on eBay.

It's a shame, but the reality is that us radio hams are congenital tightwads!

73
Mike G4KFK

6294. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 01:17:46 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135387066.015440.303550@z14g2000cwz.googlegroups.com>
Source record: 15177
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

mike@g4kfk.co.uk wrote:
> It's a shame, but the reality is that us radio hams are congenital
> tightwads!

Before the (G4) Sad Dim Wit spots that grammatical error, I'll correct
it myself...
"It's a shame, but the reality is that WE radio hams are congenital
tightwads!

Merry CHRISTmas
Mike G4KFK

6295. Re: My amateur radio stations - make requests for songs and many more!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 01:27:03 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreJerks@dev.null>
Message-ID: <MPG.1e1643c183beac2898973b@192.168.42.131>
Source record: 15178

In article <1135368232.511709.202040@z14g2000cwz.googlegroups.com>,
radioimpress@yahoo.com says...

> Spend some time listening online to my radio station -
> www.RadioImpress.hit.bg . You can request some songs and post a
> dedication with your own voice! Well, if that doesn't sound much

<trash-removal scar>

What you're describing has less than nothing to do with the
Amateur Radio Service, at least as it is defined by Section 97.1 --
'Basis and Purpose' of the FCC regs.

I suggest you examine this link, then find a more appropriate
newsgroup.

http://www.arrl.org/FandES/field/regulations/news/part97/

PLONK!

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped
with surreal ports?"

6296. Re: why must ham radio have clases of liecen what tdo we get except the devisive bullshit arists

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 01:30:04 UTC
From: "Dr. Anton T. Squeegee" <SpammersAreJerks@dev.null>
Message-ID: <MPG.1e16447a1566d56a98973c@192.168.42.131>
Source record: 15179
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

In article <1135178244.602193.112510@o13g2000cwo.googlegroups.com>,
radio.ham@lycos.co.uk says...

> Pierian Spring

Oh, look... Airy-head's got a new morph...

<yawn!>

PLONK!

--
Dr. Anton T. Squeegee, Director, Dutch Surrealist Plumbing Institute.
(Known to some as Bruce Lane, ARS KC7GR,
kyrrin (a/t) bluefeathertech[d=o=t]calm -- www.bluefeathertech.com
"If Salvador Dali had owned a computer, would it have been equipped
with surreal ports?"

6297. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 01:36:33 UTC
From: Stuart Crow <sjc.usenet@nospam.ntlworld.com>
Message-ID: <Xns9736101D8C34C321200@80.5.182.99>
Source record: 15180
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Pierian Spring" <radio.ham@lycos.co.uk> wrote in
news:1135370200.466793.250570@g47g2000cwa.googlegroups.com:

> At one time, Wood & Douglas was a respectable supplier to the
> Ham Radio market, although it has long since devoted itself
> to commercial markets only.

Given the representation of Amateur Radio given by one contributor to these NGs, it's a wonder any sensible professional organisation has anything to do with it.

The professional engineer, and many overseas Amateurs, must suspect that the rot set into British Amateur Radio some time late in the G4 series, and could be forgiven for avoiding contact with it as far as possible.

W&D's reputation has probably never stood higher. Professionals understand that; some Amateurs can't even tune up an FT101 properly. How technically inept must they be?

6298. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 06:48:39 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135406919.014961.269620@f14g2000cwb.googlegroups.com>
Source record: 15181
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

The remarks below indicates everything that is wrong with
the educational and background requirements for the
gangrenous degeneration that is the M3/CB Fools'
Licence scheme and why nobody who holds, or who
has ever held, a licence issued under that scheme will
ever make it into the ranks of _REAL_ Radio Hams.....

Someone who posits that the ability to walk on stilts
is somehow a competitive advantage to Radio Hammery
clearly has _NO_ idea what Radio Hammery is all about!

M3EJO / Eric Williams / Micky Taker / Wiggy wrote:

> Ah! But I can walk 25 metres on stilts. So who's the loser now?

6299. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 07:10:13 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135408212.958607.192550@z14g2000cwz.googlegroups.com>
Source record: 15182
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Not-Ham seems desperate to justify his infantile and gratuious
offensive outbursts. There is no justification for such anti-social,
obsessive, and maladjusted behaviour as he demonstrates.

He is a deranged looney BEYOND ANY SHADOW OF A DOUBT.

He is also very immature if he will not take personal responsibilty
for his own actions.

I have _NEVER_ mentioned my wife's name in this NG, nor that of
my children, nor that of my grandchildren.

Those who seek to do so and cause harassment and distress thereby
are sick in the mind.

zYYPK wrote:
> "huLLy" <thisainthamradio@aol.com> wrote:
>
> > > there you go again...
> > > giving a green light to all and sundry to mention your own wife BY
> > > NAME !!
> >
> > No, it was already in the public domain, mention by Gareth himself many a
>
>
> wrong !
>
> i'm sure another on here will confirm.

6300. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 07:15:46 UTC
From: G4ZWI <fred.c@ntlworld.com>
Message-ID: <1135408546.866424.72730@g14g2000cwa.googlegroups.com>
Source record: 15183
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

As a late G4 callsign, and therefore, it seems, being responsible for the rot that has set into the hobby, I wil inform you a little of my background, Stuart. Having joined the RAF after leaving school, I trained for two years at No:-1 Radio school, RAF Locking, as a Ground Communications engineer. I left RAF Locking, and was posted to RAF Cranwell. Upon leaving the forces, I continued in the domestic electronics trade, (TV, video, computers, etc,) I have 'fiddled' with electronics all my working life, (I am now in my 50's), and have half-filled my house with wonderful bargains, and homebrewed kit, as the love of my life will testify. I have ferric chloride stains on most of the carpets, a well-scorched bench, (soldering iron.....) and, not only can I tune my FT101B, I have also modified it to accept 6146B valves in the output stages, as the cost, and availability of the 6JS6 'bottles' became silly.
I do admit to having held a class B callsign, (G8ZWI) , and cheerfully admit to holding it for a large number of years, because I was too lazy to get off my backside, and do the Morse. My latest constructional project (half finished,) is a home-brew version of the Norcal Sierra, but with an AD9851 DDS & LCD in place of the normal VFO tuning. I will try to contact you, if I have any problems, although I am not too sure you will be willing to help a lowly, late, G4,

(P.S. I believe Santa Claus is bringing me a Yaesu FT817, with c.w. filter for Christmas. Should I send it back???)

Fred Cooper G4ZWI, GQRP 10981, FISTS 9889

6301. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 07:19:37 UTC
From: huLLy <s2f@f2s.com>
Message-ID: <zoGdnU9ETs4UazHeRVnyjQ@giganews.com>
Source record: 15184
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1135408212.958607.192550@z14g2000cwz.googlegroups.com...

> He is also very immature if he will not take personal responsibilty
> for his own actions.
>

Oh, I'd take personal responsibility, if the law allowed, but at the moment
I think you get 10 years plus for it!

6302. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 07:20:11 UTC
From: huLLy <s2f@f2s.com>
Message-ID: <gqidne1A-fU2azHenZ2dnUVZ8qednZ2d@giganews.com>
Source record: 15185
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1135408212.958607.192550@z14g2000cwz.googlegroups.com...
> Not-Ham seems desperate to justify his infantile and gratuious
> offensive outbursts. There is no justification for such anti-social,
> obsessive, and maladjusted behaviour as he demonstrates.
>
> He is a deranged looney BEYOND ANY SHADOW OF A DOUBT.
>

How cool, I'm actually getting to the nutball. Result!

6303. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 07:26:00 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135409160.924250.216800@g47g2000cwa.googlegroups.com>
Source record: 15186
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

For as long as you are prepared to illustrate so graphically
the difference between a CBer, an M3/CB Fools' Licensee, a
CBer-Masquerading-As-A-Radio-Ham and a _REAL_ Radio
Ham with his gentlemanly traditions, I am prepared to
watch you bemusedly from the sidelines and to chastise
you for your ridiculous outbursts.

It is important that we as Radio Hams make a stand for
civilised behaviour and decency against the vile CBer,
no matter how he might have slipped into our midst.

Don't you realise how silly and ridiculous you make yourself
look, by indulging in what are essentially very infantile
abusive tirades in an international forum that is broadcast to
the whole world?

However, if you wish to be perceived as a Childish Broadcaster (CBer)
then just carry on as you are with your Childish Broadcasting (CB).

You, coming as you do from a background as a ship's radio
"officer", really ought to know better.
Indeed, it is difficult to see, in the light of your
well-demonstrated infantile disposition, how you could
ever have been the export sales manager for a well-
respected company such as Wood & Douglas.

Shame on you. You should know better. What on Earth would Alan
Wood G4EEE think of the bad publicity you are visiting on
his company?

Grow up, Mike Gathergood!

Stupid boy.

mike@g4kfk.co.uk wrote:

> Before the (G4) Sad Dim Wit spots that grammatical error,

6304. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 07:28:21 UTC
From: Pierian Spring <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135409301.691117.63270@g44g2000cwa.googlegroups.com>
Source record: 15188
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

It does not say much for you that you side with those
whose habit is gratuious and offensive remarks and
that you criticise those who would steadfastly stand up
for decency and for civilised behaviour.

Stuart Crow wrote:
>.....
> the rot set into British Amateur Radio some time late in the G4 series, and
> could be forgiven for avoiding contact with it as far as possible.

6305. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 07:31:59 UTC
From: "jim.gm4dhj" <jim.gm4dhj@ntlworld.com>
Message-ID: <PP6rf.22656$zt1.17188@newsfe5-gui.ntli.net>
Source record: 15187
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

> As a late G4 callsign,

Yur deed ? ....

6306. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 07:40:54 UTC
From: G4ZWI <fred.c@ntlworld.com>
Message-ID: <1135410054.414875.267400@g47g2000cwa.googlegroups.com>
Source record: 15189
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Just another silly boy, who needs to grow up, then????

Like it or not, the hobby will move towards operating rather than
'homebrewing', our time may be better spent, educating,not insulting,
new licencees, (they will be all we have to talk to, one day!!)

6307. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 08:10:25 UTC
From: G4ZWI <fred.c@ntlworld.com>
Message-ID: <1135411825.324662.69590@z14g2000cwz.googlegroups.com>
Source record: 15190
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Thank you, by the way for the above remark. This is the first time I have had any direct contact with you. I have never directly criticised you, or your views.

Can you tell me who posted (on Dec 21 at 3:47 PM):- the following:-

I am a decent, civilised, law-abiding citizen, I NEVER ORIGINATE PERSONAL ATTACKS

{My italics..}
Merry Christmas...

6308. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 08:13:30 UTC
From: G4ZWI <fred.c@ntlworld.com>
Message-ID: <1135412010.219999.67590@g43g2000cwa.googlegroups.com>
Source record: 15191
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Sorry, my capitals..........

6309. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 08:39:36 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135413576.770105.94520@g49g2000cwa.googlegroups.com>
Source record: 15192
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Some confusion on your part, I think, because the post to which
you are replying was addressed to Stuart Crowe in response to
his rather silly and infantile gratuitous remarks directed at me.

You, however, seem to be F.Cooper, and the post to which you
reply was not addressed to you.

With a quick GoogleMiner session, neither your email addresses
nor your NNTP programs are the same.

Like a number of new contributors to this NG, you very rapidly
metamorphose into an aggressive challenger, for what reason
I do not know.

The answer to your question is that, yes, I never originate
personal attacks, I only ever assert the right of reply, and
the right of chastisement when answering posts that are
somewhat infantile as I did in the post to which you responded.

It is important that any self-respecting _REAL Radio Ham makes
a stand for decency and for civilised behaviour, a course of
action that I admonish you, in your turn, to follow.

G4ZWI wrote:
> Thank you, by the way for the above remark. This is the first time I
> have had any direct contact with you. I have never directly criticised
> you, or your views.
> Can you tell me who posted (on Dec 21 at 3:47 PM):- the following:-
> I am a decent, civilised, law-abiding citizen, I NEVER ORIGINATE
> PERSONAL ATTACKS
> {My italics..}
> Merry Christmas...

6310. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 09:02:00 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <c88rf.18172$b4.9113@newsfe1-win.ntli.net>
Source record: 15193
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Walt Davidson" <g3nyy@despammed.com> wrote in message
news:rp2qq1pvsooqjkl9pefjj7uqdtji2d0261@4ax.com...
> On 23 Dec 2005 16:57:21 -0800, mike@g4kfk.co.uk wrote:
>
>>It's a shame, but the reality is that us radio hams are congenital
>>tightwads!
>
> It is significant, is it not, that the only people who make this
> allegation are those who have been involved (or still are) in the
> business of making money out of selling equipment to the said "radio
> hams". I have heard this complaint innumerable times from failed
> amateur radio traders ... with whom this country is awash.

You don't listen to many amateur then Walt. A definite trait of the radio amateur is "short arms and deep pockets"- a positive trait in my view but still worthy of a bit of mirth. I like a bargain as much as the next man and (re)using a bit of "junk" to repair or make something is far more pleasing than flashing the credit card.

--
73
Brian
www.g8osn.org.uk

6311. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 09:17:38 UTC
From: Stuart Crow <sjc.usenet@nospam.ntlworld.com>
Message-ID: <Xns97365F1D5362B321200@80.5.182.99>
Source record: 15195
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"G4ZWI" <fred.c@ntlworld.com> wrote in news:1135408546.866424.72730
@g14g2000cwa.googlegroups.com:

> As a late G4 callsign, and therefore, it seems, being responsible for
> the rot

I don't see why you'd draw that conclusion, Fred, since my post clearly referred to one particular contributor. Rot generally takes time to spread, and starts out with a small area of contamination. There are still some good people coming into the hobby even now judging from the bands.

> (P.S. I believe Santa Claus is bringing me a Yaesu FT817, with c.w.
> filter for Christmas. Should I send it back???)

That ain't going to warm a cold shack much at this time of year - I'd rather have a nice L7 or a TL922. Merry Xmas!

6312. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 09:19:26 UTC
From: G4ZWI <fred.c@ntlworld.com>
Message-ID: <1135415966.212244.110510@g44g2000cwa.googlegroups.com>
Source record: 15194
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

If I am in error, sir, I will stand corrected. I believe, however, most
people following this thread would conclude your post 89 was directed
to me, as I did.
I am sorry if I do not live up to your ideal radio amateur, and wish
you once again,
Merry Christmas.
(Please do not respond to this post, as I have no intention of
following this thread further)
Fred Cooper G4ZWI

6313. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 09:49:09 UTC
From: Nedlar <Sam@techno.invalid>
Message-ID: <2c6qq15qpursvh01j79vh81gi615v3777h@4ax.com>
Source record: 15196
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Fri, 23 Dec 2005 23:39:14 -0000, "DieSea"
<DieSea.NoSpamPlease@ntlworldd.ccom> wrote:

>
>> But I managed a 12wpm Morse test. You couldn't manage it.
>> I have a G3 call while you have a G7.
>> I managed a proper written test and proper Morse test...you didn't.
>
>
>No doubt a REGURGITATED G3 call
>
>You talk like a CRETIN not like a Respected G3
>
>DieSea
>

The brain-dead CBr reveals himself....

6314. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 10:07:04 UTC
From: Roger <AB8MQ@lloyd>
Message-ID: <doj6f1gft0@pita.alt.net>
Source record: 15197
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Nedlar" <Sam@techno.invalid> wrote in message
news:2c6qq15qpursvh01j79vh81gi615v3777h@4ax.com...
On Fri, 23 Dec 2005 23:39:14 -0000, "DieSea"
<DieSea.NoSpamPlease@ntlworldd.ccom> wrote:

>
>> But I managed a 12wpm Morse test. You couldn't manage it.
>> I have a G3 call while you have a G7.
>> I managed a proper written test and proper Morse test...you didn't.
>
>
>No doubt a REGURGITATED G3 call
>
>You talk like a CRETIN not like a Respected G3
>
>DieSea
>

The brain-dead CBr reveals himself....

//

You kiddies are not real Hams. In order to be a REAL Ham you have to do what
I did...be retested.
And not just everybody can be retested...you have to have a special
'invitation' from Riley Hollingsworth himself.
I know. I've tested twice.

Roger
AB8MQ

6315. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 10:08:55 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135418934.958101.120670@g47g2000cwa.googlegroups.com>
Source record: 15048
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

You are a LIAR.

I have _NEVER belittled any "of the hard work and enthusiasm
shown by various members of" your "scout group"

I did not even know that you had a scout troop.

But since you raise the issue, if they are, indeed, scouts
and are over the age of 11 years, and they have had to put
in "hard work" to pass an exam intended for 6-year-olds,
then they are not achievers but retards.

mike@g4kfk.co.uk wrote:
> Or because I objected to
> your belittlement of the hard work and enthusiasm shown by various
> members of our scout group?

6316. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 10:18:25 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <Rf9rf.50114$7p5.24372@newsfe4-win.ntli.net>
Source record: 15049
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Walt Davidson" <g3nyy@despammed.com> wrote in message
news:o27qq1h208t6haf2pes4j0gqhm5rjr8sih@4ax.com...
> On Sat, 24 Dec 2005 09:02:00 GMT, "Brian Reay" <see@website.invalid>
> wrote:
>
>>"Walt Davidson" <g3nyy@despammed.com> wrote:
>>> On 23 Dec 2005 16:57:21 -0800, mike@g4kfk.co.uk wrote:
>>>
>>>>It's a shame, but the reality is that us radio hams are congenital
>>>>tightwads!
>>>
>>> It is significant, is it not, that the only people who make this
>>> allegation are those who have been involved (or still are) in the
>>> business of making money out of selling equipment to the said "radio
>>> hams". I have heard this complaint innumerable times from failed
>>> amateur radio traders ... with whom this country is awash.
>>
>>You don't listen to many amateur then Walt. A definite trait of the radio
>>amateur is "short arms and deep pockets"- a positive trait in my view but
>>still worthy of a bit of mirth. I like a bargain as much as the next man
>>and
>>(re)using a bit of "junk" to repair or make something is far more pleasing
>>than flashing the credit card.
>
> I quite agree, Brian ... but there is a world of difference between
> being "a congenital tightwad" and merely being a prudent spender!

Surely the best accolade a "prudent spender" can receive is to be called "a
congenital tightwad" ;-)

--
73
Brian
www.g8osn.org.uk

6317. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 10:24:06 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135419846.147619.172090@g47g2000cwa.googlegroups.com>
Source record: 15050
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

If you do not wish for there to be a right of reply, then you
would be better served if you do not contribute at all.

I did not say that you do not live up to my "ideal radio amateur";
in fact, I do not even use the term.

To the contrary, from what you have posted recently, you do
seem to be a _REAL_ Radio Ham in (most of) the best
traditions thereto.

A Merry (Belated) Solstice to you, also.

G4ZWI wrote:
> If I am in error, sir, I will stand corrected. I believe, however, most
> people following this thread would conclude your post 89 was directed
> to me, as I did.
> I am sorry if I do not live up to your ideal radio amateur, and wish
> you once again,
> Merry Christmas.
> (Please do not respond to this post, as I have no intention of
> following this thread further)
> Fred Cooper G4ZWI

6318. Re: If the answer's, "M3", it must be a bloody silly question!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 10:27:49 UTC
From: sKhully <beanz@hienz.com>
Message-ID: <1e8qq1lifg18lcrid91o5qoc9b6r2png3i@4ax.com>
Source record: 15051
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On 23 Dec 2005 23:10:13 -0800, "Pierian Spring"
<aiyr.r.bean@lycos.co.uk> wrote:

>I have _NEVER_ mentioned my wife's name in this NG, nor that of
>my children, nor that of my grandchildren.
>

That's it I'm getting out of Wiltshire, 'Beanie' has been allowed to
breed, the thought of dueling banjo's, and little genetic misfires
populating the county is the last straw !!!

6319. اي جمامعة فى منـح تعليميـة مجانية فى مجال برمجة الكمبيوتر

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 10:37:16 UTC
From: Dr_mohamed_hassan_82 <Dr_mohamed_hassan_82@yahoo.com>
Message-ID: <1135420636.138278.234950@z14g2000cwz.googlegroups.com>
Source record: 15052

من يرغب فى دراسة برمجة الكمبيوتر فهناك
شركة تدعى مؤسسة النمام العربى تقدم منح
مجانية - للمزيد من المعلومات

Oracle 10G Developer Users - OCP
Oracle application server
Oracle designer
Oracle 10g database administration - OCA

Microsoft Certified Solution Developer - MCSD
Microsoft Certified Systems Engineer - MCSE
International Computer Driving Licence - ICDL

CISCO - CCNA
CISCO - CCNP

Multimedia - 2D
Multimedia - 3D

Linux - power user
Linux - adminstration

PHP

Java programming

System analysis
System design

أتصل بمؤسسة النمام العربى فى 4522041
القاهرة
http://www.egyptwebs.tk

6320. اي جمامعة فى منـح تعليميـة مجانيةة فى مجال برمجة الكمبيووتر

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 10:37:32 UTC
From: Dr_mohamed_hassan_82 <Dr_mohamed_hassan_82@yahoo.com>
Message-ID: <1135420652.911678.231750@g43g2000cwa.googlegroups.com>
Source record: 15053

من يرغب فى دراسة برمجة الكمبيووتر فهناك
شركة تدعى مؤسسة النمام العربى تقدم منح
مجانبة - للمزيد من المعلومات

Oracle 10G Developer Users - OCP
Oracle application server
Oracle designer
Oracle 10g database administration - OCA

Microsoft Certified Solution Developer - MCSD
Microsoft Certified Systems Engineer - MCSE
International Computer Driving Licence - ICDL

CISCO - CCNA
CISCO - CCNP

Multimedia - 2D
Multimedia - 3D

Linux - power user
Linux - adminstration

PHP

Java programming

System analysis
System design

أتصل بمؤسسة النمام العربى فى 4522041
القاهرة
http://www.egyptwebs.tk

6321. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 10:57:25 UTC
From: DieSea <DieSea.NoSpamPlease@ntlworldd.ccom>
Message-ID: <43ad2992$0$29575$da0feed9@news.zen.co.uk>
Source record: 15054
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

> 73 de G3NYY [VERY careful with his money!]

Ok Wlat

Sew you showed the ScotchMan how to weld his sporran up

And Super glue for the Yorkshiremans wallet to boot

Happy Crimbo All

Well to all that's not in my KillFile

DieSea

6322. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 11:52:12 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <MDarf.51162$uR.27594@newsfe7-gui.ntli.net>
Source record: 15055
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring of verbal diarrhoea wrote:
> But since you raise the issue, if they are, indeed, scouts
> and are over the age of 11 years, and they have had to put
> in "hard work" to pass an exam intended for 6-year-olds,
> then they are not achievers but retards.
>
and since, I believe, _YOU_ sat the RAE when in your twenties what does
that make _YOU_ ? A super retard?
To use your words, 'GROW UP, MR EVANS.'
Alternatively, FOAD.
...(_!_)...

6323. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 13:20:17 UTC
From: Mike Clayton <news2005d.10.mikelclayton@ntlworld.com>
Message-ID: <U42XcKGRsUrDFwuz@ntlworld.com>
Source record: 15056
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

In message <1135409160.924250.216800@g47g2000cwa.googlegroups.co
>Don't you realise how silly and ridiculous you make yourself
>look, by indulging in what are essentially very infantile
>abusive tirades in an international forum that is broadcast to
>the whole world?
>

Perhaps you should ask yourself the same question?
--
Mike Clayton
'For evil to triumph it is only necessary for good men to do nothing'
http://homepage.ntlworld.com/mike_clayton

6324. Halicrafters S-40B

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 14:57:11 UTC
From: "James F. Mayer" <jfma@ix.netcom.com>
Message-ID: <bldrf.9283$3Z.3158@newsread1.news.atl.earthlink.net>
Source record: 15057
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair

Does any one know where I could obtain a copy of a manual and/or schematic for my S40B. It did work at one time but now it won't. There seems to be voltage on the antenna terminal and I don't think that is a good sign.

6325. Re: Halicrafters S-40B Manual

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 15:10:53 UTC
From: Caveat Lector <UALLBeware@9984reader.com>
Message-ID: <cxdrf.3604$nj1.3440@fed1read07>
Source record: 15058
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair

FreeBees see BAMA at
http://bama.sbc.edu/hallicra.htm

And maybe Nostalgia Air Vintage Radio References
http://www.nostalgiaair.org/

If not lots of manual vendors can supply them
See URL:
http://ac6v.com/manuals.htm

--
CL -- I doubt, therefore I might be !

"James F. Mayer" <jfma@ix.netcom.com> wrote in message
news:bldrf.9283$3Z.3158@newsread1.news.atl.earthlink.net...
> Does any one know where I could obtain a copy of a manual and/or schematic
> for my S40B. It did work at one time but now it won't. There seems to be
> voltage on the antenna terminal and I don't think that is a good sign.
>
>
>

6326. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 15:18:41 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135437521.218168.19780@g44g2000cwa.googlegroups.com>
Source record: 15059
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> You are a LIAR.
>
> I have _NEVER belittled any "of the hard work and enthusiasm
> shown by various members of" your "scout group"

Really? Which pathetic sociopath wrote, and continues to spam various newsgroups with, this bitter and twisted little piece of prose then?

"Remember - A sure sign of a CB Radio hobbyist is if he holds, or has ever held, a licence issued under the gangrenous degeneration that is the M3/CB Fools' Licence scheme! "

It was you, wasn't it Gareth?

73
Mike G4KFK

6327. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 15:26:33 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135437993.892034.104940@o13g2000cwo.googlegroups.com>
Source record: 15060
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

mike@g4kfk.co.uk wrote:
> Really? Which pathetic sociopath wrote, and continues to spam various

Definition of a sociopath, for those who were wondering:
Diagnostic criteria (DSM-IV-TR)
The Diagnostic and Statistical Manual of Mental Disorders, a widely used manual for diagnosing mental and behavioral disorders (see also: DSM cautionary statement), defines antisocial personality disorder as a pervasive pattern of disregard for and violation of the rights of others occurring since age 15 years, as indicated by three (or more) of the following:
- failure to conform to social norms with respect to lawful behaviors as indicated by repeatedly performing acts that are grounds for arrest
- deceitfulness, as indicated by repeated lying, use of aliases, or conning others for personal profit or pleasure
- impulsivity or failure to plan ahead
- irritability and aggressiveness, as indicated by repeated physical fights or assaults
reckless disregard for safety of self or others
- consistent irresponsibility, as indicated by repeated failure to sustain steady work or honor financial obligations
- lack of remorse, as indicated by being indifferent to or rationalizing having hurt, mistreated, or stolen from another

73
Mike G4KFK

6328. Amidon Cores??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 15:30:05 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <1Qdrf.4544$x%2.3558@trnddc06>
Source record: 15061

Does someone here know who manufatcures the ferrite and powdered iron cores
for Amidon,

Tnx,
Dale W4OP

6329. Re: help with a transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 15:53:43 UTC
From: Paul M0EME <m0eme432@tiscali.co.uk>
Message-ID: <43ad6f22$1_1@mk-nntp-2.news.uk.tiscali.com>
Source record: 15062

thanks to the people that replied, all sorted now

"Paul M0EME" <m0eme432@tiscali.co.uk> wrote in message
news:43ab1533$1_1@mk-nntp-2.news.uk.tiscali.com...
> Hi all, Im using the transformer from a Bremi BRL500 linear to make a ham
> HF linear using four EL519 valves. I need to identify the leads coming
> from the transformer, I bought the transformer surplus so have no data
> with it....
> Also has anyone got any EL519 valves they will sell....
>
> Thankyou
>
> --
>
>
>
> Thanks and 73's de Paul M0EME
> 432MHz EME 4 times FO19,
> FT847,
> MGF1302,
> 100 Watts at feed,
> Spectran.
> Initials 432MHz #2 CW #4 JT65
>
> http://myweb.tiscali.co.uk/m0eme
>
>

6330. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 16:04:37 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <pkerf.18312$b4.9685@newsfe1-win.ntli.net>
Source record: 15063
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

on 23/12/2005 21:52 Me said the following:
> Pierian Spring wrote:
>
>> At one time, Wood & Douglas was a respectable supplier
>
>
> At one time I wonder if this company was respectable
>
> OUT & ABOUT SYSTEMS LTD
> 13 HARDENS CLOSE
> CHIPPENHAM WILTSHIRE
> SN153AA
>
> Std. Industrial Classification (SIC):7372 Prepackaged software
> 72.20 COMPUTER SERVICES
> Turnover:0
> Profit:0
> Networth:0
> Employees:0
> Company Registration Number:3144797
http://tinyurl.com/as56c
I wonder what Company he's using for his sub-contracting in Portsmouth,
and what tax arrangements have Bean made?
--
;-)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

6331. Re: HV transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 16:06:47 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <Yjerf.2541$dZ1.834@bignews2.bellsouth.net>
Source record: 15064

christine wrote:
> hi!
> I just brought home my new HV transformer, which was
> made to my specifications.:
>
> primary 230V 22A
> secondary
> two windings, each:
> 800-1000-1100-1200-1300-1400V at 2A
>
> in this way I can connect the windings in parallell or
> serie for a multipurpose HV power unit from
> about 110V - 4000V at 2A depending on what
> tubes I'll use in the amplifier.
> the transformers weight is about 36kg...(80 pounds)
>
> I am right now building a middlepower using
> one GU84 with tunable vacuumcapacitors and rollercoil..
> it's easy to add another one for more power and I don't
> have to build a new HV power unit :-)
>
> at the moment I use this new transformer in my old, small and heavily
> modified GLA-1000 with 4xPL519 (transformer outside the case on the floor,
> of course!)
> as the original transformer is not giving enough power for those tubes.
> not much left of the original GLA-1000, added 160m etc etc
>
> I power the tubes heating with stabilized 40V from a separate transformer
> as the tubes, which are made for serial heating, are that much different,
> they get voltages from 39-41V in serial and I wanted tto have 40V for
> each tube :-)
>
> cheers,
>
> cb
>
>
>
>
>
>
WoW some transformer! That one will do a full gallon and then some
without breaking a sweat! I hate to ask what it cost! Sounds
like a universal replacement for any tube linear.

6332. Re: Bringing Chippenham in Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 16:24:42 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135441482.314555.77900@g49g2000cwa.googlegroups.com>
Source record: 15065
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Frank Turner-Smith G3VKI wrote:
> on 23/12/2005 21:52 Me said the following:
> http://tinyurl.com/as56c
> I wonder what Company he's using for his sub-contracting in Portsmouth,
> and what tax arrangements have Bean made?

That was worth £2.00 !!!

If anybody would like a Micro$oft RTF format copy of the Company Report
and Accounts, please email me at mike@g4kfk.co.uk

But don't expect a reply tomorrow, as it's Xmas!

73
Mike G4KFK

6333. Re: MY BASE CB - VK4EGE basestation.jpg

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 16:28:18 UTC
From: "hugh.g.rekshun" <m1adu.m5adu@ntlworld.com>
Message-ID: <CGerf.54374$a15.6833@newsfe5-win.ntli.net>
Source record: 15067
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Very nice, an old but cracking set,
see you have a quality 'dave made' amp..one of the best so i've heard.

anymore shack pics/antennas ??

"GARETH EVANS" <VK4EGE@10-4goodbuddy.com> wrote in message
news:7fplq1lacej8p597fv27610193g3nfrdj2@4ax.com...
> _____________________________________
> Usenet Zone Free Binaries Usenet Server
> More than 140,000 groups
> Unlimited download
> http://www.usenetzone.com to open account

6334. Re: Bringing Chippenham in Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 16:28:42 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135441722.400430.258410@g44g2000cwa.googlegroups.com>
Source record: 15066
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

m...@g4kfk.co.uk wrote:
> If anybody would like a Micro$oft RTF format copy of the Company Report
> and Accounts, please email me at mike@g4kfk.co.uk

Correction - PDF format.

6335. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 16:41:56 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135442516.754788.189530@g43g2000cwa.googlegroups.com>
Source record: 15068
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

There's no reason to ask myself the same question.

My position here is that I'm making a stand for
decency and civilised behaviour against the
gratuitous and offensive onslaught of a few
CBers who really ought to know better.

If more stood up for decency, things would improve.
Who was it who quotes, "'For evil to triumph it is only
necessary for good men to do nothing'"?

Oohh! - it is someone by the name of , "Mike Clayton" -
anybody that you know?

I find it strange that you seem to have no dispute with
those who originate the most offensive of personal
insults and yet you criticise those who defend themselves
and stand up for decency.

Mike Clayton wrote:
> In message <1135409160.924250.216800@g47g2000cwa.googlegroups.co
> >Don't you realise how silly and ridiculous you make yourself
> >look, by indulging in what are essentially very infantile
> >abusive tirades in an international forum that is broadcast to
> >the whole world?
> >
>
> Perhaps you should ask yourself the same question?
> --
> Mike Clayton
> 'For evil to triumph it is only necessary for good men to do nothing'
> http://homepage.ntlworld.com/mike_clayton

6336. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 16:42:06 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135442526.888535.138080@g49g2000cwa.googlegroups.com>
Source record: 15069
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Me wrote:
> Turnover:0
*** CORRECT ***

> Profit:0
*** CORRECT ***

> Networth:0
*** WRONG! *** ACTUALLY £40.00 ON 31/3/04

Does this mean British taxpayers are paying for him to spam his tedious
drivel into these newsgroups?

73
Mike G4KFK

6337. Re: Bringing Chippenham into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 16:44:45 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135442685.305322.311960@g44g2000cwa.googlegroups.com>
Source record: 15070
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> My position here is that I'm making a stand for
> decency and civilised behaviour against the

And this from the numpty who changed the thread into "bringing Scouting into disrepute" then x-posted it into a load of scouting newsgroups!

6338. Re: Bringing Chippenham into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 16:44:51 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135442691.607807.5190@f14g2000cwb.googlegroups.com>
Source record: 15071
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Pierian Spring wrote:
> My position here is that I'm making a stand for
> decency and civilised behaviour against the

And this from the numpty who changed the thread into "bringing Scouting into disrepute" then x-posted it into a load of scouting newsgroups!

6339. Re: Halicrafters S-40B

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 16:48:46 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <BFD2BBEE.1F1B6%dbowey@comcast.net>
Source record: 15072
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair

On 12/24/05 6:57 AM, in article
bldrf.9283$3Z.3158@newsread1.news.atl.earthlink.net, "James F. Mayer"
<jfma@ix.netcom.com> wrote:

> Does any one know where I could obtain a copy of a manual and/or schematic
> for my S40B. It did work at one time but now it won't. There seems to be
> voltage on the antenna terminal and I don't think that is a good sign.
>
>
>

I suggest you use the BAMA site, but if you have a problem, email me if you
want me to email them to you. The schematic is in three sections.

There aren't any likely fault possibilities in the receiver that would cause
a voltage on the antenna terminal. What type of voltage do you see, how
much, and if it's DC what is the polarity?

Even if the capacitor (C33) on the grid of the RF Amp was shorted, you would
measure nothing, because the slight voltage would be well grounded through
the inductors.

Don

6340. The infantile and abusive public face of Wood & Douglas

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 16:49:32 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135442972.756328.21500@f14g2000cwb.googlegroups.com>
Source record: 15073
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

There is no mention of any scout troop in what you quote.

Indeed, that you associate your scout troop with the
phrases, "gangrenous degeneration" and "M3/CB Fools'
Licence" is very revealing - no one but you has made
that association.

Every part of the FAQ, where it criticises the M3/CB Fools'
Licensees is as the direct result of encountering them
and their ridiculous behaviour in this NG. Indeed, if you
are responsible for training such licensees, perhaps it
is from you that their anti-social tendencies arise?

Once again, you resort to rather silly and infantile forms
of abuse, "pathetic sociopath" and "bitter and twisted".

Shame on you, Mike Gathergood, you ought to
know better at your age, and your pubic face, which
is also the public face of Wood & Douglas, does
them no favours.

Grow up.

Stupid child.

mike@g4kfk.co.uk wrote:
> Pierian Spring wrote:
> > You are a LIAR.
> >
> > I have _NEVER belittled any "of the hard work and enthusiasm
> > shown by various members of" your "scout group"
>
> Really? Which pathetic sociopath wrote, and continues to spam various
> newsgroups with, this bitter and twisted little piece of prose then?
>
> "Remember - A sure sign of a CB Radio hobbyist is if he holds,
> or has ever held, a licence issued under the gangrenous
> degeneration that is the M3/CB Fools' Licence scheme! "
>
> It was you, wasn't it Gareth?
>
> 73
> Mike G4KFK

6341. Re: FAQ - revised version

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 16:52:33 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135443153.165781.14670@g44g2000cwa.googlegroups.com>
Source record: 15074
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Certainly seems to describe your own anti-social, infantile and
gratuitously abusive traits over the last few days.

You are to be congratulated for your candidness.

mike@g4kfk.co.uk wrote:
> mike@g4kfk.co.uk wrote:
> > Really? Which pathetic sociopath wrote, and continues to spam various
>
> Definition of a sociopath, for those who were wondering:
> Diagnostic criteria (DSM-IV-TR)
> The Diagnostic and Statistical Manual of Mental Disorders, a widely
> used manual for diagnosing mental and behavioral disorders (see also:
> DSM cautionary statement), defines antisocial personality disorder as a
> pervasive pattern of disregard for and violation of the rights of
> others occurring since age 15 years, as indicated by three (or more) of
> the following:
> - failure to conform to social norms with respect to lawful behaviors
> as indicated by repeatedly performing acts that are grounds for arrest
> - deceitfulness, as indicated by repeated lying, use of aliases, or
> conning others for personal profit or pleasure
> - impulsivity or failure to plan ahead
> - irritability and aggressiveness, as indicated by repeated physical
> fights or assaults
> reckless disregard for safety of self or others
> - consistent irresponsibility, as indicated by repeated failure to
> sustain steady work or honor financial obligations
> - lack of remorse, as indicated by being indifferent to or
> rationalizing having hurt, mistreated, or stolen from another
>
> 73
> Mike G4KFK

6342. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 16:53:47 UTC
From: novatech@eskimo.com
Message-ID: <dojuer$38q$1@eskinews.eskimo.com>
Source record: 15075
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Back when one of my tasks at Fluke was to interview college recruits, I was asked to describe my job as an Analog Design Engineer. My answer:

"To design precision instruments using cheap, junk parts."

A tip of the hat to Norm Strong...

Steve.
--
Steven D. Swift, novatech@eskimo.com, http://www.novatech-instr.com
NOVATECH INSTRUMENTS, INC. P.O. Box 55997
206.301.8986, fax 206.363.4367 Seattle, Washington 98155 USA

6343. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 16:54:45 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135443285.415806.221060@g47g2000cwa.googlegroups.com>
Source record: 15076
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

For as long as you are prepared to illustrate so graphically
the difference between a CBer, an M3/CB Fools' Licensee, a
CBer-Masquerading-As-A-Radio-Ham and a _REAL_ Radio
Ham with his gentlemanly traditions, I am prepared to
watch you bemusedly from the sidelines and to chastise
you for your ridiculous outbursts.

It is important that we as Radio Hams make a stand for
civilised behaviour and decency against the vile CBer,
no matter how he might have slipped into our midst.

Don't you realise how silly and ridiculous you make yourself
look, by indulging in what are essentially very infantile
abusive tirades in an international forum that is broadcast to
the whole world?

However, if you wish to be perceived as a Childish Broadcaster (CBer)
then just carry on as you are with your Childish Broadcasting (CB).

You, coming as you do from a background as a ship's radio
"officer", really ought to know better.
Indeed, it is difficult to see, in the light of your
well-demonstrated infantile disposition, how you could
ever have been the export sales manager for a well-
respected company such as Wood & Douglas.

Shame on you. You should know better. What on Earth would Alan
Wood G4EEE think of the bad publicity you are visiting on
his company?

Grow up, Mike Gathergood!

Stupid boy.

mike@g4kfk.co.uk wrote:
> Me wrote:
> > Turnover:0
> *** CORRECT ***
>
> > Profit:0
> *** CORRECT ***
>
> > Networth:0
> *** WRONG! *** ACTUALLY £40.00 ON 31/3/04
>
> Does this mean British taxpayers are paying for him to spam his tedious

> drivel into these newsgroups?
>
> 73
> Mike G4KFK

6344. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 18:20:32 UTC
From: Alan Holmes <alan.holmes@virgin.net>
Message-ID: <Qjgrf.12238$f7.1774@newsfe3-win.ntli.net>
Source record: 15077
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1135346113.085610.124590@g43g2000cwa.googlegroups.com...
> What is Ham Radio?
>
> Ham Radio is a technical pursuit for those who
> are interested in the science of radio wave
> propagation and who are also interested in the
> way that their radios function. It has a long-standing
> tradition of providing a source of engineers who
> are born naturals.
>

Keeping repeating this just makes you look a bit of a twit!

Should I put you in my killfile?

Alan G4CRW if it matters!

6345. Re: Amidon Cores??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 19:11:41 UTC
From: LenAnderson@ieee.org
Message-ID: <1135451501.342490.44410@g47g2000cwa.googlegroups.com>
Source record: 15078

Amidon used to resell powdered iron products from Micrometals
[www.micrometals.com]. They now resell, apparently,
many other vendors' products.

The same with Fair-Rite for ferrite products.

LenAnderson@ieee.org

Happy Christmas and Merry Holidays!

6346. Re: Halicrafters S-40B

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-24 23:37:14 UTC
From: "fuse19@aol.com" <fuse19@aol.com>
Message-ID: <1135467434.356400.90080@f14g2000cwb.googlegroups.com>
Source record: 15079
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair

their are caps from the ac line to ground maybe one is leaky and
putting the chassis to the hot side of the line reverse the plug and
see if the term. is hot what voltage dc or ac ?? del k9fcm
Don Bowey wrote:
> On 12/24/05 6:57 AM, in article
> bldrf.9283$3Z.3158@newsread1.news.atl.earthlink.net, "James F. Mayer"
> <jfma@ix.netcom.com> wrote:
>
> > Does any one know where I could obtain a copy of a manual and/or schematic
> > for my S40B. It did work at one time but now it won't. There seems to be
> > voltage on the antenna terminal and I don't think that is a good sign.
> >
> >
> >
>
> I suggest you use the BAMA site, but if you have a problem, email me if you
> want me to email them to you. The schematic is in three sections.
>
> There aren't any likely fault possibilities in the receiver that would cause
> a voltage on the antenna terminal. What type of voltage do you see, how
> much, and if it's DC what is the polarity?
>
> Even if the capacitor (C33) on the grid of the RF Amp was shorted, you would
> measure nothing, because the slight voltage would be well grounded through
> the inductors.
>
> Don

6347. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-25 01:56:09 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <Z_mrf.23550$zt1.17699@newsfe5-gui.ntli.net>
Source record: 15080
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

on 25/12/2005 00:38 Walter Raleigh said the following:
> On 23 Dec 2005 22:48:39 -0800, "Pierian Spring"
> <aiyr.r.bean@lycos.co.uk> blurted forth into cyberspace:
>>Someone who posits that the ability to walk on stilts
>>is somehow a competitive advantage to Radio Hammery
>>clearly has _NO_ idea what Radio Hammery is all about!
>
> Nay, Gareth. However, someone who posits that either receiving a brace
> of half rotten pheasant from his local victualler is akin to rolling
> ones own in an AR sense, or that, on observing the preoccupied
> appearance of Christmas shoppers on Chippenham High Street and
> concluding that they are all depressed at the lamentably low entry
> standards to said AR, has no idea what society is all about, a sad
> fact laid bare by your difficulty with conformity to said society, or
> progress within same.
>
> Even playing within your own doctrine, as one who preaches with
> impunity-what have you done for Amateur Radio lately?
> --
>
> 73s de Walter R.
Never mind 'lately', what's he _EVER_ done?
--
;-)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

6348. Re: Unusual functions of cheap parts

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-25 02:51:47 UTC
From: Winfield Hill <Winfield_member@newsguy.com>
Message-ID: <dol1g3015t8@drn.newsguy.com>
Source record: 15082
Cross-posted to: de.sci.electronics,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Michael A. Terrell wrote...
>
> Winfield Hill wrote:
>>
>> Michael A. Terrell wrote...
>>>
>>> How many do you need, and can you use ones pulled from PC boards?
>>> I may have some left that I pulled from damaged boards.
>>
>> One or two may be enough for proof-of-principle measurements.
>
> I'll see if I can find a couple for you.

OK, I'll trade you some 1500V damper diodes, with datasheets.
They should be interesting additions to your parts inventory.

--
Thanks,
- Win

6349. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-25 03:00:05 UTC
From: jonz <someone@somewhere.com.au>
Message-ID: <43ae0b81$1@dnews.tpgi.com.au>
Source record: 15081
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

```
"Nedlar" <Sam@techno.invalid> wrote in message
news:ljroq15i2bu13mhli2sn2vm462jhhq0fr5@4ax.com...
> On Fri, 23 Dec 2005 18:14:52 GMT, "tox" <tox@toxtox.co.com> wrote:
>
> >
> >"Nedlar" <Sam@techno.invalid> wrote in message
> >news:4ecoq19n2v3acrhu9tk1hf965qvomh8u7s@4ax.com...
> >>>
> >>
> >> Would that be the same Morse test that you could NEVER pass?
> >
> >If you continue to practice, I figure in another 20 years, you may reach
5
> >WPM.
> >
> >HTH
> >tox
>
> In 20 years I'll have snuffed it, Baldy.
> Why don't you tell us why you were so lazy that you never attempted a
> Morse test? Not interested in HF eh? Bwahahahahahaha
> Bald tosser.

bald tossing ????? is this some sort of pommie sport??........j
```

6350. EPSON LCD Module

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-25 06:00:50 UTC
From: Sven Arne Astrup <sastrup@online.no>
Message-ID: <j4ydnR8JbO8GqDPeRVnzvA@telenor.com>
Source record: 15083

Merry X-mas to your all!

I have an EPSON ECM-A0404 LCD module on my table, and need the pinout or a
datasheet for the module.
I know its 20x2 characters, thats all the info I have.

Could anyone help with pinout/datasheet please?

73 de Sven LA6KJ

--

All incoming and outgoing E-mail
scanned by NAV 2005.

6351. Re: EPSON LCD Module

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-25 10:03:55 UTC
From: budgie <me@privacy.net>
Message-ID: <0drsq1dhcsq2doqbiavr8frti7mchcn73f@4ax.com>
Source record: 15084

On Sun, 25 Dec 2005 06:00:50 -0000, "Sven Arne Astrup" <sastrup@online.no>
wrote:

>Merry X-mas to your all!
>
>I have an EPSON ECM-A0404 LCD module on my table, and need the pinout or a
>datasheet for the module.
>I know its 20x2 characters, thats all the info I have.
>
>Could anyone help with pinout/datasheet please?

If it is 16-pin, I'd be inclined to suggest it has the standard pinout that is
common among HD44780 type 16*2 displays. This would be especially so in the
event that there is pin numbering on the board, and the sequence is
16-15-1-...-14. Pins 1-14 would be the standard config, 15 & 16 for backlight.

Just my experience with many types, although Seiko-Epson haven't always aligned
with the rest of the world on pinouts.

6352. Re: The infantile and abusive public face of Wood & Douglas

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-25 10:26:02 UTC
From: DieSea <DieSea.NoSpamPlease@ntlworldd.ccom>
Message-ID: <43ae73b8$0$23286$db0fefd9@news.zen.co.uk>
Source record: 15085
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

>
> ROTFL!
>
> 73 de Wlat
>
> --

Pot calling Kettle me thinks

Happy Christmas All

DieSea

6353. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-25 11:42:37 UTC
From: Mike Clayton <news2005d.10.mikelclayton@ntlworld.com>
Message-ID: <XHJnjtJtWorDFwsH@ntlworld.com>
Source record: 15086
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

In message <1135442516.754788.189530@g43g2000cwa.googlegroups.com>,
Pierian Spring <radio.ham@lycos.co.uk> writes
>There's no reason to ask myself the same question.
>
>My position here is that I'm making a stand for
>decency and civilised behaviour against the
>gratuitous and offensive onslaught of a few
>CBers who really ought to know better.
>
>If more stood up for decency, things would improve.
>Who was it who quotes, "'For evil to triumph it is only
>necessary for good men to do nothing'"?

I hardly think that the changes to the way that newcomers enter the
hobby could be described as evil :-)
>
>Oohh! - it is someone by the name of , "Mike Clayton" -
>anybody that you know?
>

Anyway, in the spirit of the season let me wish you and yours a very
Happy Christmas and a peaceful New Year
--
Mike Clayton
'For evil to triumph it is only necessary for good men to do nothing'
http://homepage.ntlworld.com/mike_clayton

6354. Re: The infantile and abusive public face of Wood & Douglas

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-25 12:30:50 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135513850.402128.302930@g47g2000cwa.googlegroups.com>
Source record: 15087
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

Must have been a divinely-inspired (on the half-chance that
she does exist) typo!

A merry Solstice to you and yours!

Walt Davidson wrote:
> On 24 Dec 2005 08:49:32 -0800, "Pierian Spring"
> <radio.ham@lycos.co.uk> wrote:
> >Shame on you, Mike Gathergood, you ought to
> >know better at your age, and your pubic face ...
> ROTFL!

6355. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-25 12:34:40 UTC
From: Pierian Spring <radio.ham@lycos.co.uk>
Message-ID: <1135514080.192884.48790@o13g2000cwo.googlegroups.com>
Source record: 15088
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

The only "hobby" around is CB Radio.

Ham Radio is a technical pursuit.

Newcomers to Ham Radio are those who
are naturally interested in technicalia and
who drive themselves forward. Such people
will have no interest in a licence issued
under the gangrenous degeneration that is
the M3/CB Fools' Licence scheme.

To have introduced such a scheme whose
sole purpose is to maintain the profit
levels of a CB (Sorry, "seedy"!) book
publisher was evil indeed.

Mike Clayton wrote:
> In message <1135442516.754788.189530@g43g2000cwa.googlegroups.com>,
> Pierian Spring <radio.ham@lycos.co.uk> writes
> >My position here is that I'm making a stand for
> >decency and civilised behaviour against the
> >gratuitous and offensive onslaught of a few
> >CBers who really ought to know better.
> >If more stood up for decency, things would improve.
> >Who was it who quotes, "'For evil to triumph it is only
> >necessary for good men to do nothing'"?
>
> I hardly think that the changes to the way that newcomers enter the
> hobby could be described as evil :-)

6356. Re: AM to FM?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-25 18:41:07 UTC
From: Ken Scharf <wa2mzeNOTTHIS@bellsouth.net>
Message-ID: <FGBrf.46374$k76.26458@bignews6.bellsouth.net>
Source record: 15089

Bill wrote:
> John Miles wrote:
>
>> In article <1134948617.340619.13790@g49g2000cwa.googlegroups.com>,
>> packerfan6000@yahoo.com says...
>>
>>> Hello, I have a 1969 Porsche that has an original, Blaupunkt, radio.
>>> The AM works, but the FM does not. I was trying to find information on
>>> a "FM to AM converter". If anyone has a schematic, or any advice at
>>> all, I would GREATLY appreciate it. Thanks in advance!
>>>
>>>
>>
>>
>> I'd call these guys up (http://www.radiomanrepair.com/) and see if
>> they'll provide a quote for repair of the OEM radio. You'll have a
>> neat, operating vintage car radio, and you might even get the cash
>> back when you sell the car.
>>
>> It isn't trivial to convert FM broadcast signals for reception in the
>> AM band. You pretty much need a back-to-back FM receiver and an AM
>> transmitter to do that, and the RF work associated with homebrewing a
>> converter would (honestly) place the task out of reach for anyone who
>> needs to ask how to do it. :-)
>>
>> -- jm
>
>
> They used to sell FM to AM converters for car radios. They 'worked' ok.
> Watch ebay for Audiovox FM Converter. Here's one example.
> http://cgi.ebay.com/ebaymotors/ws/eBayISAPI.dll?ViewItem&item=4597467612
>
Hey if you are interested I have the EXACT same unit that the above link
points to (except mine was OEM'ed by Lafayette radio and has their name
on it). Is it worth anything near what the audiovox unit sold for?

6357. Re: EPSON LCD Module

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-25 22:03:21 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <pan.2005.12.25.22.03.20.670068@oceanfree.net>
Source record: 15090

On Sun, 25 Dec 2005 06:00:50 +0000, Sven Arne Astrup wrote:

> Merry X-mas to your all!
>
> I have an EPSON ECM-A0404 LCD module on my table, and need the pinout or a
> datasheet for the module.
> I know its 20x2 characters, thats all the info I have.

I hope you mean 2x20 characters :-)

> Could anyone help with pinout/datasheet please?
>
> 73 de Sven LA6KJ

If it is based on the Hitachi HD44780 chip, it is probably
pin compatible with similar displays from Hitachi, Seiko,
Densitron and others. I have seen a few LCD modules that
don't use the HD44780 but are still 100% compatible with
it. Check the numbers on the IC's. Send us a link to a
photograph of the module. If all else fails, try using
the pinout for the Hitachi displays and hope for the best!
Displays without backlighting usually have 14 pins. Displays
with LED backlighting usually have 16 pins.

From a Seiko 2x20 display data-sheet:
1 VSS GND
2 VDD Power supply voltage +5 V
3 VLC Liquid crystal driving voltage
4 RS H: Data register; L: Instruction register
5 R/W H: Read; L: Write
6 E Enable
7 DB0 Data Bus Line
8 DB1 Data Bus Line
9 DB2 Data Bus Line
10 DB3 Data Bus Line
11 DB4 Data Bus Line
12 DB5 Data Bus Line
13 DB6 Data Bus Line
14 DB7 Data Bus Line
15 A Anode
16 K Cathode

Don't let the smoke out of it.

73, Ed. EI9GQ.

--
Linux
Remove 'X' to reply by e-mail.

6358. Harry E. Landsberg, Jr., CIA Maltese Falcon: Kennedy assassination, IRAN/CONTRA, UFO's

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-26 03:43:22 UTC
From: Laura <lhann10243@earthlink.net>
Message-ID: <1135568602.102362.228660@g14g2000cwa.googlegroups.com>
Source record: 15091

Harry E. Landsberg, Jr., CIA Maltese Falcon: Kennedy assassination,
IRAN/CONTRA, UFO's

My late father, Harry E. Landsberg, Jr. is apparently one of the 35 CIA
Officers memorialized on the north wall of the Original Headquarters
Building lobby whose "names ... must remain secret, even in death."

Please see:

http://www.angelfire.com/journal2/landsbergphotos2/maltese_falcon_search_terms_maltese_falcon_cia_dot_gov.jpg

taking note of the search terms "maltese+falcon."

Then:

http://www.angelfire.com/journal2/landsbergphotos2/maltese_falcon_cia_dot_gov_memorial_wall.jpg

and

http://www.angelfire.com/journal2/landsbergphotos2/maltese_falcon_cia_dot_gov_memorial_wall_2.jpg

---

I was discredited as being mentally ill in 1981 and again in 1985. As
a result I was motivated to research family matters.

In 2004 I learned that my husband, Richard Hanning, Jr., was a
Marine/covert operator assigned to me. We met in 1985 and I knew I was
a target when I met him. I just didn't know I was his target.

We are divorced. My life has been in danger and I have been revealing
information about my family and their associates as a result.

Please see:

"Harry E. Landsberg, Jr. -- resemblance to man in photo with Specter"
http://home.earthlink.net/~lhann10243/index.html

and

"IRAN/CONTRA: Fleming O. Landsberg, Fleming Landsberg, U.S. Ordinance
[sic] Inc."
http://home.earthlink.net/~lhann10243/id85.html

and

"Landsbergs and Maddens -- Mirror" (UFO's)
http://www.angelfire.com/journal2/landsbergphotos/Landsbergs_and_Maddens_mirror.html

---

I am a survivor of satanic ritual abuse and mind control.

Please see:

"The Love Game"
http://home.earthlink.net/~sammark4/id2.html

and

"Scars and other signs of mind control"
http://home.earthlink.net/~sammark4/id5.html

My legal mother, Donna Jean Volkmer Landsberg, worked as secretary to
the Undersecretary of the Navy in the 1940's, likely James Forrestal.

He died under mysterious circumstances. Please see:

"The Death of James Forrestal" by Richard M. Dolan
http://keyholepublishing.com/Death%20of%20James%20Forrestal.htm

---

I had a vision of Donna as a three-headed bird (black heads.)

I was searching for photos of Vanessa Redgrave and found this photo
which was similar to the bird in my vision:

http://www.angelfire.com/journal2/landsbergphotos2/donnas_bird_head_more_like_this.jpg

Then searching on "Maltese Falcon" I came across "The Virtual Tour of
the CIA:"

http://images.google.com/imgres?imgurl=http://www.cia.gov/cia/information/
tour/83stars_lg.jpg&imgrefurl=http://www.cia.gov/cia/information/tour/
stars.html&h=465&w=600&sz=184&tbnid=fQ8WESE-YHkpWM:&tbnh=103&tbnw
=133&hl=en&start=130&prev=/images%3Fq%3D%2522maltese%2Bfalcon
%2522%26start%3D120%26svnum%3D10%26hl%3Den%26lr%3D%26sa%3DN

or

http://www.cia.gov/cia/information/tour/stars.html

There is no mention of the words "Maltese Falcon" on the page.

There was a Divine Intervention in late 2003 and I have been protected
as I have been enduring harassment in the astral plane.

Please see:

"Mystical Journey"
http://home.earthlink.net/~sammark4/id157.html

"Mystical Journey -- more"
http://home.earthlink.net/~silent_no_more99/id41.html

"Mystical Journey -- more ii"
http://home.earthlink.net/~sammark4lhann/id17.html

"Mystical Journey -- more iii"
http://home.earthlink.net/~twainablelhann/id17.html

and

"To My Friend"
http://home.earthlink.net/~sammark4/id214.html

"To My Friend -- more"
http://home.earthlink.net/~sammark4lhann/id33.html

"To My Friend -- more ii"
http://home.earthlink.net/~twainablelhann/id12.html

"To My Friend -- more iii"
http://home.earthlink.net/~twainable2lhann/id7.html

Laura Landsberg
305 Linden St., Apt. B
Fond du Lac, WI 54935
(920) 922-2599

6359. No link attitude!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-26 04:30:26 UTC
From: n9zle <NoSpam@nospam.com>
Message-ID: <ClKrf.37463$dO2.281@newssvr29.news.prodigy.net>
Source record: 15092

No link attitude!

http://www.n9zle.com/forum/

What is it with this no-link to other site attitude?
Years ago when the internet was in its infancy just about any site would add your site as a link from theirs. In return you would do the same. But now it has come to NO-LINKS. Not even in the forums. I have had a website located on tripod for about 9 years over those nine years I had a link to qrz dot com That site received over a million hits. And many users went from that site to qrz and on-to Icomamerica dot com. I have always supported Icom. They have never given a link on their site to mine. I have always supported qrz. But of course he(AA7BQ) never put a link on his site to mine. Well you may say that "I never asked". And that is true. But recently I have noticed he has been deleting my posts. ALL OF THEM. He never contacted me telling me why. AA7BQ just deleted them. I build CIV cables and sell a few of them every week to amateur operators who want them. When I posted one on his site. I found he deleted the post soon after it was placed there.

My beliefs are.
1. QRZ AKA AA7BQ no longer has the amateur radio attitude.
2. AA7BQ has gone fully commercial but calls his site "The Ham Radio Super Site"
3. AA7BQ does not have your best interest in mind.

I can also prove what I am writing here.
For one if he claims he is nothing but a commercial site then why does he ask for donations?
If he is not a commercial site than why will he not allow me to post my CIV cables on his site?

That takes care of number 2
Now for number 1 and 3. If some one knows the truth about something but keeps it from you he is a liar.
No mater how you put it, he is a liar. On the QRZ site Fred is there to help you renew your license. Or so he leads you to believe so. He charges you for it. Mr. Lloyd has never revealed it to any amateurs that you can renew your license or do an address change at the fcc.gov web site for FREE. Yes TOTAL FREE at the FCC web site.
The forms at the FCC web site or no harder to fill out than his.

His CD. He charges 24.95 plus tax and shipping. On that CD is data he obtained from the FCC and got it for FREE, he sales it to you. Also he has software, created by programmers like MYSELF. And MODS that have been made available from the manufactures and other HAMS like ME! I have been contributing to Amateur Radio community for greater than 10 years, and have

received very little for software I created. Never complained when it was copied. I have performed and created several of the MODS for various transceivers. Never asked a penny for it. I never commercialized HAM RADIO. And NEVER took money from some one for something they could get FREE else where.

I am sure many of you would like to ask me "what I am going to do about it?" Here is my answer.

I have created an open forum on my web site http://www.n9zle.com/forum/

There you can post a link to your own site even if it is a commercial site. You can post any ham radio equipment you have for sell on the site.

You can do a callsign lookup at my site from the FCC database, not that stupid qrz thing.
I will soon put together an open source database that I will sell for the price of the CD plus the true cost of shipping. About two bucks total. Once you install the database on your system, you will be able to download updates for FREE. I will make drivers available to programmers to access the database in several different languages and operating systems. I will also attempt to make the database available on the internet for FREE to download.

I only ask for a little help from other HAMS like myself. I need a few elmers that are willing to moderate some of the forums. It is easy and you will find it fun. If you have any suggestions on new forums or sections please logon to my site and make a post.

73s N9ZLE

6360. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-26 04:36:24 UTC
From: jonz <someone@somewhere.com.au>
Message-ID: <43af7394$1@dnews.tpgi.com.au>
Source record: 15093
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Pierian Spring" <aiyr.r.bean@lycos.co.uk> wrote in message
news:1135409160.924250.216800@g47g2000cwa.googlegroups.com...
> For as long as you are prepared to illustrate so graphically
> the difference between a CBer, an M3/CB Fools' Licensee, a
> CBer-Masquerading-As-A-Radio-Ham and a _REAL_ Radio
> Ham with his gentlemanly traditions, I am prepared to
> watch you bemusedly from the sidelines and to chastise
> you for your ridiculous outbursts.
>
> It is important that we as Radio Hams make a stand for
> civilised behaviour and decency against the vile CBer,
> no matter how he might have slipped into our midst.
>
> Don't you realise how silly and ridiculous you make yourself
> look, by indulging in what are essentially very infantile
> abusive tirades in an international forum that is broadcast to
> the whole world?
well, an *international* forum, broadcasting to the *whole
world* indeed, a stunning concept!!!.....j
>
> However, if you wish to be perceived as a Childish Broadcaster (CBer)
> then just carry on as you are with your Childish Broadcasting (CB).
>
> You, coming as you do from a background as a ship's radio
> "officer", really ought to know better.
> Indeed, it is difficult to see, in the light of your
> well-demonstrated infantile disposition, how you could
> ever have been the export sales manager for a well-
> respected company such as Wood & Douglas.
>
> Shame on you. You should know better. What on Earth would Alan
> Wood G4EEE think of the bad publicity you are visiting on
> his company?
>
> Grow up, Mike Gathergood!
>
> Stupid boy.
>
> mike@g4kfk.co.uk wrote:
>
> > Before the (G4) Sad Dim Wit spots that grammatical error,
>

6361. Re: FAQ - Repeated because the issues are too important to let the Mongolian Hordes of CBers shout them down.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-26 10:55:47 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135594547.622389.316040@o13g2000cwo.googlegroups.com>
Source record: 15094
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

jonz wrote:
> bald tossing ????? is this some sort of pommie sport??........j

I think he must've meant "dwarf tossing"

See http://archives.cnn.com/2002/WORLD/europe/09/27/dwarf.throwing/

Merry Christmas!
Mike G4KFK

6362. Re: HV transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-26 11:18:53 UTC
From: christine <habla@hotmail.com>
Message-ID: <7mQrf.1194$E42.402@reader1.news.jippii.net>
Source record: 15095

lol!

actually it wasn't very expensive. it's custom made by
a transformer manufacturer and the price was some
340.-E which will add up to a little more in US-dollars

i thought first on making it with a ferrite core to save some
space and weight, but they said there is an insulation problem
with high voltages and the cost would be much higher...

cheers,

cb

"Ken Scharf"

> christine wrote:
>> primary 230V 22A
>> secondary
>> two windings, each:
>> 800-1000-1100-1200-1300-1400V at 2A
>> weight 80 pounds (36kg)

> WoW some transformer! That one will do a full gallon and then some
> without breaking a sweat! I hate to ask what it cost! Sounds
> like a universal replacement for any tube linear.

6363. Re: Bringing Wood & Douglas into Disrepute

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-26 11:56:54 UTC
From: jonz <someone@somewhere.com.au>
Message-ID: <43afdad2$1@dnews.tpgi.com.au>
Source record: 15096
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Pierian Spring" <radio.ham@lycos.co.uk> wrote in message
news:1135419846.147619.172090@g47g2000cwa.googlegroups.com...
> If you do not wish for there to be a right of reply, then you
> would be better served if you do not contribute at all.
>
> I did not say that you do not live up to my "ideal radio amateur";
> in fact, I do not even use the term.
>
> To the contrary, from what you have posted recently, you do
> seem to be a _REAL_ Radio Ham in (most of) the best
> traditions thereto.
>
> A Merry (Belated) Solstice to you, also.
> the word is christmas mr backdown.....hehe.....j
> G4ZWI wrote:
> > If I am in error, sir, I will stand corrected. I believe, however, most
> > people following this thread would conclude your post 89 was directed
> > to me, as I did.
> > I am sorry if I do not live up to your ideal radio amateur, and wish
> > you once again,
> > Merry Christmas.
> > (Please do not respond to this post, as I have no intention of
> > following this thread further)
> > Fred Cooper G4ZWI
>

6364. Re: Harry E. Landsberg, Jr., CIA Maltese Falcon: Kennedy assassination, IRAN/CONTRA, UFO's

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-26 17:28:12 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrndr0a1c.t1u.bit-bucket@shell.config.com>
Source record: 15097

On 25 Dec 2005 19:43:22 -0800, Laura rattled on...

...
> I was discredited as being mentally ill in 1981 and again in 1985.

Looks like 2006 will not go your way either. :-)

6365. 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 02:02:15 UTC
From: "James F. Mayer" <jfma@ix.netcom.com>
Message-ID: <Hg1sf.10532$nm.866@newsread2.news.atl.earthlink.net>
Source record: 14998
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

I need to generate 6v DC and 90v DC from a 12v DC automotive electrical system to power an RT-70A/GRC surplus military radio. I need about 250 mA at +6 volts and about 75 mA at +90 volts. I was thinking about using the guts from an old battery back up but it would be a bit of a kluge. Are there any 90 volt regulators in the 78xx series? How do I get the voltage up to where I can get something that I can get the 90 volts from. Getting the 6 volts doesn't seem to be a problem. A 7806 off the battery should work for that unless any of you can see a problem doing that. Maybe the common common would be a problem. Right now I'm running it off of an HP6299A and an HP6236B with commons jumpered. I'd like to be able to go portable with it.

6366. Antenna gain vs. isotrophic (teorethical) one

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 02:09:34 UTC
From: Spajky <Spajky@##volja.net>
Message-ID: <td81r1lhbi1f0b5p9bba6pfcr64iqnbjja@4ax.com>
Source record: 14999

Hi guys,
hope that someone will clarify me certain doubts!

The problem: I have 2 different sources (some book, something DL-ed
from net) stating that approx.:

-isotrophic antenna (teorethical all around ball space HF radiation of
a single round point) has only 2,15dB less gain than half wave di-pole
(=2nd source)

- the book instead says that 1/4 lambda antenna has -3dB worse gain
that same dipole as before, [5/8 one just -1dB] & so my thought is,
that 1/4 antenna must be better than isotrophic one, since even if it
radiates 360° horizontally (if vertical polarized-mounted); vertically
it does not more than 120° both sides (all around).

I believe that on second source there is a mistake & was ment
that isotropic is 2 dB worse than 1/4 antenna & not 1/2 dipole.

so, it would be so IMHO : 0dB isotropic one
+2dBi 1/4 one
+5dBi 1/2 dipole (3dB more than 1/4 one)
Am I write or wrong?
--
Seasons Greetings & Regards , SPAJKY ®
mail addr. @ my site @ http://www.spajky.vze.com
more than 3y - "Tualatin OC-ed / BX-Slot1 / inaudible setup!"

6367. N9ZLE.COM forum a success!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 02:23:15 UTC
From: n9zle <NoSpam@nospam.com>
Message-ID: <nA1sf.40733$q%.8522@newssvr12.news.prodigy.com>
Source record: 15000

N9ZLE.COM forum a success!

http://www.n9zle.com/forum

After one day up there is now 8 registered users, and 38 posts. We have had
36 guests come by and take a look at the postings.
This forum is slightly different than most internet forums because of the
following.
We are holding to the Amateur Radio ideals and principles.
We have a section for anonymous posts.
You may post a link to your personal or commercial site.
All opinions are appreciated and accepted as long as they are not slanderous
or unclean.
There is a callsign lookup at the top of the forum on every page.
We are dedicated to helping our fellow HAM in what ever his/her needs are.
Please stop by and make a suggestion on any additional forums you believe
the BBS may need,

73s and 88s N9ZLE

6368. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 02:57:30 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <u42sf.37685$dO2.4744@newssvr29.news.prodigy.net>
Source record: 15001
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello James,

> I need to generate 6v DC and 90v DC from a 12v DC automotive electrical
> system to power an RT-70A/GRC surplus military radio. I need about 250 mA
> at +6 volts and about 75 mA at +90 volts. I was thinking about using the
> guts from an old battery back up but it would be a bit of a kluge. Are
> there any 90 volt regulators in the 78xx series? How do I get the voltage
> up to where I can get something that I can get the 90 volts from. ...

You can build a step-up or flyback with the LM3478. Tough to solder
though, it's a TSSOP package. Don't know what current you need but just
pick a suitable FET.

For 6V I'd use a buck regulator instead of wasting 50% of the energy in
a series regulator.

Regards, Joerg

http://www.analogconsultants.com

6369. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 04:14:14 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <7of1r11tlh7h39dnb6a79lr5b6ppsp0dv0@4ax.com>
Source record: 15003
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

ORIGINAL MESSAGE:

On Tue, 27 Dec 2005 02:02:15 GMT, "James F. Mayer"
<jfma@ix.netcom.com> wrote:

> I need to generate 6v DC and 90v DC from a 12v DC automotive electrical
>system to power an RT-70A/GRC surplus military radio. I need about 250 mA
>at +6 volts and about 75 mA at +90 volts. I was thinking about using the
>guts from an old battery back up but it would be a bit of a kluge. Are
>there any 90 volt regulators in the 78xx series? How do I get the voltage
>up to where I can get something that I can get the 90 volts from. Getting
>the 6 volts doesn't seem to be a problem. A 7806 off the battery should
>work for that unless any of you can see a problem doing that. Maybe the
>common common would be a problem. Right now I'm running it off of an HP6299A
>and an HP6236B with commons jumpered. I'd like to be able to go portable
>with it.
>

~~~~~~

I'd use one of those small inexpensive inverters which put out 120vac
and then use a conventional transformer/rectifier system. You can pick
up the inverter at any truck stop.

73, Bill W6WRT
~~~~~~

6370. Re: Antenna gain vs. isotrophic (teorethical) one

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 04:15:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11r1fveeaps4ib8@corp.supernews.com>
Source record: 15002

dB is a ratio of two gains or other quantities, so gain expressed in dB is meaningless unless both antennas being compared are specified. dBi is a common way of expressing the gain of an antenna, and its meaning is universally accepted and unambiguous -- it's the gain in dB relative to that of an isotropic antenna.

Let's begin by assuming that all antennas are perfectly efficient. That is, all power applied to them is radiated and none turned to heat. This assumption is a valid one for most antennas of a reasonable size in terms of wavelength. For other antennas, the assumption is useful because it separates loss, which can be modified by construction, materials, and other factors, from more fundamental phenomena which can't.

Given that assumption, the first important point is that no antenna can have a gain lower than 0 dBi (the gain of an isotropic antenna) in its most favored direction. If it did have a gain lower than 0 dBi in some direction, it would have to have a gain higher than 0 dBi in some other, because the only way gain can be increased in a perfectly efficient antenna is by robbing radiation in one direction in order to increase it in another.

The next important point is that a thin half wave dipole in free space has a gain of about 2.15 dBi. If you make the dipole shorter, the gain decreases slightly due to a change in the current distribution. When the dipole gets vanishingly short, the gain has dropped to 1.76 dBi. In practice, the loss increases dramatically when a dipole is made very short in terms of wavelength, so this gain can't be achieved in real life. However, the loss depends on construction, materials, and other factors which can be controlled to minimize loss when needed. The gain of a lossless quarter wave dipole in free space is about 1.84 dBi. The loss of a real quarter wave dipole can usually be made negligible, although attention also has to be paid to matching network components to keep the system loss low.

Over a perfect ground plane of infinite extent, the gains of antennas typically increase by about 3 dB compared to free space. In the case of a free space dipole vs. a quarter wavelength antenna over a perfect ground plane, the difference is exactly 3 dB. This is because they have exactly the same radiation pattern (except of course, that the half pattern of the vertical below the ground plane is missing), but the same amount of power is being concentrated in half the volume. Consequently, the gain of a 1/4 wave vertical over a perfect and infinite ground plane is about 5.15 dBi. This also can't be achieved in practice because there isn't any such thing as a perfect ground plane of infinite extent. You can come close if working over salt water, but nowhere near if the

ground plane is dirt.

Roy Lewallen, W7EL

Spajky wrote:
> Hi guys,
> hope that someone will clarify me certain doubts!
>
> The problem: I have 2 different sources (some book, something DL-ed
> from net) stating that approx.:
>
> -isotrophic antenna (teorethical all around ball space HF radiation of
> a single round point) has only 2,15dB less gain than half wave di-pole
> (=2nd source)
>
> - the book instead says that 1/4 lambda antenna has -3dB worse gain
> that same dipole as before, [5/8 one just -1dB] & so my thought is,
> that 1/4 antenna must be better than isotrophic one, since even if it
> radiates 360ï¿½ horizontally (if vertical polarized-mounted); vertically
> it does not more than 120ï¿½ both sides (all around).
>
> I believe that on second source there is a mistake & was ment
> that isotropic is 2 dB worse than 1/4 antenna & not 1/2 dipole.
>
> so, it would be so IMHO : 0dB isotropic one
> +2dBi 1/4 one
> +5dBi 1/2 dipole (3dB more than 1/4 one)
> Am I write or wrong?
> --
> Seasons Greetings & Regards , SPAJKY ï¿½
> mail addr. @ my site @ http://www.spajky.vze.com
> more than 3y - "Tualatin OC-ed / BX-Slot1 / inaudible setup!"

6371. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 05:11:35 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <n_qdnUA8o7yFUC3eRVnyjA@pipex.net>
Source record: 15004
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

> I'd use one of those small inexpensive inverters which put out 120vac
> and then use a conventional transformer/rectifier system. You can pick
> up the inverter at any truck stop.

==========

Those 'inexpensive inverters' might need some attention in respect of
the 'hash' they create , possibly causing interference in the receiver.

Frank

6372. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 05:13:22 UTC
From: Fred Bloggs <nospam@nospam.com>
Message-ID: <43B0CD61.60301@nospam.com>
Source record: 15005
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

> I need to generate 6v DC and 90v DC from a 12v DC automotive electrical
> system [to power an RT-70A/GRC surplus military radio]. I need about 250 mA
> at +6 volts and about 75 mA at +90 volts. [I was thinking about using the
> guts from an old battery back up but it would be a bit of a kluge.] Are
> there any 90 volt regulators in the 78xx series? How do I get the voltage
> up to where I can get something that I can get the 90 volts from. Getting
> the 6 volts doesn't seem to be a problem. A 7806 off the battery should
> work for that unless any of you can see a problem doing that. [Maybe the
> common common would be a problem. Right now I'm running it off of an HP6299A
> and an HP6236B with commons jumpered. I'd like to be able to go portable
> with it.]
>
>

90V @70ma is only 6.3W and a step-up of no more than 90/12=7.5. This
would be something like a 24VAC center-tapped transformer turned
backwards with a multivibrator drive of the secondary at 50-60Hz and the
usual primary is rectified and capacitor filtered to produce the 90V.
Since the reflected current is only about 1/2A, you can then feedback
the rectified HV to drive an error amp that regulates the center tap
down to 9V or so.

6373. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 05:58:18 UTC
From: john_c@tpg.com.au
Message-ID: <43b0c4ec.3072303@free.teranews.com>
Source record: 15006
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Tue, 27 Dec 2005 02:02:15 GMT, "James F. Mayer"
<jfma@ix.netcom.com> wrote:

> I need to generate 6v DC and 90v DC from a 12v DC automotive electrical
>system to power an RT-70A/GRC surplus military radio. I need about 250 mA
>at +6 volts and about 75 mA at +90 volts. I was thinking about using the
>guts from an old battery back up but it would be a bit of a kluge. Are
>there any 90 volt regulators in the 78xx series? How do I get the voltage
>up to where I can get something that I can get the 90 volts from. Getting
>the 6 volts doesn't seem to be a problem. A 7806 off the battery should
>work for that unless any of you can see a problem doing that. Maybe the
>common common would be a problem. Right now I'm running it off of an HP6299A
>and an HP6236B with commons jumpered. I'd like to be able to go portable
>with it.
>
>

Hello James,
Speaking as a cheapskate ham/hobbyist, how
about salvaging parts from a computer power supply.
Find a dud power supply for free at computer
shops/dumpsters/rubbish tips/roadside etc.
Salvage the TL494 integrated circuit that can
be found in many computer power supplies.

You could build a 90 Volt power supply as
Ray Robinson has down here
http://www.shlrc.mq.edu.au/~robinson/Information/Inverter_4W.html

Here is a link to the TL494 Data sheet
http://focus.ti.com/lit/ds/symlink/tl494.pdf

This link tells you how to use the TL494 IC
http://focus.ti.com/lit/an/slva001d/slva001d.pdf

Use another TL494 in a buck converter for your
12 Volts to 6Volts power supply module.
Look at the bottom of this page for more info.
http://focus.ti.com/docs/prod/folders/print/tl494.html
Your 7806 is probably a better idea, saves a lot
of messing about.
Or
you could use the guts of a mobile phone
car charger. The charger that fits into the
cigarette lighter in a motor car.

You can find them in pawn shops for a dollar
or two. Dud ones even cheaper. Usually
just a broken connection from rough handling.
http://www.onsemi.com/pub/Collateral/MC34063A-D.PDF
Look at page 7 Figure 10 Step down converter.

In the few car phone chargers that I opened,
the IC was a MC34063 and the schematic was
very similar to that shown in figure 10
Just change R1 or R2 slightly so that you
get 6 Volts out.
You may have to check/change the value of
resistor Rsc to be closer to that shown in figure 10
You might even get away with not changing the
inductor. Try it and see if the original inductor
works well enough for you.

A ton of reading, bits and pieces for free
or dirt cheap.
What a great hobby, this is James, eh!

Regards,
John Crighton
Sydney

6374. OT need HX-50 schematic please.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 07:31:43 UTC
From: Paul P <paulREMOVE@REMOVEppinyotREMOVE.com>
Message-ID: <z56sf.1344$D43.203@trndny06>
Source record: 15007

I am restoring a Hammarlund HX-50 for a fellow ham. The BAMA schematic is...quite bad. I am having trouble tracing and verifying the components of the unit. The rest of the manual is rather good in DjVu format. The owner has a reproduction manual on order and we hope it has a better schematic.

In the mean time I would like to get started and order caps, resistors, etc. Could a kind soul please email me a copy of the schematic? Also my parts list resistor section starts with R165. There seems to be a missing BAMA page in between pages 43 and 44.

Also, is there a better forum for such a request?

Thanks to all,
Paul
www.ppinyot.com

BTW - if you would like a stand alone (not plug in) DjVu application go to: http://www.tuberadio.it/utils.htm It is slick. I have combined many jpgs and gifs into a single file. The resolution is surprisingly good for the overall compressed file size.

6375. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 08:25:53 UTC
From: john_c@tpg.com.au
Message-ID: <43b0e5c3.11480811@free.teranews.com>
Source record: 15008
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Tue, 27 Dec 2005 02:02:15 GMT, "James F. Mayer"
<jfma@ix.netcom.com> wrote:

> I need to generate 6v DC and 90v DC from a 12v DC automotive electrical
>system to power an RT-70A/GRC surplus military radio. I need about 250 mA
>at +6 volts and about 75 mA at +90 volts. I was thinking about using the
>guts from an old battery back up but it would be a bit of a kluge. Are
>there any 90 volt regulators in the 78xx series? How do I get the voltage
>up to where I can get something that I can get the 90 volts from. Getting
>the 6 volts doesn't seem to be a problem. A 7806 off the battery should
>work for that unless any of you can see a problem doing that. Maybe the
>common common would be a problem. Right now I'm running it off of an HP6299A
>and an HP6236B with commons jumpered. I'd like to be able to go portable
>with it.
>
>
Hello again James,
I just came across this site while looking
for something else.

http://web.telia.com/~u85920178/use/tubepsu.htm
Look at the the 6V AC from 12 V DC. Nifty!

Here is another
http://www.i4at.org/lib2/inverter.htm
You want DC out so you will have to fit a bridge rectifier
and filter capacitors to the output of the transformer
just like Harry Lythall's circuit above.

Regards,
John Crighton
Sydney

6376. Re: Antenna gain vs. isotrophic (teorethical) one

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 10:42:41 UTC
From: Spajky <Spajky@##volja.net>
Message-ID: <8962r1931akpn3quae86g0el86n643l6sp@4ax.com>
Source record: 15009

On Mon, 26 Dec 2005 20:15:41 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>hat a thin half wave dipole in free space
>has a gain of about 2.15 dBi. If you make the dipole shorter, the gain
>decreases slightly ......
>...has dropped to 1.76 dBi. ...
> The gain of a lossless quarter wave dipole in free space is about 1.84 dBi....

>Over a perfect ground plane of infinite extent, the gains of antennas
>typically increase by about 3 dB compared to free space. In the case of
>a free space dipole vs. a quarter wavelength antenna over a perfect
>ground plane, the difference is exactly 3 dB. This is because they have
>exactly the same radiation pattern (except of course, that the half
>pattern of the vertical below the ground plane is missing), but the same
>amount of power is being concentrated in half the volume. Consequently,
>the gain of a 1/4 wave vertical over a perfect and infinite ground plane
>is about 5.15 dBi. This also can't be achieved in practice because there
>isn't any such thing as a perfect ground plane of infinite extent.

Roy, thanks for detailed explanation :-) I got now some stuff
clarified even more than enough! :-)

(btw, the old book I mentioned was written 20y ago from a "local"
radioamateur [prof.& dr.] one, I use it much. & there I saw the
comparision chart of different type of basic antennas; so must be
kind of a mistake there like it looks, the reference of 0dB was set as
halfwave dipole there...)

Roy I have also another 2 quick questions for short answers:

- if I connect to a 50ohm TX out a cable of 75ohms (w/o "perfect"
Z transform add_on there), I can aspect approx. 1: 1,5 SWR [50:75]
& because of Z miss-match I will loose no more than 0,5dB (that same
my book states for that SWR in some diagram); yes I know that is in
"ideal" conditions & TX is only 50mW ... could you confirm me
briefly that?

- next : twin-lead/symetric cable of only half wavelenght (or 3x,5x
etc. half wavelenghts, shorted by a velocity factor sure) mirrors the
input Z to its end; does a coaksial cable do the same at the same
lenght or for that is a different simplified formula?

TIA!

--
Seasons Greetings & Regards , SPAJKY ®

mail addr. @ my site @ http://www.spajky.vze.com
more than 3y - "Tualatin OC-ed / BX-Slot1 / inaudible setup!"

6377. Re: Antenna gain vs. isotrophic (teorethical) one

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 11:45:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11r2ab2sa825hf2@corp.supernews.com>
Source record: 15010

Spajky wrote:
>
> - if I connect to a 50ohm TX out a cable of 75ohms (w/o "perfect"
> Z transform add_on there), I can aspect approx. 1: 1,5 SWR [50:75]
> & because of Z miss-match I will loose no more than 0,5dB (that same
> my book states for that SWR in some diagram); yes I know that is in
> "ideal" conditions & TX is only 50mW ... could you confirm me
> briefly that?

No, you would lose 0.18 dB if your source is something like a signal generator with fixed 50 ohm output impedance. If you match the impedance so the source sees 50 ohms, you'll regain the 0.18 dB.

>
> - next : twin-lead/symetric cable of only half wavelenght (or 3x,5x
> etc. half wavelenghts, shorted by a velocity factor sure) mirrors the
> input Z to its end; does a coaksial cable do the same at the same
> lenght or for that is a different simplified formula?

All transmission lines transform impedances the same, regardless of construction. However, the impedance seen at the input of an integral number of half wavelengths of real transmission line won't equal the load impedance, because of line loss. The error will be small if the load impedance is about the same as the line Z0. But if they're quite different, even a small amount of loss will change the input impedance a significant amount.

Roy Lewallen, W7EL

6378. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 14:32:32 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <13k2r19jp9pqt937em8b21hh855bmfebr3@4ax.com>
Source record: 15011
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

ORIGINAL MESSAGE:

On Mon, 26 Dec 2005 21:11:35 -0800, Highland Ham
<abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:

>Those 'inexpensive inverters' might need some attention in respect of
>the 'hash' they create , possibly causing interference in the receiver.
>
>Frank

~~~~~~

True for any kind of inverter.

73, Bill W6WRT
~~~~~~

6379. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 14:38:49 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <6fk2r11b5k6kt71t6f3r5m2p7p92e99c26@4ax.com>
Source record: 15013
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

ORIGINAL MESSAGE:

On Tue, 27 Dec 2005 05:58:18 GMT, john_c@tpg.com.au (John Crighton)
wrote:

>
>Hello James,
>Speaking as a cheapskate ham/hobbyist, how
>about salvaging parts from a computer power supply.
>Find a dud power supply for free at computer
>shops/dumpsters/rubbish tips/roadside etc.
>Salvage the TL494 integrated circuit that can
>be found in many computer power supplies.

~~~~~~

Excellent info, John. Thanks!!

73, Bill W6WRT
~~~~~~

6380. Re: Antenna gain vs. isotrophic (teorethical) one

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 14:52:46 UTC
From: Spajky <Spajky@##volja.net>
Message-ID: <53k2r1pdln39mri8dj7a550ifaqm1rc2uk@4ax.com>
Source record: 15012

On Tue, 27 Dec 2005 03:45:37 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>No, you would lose 0.18 dB if your source is something like a signal
>generator with fixed 50 ohm output impedance. If you match the impedance
>so the source sees 50 ohms, you'll regain the 0.18 dB.

nice not to have much mismatch Z loss :-) (RX+TX sum = 2x 0.18
dB=0,36dB signal loss) on LAN wireless 2,45GHz PCI card using
directly connected 75ohm quality cheaper & flexible Sat [d=6mm] cable
for only few meters to outside 3D_corner_reflector (75ohm) 2,45GHz
15dBi homemade antenna I am starting to build now ...

>All transmission lines transform impedances the same, regardless of
>construction. ...

Bye Telecom & Dial-Up expences & its speeds [have nice signal
strenght from wireless ISPs 100mW/12dBi antenna 1km away on clear
sight for a month already .. :-)

Thanks for clarifications Ron &
Merry Hollidays+Happy new year! :-)
--
Seasons Greetings & Regards , SPAJKY ®
mail addr. @ my site @ http://www.spajky.vze.com
more than 3y - "Tualatin OC-ed / BX-Slot1 / inaudible setup!"

6381. Re: Antenna gain vs. isotrophic (teorethical) one

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 15:14:23 UTC
From: "Saandy , 4Z5KS" <hardware2@ift-int.com>
Message-ID: <1135696463.832106.44160@g14g2000cwa.googlegroups.com>
Source record: 15014

....to put things straight:
isotropic antenna has 0dB gain by definition and is called 0dBi (dB
over isotropic)
quarter wave vertical over ground plane has 0.13 dBi gain.
a dipole IN FREE SPACE!!!! has a gain of 2.15 dBi.
a 5 eights wavelength vertical has a gain of 3 dBi.
this is holy writ!
so now you have them set up in correct order.
just add the lower gain from the higher one to get the difference.

Spajky wrote:
> Hi guys,
> hope that someone will clarify me certain doubts!
>
> The problem: I have 2 different sources (some book, something DL-ed
> from net) stating that approx.:
>
> -isotrophic antenna (teorethical all around ball space HF radiation of
> a single round point) has only 2,15dB less gain than half wave di-pole
> (=2nd source)
>
> - the book instead says that 1/4 lambda antenna has -3dB worse gain
> that same dipole as before, [5/8 one just -1dB] & so my thought is,
> that 1/4 antenna must be better than isotrophic one, since even if it
> radiates 360° horizontally (if vertical polarized-mounted); vertically
> it does not more than 120° both sides (all around).
>
> I believe that on second source there is a mistake & was ment
> that isotropic is 2 dB worse than 1/4 antenna & not 1/2 dipole.
>
> so, it would be so IMHO : 0dB isotropic one
> +2dBi 1/4 one
> +5dBi 1/2 dipole (3dB more than 1/4 one)
> Am I write or wrong?
> --
> Seasons Greetings & Regards , SPAJKY ®
> mail addr. @ my site @ http://www.spajky.vze.com
> more than 3y - "Tualatin OC-ed / BX-Slot1 / inaudible setup!"

6382. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 15:48:57 UTC
From: Allison-nospam@nouce.bellatlantic.net
Message-ID: <bho2r1lo8msnqc5chrkiomlfgc0dekgtg5@4ax.com>
Source record: 15015

On Tue, 27 Dec 2005 02:02:15 GMT, "James F. Mayer"
<jfma@ix.netcom.com> wrote:

> I need to generate 6v DC and 90v DC from a 12v DC automotive electrical
>system to power an RT-70A/GRC surplus military radio. I need about 250 mA
>at +6 volts and about 75 mA at +90 volts. I was thinking about using the
>guts from an old battery back up but it would be a bit of a kluge. Are
>there any 90 volt regulators in the 78xx series? How do I get the voltage
>up to where I can get something that I can get the 90 volts from. Getting
>the 6 volts doesn't seem to be a problem. A 7806 off the battery should
>work for that unless any of you can see a problem doing that. Maybe the
>common common would be a problem. Right now I'm running it off of an HP6299A
>and an HP6236B with commons jumpered. I'd like to be able to go portable
>with it.
>

Google "GLOWBUGS" as there are a number of small tube based sites
that have dealt with this problem.

Allison
Spam/adverts severly not wanted.

6383. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 16:16:42 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <c929c$43b168e9$42513f5f$29883@DIALUPUSA.NET>
Source record: 15016
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Do it the way the original radio did it -- dynamotor. You can still find
them in the back room at a lot of military surplus electronics junk stores.

Jim

6384. Re: The infantile and abusive public face of Wood & Douglas

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 16:20:57 UTC
From: Alan Holmes <alan.holmes@virgin.net>
Message-ID: <JRdsf.15698$f7.5635@newsfe3-win.ntli.net>
Source record: 15017
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"DieSea" <DieSea.NoSpamPlease@ntlworldd.ccom> wrote in message
news:43ae73b8$0$23286$db0fefd9@news.zen.co.uk...
>
>>
>> ROTFL!
>>
>> 73 de Wlat
>>
>> --
>
> Pot calling Kettle me thinks

Somehow I think you have missed the point, try reading the article again.

I thought it was funny as well.

Why is it crossposted to so many groups?

Alan

>
>
>
> Happy Christmas All
>
>
>
> DieSea
>
>

6385. Re: A Merry Solstice To All Our Readers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 16:33:14 UTC
From: Alan Holmes <alan.holmes@virgin.net>
Message-ID: <e1esf.50941$7p5.3027@newsfe4-win.ntli.net>
Source record: 15018
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Galen, W8LNA" <w8lna@arrl.net> wrote in message
news:MvSqf.193$qg.182@news02.roc.ny...
> Pierian Spring wrote:
>> Now that the onslaught of rather silly and infantile
>> tirades from the closet CBers...
>
> Sorry for the delay, I was over on the LinRadio console actually doing ham
> radio (it's sunrise here) instead of provoking what could be described as
> the 21st century version of Inspiration for the Sex Pistols.
>
> Where were we? Oh yes,
>
> If you were a real ham radio op you'd be on the radio instead of playing
> Lord of the Gnats.

Wasn't one posting enough for you?

Alan

>
> Twit.
> -W8LNA

6386. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 18:59:56 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <Magsf.39337$7h7.30198@newssvr21.news.prodigy.com>
Source record: 15019
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Jim,

> Do it the way the original radio did it -- dynamotor. You can still find
> them in the back room at a lot of military surplus electronics junk stores.
>

But then be prepared for some major restoration. The bearings of a lot
of these are nearly shot, mostly from sitting in an attic for decades.
It's like old pond pumps. They run fine for a few weeks and then the
racket increases, some weird noises appear, things get hot and they
seize up.

I restored an old Hammond organ. These generate the tones in a similar
manner. A motor (plus a start motor) and over a hundred pickup coils on
the long secondary shaft. 20 hours of hard work got it going again but
we have accepted the fact that some of the bearings are pretty much over
the hill. So it needs 2-3 starts to coax it to run without that mild
screeching in the background. Getting spare parts from a company that
went out of business 30 years ago just isn't going to happen.

Regards, Joerg

http://www.analogconsultants.com

6387. Re: Antenna gain vs. isotrophic (teorethical) one

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 19:02:26 UTC
From: Spajky <Spajky@##volja.net>
Message-ID: <9833r1ll6os644jtvhktj10pomtr9m1dvo@4ax.com>
Source record: 15020

On 27 Dec 2005 07:14:23 -0800, "Saandy , 4Z5KS"
<hardware2@ift-int.com> wrote:

>quarter wave vertical over ground plane has 0.13 dBi gain.
>a dipole IN FREE SPACE!!!! has a gain of 2.15 dBi.
>a 5 eights wavelength vertical has a gain of 3 dBi.
>so now you have them set up in correct order.
>just add the lower gain from the higher one to get the difference.

also thanks to you & Merry Hollidays+Happy new year! :-)
--
Seasons Greetings & Regards , SPAJKY ®
mail addr. @ my site @ http://www.spajky.vze.com
more than 3y - "Tualatin OC-ed / BX-Slot1 / inaudible setup!"

6388. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 19:22:13 UTC
From: David Harmon <source@netcom.com>
Message-ID: <43db1d39.145554171@news.west.earthlink.net>
Source record: 15021
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Tue, 27 Dec 2005 05:58:18 GMT in sci.electronics.design,
john_c@tpg.com.au (John Crighton) wrote,
>This link tells you how to use the TL494 IC
>http://focus.ti.com/lit/an/slva001d/slva001d.pdf

So why is the guy from TI showing NTE transistors for the power
switching? Nothing in the TIP line good enough?

6389. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 21:03:02 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.12.27.21.07.20.973550@example.net>
Source record: 15022
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Tue, 27 Dec 2005 18:59:56 +0000, Joerg wrote:
> Hello Jim,
>
>> Do it the way the original radio did it -- dynamotor. You can still find
>> them in the back room at a lot of military surplus electronics junk stores.
>
> But then be prepared for some major restoration. The bearings of a lot
> of these are nearly shot, mostly from sitting in an attic for decades.
> It's like old pond pumps. They run fine for a few weeks and then the
> racket increases, some weird noises appear, things get hot and they
> seize up.
>
> I restored an old Hammond organ. These generate the tones in a similar
> manner. A motor (plus a start motor) and over a hundred pickup coils on
> the long secondary shaft. 20 hours of hard work got it going again but
> we have accepted the fact that some of the bearings are pretty much over
> the hill. So it needs 2-3 starts to coax it to run without that mild
> screeching in the background. Getting spare parts from a company that
> went out of business 30 years ago just isn't going to happen.

So, put the cam thingie on some sort of spindle, with some kind of
depth gauge thingie, (maybe a slide pot and a stick), and map the
disks, and just make the same waveform from ROM?

Good Luck!
Rich

6390. Re: A Merry Solstice To All Our Readers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 21:14:40 UTC
From: Uncle Bobbolink <weleasewoger33@gmail.com>
Message-ID: <20a51$43b1be11$d1cc7923$32224@snip.allthenewsgroups.com>
Source record: 15024
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb,rec.radio.shortwave,uk.radio.amateur

The folllowing is from the URL: http://www.fuckchristmas.org/

This is a F-N MASTERPIECE. ENJOY you mother-fucking assholes. (grin)

Oh man, fuck Christmas.

Seriously – are you kidding me with this “There’s a war on Christmas” bullshit? FOX News wasn’t raking in enough cash already from all the Christmas commercials for Kill ‘em All Barbie and Girls Gone Wild Brand Toddler Gear? They had to start publishing books about some bogus attack on Christianity? And who did they pick to lead this particular charge?

John fucking Gibson. This guy has wiener written all over him.

Bill O’Reilly gets all the credit as the biggest nutcase in FOXville, but Gibson really deserves his own special wing in the happy house. This motherfucker’s embedded assignment reads “Up Karl Rove’s ass.”

What makes him such a dick? I mean, besides making a fortune by screaming hysterically about how oppressed Christians are by the other twenty percent? How about advocating bombing countries that don’t vote the way we want in their own elections? Way to encourage democracy, fuckhead. And maybe he was kidding when he wished, on air, that the French had gotten the 2012 Olympics instead of the Brits so the terrorists would “blow up Paris,” but it might have been just a touch over the top to call for it again on the day of the London train bombings. Classy move, asshole.

And really? That’s just scratching the fucking surface. Anyone remember who was responsible for the bombing of the Federal building in Oklahoma City? John does: Iraq. And speaking of Iraq, Gibson thinks Rove deserves a fucking medal for outing that CIA agent. And, like any good reporter, he wanted to burn the Florida ballots after his buddy Bush got “elected” rather than, I don’t know, count them? “Is this a case where knowing the facts actually would be worse than not knowing?” That right there is why sometimes it’s useful for journalists to go to, what do you call that fucking place? Oh yeah, journalism school.

And now he's all worked up about Christmas being stolen. What is this, the fucking Fairytale Network? It's a national fucking holiday and we're spending gobs of our hard-earned tax dollars on wreaths and lights for your special Santa day. But these bastards are all "But they call them Holiday trees!" Here's a clue: no, they fucking don't. Ok, maybe in a couple places, like on FOXNews.com and at the White House, but if Christmas is under attack, I'm Kris fucking Kringle.

And guess who's stealing Christmas, according to Gibson. Go on — guess. "A cabal of secularists, so-called humanists trial lawyers, cultural relativists, and liberal, guilt-wracked Christians — not just Jewish people." (Emphasis mine. Pure, unadulterated anti-semitism, his.) A cabal? Are you fucking kidding me? Could we try to be a little more fucking original with our Jew-hating?

Speaking of Jew-hating, Pat Buchanan has joined the hype-a-thon of the supposed Attack on Christmas, too. Or, as he put it, "What we're witnessing here are hate crimes against Christianity." Sorry? We're not so hot on paying for an inflatable camel for your goddamn nativity scene and suddenly we're Slobodan fucking Milosevic? Fuck you. Get some goddamn perspective, you little prick. When they start hunting Christians in the streets, it'll be time to start yelling "Hate crime." And no, it won't count when they start chasing you with the torches. That'll be called "The Most Wonderful Time of the Year."

And Bill O'Reilly, Gibson's cellmate in the silly shack, is doing his part to save Christmas, too. He's been going after New York's Mayor Bloomberg (that Commie) because he says the Christmas Tree at Rockefeller Center has been renamed a "Holiday Tree," and "No Christian Christmas symbols are allowed in the public schools." The only problem? Neither of those things is even remotely fucking true.

It takes some super-sized balls for O'Reilly to get all lathered up about sinners and their fictional anti-Christian crusade. Every fucking person on the planet has hard and fast evidence that Bill is a world-class pervert, but still he feels totally justified lecturing the rest of us on our moral inferiority.

How fucked up is Bill O'Reilly? Pretty fucked up. Everyone got so crazyfaced about him confusing a sponge and a Middle Eastern snackcake (pretty fucking funny, mind you), that they missed the scary bit: what he meant to say. Old Bill wanted to get all funky on his intern like this: (you'll excuse my foul language, I'm quoting an award-winning newscaster here) "I'd take the other hand with the [loofah] thing and

put it on your pussy."

loofah (lū'fə) noun. A natural exfoliating sponge.

exfoliate (ĕks-fō'lē-āt') verb. To remove
(a layer of bark or skin, for example) in flakes
or scales; peel.

That's right. Bill O'Reilly, fount of morals, is super
familiar with the female anatomy. So much so, that
he knows how good it feels to have one's pussy
exfoliated. We're talking h – o – t, Hot.
That's exactly who I'm going to for my life lessons.

Sorry, where were we? Oh yeah, fuck Christmas.

Can we back up just a couple steps here? At what
point did a basic understanding of the separation
of church and state become a fucking war on religion?
And how did we get to the point where you can call
an organization set up to defend our civil liberties
"Terrorists" on national television and no one fires
your ass? Enough. Fuck all of you lying little shitheads
who wish the world was out to get you so you could
play the poor oppressed victims. Wake up assholes
— you're the cowboys, not the fucking Indians.

"But we want to display our Christmas tree on city property!"
You can, go right ahead. "They're stopping us from
praying in school!" They're not, so fuck off. "We're
not allowed to say 'Merry Christmas' anymore!" Are you
fucking kidding me? Knock yourself out. Say it at work,
scream it in your high school lunch room, hell, tattoo it
on your fucking g-ddammed slooped forehead for all we care.
Guess who's gonna be there defending your right to do
every one of those things? The fucking ACLU. One of
these days you bastards are going to drive those fuckers
out of business, and then you'll see some actual attacks
on your religious liberties. I thought conservatives
were supposed to be all proud and independent?
When did they turn into a bunch of fucking crybabies?

Let's back up even fucking further, shall we?
Can anyone tell me how old Christmas is? Anyone?
Two thousand years, give or take, right? Gee, who's
been reading their No Child Left Behind History Textbooks?
Try fucking four thousand years. Huh. Twice as fucking
long as your little baby king has been around. How
could that possibly be, unless. . . waitaminute. . .

Christmas isn't fucking Christian. Ok, now we're talking.

That’s right, that Yuletide cheer you’re spreading? What exactly do you think Yule is? It's the fucking Pagan celebration of solstice. And those “Christmas” traditions? They’re not just *like* Pagan rituals, they fucking *are* Pagan rituals. Way before your Jesus got all magical with the bread and fishes, the Romans were celebrating the birth of Mithra on . . . guess? Go on – guess. December fucking twenty fifth. What a weird coincidence, eh shithead..? Practically the whole thing is ripped off from the fucking Druids and the Romans. Twelve days? Check. Exchanging gifts? Check. Mistletoe? Check. And you’d better fucking believe that those decorated trees that Gibson and Co. are so bent out of shape over are as Pagan as the Rune and Crystal Shack at Pentagramfest 2005. You might as well be building miniature fucking Stonehenges in your den or rec room alongside the bar.

And don’t you read your own goddamn Bibles? Jesus was born when? In the middle of winter? Lot of Shepherds out watching their flocks around that time of year in Bethlehem? No, because they’d be freezing their fucking asses off. Tell you what – y’all go figure out which one of the different Bible stories about the birth of Baby Jesus® you want to believe, and then we’ll argue about whether it fucking happened like that or not.

Christians just stole a bunch of traditions from other cultures, slapped them together, stuck a fucking tinfoil star on top and called it the Most Important Holiday of the Year. Modern American Christmas makes Michael Jackson look positively organic.

But you boys at FOX still freak out every year about how everyone's out to get your special trees. This is really the most important thing you have to talk about? Whether Target says Happy Holidays or Merry Christmas? Here’s a brainstorm: there’s a fucking war on. Our soldiers are out there dying in an Islamic shithole Country while you guys do your 14th live feed of the day from WalMart to show us what good little consumers we are. What Would Jesus Do? He’d jump over that newsdesk and kick your ass for that shit. Are you sure you want to hang your journalism credentials on a story about what some guy calls a tree? They should break one of the branches off and shove it up his arse raw and with the splinters still intact.

Well we’ve fucking had it. You want to play bullshit games and scream about how God’s fucking judgment is gonna come raining down on us if we don't start watching our vocabulary? Go right the fuck ahead. But let me clue you in on something: fire and brimstone ain’t no deterrent for us. We’re not going to hell, assholes, we’re fucking in hell. We live with you.

And fuck Easter too, you fertility-rite-celebrating,
whiny, self-righteous, don't-know-the- history-
of-your-own-religion assholes.

Fuck off.

:)

"Alan Holmes" <alan.holmes@virgin.net> wrote in message
news:e1esf.50941$7p5.3027@newsfe4-win.ntli.net...
>
> "Galen, W8LNA" <w8lna@arrl.net> wrote in message
> news:MvSqf.193$qg.182@news02.roc.ny...
> > Pierian Spring wrote:
> >> Now that the onslaught of rather silly and infantile
> >> tirades from the closet CBers...
> >
> > Sorry for the delay, I was over on the LinRadio console actually doing
ham
> > radio (it's sunrise here) instead of provoking what could be described
as
> > the 21st century version of Inspiration for the Sex Pistols.
> >
> > Where were we? Oh yes,
> >
> > If you were a real ham radio op you'd be on the radio instead of
playing
> > Lord of the Gnats.
>
> Wasn't one posting enough for you?
>
> Alan
>
> >
> > Twit.
> > -W8LNA
>
>

6391. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 21:27:31 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <7lisf.6077$oW.2140@newssvr11.news.prodigy.com>
Source record: 15023
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Rich,

>>I restored an old Hammond organ. These generate the tones in a similar
>>manner. A motor (plus a start motor) and over a hundred pickup coils on
>>the long secondary shaft. 20 hours of hard work got it going again but
>>we have accepted the fact that some of the bearings are pretty much over
>>the hill. So it needs 2-3 starts to coax it to run without that mild
>>screeching in the background. Getting spare parts from a company that
>>went out of business 30 years ago just isn't going to happen.
>
> So, put the cam thingie on some sort of spindle, with some kind of
> depth gauge thingie, (maybe a slide pot and a stick), and map the
> disks, and just make the same waveform from ROM?
>

That has been tried many times. Several rather expensive electronic organs have come out claiming to emulate a Hammond. So far the real enthusiasts do anything to get their hands on the real thing, knowing that there will come a day when the last one croaks. IIRC it was Paul Shaffer (the guy who makes the music at david Letterman's show) who spent the equivalent of a luxury car to have one restored.

Regards, Joerg

http://www.analogconsultants.com

6392. Too f'ing looooong....

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 22:51:05 UTC
From: Scott in Baltimore <sDcOoNtTtS_PuAnMiMtE_69@yahoo.com>
Message-ID: <3uCdnbdFA6vFWCzeRVn-hw@comcast.com>
Source record: 15025
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb,rec.radio.shortwave,uk.radio.amateur

[No readable article body recovered]

6393. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 23:02:42 UTC
From: "James F. Mayer" <jfma@ix.netcom.com>
Message-ID: <mKjsf.10823$nm.1134@newsread2.news.atl.earthlink.net>
Source record: 15026
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"David Harmon" <source@netcom.com> wrote in message
news:43db1d39.145554171@news.west.earthlink.net...
> On Tue, 27 Dec 2005 05:58:18 GMT in sci.electronics.design,
> john_c@tpg.com.au (John Crighton) wrote,
>>This link tells you how to use the TL494 IC
>>http://focus.ti.com/lit/an/slva001d/slva001d.pdf
>
> So why is the guy from TI showing NTE transistors for the power
> switching? Nothing in the TIP line good enough?
>
>

Probably good enough for his measly 32 volts. I need to modify that
circuit to work on outputs of 90 volts and 6 volts.

6394. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 23:19:39 UTC
From: "Rich Grise, but drunk" <yahright@example.net>
Message-ID: <pan.2005.12.27.23.23.50.707924@example.net>
Source record: 15027
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Tue, 27 Dec 2005 21:27:31 +0000, Joerg wrote:

> Hello Rich,
>
>>>I restored an old Hammond organ. These generate the tones in a similar
>>>manner. A motor (plus a start motor) and over a hundred pickup coils on
>>>the long secondary shaft. 20 hours of hard work got it going again but
>>>we have accepted the fact that some of the bearings are pretty much over
>>>the hill. So it needs 2-3 starts to coax it to run without that mild
>>>screeching in the background. Getting spare parts from a company that
>>>went out of business 30 years ago just isn't going to happen.
>>
>> So, put the cam thingie on some sort of spindle, with some kind of
>> depth gauge thingie, (maybe a slide pot and a stick), and map the
>> disks, and just make the same waveform from ROM?
>>
>
> That has been tried many times. Several rather expensive electronic
> organs have come out claiming to emulate a Hammond. So far the real
> enthusiasts do anything to get their hands on the real thing, knowing
> that there will come a day when the last one croaks. IIRC it was Paul
> Shaffer (the guy who makes the music at david Letterman's show) who
> spent the equivalent of a luxury car to have one restored.
>

Well, tastes vary, but really! Who wants a music box that makes it
sound like you're at a skating rink? ;-P

cheers!
Rich

6395. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-27 23:53:50 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <iuksf.37427$BZ5.28769@newssvr13.news.prodigy.com>
Source record: 15028
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Rich,
>
> Well, tastes vary, but really! Who wants a music box that makes it
> sound like you're at a skating rink? ;-P
>

Ok, I am not much of an expert on instruments or music in general. But a Hammond organ can fill a living room with a sound that, with the eyes closed, you'd think you are sitting in a cathedral. And lots of rock bands wouldn't use anything else. That is why a lot of Hammonds have been "sawed in halves" so they can be transported to the next gig. You could even buy split versions built into professional transport cases.

Regards, Joerg

http://www.analogconsultants.com

6396. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-28 01:31:31 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43B1EAEB.A80723C4@earthlink.net>
Source record: 15029
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Joerg wrote:
>
> Hello Rich,
> >
> > Well, tastes vary, but really! Who wants a music box that makes it
> > sound like you're at a skating rink? ;-P
> >
>
> Ok, I am not much of an expert on instruments or music in general. But a
> Hammond organ can fill a living room with a sound that, with the eyes
> closed, you'd think you are sitting in a cathedral. And lots of rock
> bands wouldn't use anything else. That is why a lot of Hammonds have
> been "sawed in halves" so they can be transported to the next gig. You
> could even buy split versions built into professional transport cases.
>
> Regards, Joerg
>
> http://www.analogconsultants.com

They have a Hammond B3 at my church, with the Leslie speaker. There
is another model Hammond in storage that needs a lot of work. Someone
had it on their screened in porch and the finish is ruined, but it still
plays.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

6397. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-28 01:34:30 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43B1EB9E.613886E0@earthlink.net>
Source record: 15030
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"Rich Grise, but drunk" wrote:
>
> Well, tastes vary, but really! Who wants a music box that makes it
> sound like you're at a skating rink? ;-P
>
> cheers!
> Rich

People like the old Hammond organs like the B3 because the can't go
out of tune. The mechanical tone generator makes sure of that. They
only sound like a skating rink in, get this, A SKATING RINK!

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

6398. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-28 02:14:50 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <uymsf.38509$BZ5.19612@newssvr13.news.prodigy.com>
Source record: 15031
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Michael,

> They have a Hammond B3 at my church, with the Leslie speaker. There
> is another model Hammond in storage that needs a lot of work. Someone
> had it on their screened in porch and the finish is ruined, but it still
> plays.
>

Just make sure that the oiling intervals are religiously kept. If the other one still plays be grateful for that. If it's the same model or nearly the same keep it. Even if the finish is beyond repair some day you might be really thankful to be able to scavenge its tone generator once the TG on the other Hammond goes.

A bad finish is often easy to fix compared to taking the whole machinery apart. Ours has a superb finish condition but it had been run dry for more than a decade before it was given to us. So the TG is quite worn :-(

Actually it was so bad that when I was done it gulped almost two cans of Hammond oil.

Some words of caution: The rectifier tube of the amp in the bottom is located pretty close to the back and it gets freaking hot. I would take care that the organ is never placed against a curtain or other flammable material and that nobody stores any stuff behind it. The power cord on ours almost crumbled in my hands and when attemting to swap it I discovered that this instrument did not have a single fuse. So I made a nice box with fuse and IEC connector.

Regards, Joerg

http://www.analogconsultants.com

6399. Re: A Merry Solstice To All Our Readers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-28 02:15:23 UTC
From: DrDeath <drdeath555usb@nospam.yahoo.com>
Message-ID: <11r3t9s73hmdsbc@corp.supernews.com>
Source record: 15032
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb,rec.radio.shortwave,uk.radio.amateur

"Uncle Bobbolink" <weleasewoger33@gmail.com> wrote in message
news:20a51$43b1be11$d1cc7923$32224@snip.allthenewsgroups.com...
> The folllowing is from the URL: http://www.fuckchristmas.org/
>
snipped of stupidity

My kids school no longer has x-mas plays. They are not allowed to pray in school. In her religion class, they do not study any form of Christianity. Bill O'Reilly was cleared of the sex allegations,and if you would have kept up with that bit of the news, you would know that Bill O'Reilly's lowers WANTED them to release the alleged tapes because there were none. I could go on, but it would be a waste of bandwidth and your going to believe what you want no matter what I say.

6400. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-28 02:18:15 UTC
From: "Rich Grise, but drunk" <yahright@example.net>
Message-ID: <pan.2005.12.28.02.22.07.193871@example.net>
Source record: 15033
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Wed, 28 Dec 2005 01:34:30 +0000, Michael A. Terrell wrote:
> "Rich Grise, but drunk" wrote:
>>
>> Well, tastes vary, but really! Who wants a music box that makes it
>> sound like you're at a skating rink? ;-P
>
> People like the old Hammond organs like the B3 because the can't go
> out of tune. The mechanical tone generator makes sure of that. They
> only sound like a skating rink in, get this, A SKATING RINK!

Well, being the insufferabley pedantic researcher that I am, I came
up with a page:
http://en.wikipedia.org/wiki/Hammond_organ

that about a third of the way down, says:
"... Accurate imitation of the Hammond sound with simple electronic
circuitry was difficult, because the subtly-changing phase relationships
between tonewheels could not be easily replicated...."

OK, fair enough. :-)

I guess a piano is even harder - they don't even reproduce well from a
live recording! :-)

Cheers!
Rich

6401. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-28 02:42:58 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <SYmsf.38731$BZ5.37366@newssvr13.news.prodigy.com>
Source record: 15034
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Rich,

> that about a third of the way down, says:
> "... Accurate imitation of the Hammond sound with simple electronic
> circuitry was difficult, because the subtly-changing phase relationships
> between tonewheels could not be easily replicated...."
>
> OK, fair enough. :-)
>

Even with complicated electronics it wasn't. IIRC it was Suzuki-Hammond
which came out with the XK2 and then the XK3. Those are pretty elaborate
synthesizer organs. But according to the experts it just ain't the same.

Regards, Joerg

http://www.analogconsultants.com

6402. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-28 07:20:02 UTC
From: w_tom <w_tom1@hotmail.com>
Message-ID: <43B23CA2.813C2E0E@hotmail.com>
Source record: 15035
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Buy a DC-DC converter that includes other protection features (ie overvoltage and overcurrent protection) and outputs known parameters (ie ripple voltage). I doubt you will find a single DC-DC converter for both voltages. But a small converter for each voltage should work. Many sources including this one that just arrived on my desk - www.astrodyne.com .

BTW, power from automotive systems should also worry about load dump. Technically load dump can be a transient as much as 270 volts on a 12 volt system. In reality, such events may only be 50 volts or less. Transients that would not damage other automotive electronics already designed for this rare and so destructive event.

That is a problem with some regulators such as 78xx series. Maximum voltage is typically not sufficient for automotive purposes - would require additional protection.

"James F. Mayer" wrote:
> Probably good enough for his measly 32 volts. I need to
> modify that circuit to work on outputs of 90 volts and 6 volts.

6403. APRSPoint holiday special

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-28 08:44:47 UTC
From: "hxc98@yahoo.com" <hxc98@yahoo.com>
Message-ID: <1135759487.418357.54570@f14g2000cwb.googlegroups.com>
Source record: 15036

APRSPoint is a complete APRS package with integrated street-level maps.

We are offerring a holiday special right now. You can APRSPoint license

plus MapPoint 2004 for more than 30% off the regular price. Please
visit
http://www.aprspoint.com/ for details. Thanks.

6404. Re: OT need HX-50 schematic please.

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-28 10:06:44 UTC
From: Paul P <paulREMOVE@REMOVEppinyotREMOVE.com>
Message-ID: <Ustsf.630$SW3.412@trndny08>
Source record: 15037

Gentlemen,
I found a schematic. Thanks,
Paul.

"Paul P" <paulREMOVE@REMOVEppinyotREMOVE.com> wrote in message
news:z56sf.1344$D43.203@trndny06...
>I am restoring a Hammarlund HX-50 for a fellow ham. The BAMA schematic
>is...quite bad. I am having trouble tracing and verifying the components
>of the unit. The rest of the manual is rather good in DjVu format. The
>owner has a reproduction manual on order and we hope it has a better
>schematic.
>
> In the mean time I would like to get started and order caps, resistors,
> etc. Could a kind soul please email me a copy of the schematic? Also my
> parts list resistor section starts with R165. There seems to be a missing
> BAMA page in between pages 43 and 44.
>
> Also, is there a better forum for such a request?
>
> Thanks to all,
> Paul
> www.ppinyot.com
>
> BTW - if you would like a stand alone (not plug in) DjVu application go
> to: http://www.tuberadio.it/utils.htm It is slick. I have combined many
> jpgs and gifs into a single file. The resolution is surprisingly good for
> the overall compressed file size.
>

6405. Re: A Merry Solstice To All Our Readers

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-28 17:39:50 UTC
From: Uncle Bobbolink <weleasewoger33@nosp.gmail.com>
Message-ID: <322f$43b2dbe5$d1cc5960$14438@snip.allthenewsgroups.com>
Source record: 15038
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb,rec.radio.shortwave,uk.radio.amateur

ROTFLMAO

6406. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-28 17:48:38 UTC
From: Rich Grise <eatmyshorts@doubleclick.net>
Message-ID: <pan.2005.12.28.17.52.55.612813@doubleclick.net>
Source record: 15039
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Wed, 28 Dec 2005 02:42:58 +0000, Joerg wrote:

> Hello Rich,
>
>> that about a third of the way down, says:
>> "... Accurate imitation of the Hammond sound with simple electronic
>> circuitry was difficult, because the subtly-changing phase relationships
>> between tonewheels could not be easily replicated...."
>>
>> OK, fair enough. :-)
>>
>
> Even with complicated electronics it wasn't. IIRC it was Suzuki-Hammond
> which came out with the XK2 and then the XK3. Those are pretty elaborate
> synthesizer organs. But according to the experts it just ain't the same.
>

It seems like, no matter how closely you try to mimic the waveform of a
real instrument, there's always something that says, "This is electronic."
Or, maybe more accurately, "This is not real." ;-)

Cheers!
Rich

6407. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-28 17:58:25 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.12.28.18.02.43.142779@example.net>
Source record: 15040
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Wed, 28 Dec 2005 02:20:02 -0500, w_tom wrote:

On Wed, 28 Dec 2005 02:20:02 -0500, w_tom top-posted:
...
> BTW, power from automotive systems should also worry about
> load dump. Technically load dump can be a transient as much
> as 270 volts on a 12 volt system. In reality, such events may
> only be 50 volts or less. Transients that would not damage
> other automotive electronics already designed for this rare
> and so destructive event.
>
> That is a problem with some regulators such as 78xx series.
> Maximum voltage is typically not sufficient for automotive
> purposes - would require additional protection.

This is what transzorbs
http://www.vishay.com/docs/88301/15ke.pdf
and hash chokes are for.

I'm not affiliated with Vishay, formerly General Semiconductor,
just a satisfied customer. I've used them to protect circuits
against the transients caused by a 5 KV arc in an ion gun. :-)

Cheers!
Rich

>
> "James F. Mayer" wrote:
>> Probably good enough for his measly 32 volts. I need to
>> modify that circuit to work on outputs of 90 volts and 6 volts.

6408. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-28 18:53:36 UTC
From: "James F. Mayer" <jfma@ix.netcom.com>
Message-ID: <QaBsf.1462$M%4.361@newsread3.news.atl.earthlink.net>
Source record: 15041
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"John Crighton" <john_c@tpg.com.au> wrote in message
news:43b0e5c3.11480811@free.teranews.com...
> On Tue, 27 Dec 2005 02:02:15 GMT, "James F. Mayer"
> <jfma@ix.netcom.com> wrote:
>
>> I need to generate 6v DC and 90v DC from a 12v DC automotive
>> electrical
>>system to power an RT-70A/GRC surplus military radio. I need about 250 mA
>>at +6 volts and about 75 mA at +90 volts. I was thinking about using the
>>guts from an old battery back up but it would be a bit of a kluge. Are
>>there any 90 volt regulators in the 78xx series? How do I get the voltage
>>up to where I can get something that I can get the 90 volts from. Getting
>>the 6 volts doesn't seem to be a problem. A 7806 off the battery should
>>work for that unless any of you can see a problem doing that. Maybe the
>>common common would be a problem. Right now I'm running it off of an
>>HP6299A
>>and an HP6236B with commons jumpered. I'd like to be able to go portable
>>with it.
>>
>>
> Hello again James,
> I just came across this site while looking
> for something else.
>
> http://web.telia.com/~u85920178/use/tubepsu.htm
> Look at the the 6V AC from 12 V DC. Nifty!
>
> Here is another
> http://www.i4at.org/lib2/inverter.htm
> You want DC out so you will have to fit a bridge rectifier
> and filter capacitors to the output of the transformer
> just like Harry Lythall's circuit above.
>
> Regards,
> John Crighton
> Sydney
>

I'm going to build a modified Lythall but I need to determine what the
wattage of the 330 Ohm resisters would be. I'm thinking they should be
fairly high.

6409. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-28 19:25:28 UTC
From: w_tom <w_tom1@hotmail.com>
Message-ID: <43B2E6A8.8DDB3F66@hotmail.com>
Source record: 15042
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Actually SGS Thompson that specifically makes protectors for
automobiles and load dump (do what 'too small' transzorb would
also do) acknowledge in their app notes that:
> " ... there are several existing products products able to
> clamp this overvoltage at the board level, for example the
> LDP24 or RBO series. The protection at the alternator level
> is a quite new concept and all the technical problems do not
> seem to be completely solved."

This would explain why an 'up to 270 volt' transient is not
routinely observed. Still, automotive electronics typically
should withstand about 50 volts ballpark without damage.
Transzorb could be but one part of that protection system. Or
a DC to DC converter that specifically has such protection
could be obtained. A weakness of Transzorbs are their low
power abilities. The advantage - those avalanche diodes can
handle so much more power than conventional zeners. My first
design that used Transzorb was maybe 20 years ago. GS was
selling Transzorbs even long before then.

Load dump does not occur frequently. But that one time can
be so destructive. Best to consider load dump when attaching
any electronics to automotive power because even trivial
protection does so much.

Rich Grise wrote:
> This is what transzorbs
> http://www.vishay.com/docs/88301/15ke.pdf
> and hash chokes are for.
>
> I'm not affiliated with Vishay, formerly General Semiconductor,
> just a satisfied customer. I've used them to protect circuits
> against the transients caused by a 5 KV arc in an ion gun. :-)

6410. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-28 19:39:16 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <8tydnUu6b8c4dy_eRVn-rA@comcast.com>
Source record: 15043
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,rec.antiques.radio+phono

"James F. Mayer" <jfma@ix.netcom.com> wrote in message
news:Hg1sf.10532$nm.866@newsread2.news.atl.earthlink.net...
> I need to generate 6v DC and 90v DC from a 12v DC automotive
> electrical system to power an RT-70A/GRC surplus military radio. I need
> about 250 mA at +6 volts and about 75 mA at +90 volts. I was thinking
> about using the guts from an old battery back up but it would be a bit of
> a kluge. Are there any 90 volt regulators in the 78xx series? How do I
> get the voltage up to where I can get something that I can get the 90
> volts from. Getting the 6 volts doesn't seem to be a problem. A 7806 off
> the battery should work for that unless any of you can see a problem doing
> that. Maybe the common common would be a problem. Right now I'm running
> it off of an HP6299A and an HP6236B with commons jumpered. I'd like to be
> able to go portable with it.

You will find a number of solutions (e.g. battery radios) in the Usenet
group: rec.antiques.radio_phono

gb

6411. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-28 22:03:48 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <8ZDsf.6497$oW.423@newssvr11.news.prodigy.com>
Source record: 15044
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Rich,
>
> It seems like, no matter how closely you try to mimic the waveform of a
> real instrument,...

I have a feeling that this is exactly the problem. Engineers try to
mimic the output waveform instead of looking how the real instrument is
built. If they did that, they'd try to emulate all the individual parts
and pieces.

Regards, Joerg

http://www.analogconsultants.com

6412. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-28 22:29:14 UTC
From: clifto <clifto@clifto.com>
Message-ID: <q6gb83-pss.ln1@remote.clifto.com>
Source record: 15045
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Rich Grise, but drunk wrote:
> "... Accurate imitation of the Hammond sound with simple electronic
> circuitry was difficult, because the subtly-changing phase relationships
> between tonewheels could not be easily replicated...."
>
> OK, fair enough. :-)
>
> I guess a piano is even harder - they don't even reproduce well from a
> live recording! :-)

I heard a decently accurate electronic piano sound long before I heard anything remotely resembling the timber of a B3. Still haven't heard anything that sounds exactly like a B3 (other than an A100 or another B3).

--
If John McCain gets the 2008 Republican Presidential nomination,
my vote for President will be a write-in for Jiang Zemin.

6413. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 01:06:02 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.12.29.01.10.21.893562@example.net>
Source record: 15046
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Wed, 28 Dec 2005 22:03:48 +0000, Joerg wrote:

> Hello Rich,
>>
>> It seems like, no matter how closely you try to mimic the waveform of a
>> real instrument,...
>
>
> I have a feeling that this is exactly the problem. Engineers try to
> mimic the output waveform instead of looking how the real instrument is
> built. If they did that, they'd try to emulate all the individual parts
> and pieces.
>
> Regards, Joerg
>
> http://www.analogconsultants.com

Yabbut, how many gyrators and phase shifters and stuff does it take to
model, for example, a bowed string? ;-)

Thanks!
Rich

6414. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 01:28:30 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <sre6r1t9ll9jj2gbae0r5a135of9adk5ml@4ax.com>
Source record: 15047
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Thu, 29 Dec 2005 01:06:02 GMT, the renowned Rich Grise
<richgrise@example.net> wrote:

>On Wed, 28 Dec 2005 22:03:48 +0000, Joerg wrote:
>
>> Hello Rich,
>>>
>>> It seems like, no matter how closely you try to mimic the waveform of a
>>> real instrument,...
>>
>>
>> I have a feeling that this is exactly the problem. Engineers try to
>> mimic the output waveform instead of looking how the real instrument is
>> built. If they did that, they'd try to emulate all the individual parts
>> and pieces.
>>
>> Regards, Joerg
>>
>> http://www.analogconsultants.com
>
>Yabbut, how many gyrators and phase shifters and stuff does it take to
>model, for example, a bowed string? ;-)
>
>Thanks!
>Rich

Whatever it is, if it has to come out of speakers it isn't going to
sound quite right.

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

6415. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 02:13:05 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <RCHsf.6550$oW.1097@newssvr11.news.prodigy.com>
Source record: 14948
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Spehro,
>
> Whatever it is, if it has to come out of speakers it isn't going to
> sound quite right.
>

In case of a Hammond organ it might since it has a speaker. Of course, it's a tube amp but that is a whole other matter which alone could make this thread balloon.

It'll take a lot of gyrators and filters but considering that one can buy a 400MHz DSP for less than a crate of beer these days it should be feasible. In case of our piano the DSP still couldn't win. The piano doesn't need power. Not even light since it has its own candles.

Regards, Joerg

http://www.analogconsultants.com

6416. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 02:24:27 UTC
From: nothermark <trash@gnomex.cotse.net>
Message-ID: <toh6r1tkj7r4b3h6pttl6ktlqnor0p3pof@4ax.com>
Source record: 14949
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Tue, 27 Dec 2005 18:59:56 GMT, Joerg
<notthisjoergsch@removethispacbell.net> wrote:

>Hello Jim,
>
>> Do it the way the original radio did it -- dynamotor. You can still find
>> them in the back room at a lot of military surplus electronics junk stores.
>>
>
>But then be prepared for some major restoration. The bearings of a lot
>of these are nearly shot, mostly from sitting in an attic for decades.
>It's like old pond pumps. They run fine for a few weeks and then the
>racket increases, some weird noises appear, things get hot and they
>seize up.
>
>I restored an old Hammond organ. These generate the tones in a similar
>manner. A motor (plus a start motor) and over a hundred pickup coils on
>the long secondary shaft. 20 hours of hard work got it going again but
>we have accepted the fact that some of the bearings are pretty much over
>the hill. So it needs 2-3 starts to coax it to run without that mild
>screeching in the background. Getting spare parts from a company that
>went out of business 30 years ago just isn't going to happen.
>
>Regards, Joerg
>
>http://www.analogconsultants.com

what kind of bearings? - ball bearings are like tubes - thay have
numbers and substitutes. Bronze bearings are routinely made by
machinists. Babbit is hardest as it is poured in place but you might
be better off replacing them with something else like bronze. Bearing
technology is not all that complicated if you poke into the right
group of folks.

6417. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 02:37:46 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <ori6r1lktd4viehscub9c06ufe4ku2b8il@4ax.com>
Source record: 14950
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Thu, 29 Dec 2005 02:13:05 GMT, the renowned Joerg
<notthisjoergsch@removethispacbell.net> wrote:

>Hello Spehro,
>>
>> Whatever it is, if it has to come out of speakers it isn't going to
>> sound quite right.
>>
>
>In case of a Hammond organ it might since it has a speaker. Of course,
>it's a tube amp but that is a whole other matter which alone could make
>this thread balloon.

Don't some of them have rotating speakers?
>
>It'll take a lot of gyrators and filters but considering that one can
>buy a 400MHz DSP for less than a crate of beer these days it should be
>feasible. In case of our piano the DSP still couldn't win. The piano
>doesn't need power. Not even light since it has its own candles.
>
>Regards, Joerg
>
>http://www.analogconsultants.com

Sure, but can you flip a switch and be playing the flute or er-hu?

Best regards,
Spehro Pefhany
--
"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com

6418. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 05:11:00 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43B36FD7.C5F9E028@earthlink.net>
Source record: 14951
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Spehro Pefhany wrote:
>
> Don't some of them have rotating speakers?

That is a "Leslie" speaker. I have to service the one at my church.
The bearings are shot.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

6419. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 05:11:03 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_43b36882@fidonet.org>
Source record: 14952

"Rich Grise" bravely wrote to "All" (29 Dec 05 01:06:02)
--- on the heady topic of "Re: 6v & 90v DC Power supply"

RG> From: Rich Grise <richgrise@example.net>
RG> Xref: core-easynews rec.radio.amateur.homebrew:90355
RG> sci.electronics.design:535244

RG> On Wed, 28 Dec 2005 22:03:48 +0000, Joerg wrote:

> Hello Rich,
>>
>> It seems like, no matter how closely you try to mimic the waveform of a
>> real instrument,...
>
>
> I have a feeling that this is exactly the problem. Engineers try to
> mimic the output waveform instead of looking how the real instrument is
> built. If they did that, they'd try to emulate all the individual parts
> and pieces.
>
> Regards, Joerg
>
> http://www.analogconsultants.com

RG> Yabbut, how many gyrators and and stuff does it take to
RG> model, for example, a bowed string? ;-)

RG> Thanks!
RG> Rich

One wouldn't use gyrators and phase shifters but rather wavetables.
In a nutshell, it is a sample (digital recording) of the real
instrument. Then it is digitally manipulated to add modulation, timbre
characteristics, and whatever other effects are required for the
instrument. This is calculated for each note and stored in a table in
memory, hence the name wavetable. Then this is read out to the digital
to analog converter. The resulting sound is hard to tell apart from
the real instrument. Another even more realistic and versatile method
uses digital building blocks to mimic each physical component. For
example in the case of the human voice, the nose, the mouth, windpipe,
etc. One can create totally non-existant instruments like a violin
that sounds like a flute or whatever else you could possibly imagine.
There is a program which does this but I'm drawing a blank now.

A*s*i*m*o*v

... Guitar smashing doesn't bother me. Some "need" smashing. -Chet Atkins

6420. Re: Comcast Info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 05:17:45 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43B3716C.F7AE1F9F@earthlink.net>
Source record: 14953

Henry wrote:
>
> When the last Comcast guy was here he gave me some information I
> thought I'd pass on.
>
> To query the Comcast modem, use IE (Mozilla don't work) and type in
> the following URL 192.168.100.1
>
> You should get a screen that looks like the attached .doc file.

That address works with the Scientific-Atlanta WebSTAR DPC2100 cable
modem, but only the "System" button is active, and it comes up as the
default.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

6421. Re: BF964S noise - alternatives??

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 12:25:31 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <3ci5r1tfkfalv2e541528sc26v3bijrhqf@4ax.com>
Source record: 14954

On Wed, 21 Dec 2005 00:27:31 +0100, "Henry Kiefer"
<otc_friend@gmx.net> wrote:

>"K7ITM" <k7itm@msn.com> schrieb im Newsbeitrag
>news:1134922656.246374.46970@o13g2000cwo.googlegroups.com...
>> I'm curious, what sorts of things do amateurs do that really need
>> better than a 1dB noise figure on 2 meters? I can understand it on
>> higher frequencies, but I'd have thought that galactic noise, at least,
>> would be a limiting factor on 2 meters.

>Is that galactic noise measured on a wide bandwidth antenna?
>What if it is very narrow band?

At 2 m the Sun is quite noisy, in addition the noise from the stars in
our Milky Way galaxy will contribute quite strongly to the background
noise levels with noise temperatures of several hundred Kelvins if the
antenna is pointing at the galactic plane.

However, if the antenna is pointing away from both the Sun and the
Milky Way, the noise levels are lower and thus, if you try to receive
a satellite in that direction, a low noise preamplifier will help. Of
course, this can be more easily observed on 70 cm and 23 cm, in which
the "cold sky" noise levels are even lower.

Paul OH3LWR

6422. What's it all about? - FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 13:03:11 UTC
From: Orator For Decency <aiyr.r.bean@lycos.co.uk>
Message-ID: <1135861391.024058.277720@o13g2000cwo.googlegroups.com>
Source record: 14955
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

In case there are those who got a CB-type rig such as the 817
in their stockings and were misled by
those-who-ought-to-have-known-better
into thinking that they were Radio Hams, the weekly
FAQ is posted a couple of days early to enable the parents to take
the CB gear back to the shop before the shops close for
another Bank Holiday.....

Please remember that this FAQ is a positive exhortation
to you to exert yourselves to join our fraternity! (If you find
otherwise, then perhaps you are already classing yourself in the
mediocre groups of those who are criticised in the FAQ and from
whom we _MUST_ dissociate? If so - it's never too late for
a re-taxonomisation on your part - there's nothing elitist about
us, and we welcome all those who are prepared to put themselves
out in order to join our ranks!)

-----ooooo-----

What is Ham Radio?

Ham Radio is a technical pursuit for those who
are interested in the science of radio wave
propagation and who are also interested in the
way that their radios function. It has a long-standing
tradition of providing a source of engineers who
are born naturals.

Ham Radio awakens in its aficionados a whole-life
fascination with all things technical and gives
an all-abiding curiosity to improve one's scientific
knowledge. It's a great swimming pool, please dive in!

This excitement causes a wish to share the experience
with ones fellow man, and shows itself in the
gentlemanly traditions of Ham Radio.

Radio Hams are in a unique privileged position in that
they can construct and operate their own equipment! No-one
else has this privilege. Users, such as broadcasters,
the po lice and armed farces, CBers and mobile phone
users have to purchase ready-made gear. Manufacturers
are not licensed to operate their gear. Radio Hams
are qualified to design, build and then
operate their own pieces of equipment. They do this

with gusto, and also repair and modify their own
equipment. This is a privilege well worth the effort
to gain, and one to be jealously guarded.

The excitement that drives a Radio Ham starts with
relatively simple technologies at first, perhaps making
his own Wimshurst machine and primary cells. Small pieces
of test equipment follow, possibly multimeters and signal
generators. Then comes receivers and transmitters. It is with
the latter that communication with like-minded technically
motivated people takes off. The scope for technical
development grows with the years
and now encompasses DSP and DDS. There is also a great deal
of excitement in the areas of computer programming to
be learnt and applied.

The technical excitement motivates Radio Hams to compete
with each other to determine who has designed and manufactured
the best-quality station. This competitiveness is found in DXing,
competitions and fox-hunts.

-----OOOOO----

However, beware! A Ham Radio licence is such a
desirable thing to have that there are large
numbers of people who wish to be thought of
as Radio Hams when, in fact, they are nothing
of the kind! Usually such people are a
variation of the CB Radio hobbyist; they buy their
radios off the shelf and send them back to be
repaired; they are not interested in technical discussion
and sneer at those who are; they have no idea how
their radios work inside and have no wish to find out;
they are free with rather silly personal insults;
they have not satisfied any technical qualification
and their licences prevent the use of
self-designed-and-built equipment.

These CB types engage in the competitive activities
with their Cheque-Book-purchased off-the-shelf radios
in a forlorn effort to prove that they are Radio Hams.

No _REAL_ Radio Hams are deceived by such people!

-----ooooo-----

One such CB type is the so-called "Not-Ham". Otherwise
known as the CBer-Masquerading-As-A-Radio-Ham, this type
had their background in the hobby that is CB Radio and not
in the technical pursuits that lead up to a coveted Ham licence.
Easily recognised by their boasts of the criminal activity of
11 metre SSB operation, one wonders why they don't go back to
the CB Bands if such bands are dearer in their hearts than are the Ham

Bands? No _REAL Radio Hams associate with those who made an
illegal installation of transmitting equipment before being
in possession of an appropriate licence.

-----ooooo-----

One infallible way to disambiguate the CB Radio Hobbyist
from the _REAL_ Radio Ham is to solicit their view of the
difference between CB Radio and Ham Radio. A Radio Ham will
perceive Ham Radio to be a technical pursuit and will
perceive CB Radio to be a social communications facility
no different in essence to a land-line telephone or a
GSM mobile in the hands of a 6-year-old. Thus a Radio Ham
could also hold a CB licence safe in the knowledge that
such a licence says no more about him than having a land-line
telephone, whilst continuing to regard Ham Radio as a separate
technical pursuit.

A CB Radio hobbyist, on the other hand, sees no difference between
a Ham Radio licence and a CB Radio licence. To him, they are
sisters-under-the-skin. Wrongly, the CB Radio Hobbyist then
tries to classify himself as the equal of the Radio
Ham when, in fact, he is nothing of the kind. A sure sign of
a CB Radio hobbyist is if he holds, or has ever held, a licence
issued under the gangrenous degeneration that is the
M3/CB Fools' Licence scheme.

-----ooooo-----

One group of people who claim to be of the standard of
Radio Hams but who are in reality nothing more than an
apology for the failure of a CBer are those class B
licensees who falsely proclaimed that they were against
the use of a Morse Test to control access to the HF
bands, until, that is, a test was introduced at their
intellectual level, the intellectual level of 6-year-olds.

6 year-olds simply lack the mathematical tool kit to
enable them to handle even the simplest algebraic manipulation
for Ohm's Law and thus, the disgraceful Class Ber's in
the aforementioned category are not Radio Hams by any stretch
of the imagination!

Remember - A sure sign of a CB Radio hobbyist is if he holds,
or has ever held, a licence issued under the gangrenous
degeneration that is the M3/CB Fools' Licence scheme!

6423. new dose of bile

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 13:17:43 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <1135862263.344467.6970@o13g2000cwo.googlegroups.com>
Source record: 14956
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Orator For Decency wrote:
> In case there are those who got a CB-type rig such as the 817
hmm in the USA the rig is aham rig one I would not have minded geting
but it is too pricey for what you get IMO

6424. Re: What's it all about? - FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 13:35:04 UTC
From: Know Code <know_code@wanadoo.nl>
Message-ID: <43b3e607$0$35265$dbd4d001@news.wanadoo.nl>
Source record: 14957
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Orator For Decency wrote:

> and we welcome all those who are prepared to put themselves
> out in order to join our ranks!)

You might want to re-word that.... do you know what 'putting out' means
to youngsters these days?

--

I fully support the Know Code debate.

6425. more bile

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 13:41:38 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1135863698.763298.127840@z14g2000cwz.googlegroups.com>
Source record: 14958
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Know Code wrote:
> Orator For Decency wrote:
>
> > and we welcome all those who are prepared to put themselves
> > out in order to join our ranks!)
>
> You might want to re-word that.... do you know what 'putting out' means
> to youngsters these days?

good one pity is wasted on bile
>
>
> --
>
> I fully support the Know Code debate.

6426. Re: What's it all about? - FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 15:04:14 UTC
From: Spike <Aero.Spike@S&T.invalid>
Message-ID: <e6u7r1dsmsgkql772otbvkv9jkmqg0ffc2@4ax.com>
Source record: 14959
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Know Code wrote:

>Orator For Decency wrote:
>
>> and we welcome all those who are prepared to put themselves
>> out in order to join our ranks!)
>
>You might want to re-word that.... do you know what 'putting out' means
>to youngsters these days?

It is to be noted that the OP also said, elsewhere, that "I wouldn't
recommend anyone whose background is in transistorised QRP
to tackle the neutralising of a compact PA stage with 600 VDC on the
anodes after replacing the antenna coupling capacitor ".

So, take warning that the so-called FAQ is not to be taken literally;
there are safety criteria that limit its generality. The author has
yet to publish these.

It is, for example quite unclear what the difference between a compact
PA with 600VDC on the anodes, and a non-compact PA that is otherwise
the same.

In that context, it is best ignored.

from
Aero Spike

6427. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 16:49:06 UTC
From: bmburgess@rogers.com
Message-ID: <1135874946.792247.300250@g43g2000cwa.googlegroups.com>
Source record: 14960
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I noticed the reference in meow2's posting the question of budget workbenches. If anyone is interested, I have 2 references to simple, inexpensive workbench designs that I have used successfully. Both are made of plywood or similar material.

A small, but very useful one can be made from a 4'x4' (half sheet) of 3/4" plywood and provides a 24"x40" top. I built one of these for my wood shop using cheap plywood, though MDF would do. The second has a 28"x65" top and is cut from a full sheet. I used 3/4" MDF for this and it works great as a desk or as a work table.

As the designs are in published materials, I don't feel right posting them to a site or a NG. I would be willing to respond to an email at: -... -- -... ..- .-. . ... @ .-. --- --. . .-. ... .-.-. -.-. --- -- (If I'm posting to who I think I'm posting to, you won't have trouble figuring out my email id. If you can't. please don't flame me for being too clever, but ask and I will find a different way.

73
Basil B., soon-to-be VA3 something (I HOPE)

6428. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 16:56:31 UTC
From: jimmy <jimmy@nospamhere.com>
Message-ID: <43B4153D.2B8D9B36@nospamhere.com>
Source record: 14961

http://www.rodgersinstruments.com/

featured on Made in America tv show,
amazing stuff.

6429. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 17:06:27 UTC
From: jimmy <jimmy@nospamhere.com>
Message-ID: <43B41791.701A651B@nospamhere.com>
Source record: 14962

I bet you can get replacement
bearings from searching on the web

http://www.mitatechs.com/organcom.html
http://www.tonewheelgeneral.com/
http://www.goffprof.com/

6430. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 17:33:51 UTC
From: John B <spamj_baraclough@blockerzetnet.co.uk>
Message-ID: <43b41dfe$0$817$4c56ba96@master.news.zetnet.net>
Source record: 14963
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On 29/12/2005 the venerable bmburgess@rogers.com etched in runes:

.
.
.
> -... -- -... ..- .-. . ... @ .-. --- --. . .-. ... .-.-. -.-. ---
> --
.
.

Oops you missed out the 'g'.

Maybe you'll get to be VA3 something next time around. ;-)

--
John B

6431. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 18:54:44 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <UhWsf.6675$oW.5408@newssvr11.news.prodigy.com>
Source record: 14964
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Spehro,

>>In case of a Hammond organ it might since it has a speaker. Of course,
>>it's a tube amp but that is a whole other matter which alone could make
>>this thread balloon.
>
> Don't some of them have rotating speakers?
>

That was an accessory item, a Leslie speaker. A huge cabinet with a rotating speaker on slide contacts, motors, gears. We don't have one and we wouldn't know where to put it anyway. The amp under the organ is only 20W AFAIK with a huge speaker. That's real watts, not PMPS or whatever kids call "power" these days. Meaning it can make the sound of a large pipe organ and not lose steam after holding the bass chord for more than a hundred milliseconds.

>
> Sure, but can you flip a switch and be playing the flute or er-hu?
>

Actually you could. Ours doesn't have the flute presets but drawbars. With these you can set the ratio of all the harmonics and the manual shows the settings for a lot of common instruments. Some sound real, some don't. But we also have a small environmentally friendly (zero electric power, made from wood) flute. Not that I can play it but my wife can.

Regards, Joerg

http://www.analogconsultants.com

6432. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 18:58:52 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <MlWsf.6677$oW.6107@newssvr11.news.prodigy.com>
Source record: 14965
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Michael,
>
> That is a "Leslie" speaker. I have to service the one at my church.
> The bearings are shot.
>

If you get stuck or need a rare part talk to Bob:
http://www.tonewheel.com/services.htm

That's where I got my Hammond oil. Very friendly and helpful. His dog
was very friendly as well, he greeted me first.

Regards, Joerg

http://www.analogconsultants.com

6433. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 19:06:40 UTC
From: "James F. Mayer" <jfma@ix.netcom.com>
Message-ID: <4tWsf.11474$nm.11203@newsread2.news.atl.earthlink.net>
Source record: 14966
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
news:UhWsf.6675$oW.5408@newssvr11.news.prodigy.com...
> Hello Spehro,
>
>>>In case of a Hammond organ it might since it has a speaker. Of course,
>>>it's a tube amp but that is a whole other matter which alone could make
>>>this thread balloon.
>>
>> Don't some of them have rotating speakers?
>
> That was an accessory item, a Leslie speaker. A huge cabinet with a
> rotating speaker on slide contacts, motors, gears. We don't have one and
> we wouldn't know where to put it anyway. The amp under the organ is only
> 20W AFAIK with a huge speaker. That's real watts, not PMPS or whatever
> kids call "power" these days. Meaning it can make the sound of a large
> pipe organ and not lose steam after holding the bass chord for more than a
> hundred milliseconds.
>
>>
>> Sure, but can you flip a switch and be playing the flute or er-hu?
>
> Actually you could. Ours doesn't have the flute presets but drawbars. With
> these you can set the ratio of all the harmonics and the manual shows the
> settings for a lot of common instruments. Some sound real, some don't. But
> we also have a small environmentally friendly (zero electric power, made
> from wood) flute. Not that I can play it but my wife can.
>
> Regards, Joerg
>
> http://www.analogconsultants.com

The Wurlitzer down at Roaring 20s Pizza and Pipes
http://www.roaring20spizza.com/ actually plays instruments like horns and
drums.

6434. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 19:27:43 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <PMWsf.6682$oW.4538@newssvr11.news.prodigy.com>
Source record: 14967
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

> what kind of bearings? - ball bearings are like tubes - thay have
> numbers and substitutes. Bronze bearings are routinely made by
> machinists. Babbit is hardest as it is poured in place but you might
> be better off replacing them with something else like bronze. Bearing
> technology is not all that complicated if you poke into the right
> group of folks.

More like bronze bearings. But it ain't that easy. When you take it apart you end up with hundreds of pieces. It is the most complicated concoction of moving mechanical parts I ever encountered. The photo at near bottom show just a small part of it:
http://www.myplanet.net/x77dude/photos.html

Regards, Joerg

http://www.analogconsultants.com

6435. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 19:31:41 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43B4398A.994F714A@earthlink.net>
Source record: 14968
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Joerg wrote:
>
> More like bronze bearings. But it ain't that easy. When you take it
> apart you end up with hundreds of pieces. It is the most complicated
> concoction of moving mechanical parts I ever encountered. The photo at
> near bottom show just a small part of it:
> http://www.myplanet.net/x77dude/photos.html
>
> Regards, Joerg
>
> http://www.analogconsultants.com

Stay away from early jukeboxes and old NCR cassh registers, too! :-)

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

6436. Re: Comcast Info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 20:09:00 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <NI6dndOfBe783yneRVn-vQ@comcast.com>
Source record: 14969

"Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
news:43B3716C.F7AE1F9F@earthlink.net...
> Henry wrote:
>>
>> When the last Comcast guy was here he gave me some information I
>> thought I'd pass on.
>> To query the Comcast modem, use IE (Mozilla don't work) and type in
>> the following URL 192.168.100.1
>> You should get a screen that looks like the attached .doc file.
>
> That address works with the Scientific-Atlanta WebSTAR DPC2100 cable
> modem, but only the "System" button is active, and it comes up as the
> default.
>
> Michael A. Terrell
> Central Florida

Mike -

That is a fairly standard IP address usage for DOCSIS 1.0/2.0 compliant
cable modems. The Linksys and Motorola modems also use these addresses as a
default.

You can look at the statistics on some of these modems, however the firmware
and configuration files for various cable modems are only uploaded from the
head-end of the cable system's equipment.

IF you have a router/gateway after the modem, these are usually 192.168.1.1

Greg
w9gb

6437. Nice tool set from Newark

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 20:48:01 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <4c2dnaSCookY1ineRVn-rA@comcast.com>
Source record: 14970
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

Newark has been placing their over stock items on eBay for the past few
months. Some interesting items for repair or homebrew construction
occasionally appear.

Today a Cellular Phone Service Kit with free shipping at $ 25 appeared
eBay Item number: 7576616984
This item use to sell for around $65

A few nice tools to have,
that are not always common on the workbench:

a.. 4 piece spanner screwdriver set:
a.. M1.7
b.. M2.0
c.. M2.3
d.. M2.6
a.. PRO-SOFT Duplex color nutdrivers and screwdrivers:
a.. Nut: 5 mm, 6 mm
b.. Torx: T5, T6, T8, T10
c.. Phillips: # 1 x 75 mm
d.. Slotted: 5 x 75 mm
gb

6438. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 21:50:43 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <TSYsf.42098$q%.10672@newssvr12.news.prodigy.com>
Source record: 14971
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello James,

> The Wurlitzer down at Roaring 20s Pizza and Pipes
> http://www.roaring20spizza.com/ actually plays instruments like horns and
> drums.
>

Thanks! That is one big organ. The 20HP blower motor alone speaks
volumes. I wish we had one of these somewhere in California.

Regards, Joerg

http://www.analogconsultants.com

6439. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 22:12:04 UTC
From: "James F. Mayer" <jfma@ix.netcom.com>
Message-ID: <UaZsf.1943$M%4.990@newsread3.news.atl.earthlink.net>
Source record: 14972
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
news:TSYsf.42098$q%.10672@newssvr12.news.prodigy.com...
> Hello James,
>
>> The Wurlitzer down at Roaring 20s Pizza and Pipes
>> http://www.roaring20spizza.com/ actually plays instruments like horns and
>> drums.
>
> Thanks! That is one big organ.

It is built into the whole building.

The 20HP blower motor alone speaks
> volumes. I wish we had one of these somewhere in California.
>

It was in the Paramont Theater in Oakland California back in 1932.

> Regards, Joerg
>
> http://www.analogconsultants.com

6440. Re: Comcast Info

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-29 23:01:16 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <43B46AA7.450461F@earthlink.net>
Source record: 14973

gb wrote:
>
> "Michael A. Terrell" <mike.terrell@earthlink.net> wrote in message
> news:43B3716C.F7AE1F9F@earthlink.net...
> > Henry wrote:
> >>
> >> When the last Comcast guy was here he gave me some information I
> >> thought I'd pass on.
> >> To query the Comcast modem, use IE (Mozilla don't work) and type in
> >> the following URL 192.168.100.1
> >> You should get a screen that looks like the attached .doc file.
> >>
> > That address works with the Scientific-Atlanta WebSTAR DPC2100 cable
> > modem, but only the "System" button is active, and it comes up as the
> > default.
> >
> > Michael A. Terrell
> > Central Florida
>
> Mike -
>
> That is a fairly standard IP address usage for DOCSIS 1.0/2.0 compliant
> cable modems. The Linksys and Motorola modems also use these addresses as a
> default.
>
> You can look at the statistics on some of these modems, however the firmware
> and configuration files for various cable modems are only uploaded from the
> head-end of the cable system's equipment.
>
> IF you have a router/gateway after the modem, these are usually 192.168.1.1
>
> Greg
> w9gb

Thanks. They didn't have broadband internet on cable systems when I
worked in the business. I repaired headend and distribution equipment
back in the '80s.

Actually, I have a Linksys router and a Belkin Wireless G router on
my network. The Linksys is in the 192.168.1.X range, but the Belkin is
in the 192.168.2.X range. I have it set up this way because the DHCP
server in the Belkin is a severe bottleneck, dropping my bandwidth down
to barely more than dialup, but the Linksys gives me over 2 Mb per
second. I should have taken the Belkin crap back to Circuit City they
day that I bought it.

--
Service to my country? Been there, Done that, and I've got my DD214 to
prove it.
Member of DAV #85.

Michael A. Terrell
Central Florida

6441. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-30 00:20:06 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.12.30.00.24.26.233156@example.net>
Source record: 14974
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Thu, 29 Dec 2005 22:12:04 +0000, James F. Mayer wrote:
> "Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
> news:TSYsf.42098$q%.10672@newssvr12.news.prodigy.com...
>> Hello James,
>>
>>> The Wurlitzer down at Roaring 20s Pizza and Pipes
>>> http://www.roaring20spizza.com/ actually plays instruments like horns and
>>> drums.
>>
>> Thanks! That is one big organ.
>
> It is built into the whole building.
>
> The 20HP blower motor alone speaks
>> volumes. I wish we had one of these somewhere in California.
>
> It was in the Paramont Theater in Oakland California back in 1932.

"Installed in 1931 at a price of $20,000 this Mighty Wurlitzer enjoyed
only a brief period of glory before the theatre closed in 1932. By the
late 1950's, the organ was sold and placed in storage."
-- http://www.roaring20spizza.com/history.htm

But, wasn't $20K in 1931 dollars equivalent to about two mil nowadays?
=:-O

Thanks,
Rich

6442. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-30 00:55:52 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.12.30.01.00.10.258705@example.net>
Source record: 14975
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Thu, 29 Dec 2005 08:49:06 -0800, bmburgess wrote:

> I noticed the reference in meow2's posting the question of budget
> workbenches. If anyone is interested, I have 2 references to simple,
> inexpensive workbench designs that I have used successfully. Both are
> made of plywood or similar material.
>
> A small, but very useful one can be made from a 4'x4' (half sheet) of
> 3/4" plywood and provides a 24"x40" top. I built one of these for my
> wood shop using cheap plywood, though MDF would do. The second has a
> 28"x65" top and is cut from a full sheet. I used 3/4" MDF for this and
> it works great as a desk or as a work table.
>
> As the designs are in published materials, I don't feel right posting
> them to a site or a NG. I would be willing to respond to an email at:
> -... -- -... ..- .-. . ... @ .-. --- --. . .-. ... .-.-. -.-. ---
> -- (If I'm posting to who I think I'm posting to, you won't have
> trouble figuring out my email id. If you can't. please don't flame me
> for being too clever, but ask and I will find a different way.
>
> 73
> Basil B., soon-to-be VA3 something (I HOPE)

You mean bmburgess@rogers.com, like in your header? >:->

Cheers!
Rich

6443. Re: 6v & 90v DC Power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-30 05:11:02 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_43b4b884@fidonet.org>
Source record: 14976

"Joerg" bravely wrote to "All" (29 Dec 05 18:54:44)
--- on the heady topic of "Re: 6v & 90v DC Power supply"

Jo> From: Joerg <notthisjoergsch@removethispacbell.net>
Jo> Xref: core-easynews rec.radio.amateur.homebrew:90375
Jo> sci.electronics.design:535390

Jo> Hello Spehro,

>>In case of a Hammond organ it might since it has a speaker. Of course,
>>it's a tube amp but that is a whole other matter which alone could make
>>this thread balloon.
>
> Don't some of them have rotating speakers?
>

Jo> That was an accessory item, a Leslie speaker. A huge cabinet with a
Jo> rotating speaker on slide contacts, motors, gears.

Later on the speaker didn't rotate. The speaker was mounted face up.
Covering the speaker was a rotating funnel with 2 output horns at the
apex. The dual rotating horns gave a strong Doppler Effect that was
hard to duplicate electronically. A belt turned the rotating funnel
which was driven by a variable speed motor under user control.

A*s*i*m*o*v

6444. Knob for Hallicrafter S-53?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-30 13:47:31 UTC
From: Terry <tsanford@nf.sympatico.ca>
Message-ID: <jVatf.6393$I87.727848@news20.bellglobal.com>
Source record: 14977
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew

With many thanks again to those on < rec.antiques ..... who previously identified possible sources.
But nothing yet!
So; still seeking one used knob for the Vol, RF gain or Bandswitch position of a circa 1955 Hallicrafter S-53A.
Knob is about one inch diameter and is serrated/ridged.
The smaller knobs on this model do 'not have' round aluminum inserts or the silver inner rings of some Hallicrafter style knobs.
I also have at least one of the slightly larger Hallicrafter style 'tuning/bandspread' knob; approx 1.5 inches diameter and which 'does have' the inner silver ring. Someone mentioned KF6AR in 2004 was seeking such a knob?
Also mentioned was that it may be possible to get a knob (or set of knobs) 'made', but they will 'look' different?
Best regards for the New Year.
Terry
PS. A few miles from where, in December 1901 Marconi received the first Transatlantic wireless telegraph signal at St. John's, Newfoundland (VO1xx country! Now part of Canada).

6445. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-30 16:02:29 UTC
From: "Basil B." <bmburgess@rogers.com>
Message-ID: <1135958394.402293.177430@o13g2000cwo.googlegroups.com>
Source record: 14978
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Yes, I forgot the G. Fortunately, if this lapse continues, it will
only affect my traffic to people in Great Britain :-)

And, yes, it is like the one in my header. I'm using Google to access
these newsgroups, and it seems to keep my full email address protected,
at least from spambots.

Anyway, thanks for the warm welcome, because I interpret the responses
as good natured jibes from friendly folk.

73

Basil Burgess

6446. Re: What Does Your Electronics Workshop Look Like?

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-30 16:10:40 UTC
From: Jim Thompson <To-Email-Use-The-Envelope-Icon@My-Web-Site.com>
Message-ID: <fumar11p5li9s8gn0hrdbb0agktliiat9m@4ax.com>
Source record: 14979
Cross-posted to:
sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On 30 Dec 2005 08:02:29 -0800, "Basil B." <bmburgess@rogers.com>
wrote:

>Yes, I forgot the G. Fortunately, if this lapse continues, it will
>only affect my traffic to people in Great Britain :-)
>
>And, yes, it is like the one in my header. I'm using Google to access
>these newsgroups, and it seems to keep my full email address protected,
>at least from spambots.
>
>Anyway, thanks for the warm welcome, because I interpret the responses
>as good natured jibes from friendly folk.
>
>73
>
>Basil Burgess

Yep. You're really protected...

"Basil B." <bmburgess@rogers.com>

It's right in the headers.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

"Winners never quit, quitters never win", Jack Bradley Budnik ~1956

6447. Ground Plane construction vs pre-printed "protoboards"

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-30 17:32:25 UTC
From: "Basil B." <basilb@hotmail.com>
Message-ID: <1135963945.852450.121160@z14g2000cwz.googlegroups.com>
Source record: 14980

Hello all

I've been doing a fair bit of internet reading about RF construction projects. I'm still confused about something.

Most authors, including those in the ARRL Handbook, seem to espouse "ugly construction" and a variant called Manhatten construction. I understand that the reason is that these techniques minimize capacitance by providing a large ground plane. Ugly construction seems to also encompass perfboard construction with wire traces or direct component-to-component connections. This seems to me to be not much better than using pre-printed boards whose traces match, in geometry, those of solderless prototyping boards.

I do understand that the solderless boards are inadequate for RF work, but are the pre-printed perforated "protoboards" also inadequate.

Call it an OC tendency, but ugly construction is, well, ugly. Of course, I want to use the best techniques for what I'm doing, and if UC is the way to go, then that's what I'll do.

I'd appreciate your opinions on this.

Thanks
Basil B.

6448. Re: Ground Plane construction vs pre-printed "protoboards"

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-30 18:20:18 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <t--dncO79t3J5yjeRVn-tQ@web-ster.com>
Source record: 14981

Basil B. wrote:

> Hello all
>
> I've been doing a fair bit of internet reading about RF construction
> projects. I'm still confused about something.
>
> Most authors, including those in the ARRL Handbook, seem to espouse
> "ugly construction" and a variant called Manhatten construction. I
> understand that the reason is that these techniques minimize
> capacitance by providing a large ground plane. Ugly construction seems
> to also encompass perfboard construction with wire traces or direct
> component-to-component connections. This seems to me to be not much
> better than using pre-printed boards whose traces match, in geometry,
> those of solderless prototyping boards.
>
> I do understand that the solderless boards are inadequate for RF work,
> but are the pre-printed perforated "protoboards" also inadequate.
>
> Call it an OC tendency, but ugly construction is, well, ugly. Of
> course, I want to use the best techniques for what I'm doing, and if UC
> is the way to go, then that's what I'll do.
>
> I'd appreciate your opinions on this.
>
> Thanks
> Basil B.
>

I think the primary reason that folks espouse ugly construction is that it may look bad to us, but the electrons like it just fine. It can be tough to get over the aesthetics (or lack thereof) of your fine new circuit, but it'll work just as well and it'll be less work than using a PC board.

You can, of course, make a PC board. Unless you know _exactly_ what you're doing you'll end up making mistakes, which will require changes, which you won't get right the first time. So if you have your new, flawed, PC board you'll modify it, and the mods will be, well, ugly.

So if you're going to make something ugly anyway, why not make it ugly to start? Once it works right then you can make a nice pretty PC if you feel like it.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

6449. Re: Ground Plane construction vs pre-printed "protoboards"

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-30 18:52:03 UTC
From: "Basil B." <basilb@hotmail.com>
Message-ID: <1135968723.415737.192060@o13g2000cwo.googlegroups.com>
Source record: 14982

Well, that is certainly a vote for UC. Do you also have an opinion of
the other idea, using pre-patterned, pre-etched boards such as
Veroboard and the like?

Thanks
Basil Burgess

6450. Re: Ground Plane construction vs pre-printed "protoboards"

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-30 19:26:47 UTC
From: dplatt@radagast.org
Message-ID: <11rb2fn95g8dv39@corp.supernews.com>
Source record: 14983

>Well, that is certainly a vote for UC. Do you also have an opinion of
>the other idea, using pre-patterned, pre-etched boards such as
>Veroboard and the like?

My own feeling, for what it's worth, is that these are pretty good for DC and audio-frequency projects, but can have problems at RF.

A big part of the issue is one of grounding. Many of the pre-etched proto boards I've seen use most of their real estate for pads and pad-connection strips. There are usually sets of traces for supplying power and ground to the components, but these don't use more than a relatively small amount of the board's copper area and are often run as long strips coming in from the side of the board.

As a result, if you have two groups of components which are physically fairly close together, and connect components in these groups to the physically-closest ground pads/strips (minimizing the lead length), you may find that there are actually quite a few inches of PC-board ground trace between one component's "grounded" lead and another.

This is usually adequate at DC and audio frequency. At RF, the parasitic inductance of those long looping ground traces can have an adverse effect on the circuit's stability. You can sometimes minimize this by using a star-grounding approach, but since the connection pads are pre-etched into clusters and strips there's likely to be a limit to the number of components that you can connect to a "single point" ground, and it may not be all that good an approximation of a true single-point.

One of the recipes for making stable, friendly, and reproducible designs at RF seems to be to minimize the impact of parasitic reactances. As you point out, using "ugly" construction of the Manhattan or free-air (point-to-point) variety minimizes parasitic capacitance between components, and between components and the board.

It also has the benefit of minimizing parasitic _inductive_ reactance in the circuit's "ground", if you use a solid copper ground plane as the basis for your construction. "Ground" is always an approximation... a perfect ground cannot be achieved at either DC or RF... but you can get closer if you have lots of copper area to work with.

Etched PC boards can be used quite successfully for RF projects, of course, and often are. It's important, when laying out such a board, to minimize unwanted parasitics... leaving large sections of un-etched copper for grounding, using wide traces, paying attention to where the

actual ground currents flow, adding ground-shield traces between any
signal-carrying traces that might tend to suffer from cross-coupling,
and so forth.

One usually does not have the luxury of being able to take advantage
of these techniques (at least to their fullest) when using a
pre-etched proto board,

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

6451. Re: Ground Plane construction vs pre-printed "protoboards"

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-30 21:02:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11rb8402jauvr7b@corp.supernews.com>
Source record: 14984

It's much easier to make a sensitive RF circuit work with "ugly" construction than on a typical PC board. There are a couple of reasons. One is that leads can generally be kept shorter. The second, and chief reason, is the solid, continuous ground plane. The advantage of the ground plane isn't capacitance reduction as you say, but much lower ground inductance. In a typical PC board layout, currents from various parts of a circuit have to flow through ground traces which can have considerable impedance at RF. This causes voltage drops which are related to each of the currents. The voltages are applied to the connected circuits, resulting in crosstalk and feedback.

It's usually possible to get by with a fairly abbreviated ground system, but it can take an awful lot of care and knowledge to do it -- I haven't even run across a lot of otherwise skilled engineers who are good at it. The average home constructor is much more likely to succeed on the solid plane provided by "ugly" construction. It's not uncommon for an "ugly" prototype to work well and a PC board version fail -- unless you have the luxury of using a multiple-layer PC board where you can devote one layer to being a solid ground plane. The chances of succeeding with a PC depends heavily, of course, on the nature of the circuit -- some are vastly more tolerant than others.

I personally like "ugly" construction also because it's much faster than making a PC board and, if done right, can be as rugged. Of course the advantages of a PC board are obvious when making multiple copies of a project.

I know of what I speak -- I've spent a career designing electronic test equipment, and do consulting in the EMC field (electromagnetic compatibility, dealing with such issues as crosstalk and RFI). And I've done a considerable amount of RF homebrewing.

Roy Lewallen, W7EL

Basil B. wrote:
> Hello all
>
> I've been doing a fair bit of internet reading about RF construction
> projects. I'm still confused about something.
>
> Most authors, including those in the ARRL Handbook, seem to espouse
> "ugly construction" and a variant called Manhatten construction. I
> understand that the reason is that these techniques minimize
> capacitance by providing a large ground plane. Ugly construction seems
> to also encompass perfboard construction with wire traces or direct
> component-to-component connections. This seems to me to be not much

> better than using pre-printed boards whose traces match, in geometry,
> those of solderless prototyping boards.
>
> I do understand that the solderless boards are inadequate for RF work,
> but are the pre-printed perforated "protoboards" also inadequate.
>
> Call it an OC tendency, but ugly construction is, well, ugly. Of
> course, I want to use the best techniques for what I'm doing, and if UC
> is the way to go, then that's what I'll do.
>
> I'd appreciate your opinions on this.
>
> Thanks
> Basil B.
>

6452. Re: Ground Plane construction vs pre-printed "protoboards"

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-30 22:06:53 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <fditf.402$va6.317@fe07.lga>
Source record: 14985

"Basil B." <basilb@hotmail.com> wrote in message
news:1135963945.852450.121160@z14g2000cwz.googlegroups.com...

> Call it an OC tendency, but ugly construction is, well, ugly. Of

Take a peek at the work of K8IQY who really made Manhattan construction
popular, or K7QO, who has some tutorials on the subject. Their work is
anything but ugly.

Mine on the other hand ...

..

6453. Re: Ground Plane construction vs pre-printed "protoboards"

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-30 23:04:12 UTC
From: "Basil B." <basilb@hotmail.com>
Message-ID: <1135982509.626274.149970@g47g2000cwa.googlegroups.com>
Source record: 14986

I'd like to thank you all for your input. Obviously, a process that
works and has high quality of results is much better than one that
merely looks good. I did research the sites of the people you mention.
I just wanted to be sure I understood the issues, and you've all
helped. Thank you.

Regards
Basil B.

6454. Re: What's it all about? - FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-30 23:23:49 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135985029.072745.247110@o13g2000cwo.googlegroups.com>
Source record: 14987
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Gareth Alun Evans (G4SDW) wrote:
> Remember - A sure sign of a CB Radio hobbyist is if he holds...

Gareth - I'm not sure if anybody has suggested this in the past, but
you could save everybody's bandwidth by posting this tedious drivel on
a website, with a weekly (or even daily) link to it instead.

For example: http://www.g4kfk.co.uk/html/g4sdw_faq.html

73
Mike G4KFK

6455. Re: What's it all about? - FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-30 23:34:17 UTC
From: huLLy <s2f@f2s.com>
Message-ID: <gpudnW_GevBkXijeRVnyhw@giganews.com>
Source record: 14988
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

mike@g4kfk.co.uk wrote:
> Gareth Alun Evans (G4SDW) wrote:
>> Remember - A sure sign of a CB Radio hobbyist is if he holds...
>
> Gareth - I'm not sure if anybody has suggested this in the past, but
> you could save everybody's bandwidth by posting this tedious drivel on
> a website, with a weekly (or even daily) link to it instead.
>
> For example: http://www.g4kfk.co.uk/html/g4sdw_faq.html
>
> 73
> Mike G4KFK

And who could forget:

http://groups.google.co.uk/group/uk.radio.amateur/browse_thread/thread/78624cf1a59b6d4a/1f75a40789763dfc?lnk=st&q=cycleman+uk.radio.amateur&rnum=1&hl=en#1f75a40789763dfc

I have photos taken from the newspaper report if you'd like them.

--
huLLy
Tel: 07976 123278
ICQ 136-987-925

6456. Re: What's it all about? - FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-30 23:41:26 UTC
From: mike@g4kfk.co.uk
Message-ID: <1135986086.757675.172770@g49g2000cwa.googlegroups.com>
Source record: 14989
Cross-posted to: uk.radio.amateur,rec.radio.amateur.policy,rec.radio.amateur.homebrew

huLLy wrote:
> I have photos taken from the newspaper report if you'd like them.

Yes, please email them to mike@g4kfk.co.uk and I'll add them to the
anti-FAQ

73
Mike G4KFK

6457. Identifying a mystery diode

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-31 00:05:28 UTC
From: Paul VK3DIP <pmcmahon@telstra.com>
Message-ID: <cXjtf.136133$V7.93540@news-server.bigpond.net.au>
Source record: 14990

Hi all I recently purchased a bag of unmarked supposedly diodes and I am
trying to figure out what they are. The clues so far are normal diode
action on a multimeter (ie conducts one way but not the other) but the
forward voltage is high at about 1.4 - 1.5 volts. The packaging is a small
square black plastic box with flat axial leads one of which has a small
cross
piece on it. This packaging suggests small signal or at least low power.

If anyone wants to look at the mystery diode it is the top one
in this picture.
http://www.users.bigpond.com/pmcmahon/mysterydiode.jpg
The bottom one is a normal glass 1N914 just for scale.

There is nowhere for the light to come out (or in) so they are not LEDs
which is the only other diode like component I have come across with that
high a forward voltage. Could it be two silicon diodes in series?

Any suggestions or even just identifying the case outline would be
appreciated.

Thanks
Paul VK3DIP

6458. Re: Ground Plane construction vs pre-printed "protoboards"

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-31 00:17:02 UTC
From: Allison-nospam@nouce.bellatlantic.net
Message-ID: <dajbr11edgkbeo3jd2ao9grce45ee053lm@4ax.com>
Source record: 14991

On 30 Dec 2005 09:32:25 -0800, "Basil B." <basilb@hotmail.com> wrote:

>Hello all
>
>I've been doing a fair bit of internet reading about RF construction
>projects. I'm still confused about something.
>
>Most authors, including those in the ARRL Handbook, seem to espouse
>"ugly construction" and a variant called Manhatten construction. I
>understand that the reason is that these techniques minimize
>capacitance by providing a large ground plane. Ugly construction seems
>to also encompass perfboard construction with wire traces or direct
>component-to-component connections. This seems to me to be not much
>better than using pre-printed boards whose traces match, in geometry,
>those of solderless prototyping boards.
>
>I do understand that the solderless boards are inadequate for RF work,
>but are the pre-printed perforated "protoboards" also inadequate.
>
>Call it an OC tendency, but ugly construction is, well, ugly. Of
>course, I want to use the best techniques for what I'm doing, and if UC
>is the way to go, then that's what I'll do.
>
>I'd appreciate your opinions on this.
>
>Thanks
>Basil B.

I've done carfully constructed dead bug (ugly) RF hardware that works
well at 2.4ghz and is not ugly It's a very effective techniques and
with modest care it's difficult to do better with etched circuits at
VHF or higher.

Some of my best radios and test gear have been built this way
and some test items are now several decades old. It can be very
rugged as well.

Allison
KB!gmx

6459. Re: Identifying a mystery diode

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-31 04:35:47 UTC
From: Allison-nospam@nouce.bellatlantic.net
Message-ID: <fj2cr195b72drmb58r4c6a9ipkrck7qv9f@4ax.com>
Source record: 14992

On Sat, 31 Dec 2005 00:05:28 GMT, "Paul VK3DIP" <pmcmahon@telstra.com>
wrote:

> Hi all I recently purchased a bag of unmarked supposedly diodes and I am
>trying to figure out what they are. The clues so far are normal diode
> action on a multimeter (ie conducts one way but not the other) but the
>forward voltage is high at about 1.4 - 1.5 volts. The packaging is a small
>square black plastic box with flat axial leads one of which has a small
>cross
>piece on it. This packaging suggests small signal or at least low power.
>
>If anyone wants to look at the mystery diode it is the top one
>in this picture.
>http://www.users.bigpond.com/pmcmahon/mysterydiode.jpg
>The bottom one is a normal glass 1N914 just for scale.
>
>There is nowhere for the light to come out (or in) so they are not LEDs
>which is the only other diode like component I have come across with that
> high a forward voltage. Could it be two silicon diodes in series?
>
>Any suggestions or even just identifying the case outline would be
>appreciated.
>
>Thanks
>Paul VK3DIP
>
>
Sounds like the 1KV diodes RS used to sell. it was two lower voltage
silicon rectifiers in series. In your case the forward voltage is in
the right range for two silicon diodes in series.

Allison

6460. Re: Ground Plane construction vs pre-printed "protoboards"

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-31 06:34:55 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <WN-dnQVi6ek6uyveRVny3w@pipex.net>
Source record: 14993

> I've done carefully constructed dead bug (ugly) RF hardware that works
> well at 2.4ghz and is not ugly It's a very effective techniques and
> with modest care it's difficult to do better with etched circuits at
> VHF or higher.
>
> Some of my best radios and test gear have been built this way
> and some test items are now several decades old. It can be very
> rugged as well.
==========
Ugly construction can in fact be very neat.
I normally use double sided PCB and drill holes to suit such that components to be grounded can be fitted perpendicular directly to the board without wire ends. These then also serve as support for non-grounded components. If non-grounded components are on their own I fit 10 MOhm resistors as 'practical stand-off insulators'. Where inductance is a critical element I use metal film resistors for this duty ,but normally carbon film resistors are fine.
All board mounted components are soldered to board on both sides such that both copper sides are bonded at various places.
Integrated circuit are glued 'dead bug style' with ample opportunity to connect other components.
For VHF and higher I line the board edges with folded very thin copper strip.
I am fortunate having found a roll with 6mm wide strip with a total length sufficient 'for life', at a flea market.

Frank KN6WH / GM0CSZ

6461. Re: Ground Plane construction vs pre-printed "protoboards"

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-31 06:39:59 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1e1fc78860df88a498971e@news-central.giganews.com>
Source record: 14994

In article <1135982509.626274.149970@g47g2000cwa.googlegroups.com>,
basilb@hotmail.com says...
> I'd like to thank you all for your input. Obviously, a process that
> works and has high quality of results is much better than one that
> merely looks good. I did research the sites of the people you mention.
> I just wanted to be sure I understood the issues, and you've all
> helped. Thank you.
>
> Regards
> Basil B.
>
>

Ugly is definitely in the eye of the beholder. :) If it bugs you, then you might consider enclosing your modules in neat-looking Hammond boxes, connecting them with exotic gold-plated SMA/SMB/SMC hardware. When the lid is screwed down on the box, nobody can see the ugly stuff. I've built (almost) an entire receiver this way:

http://www.speakeasy.net/~jmiles1/ke5fx/equinox/equinox.html

Only the 1st LO synthesizer(s) are built on PC boards, and it wasn't strictly necessary even in those cases. The prototype LO was built ugly-style, and works just fine.

Perfboard can best be thought of as equivalent to conventional single-sided PC boards, with no ground plane. As Roy pointed out, you often don't care about stray capacitance as much as you care about having ubiquitous access to a low-inductance ground. You don't get that with either single-sided PC boards or perfboard.

Personally, I don't think much of the idea of fabbing a PC board for a one-off project, unless it involves newfangled chips with more pins than you can see. And perfboard, for me, is not the method of choice for anything but digital work -- although people have certainly used it to build some very nice gear.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

6462. Re: Ground Plane construction vs pre-printed "protoboards"

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-31 06:40:03 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <43b627c4$0$4171$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 14995

If you want a technique that both looks good and is RF tolerant, try using double sided board and small pieces of cheap plastic insulation tape as resist. This applies to through hole parts of course - if you want to use SM you will have to use dead bug or professionally made PCBs. You will have to think out your layout carefully before you start - do this on paper. You can always go back and styart again if it is all wrong

The board must be scrupulously clean - use steel wool for this and dont touch with fingers afterwards.

You can do through hole ICs by cutting a matrix of tape from a single piece on the target board and removing the scrap from beween pads with fine forceps.

Cut small squares and strips of tape from sections laid out on another piece of scrap board for traces, resistors, capacitors and transistors. Cut the tape sections with a sharp blade such as a Stanley knife
Using fine forceps, lift these and place in your desired layout on the target board as pads and connections on the bottom side. Press down firmly with another tool to stick

Cover the top completely with tape as a ground plane.

Etch the board in Ferric Chloride.

Remove all the pieces of tape

Drill holes through the pads with a suitable size PCB drill from the bottom - a small drill press is useful as you will tend to break drills otherwise

Any pads connected to ground can be left so that the component lead can be simply soldered to the ground plane, while those that must be insulated are countersunk carefully on the top side to remove a small ring of copper - be careful not to drill right through - use a drill at slow revolutions, or even by hand in a T chuck.

Scrub again with steel wool and spray with PCB lacquer

With practice you can make quite complex boards - I did a complete triband HF SSB/QRP transceiver using this technique some years ago. I have used some SM components such as 1206 resistors and capacitors, combined with through hole parts on occasion.

Richard

Basil B. wrote:
> Hello all
>
> I've been doing a fair bit of internet reading about RF construction
> projects. I'm still confused about something.
>
> Most authors, including those in the ARRL Handbook, seem to espouse
> "ugly construction" and a variant called Manhatten construction. I
> understand that the reason is that these techniques minimize
> capacitance by providing a large ground plane. Ugly construction seems
> to also encompass perfboard construction with wire traces or direct
> component-to-component connections. This seems to me to be not much
> better than using pre-printed boards whose traces match, in geometry,
> those of solderless prototyping boards.
>
> I do understand that the solderless boards are inadequate for RF work,
> but are the pre-printed perforated "protoboards" also inadequate.
>
> Call it an OC tendency, but ugly construction is, well, ugly. Of
> course, I want to use the best techniques for what I'm doing, and if UC
> is the way to go, then that's what I'll do.
>
> I'd appreciate your opinions on this.
>
> Thanks
> Basil B.
>

6463. Re: Identifying a mystery diode

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-31 16:03:32 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrndrdauk.21g6.bit-bucket@shell.config.com>
Source record: 14996

On Sat, 31 Dec 2005 00:05:28 GMT, Paul VK3DIP wrote:
> Hi all I recently purchased a bag of unmarked supposedly diodes and I am
> trying to figure out what they are. The clues so far are normal diode
> action on a multimeter (ie conducts one way but not the other) but the
> forward voltage is high at about 1.4 - 1.5 volts. The packaging is a small
> square black plastic box with flat axial leads one of which has a small
> cross
> piece on it. This packaging suggests small signal or at least low power.
>
> If anyone wants to look at the mystery diode it is the top one
> in this picture.
> http://www.users.bigpond.com/pmcmahon/mysterydiode.jpg
> The bottom one is a normal glass 1N914 just for scale.
>
> There is nowhere for the light to come out (or in) so they are not LEDs
> which is the only other diode like component I have come across with that
> high a forward voltage. Could it be two silicon diodes in series?

Don't count it out as not being an LED. Some opaque-to-the-human-eye
packages are, in fact, quite clear in either the IR or UV range.
It could be an IR LED. (There's been many cases where light-sensitive,
'ordinary' diodes caused 'problems' in circuits on a well lit workbench.
The 'thing' would work one way in a buttoned-up case, and another way
under test.)

HTH
Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
Pueblo, Colorado | @ | Jonesy | OS/2 __
38.24N 104.55W | config.com | DM78rf | SK

6464. Re: Identifying a mystery diode

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-31 16:17:12 UTC
From: xpyttl <xpyttl_NOSPAM@earthling.net>
Message-ID: <%eytf.5261$nj1.3125@fe06.lga>
Source record: 14997

"Allodoxaphobia" <bit-bucket@config.com> wrote in message
news:slrndrdauk.21g6.bit-bucket@shell.config.com...

> Don't count it out as not being an LED. Some opaque-to-the-human-eye
> packages are, in fact, quite clear in either the IR or UV range.
> It could be an IR LED.

Other than being black, that thing looks suspiciously like an LED, so I
would go for an IR LED.

..

6465. Sell your Tube Gear!

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-31 16:57:47 UTC
From: Jeff James <cbstv@optonline.net>
Message-ID: <eMytf.11993$L75.9153@fe12.lga>
Source record: 14898

Happy New Year!
The Boatanchor Classifieds
http://www.dealamerica.com/deal/cgi-bin/ads/bcads.cgi
Dedicated to Vintage Amateur Radio..

6466. FA: 8 Air Variables + other stuff too

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-31 18:24:08 UTC
From: Heytubeguy <heytubeguy@worldnet.att.net>
Message-ID: <c1Atf.210245$qk4.34676@bgtnsc05-news.ops.worldnet.att.net>
Source record: 14899
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Have several air variables and other items too : see at:

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZheytubeguy

Tnx for looking. More Heathkit item coming soon, 73 heytubeguy

6467. Re: What's it all about? - FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-31 18:47:42 UTC
From: de Mac <de.Mac.20xav0@news.radiobanter.com>
Message-ID: <de.Mac.20xav0@news.radiobanter.com>
Source record: 14901

Oh My Goodness!

I did not know that the FT-817 was a cb rig
most that I have heard, were on 40 es 30 cw
man thanks for letting me know
that cb ops are now hanging out
on the stateside qrp calling freqs running 20 wpm

Mac dit dit

--
de Mac

6468. Re: Identifying a mystery diode

Newsgroup: rec.radio.amateur.homebrew
Date: 2005-12-31 20:34:08 UTC
From: Dan Halbert <vhalbertv@vhalwitzv.vorgv>
Message-ID: <4XBtf.1549$tJ1.82@trndny01>
Source record: 14900

xpyttl wrote:
> Other than being black, that thing looks suspiciously like an LED, so I
> would go for an IR LED.

You could apply power it to as you would an LED (using a
current-limiting resistor), and take a look at it in a digital camera's
display. Digital cameras are somewhat sensitive to IR, even though they
usually have a built-in IR cut filter. Try it with an IR remote control
to see what I mean.

Dan, KB1RT